



EuroAsia[®]
interconnector



**A European Union
Project of Common Interest**

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1. Project Overview

European Project of Common Interest

25.4.2013

EN

Official Journal of the European Union

**REGULATION (EU) No 347/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 17 April 2013**

**on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC
and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE
EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European
Union, and in particular Article 172 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national
parliaments,

Having regard to the opinion of the European Economic and
Social Committee (1),

Having regard to the opinion of the Committee of the
Regions (2),

(3) The communication from the Commission entitled
'Energy infrastructure priorities for 2020 and
beyond — A Blueprint for an integrated European
energy network', followed by the Council conclusions
of 28 February 2011 and the European Parliament resolution
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of 28 February 2011, called for a new energy infrastructure policy to
optimise network development at European level for the
period up to 2020 and beyond, in order to allow the
Union to meet its core energy policy objectives of
competitiveness, sustainability and security of supply.

(4) The European Council of 4 February 2011 underlined
the need to modernise and expand Europe's energy infra-
structure and to interconnect networks across borders, in
order to make solidarity between Member States opera-
tional, to provide for alternative supply or transit routes
and sources of energy and to develop sustainable energy
sources in conjunction with traditional sources. It
stressed that the Member States should ensure that
from the European perspective electricity networks are
open to gas to enable energy interconnectors.



European Projects PCI



EUROPEAN COMMISSION

PRESS RELEASE

Brussels, 14 October 2013

Energy: Commission unveils list of 250 infrastructure projects that may qualify for €5,85 billion of funding

A modern infrastructure with adequate interconnectors and reliable networks is crucial for an integrated energy market where consumers get the best value for their money. Today, the European Commission has adopted a list of some 250 key energy infrastructure projects that may qualify for funding from the European Union's budget.

Technical
accompanying the Commission Delegated Regulation (EU) No.../... of 2013 on trans-European energy infrastructure projects of common interest

1. Priority corridor Northern Seas offshore grid ("NSOG")

| No. | Old no. as submitted | Definition | Details on location |
|-------|----------------------|--|--|
| 3.10. | E30 | Cluster Israel - Cyprus – Greece between Hadera and Attica region [currently known as the Euro Asia Interconnector] including the following PCIs: 3.10.1. Interconnection between Hadera (IL) and Vasilikos (CY) 3.10.2. Interconnection between Vasilikos (CY) and Korakia, Crete (EL) 3.10.3. Internal line between Korakia, Crete and Attica region (EL) | Hadera (IL) to Vasilikos to Korakia, Crete (EL) and Attica region (EL) |

Promoter(s)

3.10.1.: ΔEH Quantum Energy Ltd
3.10.2.: ΔEH Quantum Energy Ltd
3.10.3.: ΔEH Quantum Energy Ltd, in cooperation with ADMIE

Common Interest

(EU) 347/2013 of the European Parliament and of the Council on guidelines for list of projects of common interest

| Technology employed | Implementation status | Date of commissioning |
|--|-----------------------|--|
| consists of a 600 kV DC underwater electric any essential equipment and/or installation connecting the Cypriot, Israeli and the Greek in networks (offshore). The project will have of 2000 MW and a total length of around 820 les/around 1518 km (329 km between CY 9 km between CY and Crete and 310 km Crete and Athens) and allow for reverse n of electricity. The dumping depth of the exceed the 2000 m under the sea in some een IL and CY. The dumping depth of the exceed the 2000 m under the sea in some een IL and CY and will exceed the 2500 m | Pre-feasibility | 3.10.1.: 2017 3.10.2.: 2019 3.10.3.: 2018 |

2nd PCI list



European Commission - Press release

Commission unveils key energy infrastructure projects to integrate Europe's energy markets and diversify sources

Brussels, 18 November 2015

The European Commission adopts a list of 195 key energy infrastructure projects - known as projects of common interest – which will help deliver Europe's energy and climate objectives

- | | |
|------|---|
| 3.10 | <p>Cluster Israel — Cyprus — Greece between Hadera and Attica region [currently known as "EUROASIA Interconnector"], including the following PCIs:</p> <ul style="list-style-type: none">3.10.1 Interconnection between Hadera (IL) and Kofinou (CY)3.10.2 Interconnection between Kofinou (CY) and Korakia, Crete (EL)3.10.3 Internal line between Korakia, Crete and Attica region (EL) |
|------|---|

Double Labelling e-Highway2050

Modular Development Plan of the Pan-European
Transmission System 2050



The Electricity highways should be capable of:

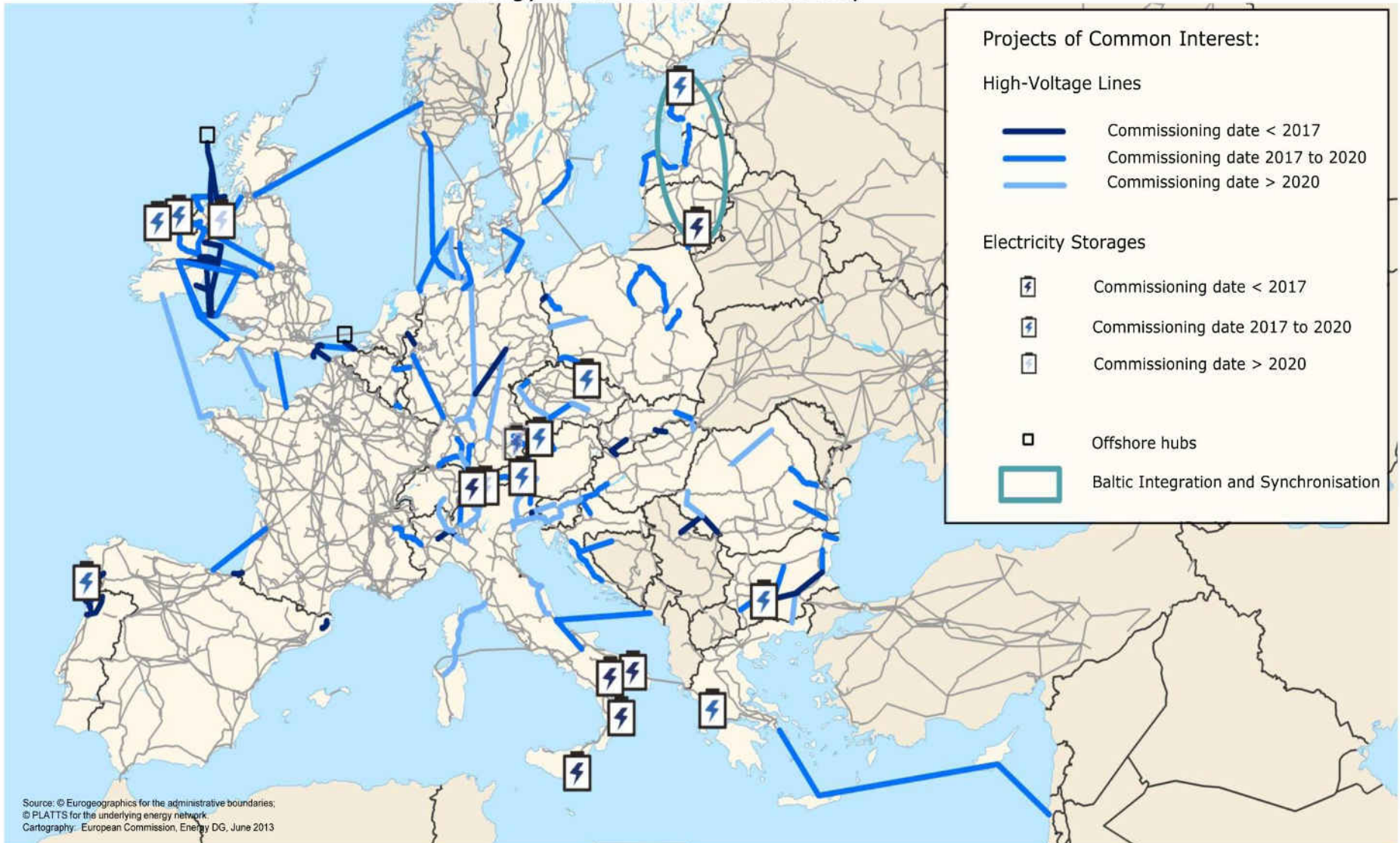
- Accommodating ever-increasing renewable generation;
- Connecting these new generation hubs with major storage capacities with major consumption centres; and
- Coping with an increasingly variable and decentralized electricity supply and flexible electricity demand.

