COUNCIL OF THE EUROPEAN UNION

Brussels, 29 August 2006

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CODEC 848

COVER NOTE

from:	Secretary-General of the European Commission, signed by Mr Jordi AYET PUIGARNAU, Director
date of receipt:	8 August 2006
to:	Mr Javier SOLANA, Secretary-General/High Representative
Subject:	Commission staff working document - Report from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on the implementation of the guidelines for trans-European networks in the period 2002-2004 pursuant to Article 11 of Decision 1229/2003/EC

Delegations will find attached Commission document SEC(2006) 1059.

Encl.: SEC(2006) 1059

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 7.8.2006
SEC(2006) 1059

COMMISSION STAFF WORKING DOCUMENT

Annex to the

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

ON THE IMPLEMENTATION OF THE GUIDELINES FOR TRANS-EUROPEAN ENERGY NETWORKS IN THE PERIOD 2002 –2004

Pursuant to Article 11 of Decision 1229/2003/EC

{COM(2006) 443 final}

ANNEX: Details of Implementation[1]

In this annex the axes for priority projects and their selection criteria are described in detail.

The main part of this annex is devoted to the presentation of the progress made in the implementation of electricity and gas connections during the period 2002 to 2004. The tables give a clear overview of the progress made along the priority axes for both the electricity and gas networks.

When appropriate, the impact of the Community funding is discussed.

The main results of the assessment are highlighted and summarised in the final section.

1. Priority Axes

In view of the objective of creating a Europe-wide internal energy market, the guidelines[2] focus Community support on projects with particular high European significance. This leads to the establishment - prior to the specification of executable projects – of the main corridors known as axes for priority projects.

The selection criteria for priority projects request that:

the project is of common interest and, further, shall

(a) have a significant impact on the competitive operation of the internal market, and/or

(b) strengthen security of supply in the Community by

- tackling congestion in the electricity networks and thus ensuring the 10% interconnection capacity target; or

- diversifying the sources of gas supply and setting up new gas supply routes across different countries.

1.1 Priority Axes in the Electricity Networks

Electric energy is generated and distributed mainly within the European Union. Concerning the electricity networks, the main function of the Trans-European Energy Networks policy is to create and foster a real European electricity market. For this objective, sufficient interconnection capacity between the Member States is essential. As a consequence, congestion in specific regions of the European Union needs to be removed and bottlenecks need to be eliminated. The accession of ten states to the European Union in 2004 requires additional infrastructure to enable the inclusion of these countries in the UCTE distribution network.

[1] This report is based on information received from Transmission System Operators and from Member States' experts.

[2] Op. cit. 1

This leads to the following axes for priority projects, as laid down in the guidelines:

ELECTRICITY NETWORKS

EL.1. France — Belgium — Netherlands — Germany:

electricity network reinforcements in order to resolve congestion in electricity flow through the Benelux.

EL.2. Borders of Italy with France, Austria, Slovenia and Switzerland:
increasing electricity interconnection capacities.

EL.3. France — Spain — Portugal:
increasing electricity interconnection capacities between these countries and for the Iberian peninsula and grid development in island regions.

EL.4. Greece — Balkan countries — UCTE System:
development of electricity infrastructure to connect Greece to the UCTE System.

EL.5. United Kingdom — Continental Europe and Northern Europe:
establishing/increasing electricity interconnection capacities and possible integration of offshore wind energy.

EL.6. Ireland — United Kingdom:
increasing electricity interconnection capacities and possible integration of offshore wind energy.

EL.7. Denmark — Germany — Baltic Ring (including Norway — Sweden — Finland — Denmark — Germany):
increasing electricity interconnection capacity and possible integration of offshore wind energy.

1.2 Priority Axes in the Gas Networks

Concerning natural gas, the dependence on gas imports will strongly increase in the next 20-30 years. The Trans-European Energy Networks policy aims to secure and diversify additional gas import capacity from sources in Russia, the Caspian basin region, Northern Africa and the Middle East. The related pipeline projects can be grouped into three main areas:

- Russia/Northern Europe/Baltic area;
- Algeria/North Africa and
- Caspian Sea/Middle East/Turkey /Balkans.

In addition, transport of Liquefied Natural Gas and storage are essential:

- LNG terminals and
- Underground Gas Storage.

This leads to the following axes for priority projects, as laid down in the guidelines:

GAS NETWORKS

NG.1. United Kingdom — northern continental Europe, including the Netherlands, Denmark and Germany — (with connections to Baltic Sea region countries) — Russia:

gas pipelines connecting to some of the main sources of gas in Europe, improving the interoperability of the networks, and increasing the security of supply.

NG.2. Algeria — Spain — Italy — France — northern continental Europe:
The construction of new gas pipelines from Algeria to Spain and France and to Italy, as well as increasing network capacities in and between Spain, Italy and France.

NG.3. Caspian Sea countries — Middle East — European Union:
new gas pipeline networks to the European Union from new sources, including the Turkey — Greece, Greece — Italy and Turkey — Austria gas pipelines.

NG.4. LNG terminals in Belgium, France, Spain, Portugal and Italy:
diversifying sources of supply and entry points, including LNG connections with the transmission grid.

NG.5. Underground storage in Spain, Portugal, Italy, Greece and the Baltic Sea region:
increasing capacity in Spain, Italy and the Baltic Sea Region and construction of the first facilities in Portugal and Greece.

2. Recent Progress in Implementation

This section analyses the progress that has been achieved from the year 2001 onwards.

The status is characterised by four categories, namely finalised projects, projects under construction, projects in the authorisation phase and abandoned projects. The corresponding data has been validated by the Member States and the transmission system operators.

2.1 Finalised Projects

In Table 1, the projects that went into operation after 2001 are displayed. This table comprises 45 electricity projects (a significant number in Spain, Portugal and south-east Europe) and of 16 gas projects. Fourteen of these projects were supported by contracts under the TEN-E budget.

For electricity networks, the total estimated costs are reported as 815 million Euros, which increase - with estimates concerning the missing data – to about 1.000 million Euros. This corresponds to an investment volume of about 250 million Euros per year.

For gas networks, the total estimated costs are reported as 1.446 million Euros, which increase - with estimates concerning the missing data – to about 3.000 million Euros. This corresponds to an investment volume of about 750 million Euros per year.

The TEN-E support is mostly granted for the early phases of the projects and gives support to the construction decision, especially for cross-border projects (see table 2).

Table 2 lists those cross-border projects (and those with high impact on cross-border transmission, including LNG terminals) that are priority projects and went into operation in 2003, when the new guidelines came into force, or later. The assessment of the impact of the finalised cross-border connections and those under construction is based on the capacity increase listed in table 2. For electricity connections, the impact is measured in ‘net additional capacity’, which is related to the ‘net transfer capacity’ of the country under consideration. For gas connections the capacity increase is measured in billion cubic metres per year (Bcm/a).