EuroAsia Interconnector fulfils the general criteria of the plan and is proposed by the EC to be labelled as electricity highways.



European
Commission

Energy Infrastructure - Electricity



Source: © Eurogeographics for the administrative boundaries;
© PLATTS for the underlying energy network.
Cartography: European Commission, Energy DG, June 2013

2612m

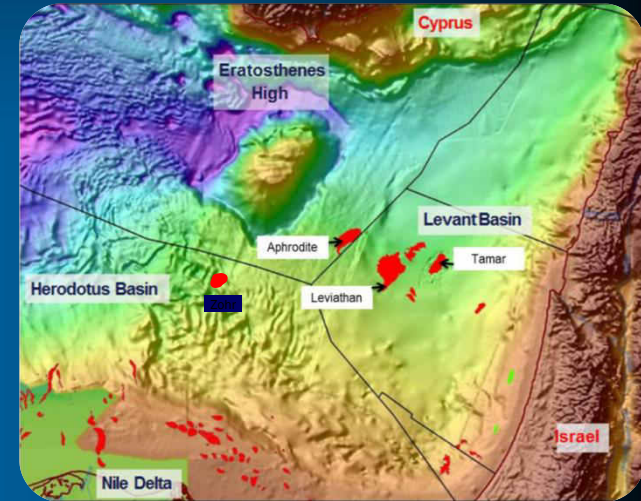
2200m

2000 MW

-  Cyprus - Israel
329 km
-  Cyprus - Crete
879 km
-  Crete - Athens
310 km

Key Drivers

- Exploitation of Natural Gas Reserves in East Mediterranean and particularly Cyprus – Israel and Egypt. Biggest Discoveries are in Levantine Basin, 22tcf (Israel) and Zorh (Egypt) 30tcf. Total estimated in East Mediterranean @345tcf.
- Create an Electricity Corridor from East Mediterranean to EU providing un-interrupted energy
- Terminate the Energy isolation of Cyprus as an EU Member State and increase the Security of Supply of all the countries involved.





NSN Interconnector

Length: 340 km
Depth: 600 m
Power: 1400MW

NorNed

Length: 580 km
Depth: 420 m
Power: 700MW

Western Link

Length: 385 km
Depth: 165 m
Power: 2200MW

SwePol

Length: 239 km
Depth: 90 m
Power: 600MW

BritNed

Length: 250 km
Depth: 30-50 m
Power: 1000MW

SAPEI

Length: 420 km
Depth: 1600 m
Power: 1000MW

Cometa

Length: 240 km
Depth: 1485 m
Power: 400MW

Is a Challenging Project with Regards to its Technical Characteristics

However, HVDC Interconnectors are developing across Europe and all over the world.

Are considered one of the Key Strategic tools of the EU for achieving its goals
In the recent TYNDP has been mentioned that investments in HVDC Interconnections will amount to approx. EUR 150bil by 2030 (EUR50bil in subsea cables) .
Technology is rapidly advancing in a highly competitive environment

Project Deployment

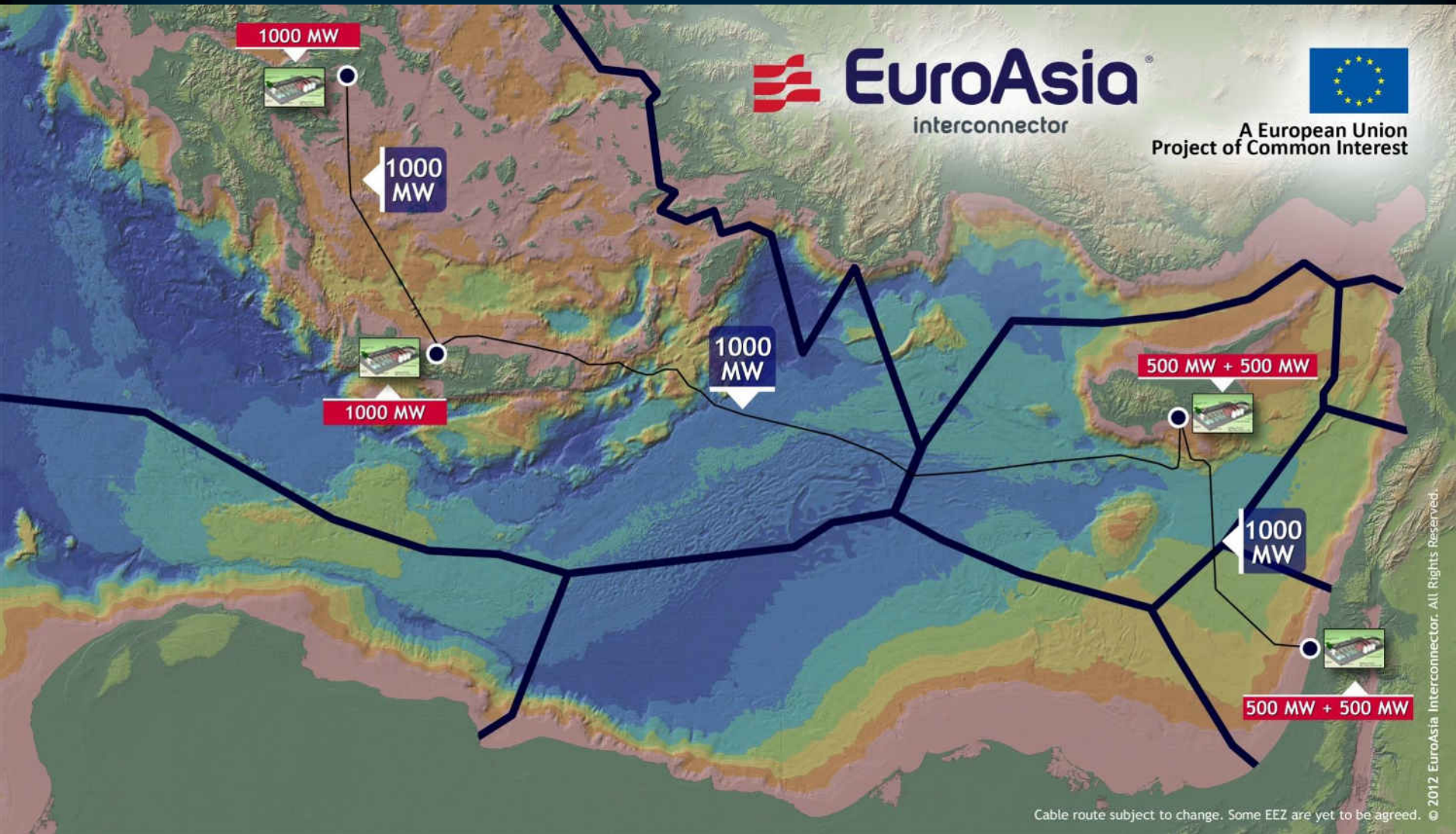


EuroAsia[®]

interconnector



A European Union
Project of Common Interest



Cable route subject to change. Some EEZ are yet to be agreed. © 2012 EuroAsia Interconnector. All Rights Reserved.