With the exception of south-east Europe, most of the finalised cross-border electricity connections were supported by contracts under the TEN-E line. Furthermore, one out of five cross-border gas projects received such support. In addition, the EIB allocated loans to three more gas projects, two of which are LNG projects.

2.2 Projects under Construction

Table 3 lists those projects that are currently under construction. This list comprises 14 electricity projects (a significant number in Spain and Portugal) and 11 gas projects. Nine of these projects were supported by contracts under the TEN-E budget.

For electricity networks, the total estimated costs are reported to be 1.148 million Euros, which increase - with estimates concerning the missing data – to about 1.250 million Euros.

For gas networks, the total estimated costs are reported to be 2.281 million Euros, which increase - with estimates concerning the LNG terminals - to a total amount of about 3.0 billion Euros.

Table 4 lists the cross-border projects, including LNG terminals. The assessment of the impact of the finalised cross-border connections and those under construction is based on the capacity increase listed in table 4.

It is evident that most cross-border electricity connections under construction were supported by study contracts under the TEN-E line. Furthermore, two cross-border gas projects (which increase supply to Greece) received such support. In addition, the EIB allocated loans to four more gas projects, three of which are LNG projects.

2.3 Projects in the authorisation phase

The authorisation phase of the project implementation covers a wide range of issues. In the starting phase of the project, the routing and the economic viability are key issues. The routing needs to be decided, which entails the purchase of land, resolving ownership rights and related permits. In particular, compliance with environmental legislation is essential. In the final phase of the project, the authorisation procedure tackles the actual construction. Here, the final permits at regional level and national level need to be acquired. Consequently, a rather lengthy list of tasks before the authorisation phase is completed can be expected.

Table 5 shows the list of projects in the authorisation phase. It comprises in total 80 projects, 61 electricity and 19 gas transmission projects. Twenty-nine of these projects were supported by contracts under the TEN-E budget.

Table 6 lists the cross-border projects, including LNG terminals and storage facilities.

Consequently, coordination measures with the objective of accelerating the authorisation procedure are as important as financial support.

2.4 Abandoned Projects

It is a well-known fact that projects are rarely deleted from the list of projects of common interest. Therefore, not all projects listed as completed in table 1 are taken out of the list of projects of common interest. The main reason is that often only a short link is completed, but

the larger project is still ongoing. The second reason is the long time span between first planning and eventual operation. Therefore, projects often come back with a new objective, for example a modified route. This tendency was confirmed during the validation procedure.

Therefore, the list of abandoned projects presented in Table 7 may not be complete. Nevertheless, it indicates projects that were supported under the TEN-E budget, but which were eventually abandoned.

3. Status of Trans-European Energy Network

In this chapter, the progress concerning priority projects (i.e. projects of common interest that are on one of the axes) is reviewed. Support given under the TEN-E budget line is indicated where appropriate. No support given under the TEN-E budget line is indicated when the negotiations between the Commission and the transmission system operators (TSOs) have not led to the signing of the corresponding contract.

3.1 ELECTRICITY NETWORKS

EL.1. France — Belgium — Netherlands — Germany:

The line Avelin (FR) –Avelgem (BE) upgrades the existing 400 kV line with a second circuit. Under the 2004 call, the project of completing the 400kV overhead line Avelin (F) - Avelgem (BE) with a second circuit was supported by EUR 1.046 Million. This project has important benefits for the whole Benelux region. In particular, the integration of the Dutch electricity market will be significantly improved. Community funding will contribute to the speedy finalisation of the project.

The decision to upgrade the Borssele sub-station (NL), which would increase the capacity between Germany, The Netherlands and Belgium, is expected soon. Operation is envisaged for 2008.

EL.2. Borders of Italy with France, Austria, Slovenia and Switzerland:

The projects relating to links across the Alps have experienced significant difficulties over the years.

At present, no investment decision has been made for the line Grand Île (FR)-Piossasco (IT) (TEN-E support of 0.814 Million Euro).

Consequently, studies are being requested. Such studies, in the form of a preparatory study and a feasibility study (including economic and preliminary environmental impact assessments) are conducted for a new 380 kV transmission line between Italy and Austria, through the Brenner Pass. The important element is the integration of electricity and rail transport in the tunnels (TEN-E support of 0.964 Million Euro).

Under the 2004 call, the following studies are co-financed:

Interconnection between France and Italy: The feasibility study for further increase of capacity through the existing interconnection is supported by EUR 0.588 Million.

Interconnection between Italy and Switzerland: The feasibility confirmation and basic engineering study for the line Bovisio (IT) - Magadino (CH) HVDC interconnection project is supported by EUR 0.725 Million.

Interconnection between Italy and Slovenia: Studies for strengthening the interconnection on the Italian north - eastern border, between Italy and Slovenia, and increasing the transmission capacity of the Italian - Slovenian corridor Okroglo (SLO) - Udine (IT) through a new 380 kV line, is supported by EUR 0.468 Million.

These important sections have already been completed:

The phase shifter in La Praz has been in operation since 2002 (TEN-E support of 0.34 Million Euro). The Phase shifter in Rondissone has been in operation since 2004.

The decision on the construction of the line S.Fiorano (IT)-Robbia CH) was taken in 2003 (TEN-E support of EUR 0.249 Million). Its construction was completed in January 2005.

The line Turbigo - Rho- Bovisio is under construction.

For the connection of the line from Lienz (AT) to Cordignano (IT) (which received 0,35 Million Euro TEN-E funding), implementation proved difficult. This project has still not reached the authorisation phase.

Furthermore, the following interconnections are in the permitting phase:

St. Peter – Tauern and Suedburgenland – Kainachtal line in Austria, and further in Italy

- Trino –Lacchiarella,

- Voghera-La Casella,

- Venezia Nord-Cordignano,

In conclusion, some progress has been made on increasing the electric capacity in and into Italy.

EL.3. France — Spain — Portugal:

The projects relating to links between France and Spain have experienced significant difficulties over the years. No investment decision was been made at present for the line Vic-Baixas II and Sentmenat-Bescanó. Further, the connection Baixas – Bescano – Sentmenat is in the authorisation phase.

However, important sections have been completed:

The phase shifter in Vic was completed in 2002 and the lines between Hernani – Argia and Mougerre – Cantegrit were upgraded in 2002 also.

The interconnection capacity between Spain and Portugal has been increased by the completion of:

- Cartelle-Lindoso II

- Sines - Alqueva - Balboa

Modification of the current Pego (PT) - Cedillo (ES) / Falaguiera (PT) line and Falaguiera facilities is also under construction, with operation scheduled for 2005.