Project Benefits and EU Objectives



Project Economic Benefits



- Project Economic Evaluation by ENTSO-E (CBA Methodology) - 2013



- Project Detailed Economic Evaluation By CESI applying the ENTSO-E CBA Methodology (2014-2015)



- Project Economic and Business Evaluation by PwC in co operation with CESI



- Data contribution and Active Participation by National TSO's to all above studies

Subject: Preliminary results in Vision 1 according to ENTSO-E Cost-Benefit Methodology for project *EuroAsia Interconnector*

| Vision 1 preliminary Assessment | Cross-border Grid Transfer Capability Increase [MW] ³ | Contribution to 10% Interconnection | Social and Economic Welfare [M€/y] | Security of Supply [MWh/y] | RES Integration [MWh/y] | CO2 emissions variation [kt/y] | Losses variation [MWh/y] | Technical resilience | Flexibility | Environmental and social impact |
|---------------------------------|--|-------------------------------------|------------------------------------|----------------------------|-------------------------|--------------------------------|--------------------------|---|-------------|---------------------------------|
| <i>EuroAsia Interconnector</i> | 2000 | > 10% ⁴ | 526 - 643 | 0 | 2000 | -0,36 | +1563050 | Not available at this stage – based on analysis in all 2030 Visions | | |

| Vision 1 preliminary Assessment | Cross-border Grid Transfer Capability Increase [MW] ³ | Contribution to 10% Interconnection | Social and Economic Welfare [M€/y] | Security of Supply [MWh/y] | RES Integration [MWh/y] | CO2 emissions variation [kt/y] | Losses variation [MWh/y] | Technical resilience | Flexibility | Environmental and social impact |
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Geopolitical Importance Co - Operation

January 2012



Project Announcement - Nicosia

March 4, 2012



1st row from left - Mr Yasha Hain, vice president of Israel Electric Corporation (IEC), Mr. Nassos Ktorides President of PPC-Quantum Energy and Mr. Yiftach Ron Tal, President of IEC.

From left, second row - the Ambassador of Greece in Israel Loukakis Mr. Kyriakos, Mr. Minister Uzi Landau Energy and Water Israel and the Ambassador of Cyprus in Israel Mr. Demetris Hatzigiorgiou.

Israel's Official Commitment - Jerusalem

A Bridge for Friendship and Prosperity



August 2013

Meeting between the ministers of Cyprus, Israel and Greece in Cyprus.

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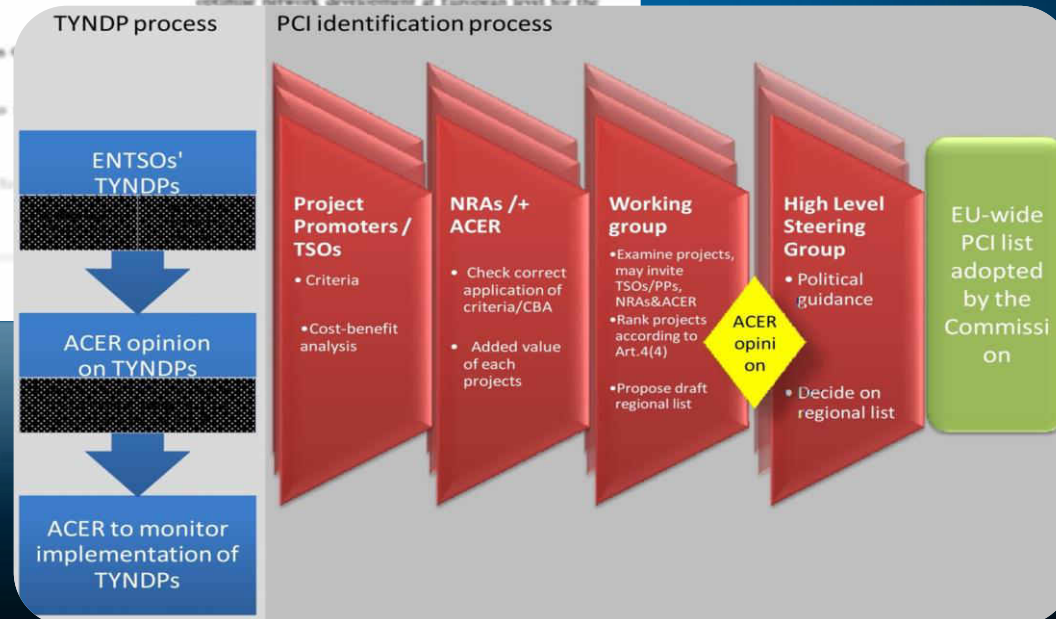
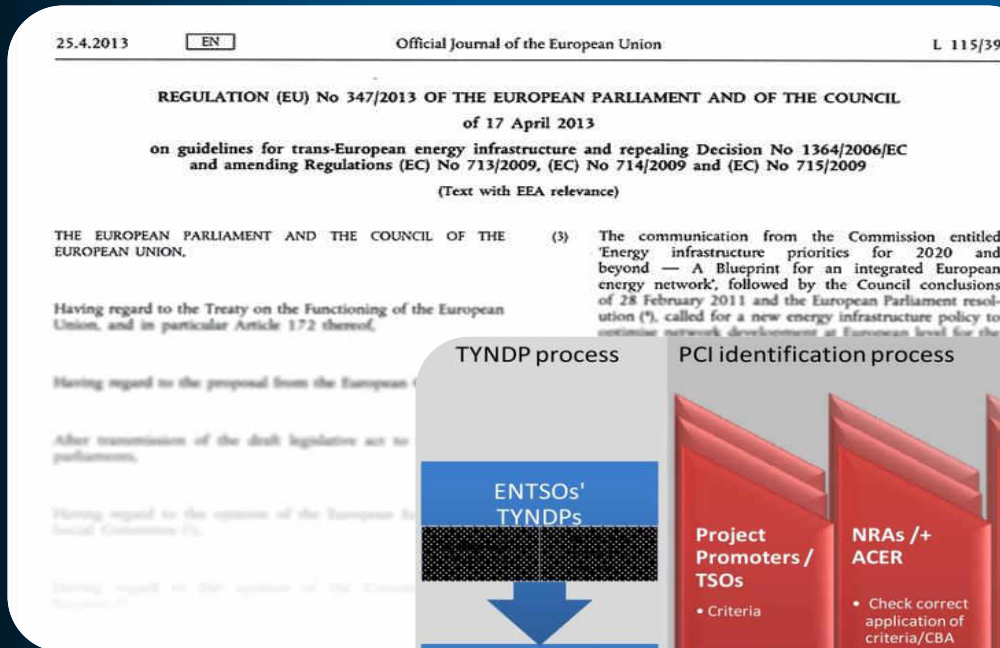
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the need to modernise and expand Europe's energy
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order to make solidarity between Member States
operational, to provide for alternative supply or transit routes
and sources of energy and to develop sustainable energy
sources in conjunction with traditional sources. It
stressed that, as Member States should remain linked
from the European perspective, electricity networks and
gas pipelines should be developed in parallel.



2. The European Perspective PCI Regulation Benefits

A European Project of Common Interest (PCI)



PCI Regulation Benefits

CEF – one of the tools



Process to identify projects of common European interest, with involvement of all stakeholders

Benefits for PCIs

Accelerated permit granting

3.5 years

One stop shop

Participation

Improved Regulatory treatment

Incentives

Cost allocation

Financial support

CEF

(and IFIs)

Financial instruments

Grants

Accelerated Permit Granting

- “One Stop Shop” National Licensing Body
- Pre-defined Time Frame
- Manual of Licensing Procedures

23 October 2013

Designation of a national competent Licensing Authority in Cyprus (one stop shop)

16 May 2014

Issue of Manual of procedures for the permit granting process for PCI Projects

Article 10

Duration and implementation of the permit granting process

1. The permit granting process shall consist of two procedures:
 - (a) The pre-application procedure, covering the period between the start of the permit granting process and the acceptance of the submitted application file by the competent authority, shall take place within an indicative period of two years.