Furthermore, the line between Spain and Morocco, Estrecho-Melloussa II (TEN-E support of 0.18 Million Euro) came into operation in 2003.

From 2002 onwards the following lines came into operation in Spain:

- Mesón-Cartelle II

- Cartelle-Trives II

- Cartelle – In/ Castrelo – Velle

- Trillo – Megallon

- Megallon – In/ La Sena - Penflor

- Pinar - Estrecho

- Boimente - ln/ Aluminio-Puentes I y II

- La Eliana – La Plana II

- Litoral – Rocamora

- Zanturce – Zierbana.

The lines Soto- Penagos and Nueva Escombreras – El Palmar are under construction. Their completion is scheduled for 2006 and 2005, respectively.

In Portugal, the following lines went into operation in 2002 or later:

- Picote – Pocinho line upgrading

- Pereiros – Santarem line

- Baltaha – Rio Major I and II line upgrading.

- Carrapatelo (PT) - Mourisca (PT) line (upgrading).

The Sines – Ferreira do Alentejo and Valdigem (PT) - Viseu (PT) - Anadia (PT) lines are being upgraded, with completion of both reported for 2005.

The connection Valdigem-Viseu-Anadia is under construction.

Studies are being conducted for a submarine cable between ES - Balearic Islands (TEN-E support of 0.86 Million Euro) and for directoral flows around Madrid (TEN-E support of 0.17 Million Euro).

A considerable number of projects in Spain and Portugal are in the authorisation phase, as seen in table 5.

In conclusion, significant progress is being made regarding the increase in electricity capacity in the Iberian Peninsula.

EL.4. Greece — Balkan countries — UCTE System:

The undersea cable between Greece and Italy, Puglia – Ipiros went into operation in 2002.

The study for the line Amintaio-Bitola between Greece and the former Yugoslav Republic of Macedonia (TEN-E support of 0.175 Million Euro) was supported and further the continuation Florina – Amyndeo/Amyntaio in Greece was completed in 2003.

Two lines connecting Ernestinovo (HR), Ernestinovo – Ugljevik and Ernestinovo – Mladost were completed in 2003.

The line between Bulgaria and Turkey, Maritsa East – Hamitabat was completed in 2002. A new interconnection between Bulgaria and the former Yugoslav Republic of Macedonia is under construction. The connection between Greece and the former Yugoslav Republic of Macedonia is in the authorisation phase. The decision to construct the line between Greece and Bulgaria, Philippi-Maritsa 3 (TEN-E support of 0.5 Million Euro) has not yet been taken.

The projects between Greece and Turkey, Philippi - Babaeski (TEN-E support of 0.545 Million Euro), are still in the planning phase. The line is scheduled to start operation in 2007.

Further projects are listed in table 1 and table 3.

A feasibility study is being conducted for the connections in the southern Cyclades (TEN-E support of 0.25 Million Euro).

EL.5. United Kingdom — Continental Europe and Northern Europe:

Various studies were conducted for the Britain-Netherlands interconnector Britned, Holland – south-east England (TEN-E support of 6.178 Million Euro). Under the 2004 call, the Netherlands / United Kingdom interconnector development study, including the engineering, construction contract tendering and environmental permitting, is co-financed by EUR 1.0 Million. This project is at present in the authorisation phase.

Two studies are being conducted for the interconnection between Ireland and Wales (UK), the Ireland-Wales East-West Interlink (TEN-E support of 2.35 Million Euro). The other two feasibility studies concern the submarine connection of Shetland to north-east Scotland (TEN-E support of 0.534 Million Euro).

EL.6. Ireland — United Kingdom:

Connections in Ireland were improved. The line Oldstreet-Cashla (TEN-E support of 0.70 Million Euro) went into operation in 2003 and the line Flagford-Srananagh (TEN-E support of 0.55 Million Euro) is under construction, with operation reported for 2005.

The under-sea connection Island Magee – Coylton (MOYLE) went into operation in 2002.

Studies for connections between the Republic of Ireland and Northern Ireland (TEN-E support of 2.10 Million Euro) were started in 2003.

Under the 2004 call, the review of feasibility and selection of preferred scheme for the HVDC Interconnector between Ireland and UK (Wales) is supported by EUR 0.61 Million.

EL.7. Denmark — Germany — Baltic Ring (including Norway — Sweden — Finland — Denmark — Germany):

An important north – south link in Denmark, the connection V. Hassing-Trige, was completed in 2004.

Two lines between Sweden and Norway, Jaerpstroemmen – Nea and Grunfors – Rossaga were completed in 2003.

The line between Finland and Russia, Kymi – St. Petersburg II, went into operation in 2003. In Norway, the Oslo West line was completed in 2005.

In Poland the line Dobrzen – Wielopole has come into operation in 2003.
The lines Ostrow – Plewiska, Tarnow – Krosno and Ostrow - Rogowiec/ Trebaczew are under construction. The corresponding operation date ranges from 2005 to 2008.

In Denmark, the Fyn-Sjælland cable is under consideration.

The upgrade of the cable connection between Denmark and Sweden, Konti-Skan 1, consists of the refurbishment of the old cable and came into operation in 2005.

The decision to construct the connection Harku-Espoo (ESTLINK) (TEN-E support of 0.70 Million Euro) between Finland and Estonia was made in 2003. It is under construction and its operation is scheduled to start in 2006.

Connections between Germany and Poland are in the authorisation phase, as seen in table 5, i.e. the Neuenhagen (DE) - Vierraden (DE) - Krajnik (PL) line, the third 400 kV AC connection PL – D and the installation of phase shifting transformers for the Hagenwerder-Mikulowa line.

Feasibility studies are ongoing for Petäjäskoski-Letsi, Pikkarala-Svartbyn, the lines between Finland and Sweden (TEN-E support of 0.30 Million Euro).

A feasibility study was initiated in 2001 for the Kasso – Flensburg line between Denmark and Germany (TEN-E support of 0.15 Million Euro).

Under the 2004 call, the study analysing selected variants of development and the upgrade of the interconnection between the Polish electric power system and the power systems of neighbouring countries, in order to close the Baltic Ring and increase transmission capacity within the European electricity network, is supported by EUR 0.135 Million. The technical and economic analyses of various options of intersystem co-operation between the Polish 'Polskie Sieci Elektroenergetyczne (PSE)', as executor of the study, and the neighbouring systems are being carried out, among them the possible construction of a 400 kV double-circuit line Ełk (Poland) - Alytus (Lithuania).

Also under the 2004 call, a feasibility study on the *"Synchronous Interconnection of the Power Systems of IPS/UPS (Russia) to UCTE (EU)"* is supported, dealing with all technical and operational requirements, as well as legal aspects related to the east-west synchronous interconnection between the EU and Russia. The total eligible cost: € 5.488.209 (EC contribution 75%: € 4.116.157).

Both studies are also aiming to improve integration of the Member States that acceded to the EU in 2004 into the internal electrical market, while the latter study reflects the Commission's interest in **east-west interconnection** and is also addressed in the frame of the EU-Russia energy dialogue.

The project Brunsbüttel-S Norway (VIKING) Russia (TEN-E support of 0.82 Million Euro) was cancelled because of obstacles encountered in reaching an investment decision. No investment decision has been made for the connection between Finland and Russia (i.e. Finland-Kola) and for the east-west high power link between Germany and Russia (TEN-E support of 1.80 Million Euro).

Implementation of projects in isolated regions

The progress of projects relevant for developing electricity networks in island, isolated, peripheral and ultra peripheral regions, while promoting the diversification of energy sources and enhancing the use of renewable energies as specified in annex II under point 1, is reviewed. Support given under the TEN-E budget line is indicated where appropriate.

The projects are labelled according to annex III of the guidelines (Decision No 1229/2003/EC):

1.1. Submarine cable Ireland — Wales (UK)

As described under EL. 5, two studies are being conducted for the interconnection between Ireland and Wales (UK), the Ireland-Wales East-West Interlink (TEN-E support of 2.35 Million Euro).

1.2. Reinforcement of the Ipiros (GR) — Puglia (IT) link

As described under the EL.4, the undersea cable Ipiros – Puglia has come into commercial operation. The EIB has given a loan of € 100 million and further EU support of Euro 114 Million has been granted.

1.3. Connection of the southern Cyclades (GR)

Feasibility, evaluation, technical and environmental studies regarding the connection of the southern Cycladic islands to the mainland electricity grid of Greece received TEN-E support of 0.250 Million Euro.

1.4. 30 kV underwater cable link between the islands of Faial, Pico and S. Jorge (Azores, PT)

The project in the Azores has received an EIB loan of € 70 million. The project is under construction and is scheduled for operation in 2008.

1.5. Connection and reinforcement of the grid in Terceira, Faial and S Miguel (Azores, PT)

1.6. Connection and reinforcement of the grid in Madeira (PT)

1.7. Submarine cable Sardinia (IT) — Italy mainland

Studies for the construction of a new HVDC link (500 kV - 1000 MW) concerning the interconnection between Sardinia and the Italian peninsula will receive TEN-E support of 0.725 Million Euro.

1.8. Submarine cable Corsica (FR) — Italy

1.9. Connection Italy mainland—Sicily (IT)

1.10. Doubling of the connection Sorgente (IT) — Rizziconi (IT)

1.11. New connections in the Balearic and Canary Islands (ES)

Feasibility studies for the electrical connection by submarine cable between the Balearic Islands and the Spanish peninsular network will receive TEN-E support of 0.856 Million €. It comprises of feasibility, network, and marine route survey, environmental and basic engineering studies.

Further projects:

3.49. Connections in the north-west of the United Kingdom:
The interconnection (submarine cable) between UK-Isle of Man has received TEN-E support of 1.45 Million Euro for economic feasibility and engineering studies (including sea bed survey in Phase II); and

3.50. Connections in Scotland and England with the aim of increasing the use of renewable sources in electricity generation:
Two feasibility studies concerning the submarine connection of Shetland to north-east Scotland (TEN-E support of 0.534 Million Euro).

Synopsis

The finalised connections and the connections under construction make a major contribution for removing congestion along the priority corridors. In particular the cross-border links between France and Belgium (EL.1), between Italy and Switzerland and the phase shifter between Italy and France (EL.2), several lines between Portugal and Spain (EL.3), cross-border lines in south-east Europe (EL.4), connections increasing the transmission capacity between Ireland and Northern Ireland (EL.6) and between Denmark and Germany and connections between Finland and Estonia, Finland and Russia and Sweden and Norway (EL.7) increase the transmission capacity considerably.

A relatively large number of projects was finalised or is under construction on the Iberian Peninsula and in south-east Europe.

The support for the implementation of projects in isolated regions is significant and essential.

The large number of projects in the authorisation phase implies the need for increased coordination measures, with the objective of accelerating the authorisation procedure.

3.2 GAS NETWORKS

It is emphasised that in the gas sector the necessary investments were made in the previous decade. At present, new supply lines from sources outside the EU into the European Union are planned. Considerable new investments are needed to meet the challenge of secure gas supply while import volumes strongly increase, as is forecast for the coming two decades.

This report takes stock of the start of the necessary interconnections and LNG terminals.

NG.1. United Kingdom — Northern Continental Europe, including the Netherlands, Denmark and Germany — (with connections to Baltic Sea Region countries) — Russia:

Creation and development of connections between the networks of the countries along the 'Nordic Gas Grid' was supported by a total of EUR 5.208 Million for feasibility studies started between 1996 and 2000, with the aim of setting up an integrated gas network:

- The Baltic Gas Interconnector: Germany, Denmark, Sweden.

- The Mid-Nordic gas pipeline: Norway, Sweden, Finland.

- The Nybro – Dragor gas pipeline, including a connecting pipeline to the storage at Stenlille in Denmark.

- The North European gas pipeline: Russia, Baltic Sea, Germany.

- Gas pipeline from Russia to Germany, via Latvia, Lithuania and Poland, including developing underground gas storage facilities in Latvia.

The connections necessary to increase the transport capacity from Russian resources to the European Union, via Belarus and Poland, were already defined at Essen 1994 and went into operation in the year 2000.

A section lies in Germany:

- Yagal Sud gas pipeline (between the STEGAL pipeline leading to the D, F, CH triangle).

- SUDAL East gas pipeline (between the MIDAL pipeline near the Heppenheim to Burghausen connection with the PENTA pipeline in Austria).

Feasibility studies for a gas pipeline through Denmark to Poland: Denmark – Poland in the form of a submarine pipeline were supported by EUR 3.886 Million.

Under the 2004 call, a study proposed by Poland was selected for funding. It was intended to investigate the feasibility of the two alternative projects "Amber" and "Yamal II". The maximum total costs are estimated to be € 1,824,000, of which the Commission will contribute 50%.

Under the 2004 call, the study analysing the extension of transport capacity from Emden/ OSZ (German border) to Balgzand (interconnector to the United Kingdom) were supported by EUR 0.363 Million.

NG.2. Algeria — Spain — Italy — France — Northern Continental Europe:

The construction of a gas pipeline connecting Spain to France, i.e. the interconnection pipeline between Arcangues (FR) and Irun (ES), was supported by EUR 1.042 Million. This project establishes a link between a LNG terminal and an underground storage in two Member States. The pipeline between Lussagnet and Bilbao was completed in 2005.