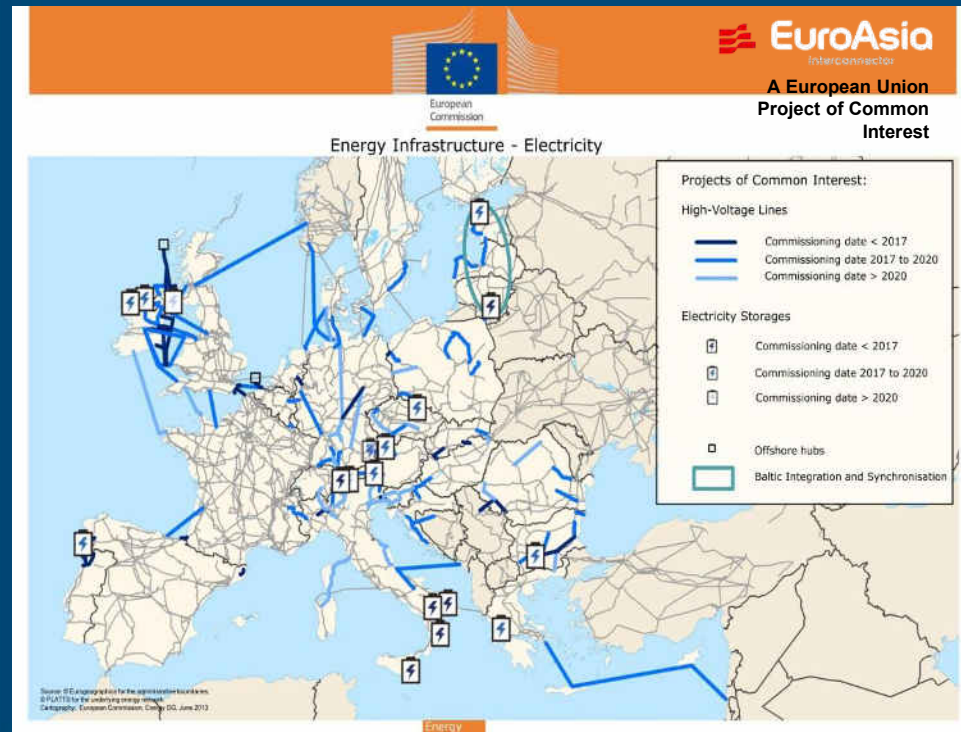
This procedure shall include the preparation of any environmental reports to be prepared by the project promoters.



Κυπριακή Δημοκρατία
Υπουργείο Ενέργειας, Εμπορίου, Βιομηχανίας και Τουρισμού

Εγχειρίδιο Διαδικασιών Αδειοδότησης
για Έργα Κοινού Ενδιαφέροντος

June 2014



Decision of the Inter-ministerial Committee for Strategic Investments in Greece (Ministry of Environment, Energy and Climate Change, Ministry of Development and Competitiveness and Ministry of Finance) for Integration of the project in the process of “Fast Track” and later the Issue of Manual of Licensing Procedures

Improved Regulatory Treatment



ACER
Agency for the Cooperation
of Energy Regulators

**How to submit an investment
request to receive a CBCA
decision**

CEF Information Day

Energy system wide cost-benefit analysis

The submission by ENTSO E to the Commission and the Agency, of a consistent and interlinked electricity and gas market and network model for a harmonized energy system-wide cost-benefit analysis at Union level for PCIs.

Article 11

Energy system wide cost-benefit analysis

1. By 16 November 2013, the European Network of Transmission System Operators (ENTSO) for Electricity and the ENTSO for Gas shall publish and submit to Member States, the Commission and the Agency their respective methodologies, including on network and market modelling, for a harmonised energy system-wide cost-benefit analysis at Union level for projects of common interest falling under the categories set out in Annex II.1(a) to (d) and Annex II.2. Those methodologies shall be applied for the preparation of each subsequent 10-year network development plan developed by the ENTSO for Electricity or the ENTSO for Gas pursuant to Article 8 of Regulation (EC) No 714/2009 and Article 8 of Regulation (EC) No 715/2009. The methodologies shall be drawn up in line with the principles laid down in Annex V and be consistent with the rules and indicators set out in Annex IV.

Prior to submitting their respective methodologies, the ENTSO for Electricity and the ENTSO for Gas shall conduct an extensive consultation process involving at least the organisations representing all relevant stakeholders — and, if deemed appropriate, the stakeholders themselves — national regulatory authorities and other national authorities.

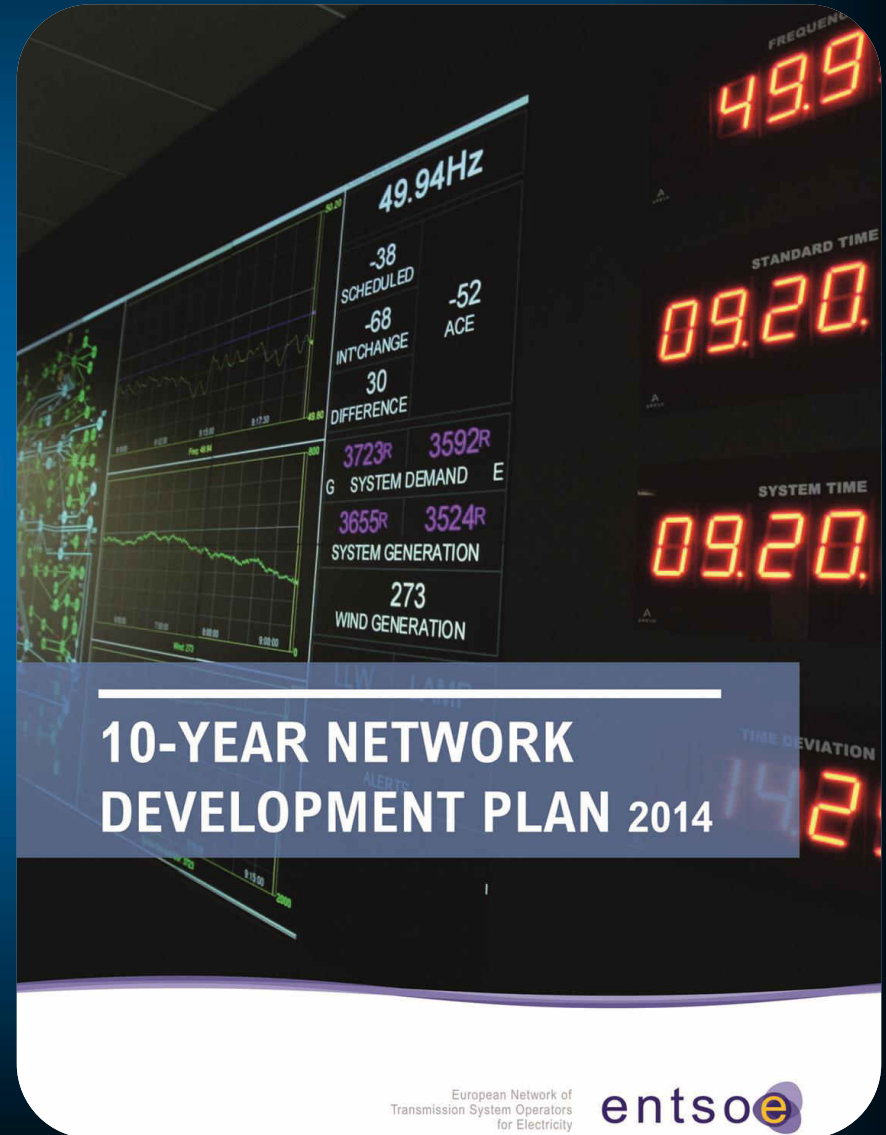
2. Within three months of the day of receipt of the methodologies, the Agency shall provide an opinion to Member States and the Commission on the methodologies and publish it.



Acting as the Technical Advisor
of European Commission.

Evaluates all the PCI Projects
using the ACER approved CBA
methodology.

The EuroAsia Interconnector
has been evaluated by ENTSO-
E and has been included in the
European 10-TYNDP 2014.



Description of the project



A link between Israel, Cyprus, and Greece (Crete and mainland).