In Spain, the transport capacity for gas imported from Algeria was expanded as far as Cordoba.

Under the 2004 call, the study concerning the MEDGAZ Gas pipeline from Algeria directly to Spain was supported by EUR 2.0 Million.

From Libyan sources, a new pipeline Libya – Italy (Gela) came into operation in 2005.

In Italy, a new pipeline between Gela –Enna (Sicily) has been in operation since 2005.

NG.3. Caspian Sea countries — Middle East — European Union:

Regarding the Greece-Turkey pipeline, technical and environmental studies for the gas interconnector Turkey – Greece and the extension of the high pressure transmission system to the Greek/Turkish border, including the feasibility, basic and environmental studies for the Komotini - Karacabey pipeline, were supported by a total of EUR 4.573 Million.

The extension of the gas network to Komitini (GR) has been in operation since the year 2000. The Greek section of the Turkey – Greece interconnector is under construction; its completion is scheduled for 2007.

Regarding the south-east European corridor (Greece, the former Yugoslav Republic of Macedonia, Serbia, Montenegro, Bosnia, Herzegovina, Croatia, Slovenia and Austria), the opportunities for marketing and financing a gas transport corridor to south-east Europe were analysed by a comprehensive feasibility study, including a market analysis study, technical study, economic study and financing study, with TEN-E support of EUR 0.221 Million.

The technical and economic feasibility study of the construction of a gas pipeline to supply Greece and other Balkan countries via southern Italy, including a sea bed survey, was supported by EUR 1.10 Million.

Regarding the pipeline leading from resources in the Caspian Sea countries to the EU, a feasibility study for a new gas pipeline connecting Greece to Italy (interconnector Greece - Italy 'IGI') was supported by EUR 0.930 Million.

Regarding the pipeline leading from resources in the Caspian Sea region to the EU, the construction of a gas pipeline ('Nabucco Pipeline'), which will transport natural gas from the Caspian and Central Asian region via Turkey, Bulgaria, Romania, Hungary and Austria, was studied with a support of EUR 1. 6682 Million. This pipeline has entered the authorisation phase; its construction can start in the year 2008 and will be finalised in 2010.

Under the 2004 call, a feasibility study for a natural gas pipeline connecting Italy and the south-east European energy markets, the trans-Adriatic pipeline, was supported by EUR 1.026 million; and the 'Front End Engineering Phase A' for a new gas pipeline connecting Greece to

Italy (I.G.I - Interconnector Greece Italy) was supported by EUR 3.225 Million. The project has entered the authorisation phase and operation is planned for 2010.

Table 11 shows the support given by EIB and other Community funds.

NG.4. LNG terminals in Belgium, France, Spain, Portugal, and Italy:

In Spain, a new terminal in Bilbao went into operation in 2003. Further, the LNG terminal Cartagena II was completed in 2002; a further extension Cartagena III came into operation in 2005. The LNG terminal Barcelona II was completed in 2005.New terminals are under construction in Galicia and in the Valencia region. One more extension, Huelva II, is under construction with operation scheduled for 2006

In Italy, LNG terminals on the north Adriatic coast and in Brindisi are under construction with operation scheduled for 2008.

The technical, environmental and feasibility study concerning a new LNG terminal in Sines, Portugal, was supported by EUR 0.943 Million.

The design study for a new LNG re-gasification terminal in Italy was supported by EUR 1.372 Million.

Under the 2004 call, the engineering and environmental study of the construction of a LNG plant in Tenerife (Canary Islands), Spain was supported by EUR 0.80 Million.

It is emphasized that a significant number of LNG terminals are in the authorisation phase (see Table 5).

Other projects of common interest:

In Greece, the LNG terminal in Revithoussa is being extended with operation scheduled for 2008.

In the United Kingdom, a LNG terminal in Grain and became operational in 2005.

Table 11 shows the significant support given by EIB.

NG.5. Underground storage in Spain, Portugal, Italy, Greece and the Baltic Sea Region:

It is emphasised that the drilling and testing of an observation /exploration well can provide a major contribution to the finalisation of the underground storage project. Therefore, the testing and exploration phase is an important and expensive part of the construction phase.

A feasibility study concerning the underground storage at South Kavala in Greece (conversion of an offshore depleted gas field) was supported by EUR 1.0 Million. The project is in the authorisation phase.

In Spain, support from the TEN-E budget line amounted to a total of EUR 26.505 Million. Projects comprised:

- Natural gas underground storage at Cerro Gordo (North-South axis): Preliminary seismic survey.

- Natural gas underground storage at Nueva Carteya, Andalucia (new site): Feasibility study.
- Underground gas storage facility at Sariñena: Technical feasibility study, including drilling of an exploration well.
- Underground gas storage at Sariñena: Environmental study, re-entry Sariñena-1 well: drilling of Sariñena-3 & 4 wells and performing a 2D seismic campaign.
- Natural gas underground storage at Valle del Ebro (North-South axis): Preliminary seismic survey.
- Natural gas underground storage at Cuenca de Cantabria (North-South axis): Preliminary seismic survey.
- Natural gas underground storage at Brihuega (North-South axis): Drilling of one exploration well.
- Underground gas storage Brihuega: Environmental study, drilling of four delineation wells.
- Underground gas storage Brihuega: Environmental study, drilling of two exploration wells, re-entry Sta. Barbara-1 and feasibility study.
- Underground natural gas storage at Brihuega: Drilling of an exploration well and implementation of a 3D seismic campaign.
- Natural gas underground storage at Huete: Feasibility study.
- Underground gas storage at Huete: Detailed feasibility study (stages 1 and 2), including drilling of the first exploratory well and geological and seismic reservoir studies.
- Natural underground storage of gas at Jumilla and Reus (Mediterranean axis): Preliminary seismic survey.
- Underground natural gas storage at Reus: Drilling of an exploration well. The project is in the authorisation phase.

Other projects of common interest:

In Austria, support from the TEN-E budget line (total amount of EUR 3.978 Million) achieved the following:

- Expansion of the Puchkirchen underground gas storage and its connection to the MEGAL gas pipeline: Detailed feasibility and technical study for locating suitable sites and construction of wells, facilities and pipeline including seismic, geological and reservoir studies.

- The Eurostorage Baumgarten (ESB), i.e. a project to install a new underground storage facility at the cross roads of three major transit pipelines in Baumgarten: Feasibility study.

- Inter-European underground natural gas storage at Haidach: Feasibility, technical pre-engineering and economic study for the construction of an underground gas storage facility at Haidach and its connection to the existing European gas grid. The project is in the authorisation phase; its completion is scheduled for 2007.

Concerning the Kinsale area gas storage project in Ireland, the feasibility study including seismic evaluation and drilling of a trial well and further technical studies were supported by EUR 5.268 Million.

The feasibility study to discover the options for natural gas storage in Northern Ireland and the technical requirements and environmental aspects of such options were supported by EUR 0.075 Million.

In Belgium, support from the TEN-E budget line of a total amount of EUR 3.391 Million was given for the extension of the Loenhout Gas Storage, a technical study (drilling campaign) in order to evaluate results obtained from the preparatory (seismic) study.

In Denmark, support from the TEN-E budget line (total amount of EUR 5.745 Million) achieved the following:

- Extension of the natural gas underground storage at Stenlille: Three-dimensional seismic survey and a feasibility study concerning the drilling and testing of an observation/exploration well.

- Toender natural gas storage: Feasibility study.

In France, support from the TEN-E budget line amounted to a total of EUR 16.113 Million and comprised of the following:

- Study for the extension of the underground storage at Lussagnet.

- Feasibility study for the conversion of the Pecorade depleted oil field into natural gas storage.

- Development of underground storage capacities for natural gas in 'Alsace': Exploration studies for the qualification of salt caverns, including drilling a well and the exploration studies for the qualification of salt caverns (2nd phase), as suitable facilities.

- Development of underground storage capacities for natural gas in the region "Centre"

- (Project "SOLOGNE OUEST"). Exploration studies for the qualification of an aquifer storage.

- Development of underground storage capacities for natural gas in the region of Hauterives (Rhône Valley, France).

- Exploration studies for the suitability of salt caverns as storage: Underground natural gas storage in salt caverns in the south-west of France.

Implementation of Projects in isolated regions

The progress of projects relevant for introducing natural gas into new regions, mainly island, isolated, peripheral and ultra peripheral regions and developing gas networks in these regions as specified in Annex II under point 6 is reviewed. Support given under the TEN-E budget line is indicated where appropriate.

The projects are labelled according to Annex III of the guidelines (Decision No 1229/2003/EC):

6.1. Developing gas network from Belfast towards the north-west region of Northern Ireland (UK) and, if appropriate, to the west coast of Ireland.

The pipeline to the west coast of Ireland was completed in 2002.

Network from Belfast towards the north-west region of Northern Ireland (UK) is under construction with completion in 2004.

Ireland was further connected by an additional interconnection pipeline between Ireland and Scotland, which was completed in 2002; this project received TEN-E support of 150.000 EUR.

6.2. LNG in Santa Cruz de Tenerife, Canary Islands (ES)

Under the 2004 call, the Engineering and Environmental study of the construction of a LNG plant in Tenerife (Canary Islands), Spain was supported by EUR 0.80 Million.

6.3. LNG in Las Palmas de Gran Canaria (ES)

The LNG terminal is in the authorisation phase with completion scheduled for 2009.

6.4. LNG in Madeira (PT)

6.5. Development of gas network in Sweden

Under the 2004 call a study for the Scandinavian Gas Ring: "A phased integration of Norway, Sweden and Denmark to expand the competitive internal gas market and improve longer term security of supply to all three countries" was selected for funding of 1.200.000 EUR.

6.6. Connection between the Balearic Islands (ES) and the Spanish mainland

6.7. High pressure branch to Thrace (GR)

6.8. High pressure branch to Corinth (GR)

This project is in the authorisation phase.

6.9. High pressure branch to North–West Greece (GR)

6.10. Connection of Lolland (DK) and Falster (DK) islands.

It is also reported that the LNG terminal in Crete is in the authorisation phase; this project received TEN-E support of 128.987 EUR.

Synopsis

The finalised connections and the connections under construction make a major contribution to increasing gas import capacity along the priority corridors. In particular, the cross-border link for gas supplies from Algeria via Morocco to Spain (NG.2), from Turkey to Greece or Austria (NG.3) and a series of new LNG terminals (NG.4) in Spain, Italy, Greece and the United Kingdom increase the import capacity considerably.

The development of essential new gas supply routes is supported by co-financing studies.

The support for the implementation of projects in isolated regions is significant and essential.

The large number of projects being in the authorisation phase asks for increased coordination measures with the objective of accelerating the authorisation procedure.

Table 1 : Finalised connections

New TEN code Annex III	Old TEN code	Axis	Country A	Country B	Priority project (guidelines)	Contract Nr	Proposal Nr	TEN-E Financial support allocated (€)	Estima-ted Cost (M€)	Status	In opera-tion
ELECTRICITY NETWORKS											
1.2	a04		GR	IT	**Ipiros-Puglia**					F	2002
2.2	b04	EL1	FR	BE	**Avelin (FR) - Avelgem (BE) line**	04-019	E191/04	1.046.000	20	F	2005
2.4	b05		FR	DE	**Vigy (FR) - Uchtelfangen (DE) line**	98-004	E085/98	230.000	21	F	2002
2.5	b06	EL2	FR	FR	**La Praz (FR) phase tranformer**	99-004	E098/99	344.200	13	F	2002
2.6		EL2	FR	IT	**Phase shifter in Rondissone**				23	F	2004
2.8	b07	EL3	ES	ES	**Vic phase shifter**					F	2002
2.8	b07	EL3	ES	FR	**Hernani-Argia (upgrade)**					F	2002
2.8	b07	EL3	FR	ES	**Cantegrit-Mougerre (220kv)-(Arkale)**					F	2002
2.10	b10	EL3	ES	PT	**Cartelle-Lindoso II**					F	2004
2.11	b10a	EL3	PT	ES	**Sines (PT) – Alqueva (PT) – Balboa (ES)**	97-023	E065/97	538.500	39	F	2004
3.2	b16	EL7	DK	DK	**V.Hassing-Trige**				166	F	2004
3.14	c05		IT	IT	**Rizziconi (IT) – Feroleto (IT) – Laino (IT) line**	98-006	E090/98	296.300	80	F	2005
3.18	c06		ES	ES	**Boimente - ln/ Aluminio-Puentes I y II**					F	2003
3.19	c06		ES	ES	**La Eliana-La Plana II**					F	2003
3.19	c06		ES	ES	**Litoral-Rocamora II**					F	2003
3.20	c06		ES	ES	**Cartelle - ln/ Castrelo-Velle**					F	2002
3.21	c06		ES	ES	**Trillo-Magallón**					F	2002
3.23	c06		ES	ES	**Pinar-Estrecho II**					F	2002
3.26	c07		PT	PT	**Picote (PT) - Pocinho (PT) line (upgrading)**				4	F	2004
3.29	c07		PT	PT	**Sines (PT) - Ferreira do Alentejo (PT) I line (upgrading)**				3	F	2005
3.31	c07		PT	PT	**Pereiros (PT) - Zêzere (PT) Santarem (PT) lines and Zezêre facilities**				28	F	2004
3.32	c07		PT	PT	**Batalha (PT) - Rio Maior (PT) I and II lines (upgradings)**				4	F	2003
3.33	c07		PT	PT	**Carrapatelo (PT) - Mourisca (PT) line (upgrading)**				4	F	2005
3.39	c09	EL6	IE	IE	**Oldstreet-Cashla**	97-027	E069/97	685.000		F	2003
3.41	c10		ES	ES	**Cartelle-Trives II**					F	2003
3.41	c10		ES	ES	**Mesón-Cartelle II**					F	2003
3.41	c10		ES	ES	**Magallón - ln/ La Serna-Peñaflor**					F	2002
3.41	c10		ES	ES	**Santurce-Zierbana**		Cf E104/99			F	2002
3.50	a01	EL6	UK	UK	**Island Magee-Coylton (MOYLE)**				225	F	2002
4.3	d05	EL2	IT	CH	**S. Fiorano (IT) - Robbia (CH)**	01-005	E135/01	249.000	54	F	2004
4.9		EL4	BH	BH	**Kakanj - Prijedor**				1	F	2003
4.9		EL4	BH	BH	**Mostar - Gacko**				4	F	2003
4.9		EL4	BH	BH	**Mostar - Sarajevo**				7	F	2003
4.9		EL4	BH	BH	**Tuzla - Visegrad**				4	F	2003
4.10	d08	EL4	HR	BH	**Ernestinovo - Ugljevik**				11	F	2003
4.10	d08	EL4	HR	FRY	**Ernestinovo - Mladost**				11	F	2003