PCI 3.10



| Investment index | Substation 1 | Substation 2 | Description | GTC contribution (MW) | Present status | Expected date of commissioning | Evolution since TYNDP 2012 | Evolution driver |
|------------------|-------------------------|-------------------------|---|-----------------------|----------------|--------------------------------|----------------------------|------------------------------------|
| 949 | Korakia site (CRETE) | Athens site (GREECE) | New HVDC interconnection between Crete and Athens | 2000 | Planning | 2020 | New Investment | Project application to TYNDP 2014. |
| 971 | Vasilikos site (CYPRUS) | Korakia site (CRETE) | New HVDC interconnection between Cyprus and Crete Islands | 2000 | Planning | 2022 | New Investment | Project application to TYNDP 2014. |
| 1054 | Hadera site (ISRAEL) | Vasilikos site (CYPRUS) | New HVDC interconnection between Israel and Cyprus | 2000 | Planning | 2018 | New Investment | Project application to TYNDP 2014. |


Enabling investments with cross-border impacts

The project promoters shall submit an Investment Request which will include

- CBA
- Business Plan
- Proposal for cross-border cost allocation



ACER

 Agency for the Cooperation
of Energy Regulators

Recommendation

Article 12

Enabling investments with cross-border impacts

1. The efficiently incurred investment costs, which excludes maintenance costs, related to a project of common interest falling under the categories set out in Annex II.1(a), (b) and (d) and Annex II.2 shall be borne by the relevant TSO or the project promoters of the transmission infrastructure of the Member States to which the project provides a net positive impact and, to the extent not covered by congestion rents


As soon as such a project has reached sufficient maturity, the project promoters, after having consulted the TSOs from the Member States to which the project provides a significant net positive impact, shall submit an investment request. That investment request shall include a request for a cross-border cost allocation and shall be submitted to all the national regulatory authorities concerned, accompanied by the following:

- (a) a project-specific cost-benefit analysis consistent with the methodology drawn up pursuant to Article 11 and taking into account benefits beyond the borders of the Member State concerned;
- (b) a business plan evaluating the financial viability of the project, including the chosen financing solution, and, for a project of common interest falling under the category referred to in Annex II.2, the results of market testing; and
- (c) if the project promoters agree, a substantiated proposal for a cross-border cost allocation.

Incentives

- “The Agency considers that incentives should be provided aiming to improve investment environment which could cause project promoters and/or investors not to invest or to delay their investment decisions.”
- The incentives shall consider the results of the CBA and the regional or Union-wide positive externalities generated by the project.

ACER

 Agency for the Cooperation
of Energy Regulators

Recommendation

Article 13

Incentives

1. Where a project promoter incurs higher risks for the development, construction, operation or maintenance of a project of common interest falling under the categories set out in Annex II.1(a), (b) and (d) and Annex II.2, compared to the risks normally incurred by a comparable infrastructure project, Member States and national regulatory authorities shall ensure that appropriate incentives are granted to that project in accordance with Article 37(8) of Directive 2009/72/EC, Article 41(8) of Directive 2009/73/EC, Article 14 of Regulation (EC) No 714/2009, and Article 13 of Regulation (EC) No 715/2009.

The first subparagraph shall not apply where the project of common interest has received:

(a) an exemption from Articles 32, 33, 34 and Article 41(6), (8) and (10) of Directive 2009/73/EC pursuant to Article 36 of Directive 2009/73/EC;

(b) an exemption from Article 16(6) of Regulation (EC) No 714/2009 or an exemption from Article 32 and Article 37(6) and (10) of Directive 2009/72/EC pursuant to Article 17 of Regulation (EC) No 714/2009;

(c) an exemption under Article 22 of Directive 2003/55/EC; or

EuroAsia Interconnector is a Regulated Infrastructure Project

Financial Support

Eligibility of projects for Union financial assistance

- . PCIs are eligible for Union financial assistance in the form of grants for studies.
- . Also, PCIs are eligible for Union financial assistance in the form of grants for works if they fulfil the following criteria:
 - > CBA provides evidence of significant positive externalities
 - > Received a cross-border cost allocation decision

Article 14

Eligibility of projects for Union financial assistance

1. Projects of common interest falling under the categories set out in Annex II.1, 2 and 4 are eligible for Union financial assistance in the form of grants for studies and financial instruments.
2. Projects of common interest falling under the categories set out in Annex II.1(a) to (d) and Annex II.2, except for hydro-pumped electricity storage projects, are also eligible for Union financial assistance in the form of grants for works if they fulfil all of the following criteria:
 - (a) the project specific cost-benefit analysis pursuant to Article 12(3)(a) provides evidence concerning the existence of significant positive externalities, such as security of supply, solidarity or innovation;
 - (b) the project has received a cross-border cost allocation decision pursuant to Article 12; or, for projects of common interest falling under the category set out in Annex II.1(c) and that therefore do not receive a cross-border cost allocation decision, the project shall aim to provide services across borders, bring technological innovation and ensure the safety of cross-border grid operation;



Financial Instruments under the Connecting Europe Facility – PCI



One of the Key Benefits of EuroAsia Interconnector is its Eligibility for Funding through the Connecting Europe Facility.

The EuroAsia Interconnector receives recognition from EU by approving its application for Grants for Studies.



EUROPEAN COMMISSION

Indicative list of actions selected for receiving financial assistance under CEF-Energy as of 29.10.2014

| PCI name | Action type | Action name | Applicant(s) | Action location | Maximum EU financial assistance (in EUR) |
|--|-------------|---|---|-----------------|--|
| Northern Seas offshore grid Priority Corridor (NSOC) | | | | | |
| PCI Norway – United Kingdom Interconnection (3.10) | Study | NSN Technical Design Studies | National Grid Interconnector Holdings Limited / Statnett SF | UK, NO | 31,300,000 |
| France – United Kingdom Interconnection between Calais (FR) and the vicinity of Dover (UK) (3.7.1) | Study | Development of the France-Albany Britain (FAB) Project | Transmission Investment LLP / Réseau de Transport d'Electricité (RTE) | FR, UK | 7,200,000 |
| France – United Kingdom Interconnection between Capwallis (FR) and Folkestone (UK) (3.7.2) | Study | Electric | Electric Limited | FR, UK | 1,600,000 |
| North-South electricity interconnections in Western Europe Priority Corridor (NSI West Electricity) | | | | | |
| PCI France – Spain Interconnection between Aquitaine (FR) and the Basque country (ES) (3.7) | Study | Studies for a new Atlantic electrical interconnection between Spain and France | Réseau de Transport d'Electricité / RED ELECTRICA DE ESPAÑA S.A.U. | ES, FR | 1,250,000 |
| North-South electricity interconnections in Central Eastern and South Eastern Europe Priority Corridor (NSI East Electricity) | | | | | |
| Interconnection between Hadera (IL) and Vasilikos (CY) (3.10.1) | Study | EuroAsia Interconnector - Design, Implementation and Environmental Studies | DEH QUANTUM ENERGY LTD | CY,EL,IL | 1,325,000 |
| Internal line between Varnovo and Vitosha (CZ) (3.11.1) | Study | Documentation for zoning permit of the line 400 kV Varnovo-Vitosha, substation 400 kV Vitosha and Project study for substation 400 kV Varnovo | CEPS a.s. | CZ | 1,011,004 |
| Interconnection between Gory (MK) and Galichovo (BG) (3.10.1) | Study | Preparation of Gory (MK) National Border (MK) 400 kV interconnection line | MikroMajgar Vitelesnenergo-spun Akademi Razvojnomynto (MK) | MK | 100,000 |



EUROPEAN COMMISSION

PRESS RELEASE

Today Member States agreed to allocate €647 million to support key priority infrastructure projects The bulk of the support goes to gas projects in the Baltic region as well as in Central Eastern and South Eastern Europe. Funding will come from an EU programme called the Connecting Europe Facility (CEF). **The**

supported projects will increase Europe's energy security and help end the isolation of Member States from EU-wide energy networks. They will also contribute to the completion of a European energy market and the integration of renewables to the electricity grid.

Vice-President of the European Commission, responsible for energy, Günther H. Oettinger said: "I welcome today's decision, which will help us to quickly build the infrastructure we need to ensure Europe's energy security. The geopolitical crisis has highlighted the need to better connect energy networks. This is also crucial for an integrated energy market where consumers get the best value for their money."

The Juncker 315bn European Investment Plan

European Commission - Press release

Investment Offensive for Europe: EU Task Force identifies 2,000 potential projects worth €1.3 trillion

09 December 2014



EUROPEAN COMMISSION – EUROPEAN INVESTMENT BANK

Brussels/Luxembourg, 9 December 2014

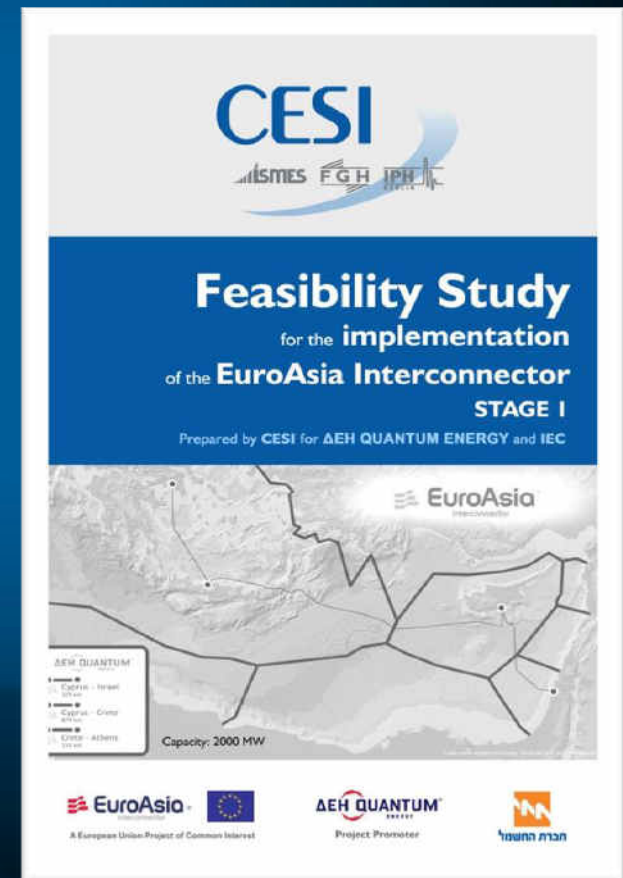
Brussels/Luxembourg, 9 December 2014

EUROPEAN COMMISSION – EUROPEAN INVESTMENT BANK

3. Project Key Technological Characteristics

Technical Feasibility Results

- Studies by the Steering Committee on Projects Technical Feasibility
- Feasibility Study on the Implementation of the EuroAsia Interconnector [Stage 1] by CESI
- Preliminary findings from Network Studies (CBA#2)



Technical Feasibility Results

Cable Laying



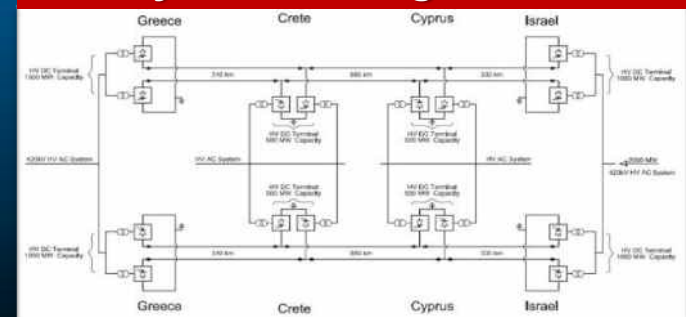
The Cable



Converter Station



System Configuration



The EuroAsia Interconnector is a Technically Feasible Project

CESI



Vs. rif. EuroAsia Interconnector

Protocollo B3024355

Data 20/09/2013

To Mr. Killas
ΔEH Quantum Energy limited
27 Philippou Str., P.O.Box 22493,
1522 Nicosia
Cyprus

Dear Mr Killas,

On the basis of the feasibility study under completion by CESI within the consultancy contract with ΔEH Quantum Energy for the EuroAsia Interconnector a European PCI project interconnecting Israel Cyprus and Greece, no substantial technical elements have arisen that might prevent the implementation of the submarine cable High Voltage Direct Current (HVDC) system as envisaged in both the alternatives of Israel Hub and Cyprus Hub, and therefore it is technically feasible.

Moreover, on the basis of the studies carried out and the information received from major manufacturers, the first phase of the project, which is the implementation of the interconnection between Cyprus-Israel with an HVDC cable system of 500MW, can be commissioned in 2017 (or 36 months from the order placement), provided that an order should be placed in the following few months. Respectively, the implementation of the interconnection of the Crete-Attica section, with an HVDC cable system of 1000MW can be commissioned within 36 months from the day of order placement.

CESI is an internationally well reputed company for consultancy and testing in the electrical power systems arena and is world leader in feasibility studies, design and assistance to construction and commissioning of HVDC schemes with more than 30 years of experience and 15 submarine interconnections. Our statement on the technical feasibility of the EuroAsia Interconnector is soundly based both on our above mentioned experience in HVDC systems and on the results of the various in depth meetings and exchanges of information we have had on the specific interconnector with world leader manufacturers of deep submarine cables and of HVDC stations, considering the particular characteristics of the project.

We would like to thank you for the very appreciated cooperation during the performance of our studies and consultancies and we are at your disposal to provide our support for the final implementation of this important project.

Sincerely Yours,



CESI S.p.A.
Consulting, Solutions & Services
Head of Business Area
Alessandro Bertani

Mod. LETT v. 12

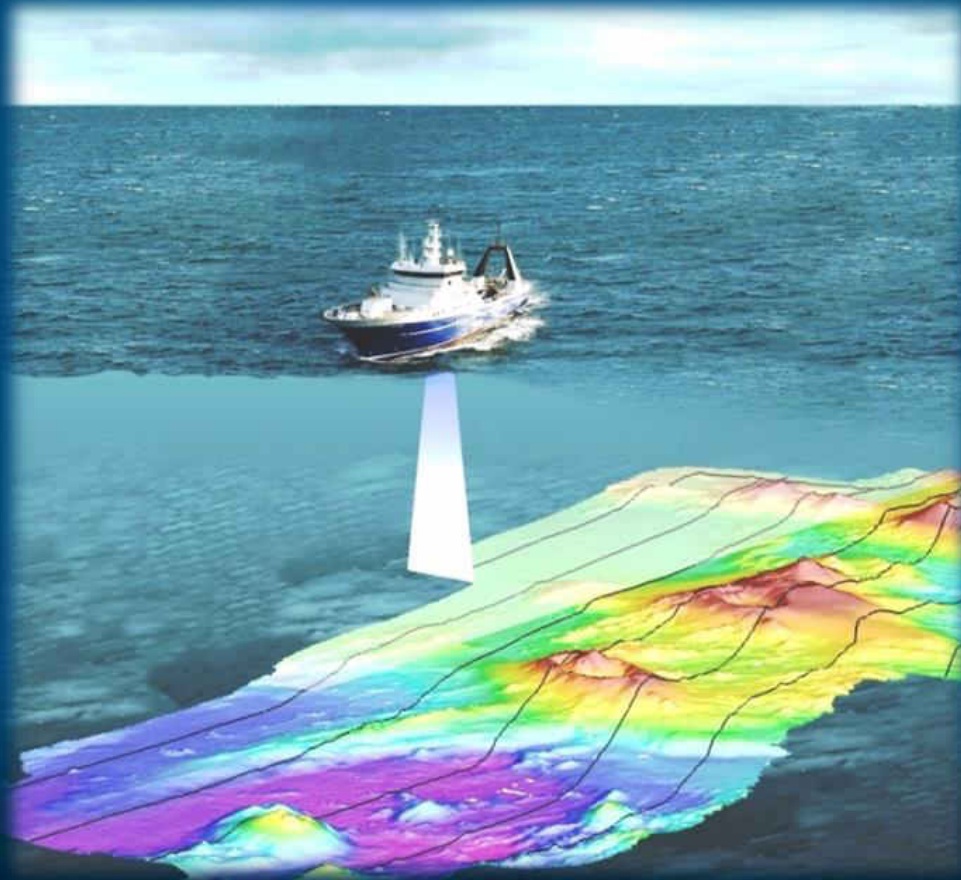
CESI S.p.A.