4.10	d08	EL4	HR	HR	**Ernestinovo - Zerjavinec**				2	F	2003
4.11		EL4	GR	GR	**Florina – Amyndeo/Amyntaio**					F	2003
4.15	d13		ES	MA	**Estrecho-Melloussa II**	01-001	E131/01	1.127.000		F	2003
4.16			PL	PL	**Dobrzen - Wielopole**				46	F	2003
4.17	d14	EL7	FI	RU	**Kymi-St.Petersburg II**	96-006	E055/96	240.000	17	F	2003
4.21	d15	EL7	SE	NO	**Järpströmmen-Nea**				1	F	2002
4.22	D15	EL7	SE	NO	**Grundfors-Rossaga**	00-002	E115/00	54.700	3	F	2003
4.23	d15		NO	NO	**Oslo West line**					F	2005
4.27		EL4	BG	TR	**Maritsa East 3 – Hamitabat**				24	F	2002
								Total:	**815**		
GAS NETWORKS											
6.1	e01		IE	IE	**Pipeline to the western coast of Ireland**				383	F	2002
6.7	e06		GR	GR	**Extension of Gas Network to Komotini**		G6/95	371.436	54	F	2000
7.1	f01		IE	UK	**Additional interconnection pipeline Ireland-Scotland**	95-019	G001/95	150.000	292	F	2002
7.4	f05	NG2	FR	ES	**Western border interconnector: Lussagnet (FR) - Bilbao (ES) pipeline**	03-014 00-013	G099/03 G061/00	1.042.000 911.350	25	F	2005
7.10	f11		AT	AT	**Bad Leonfelden(DE) - Linz(AT) pipeline**					F	2005
7.17			NL	BE	**Ravenstein - Vinkel**					F	2003
7.19	f20		DK	UK	**Connection between offshore facilities in the North Sea, or from Danish offshore to UK onshore facilities**					F	2004
8.4	e04	NG4	ES	ES	**LNG terminal Cartagena II**					F	2002
8.4	e04	NG4	ES	ES	**LNG terminal Cartagena III Extending existing terminal**					F	2005
8.6	e04	NG4	ES	ES	**LNG terminal Bilbao (new terminal)**				280	F	2003
8.8	e04	NG4	ES	ES	**LNG terminal in Barcelona (extensión)**					F	2005
9.6	e04	NG2	ES	ES	**Network in Andalucia**					F	2002
9.7	h04	NG2	DZ	ES	**Pipeline DZ-MA-ES (up to Cordoba): increasing transport capacity**					F	2004
9.18	H09		LY	IT	**Libya-Italy (Gela) new submarine pipeline**					F	2005
9.18	H09		IT	IT	**New pipeline Gela-Enna (Sicilia)**				64	F	2005
9.25	h15		NL	IT	**TENP (pipeline extension + repowering of compression units)**				348	F	2005
								Total:	**1 446**		

F = finalised; C = under construction; A = authorisation phase; D = abandoned (= deleted)

Table 2. : Finalized (2003 and later) cross-border connections

New TEN code Annex III	Old TEN code	Axis	Country A	Country B	Priority project (guidelines)	Estimated Cost (M€)	Status	Capacity increase	In operation
ELECTRICITY NETWORKS								Net MVA	
2.2	b04	EL.1	FR	BE	**Avelin (FR) - Avelgem (BE) line**	20	F	900	2005
2.6		EL2	FR	IT	**Phase shifter in Rondissone**	23	F	300	2004
2.10	b10	EL3	ES	PT	**Cartelle-Lindoso II**		F	600	2004
2.11	b10a	EL3	PT	ES	**Sines (PT) – Alqueva (PT) – Balboa (ES)**	39	F	600	2004
3.2	b16	EL7	DK	DK	**V.Hassing-Trige**	166	F	550	2004
3.39	c09	EL6	IE	IE	**Oldstreet-Cashla**		F	500	2003
4.3	d05	EL2	IT	CH	**S. Fiorano (IT) - Robbia (CH) line**	54	F	1400	2004
4.10	d08	EL4	HR	BH	**Ernestinovo - Ugljevik**	11	F	600	2003
4.10	d08	EL4	HR	FRY	**Ernestinovo - Mladost**	11	F	600	2003
4.11		EL4	GR	GR	**Florina – Amyndeo/Amyntaio**		F	200	2003
4.15	d13	EL4	ES	MA	**Estrecho-Melloussa II**		F	730	2003
4.17	d14	EL7	FI	RU	**Kymi-St.Petersburg II**	17	F	400	2003
4.22	d15	EL7	SE	NO	**Grundfors-Rossåga**	3	F	100	2003
GAS NETWORKS								B cm/a	
7.4	f05	NG2	FR	ES	**Western border interconnector: Lussagnet (FR) - Bilbao (ES) pipeline**	25	F	0.5-3	2005
7.17			NL	BE	**Ravenstein - Vinkel**		F		2003
7.19	f20		DK	UK	**Connection between offshore facilities in the North Sea, or from Danish offshore to UK onshore facilities**		F	5	2004
8.4	E04	NG4	ES	ES	**LNG terminal Cartagena III, extending existing terminal**		F	4	2005
8.6	e04	NG4	ES	ES	**LNG terminal Bilbao (new terminal)**	280	F	5	2003
8.8	E04	NG4	ES	ES	**LNG terminal in Barcelona (extension)**		F	6	2005
9.7	h04	NG2	DZ	ES	**Pipeline DZ-MA-ES (up to Cordoba): increasing transport capacity**		F	8	2004
9.18	H09		LY	IT	**Libya-Italy (Gela) new submarine pipeline**		F	8-10	2005