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I-20134 Milano - Italy
Tel: +39 02 21251
Fax: +39 02 21255440
e-mail: info@CESI.it
www.CESI.it

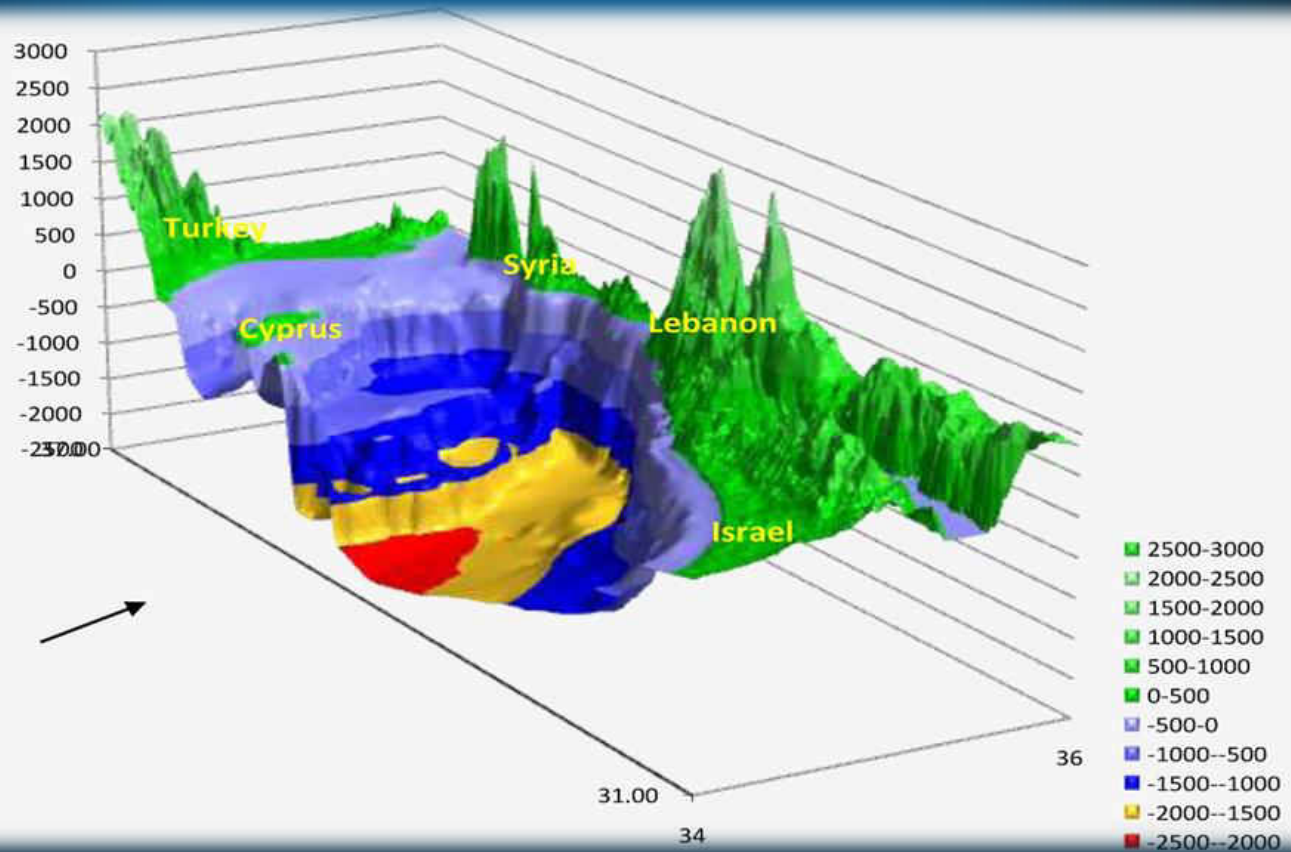
Capitale sociale € 8.550.000 interamente versato
C.F. e numero Iscrizione Reg. Imprese di Milano 00793580150
P.I. IT00793580150
N. R.E.A. 429222



Bathymetry & Routing Definition Study



The Seabed



Cable Laying Engineering

Advanced vessel Capabilities



- 9000 tons of cable
- Concurrent dual cable laying
- Depth: 3000 meters
- Vertical, heavy load cable laying
- High speed cruising

The Cable Protection



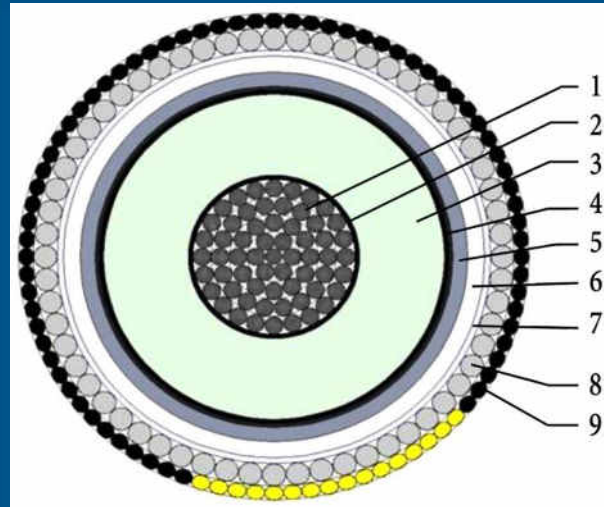
Remote Operated Vehicle (ROV) -
4000 m depth capability



Inspection ROV from
our technical team.

Cable Technology

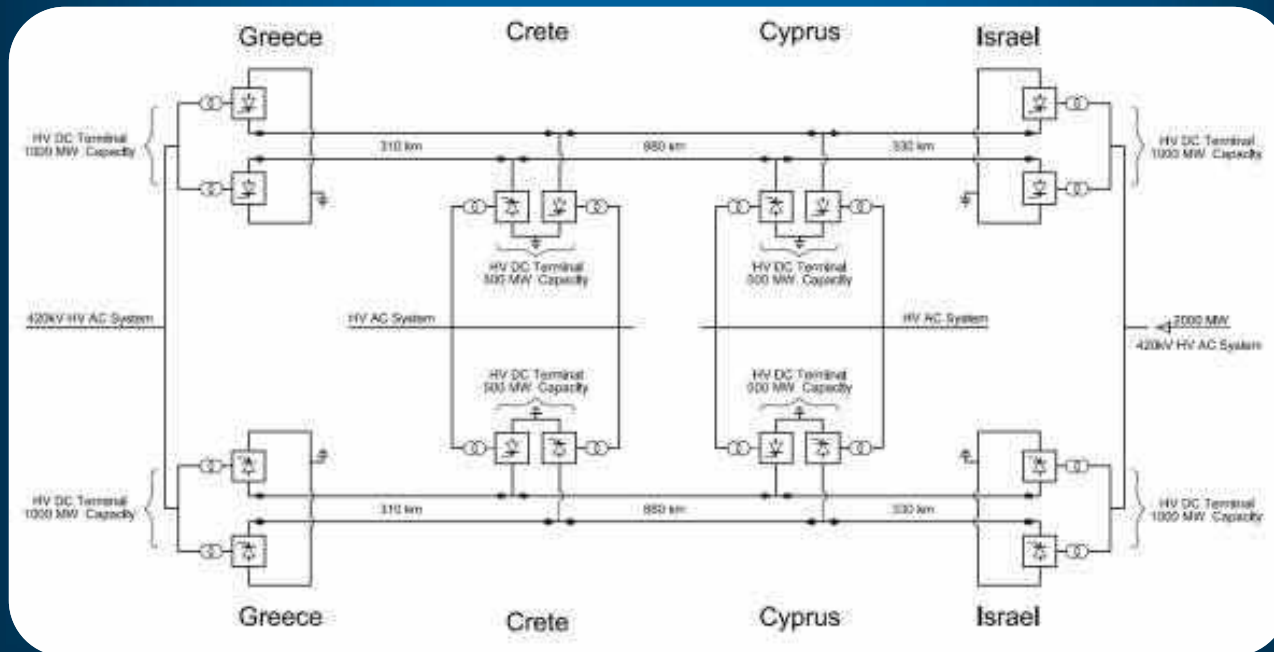
The Proposed Cable



- 1 – Stranded aluminum conductor, longitudinally sealed – Cross Section (mm²) @1000
- 2 – Semiconducting tape+ extruded layer
- 3 – XLPE based special insulation compound
- 4 – Semicond. layer + Longitudinal water penetration barrier
- 5 - Lead alloy sheath
- 6 - Polyethylene sheath
- 7 - Polypropylene bedding
- 8 – Galvanised steel wires armour
- 9 – Polypropylene serving

System Configuration - Technology

Multiterminal – Bi-Directional Operation



HVDC Land Based Infrastructure



4. Project Implementation

EuroAsia Interconnector



EuroAsia
interconnector

A European Union Project of Common Interest

Project Promoter



Other Specialized Consultants

Steering Committee & Working Groups



Project Steering Committee

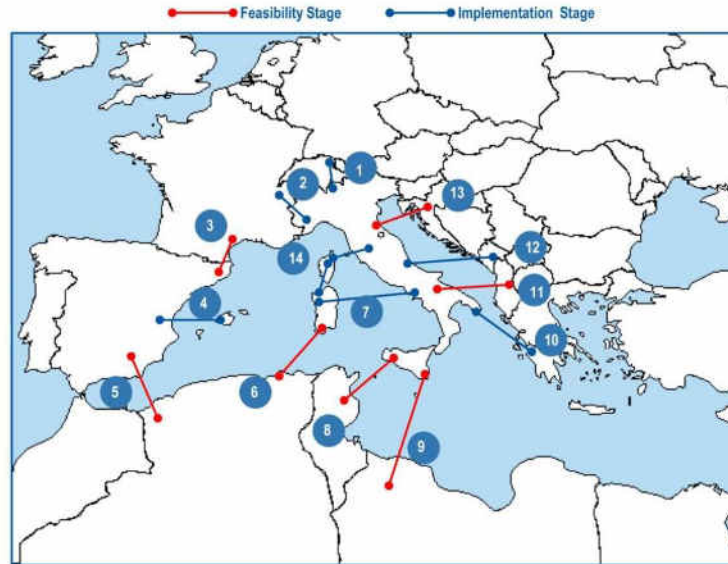


April 23, 2012 Steering Committee's 1st meeting - Nicosia

CESI



CESI in HVDC: Mediterranean Countries



- 1 Italy – Swiss HVDC link – Greenconnector
400 kV / 1000 MW / 150 km
- 2 Italy – France HVDC link – TERNA / RTE
320 kV / 1200 MW / 200 km
- 3 France – Spain HVDC link – RTE/REE
2000 MW
- 4 Spain Balears HVDC link – Red Electrica
250 kV / 400 MW / 250 km
- 5 Spain – Algeria HVDC link – REE/Sonelgaz
500 kV / 2000 MW / 280 km
- 6 Italy – Algeria HVDC link – TERNA/Sonelgaz
500 kV / 1000 MW / 350 km
- 7 Italian peninsula – Sardinia – TERNA
500 kV / 1000 MW / 435 km
- 8 Italy – Tunisia HVDC link – TERNA/STEG
400 kV / 800 MW / 180 km
- 9 Italy – Libya HVDC link – TERNA/GECOL
500 kV / 1000 MW / 530 km
- 10 Italy – Greece HVDC link – TERNA
400 kV / 500 MW / 310 km
- 11 Italy – Albania HVDC link – Moncada
400 kV / 500 MW / 150 km
- 12 Italy – Montenegro HVDC link – TERNA/CGES
500 kV / 1000 MW / 430 km
- 13 Italy – Croatia HVDC link – TERNA
- 14 Italy – Sardinia- Corse HVDC link – TERNA
200 kV / 300 MW / 420 km

- . International Reputation and reliability in the field as technical consultants and system testing
- . 30 Years of experience in HVDC systems
- . 15 submarine links

A highly qualified team with extensive experience in the energy sector in all technical, business & project financing aspects has been assembled.



Manufacturing Companies



Current Main Activities

I. Completion of the Investment Request and CBCA

Major Requirements:

- Cost Benefit Analysis (CBA - ENTSO E and CESI's studies)
- Business Plan (PwC)
- Suggestion for cross-border cost allocation (CBCA)

Article 12

Enabling investments with cross-border impacts

1. The efficiently incurred investment costs, which excludes maintenance costs, related to a project of common interest falling under the categories set out in Annex II.1(a), (b) and (d) and Annex II.2 shall be borne by the relevant TSO or the project promoters of the transmission infrastructure of the Member States to which the project provides a net positive impact, and, to the extent not covered by congestion rents

As soon as such a project has reached sufficient maturity, the project promoters, after having consulted the TSOs from the Member States to which the project provides a significant net positive impact, shall submit an investment request. That investment request shall include a request for a cross-border cost allocation and shall be submitted to all the national regulatory authorities concerned, accompanied by the following:

- (a) a project-specific cost-benefit analysis consistent with the

Current Main Activities

II. Execution of the 3 approved studies for funded by EU (Connecting Europe Facility - CEF) contracted on December the 18th:

- **Technical/Technological Study**
- **Reconnaissance Survey and**
- **Environmental Impact Assessment Studies/EIA.**

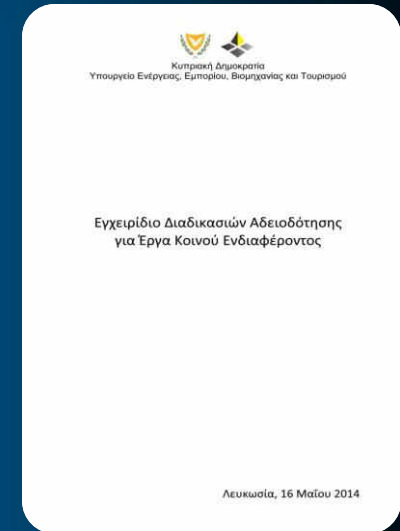
Preparation for the studies to be followed in the pre-works phase like. FEED, Geotechnical/Geophysical, Engineering a.o.



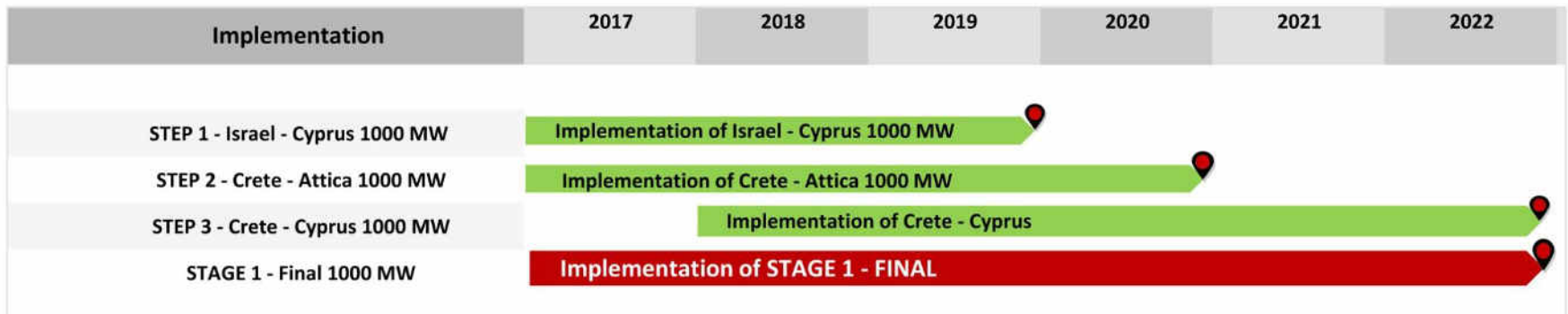
Current Main Activities

III. Licensing Procedures Cyprus , Greece (Crete), Israel

- Locations Defined and/or Secured
- Licensing Procedures have commenced



Implementation Plan - (High Level)



December 18, 2015



EuroAsia Interconnector enters final phase prior to project implementation and commissioning

Nicosia, January 11, 2016



**European Commission Vice President Maroš Šefcovič
discuss the EuroAsia Interconnector**

Limassol, January 22, 2016



**EuroAsia Interconnector starts implementation and
paves way for Global Energy Interconnector**

Nicosia, January 28, 2016



**EuroAsia Interconnector welcomes the support of the
Governments of Cyprus – Greece – Israel**



**A European Union
Project of Common Interest**