F = finalised; C = under construction; A = authorisation phase; D = abandoned (= deleted)

Table 3 : Connections under construction

New TEN code Annex III	Old TEN code	Axis	Country A	Country B	Priority project (guidelines)	Contract/ Decision Nr	Proposal Nr	TEN-E Financial support allocated (€)	Estimated Cost (M€)	Status	In operation
ELECTRICITY NETWORKS											
1.7			IT	IT	**Submarine cable Sardinia (IT) — Italy mainland**	C(2005) 4790	E181/04	725.000	650	C	2008
3.6	c05	EL2	IT	IT	**Turbigo (IT) – Rho – Bovisio (IT) line**				33	C	2006
3.18	c06		ES	ES	**Soto-Penagos**	95-014 97-031	E025/95 E076/97	90.000 55.000		C	2006
3.19	c06		ES	ES	**Nueva Escombreras-El Palmar**					C	2005
3.27		EL3	PT	ES/PT	**Modification of the current Pego (PT) - Cedillo (ES) / Falaguiera (PT) line and Falaguiera facilities**				3	C	2005
3.34	c07	EL3	PT	PT	**Valdigem (PT) - Viseu (PT) - Anadia (PT) line**	03-007	E171s/03	1.194.720	28	C	2006
3.40	c09	EL6	IE	IE	**Flagford-Srananagh**	98-003	E084/98	550.000		C	2004
4.11		EL4	BG	BG	**Zlatitsa – Karlovo – Plovdiv**				15	C	2007
4.11		EL4	BG	FYROM	**New interconnection between Bulgaria and FYROM Chervena Mogila (BG) – Shtip (FYROM)**				50	C	2007
4.16			PL	PL	**Ostrow - Plewiska**				100	C	2007
4.16			PL	PL	**Tarnow - Krosno**				25	C	2006
4.16			PL	PL	**Ostrow - Rogowiec/Trebaczew**				74	C	2008
4.20	d14	EL7	FI	EE	**Harku-Espoo (ESTLINK)**	99-001	E095/99	670.000	110	C	2006
4.26			HU	HU	**Győr - Szombathely**				60	C	2006
								Total:	**1 148**		
GAS NETWORKS											
6.1	e01		UK	IE	**Developing gas network from Belfast towards NW region of Northern Ireland (UK) and, if appropriate, to the western coast of Ireland**				100	C	2004
6.1	e01		UK	IE	**Network from Belfast towards NW region of Northern Ireland (UK)**				100	C	2004
8.3	e04	NG4	ES	ES	**LNG terminal Huelva II, extending existing terminal**					C	2006
8.5	e04	NG4	ES	ES	**LNG terminal Galicia (new terminal)**				320	C	2007
8.7	e04	NG4	ES	ES	**LNG terminal Valencia region (new terminal)**					C	2006
8.10	e06		GR	GR	**LNG terminal Revithoussa II (extension)**	01-013	G074/01	800.000	62	C	2008
8.11	G14	NG4	IT	IT	**LNG terminal on the North Adriatic Coast**				580	C	2008
8.14	g14	NG4	IT	IT	**LNG terminal at Brindisi**				400	C	2008
8.18			UK	UK	**LNG terminal at Isle of Grain, Kent**				190	C	2005
9.20	h10	NG3	TR	GR	**Interconnector Turkey (TR) – Greece (GR)**		G73 & G82	4.573.500	81 Greek part	C	2007
9.24	h14		RU	IT	**NTN pipeline upgrading + compression units repowering**				448	C	2008
								Total:	**2 281**		

F = finalised; C = under construction; A = authorisation phase; D = abandoned (= deleted)

Table 4 : Cross border connections under construction

New TEN code Annex III	Old TEN code	Axis	Country A	Country B	Priority project (guidelines)	Estimated Cost (M€)	Status	Capacity increase	In operation
ELECTRICITY NETWORKS								Net MVA	
3.27		EL3	PT	ES/PT	**Modification of the current Pego (PT) - Cedillo (ES) / Falaguiera (PT) line and Falaguiera facilities**	3	C	100	2005
3.40	c09	EL6	IE	IE	**Flagford-Srananagh**		C	125	2004
4.11		EL4	BG	FYROM	**New interconnection between Bulgaria and FYROM Chervena Mogila (BG) – Shtip (FYROM)**	50	C	650	2007
4.20	d14	EL7	FI	EE	**Harku-Espoo (ESTLINK)**	110	C	350	2006
GAS NETWORKS								B cm/a	
6.1	e01		UK	IE	**Network from Belfast towards NW region of Northern Ireland (UK)**	100	C	1,7	2004
8.3	e04	NG4	ES	ES	**LNG terminal Huelva II, extending existing terminal**		C	8	2006
8.5	e04	NG4	ES	ES	**LNG terminal Galicia (new terminal)**	320	C	2	2007
8.7	e04	NG4	ES	ES	**LNG terminal Valencia region (new terminal)**		C	5-6	2006
8.10	e06		GR	GR	**LNG terminal Revithoussa II (extension)**	62	C	3	2008
8.11	G14	NG4	IT	IT	**LNG terminal on the North Adriatic Coast**	580	C	9	2008
8.14	g14	NG4	IT	IT	**LNG terminal at Brindisi**	400	C	4-8	2008
8.18			UK	UK	**LNG terminal at Isle of Grain, Kent**	190	C	4	2005
9.20	h10	NG3	TR	GR	**Interconnector Turkey (TUR) – Greece (GR)**	81 only Greek part	C	3,6	2007
9.24	h14		RU	IT	**NTN pipeline upgrading + compression units repowering**	448	C	6	2008

F = finalised; C = under construction; A = authorisation phase; D = abandoned (= deleted)

Table 5 : Projects in authorization phase

New TEN code Annex III	Old TEN code	Axis	Country A	Country B	Priority project (guidelines)	Contract Nr	Proposal Nr	TEN-E Financial support allocated (€)	Estima-ted Cost (M€)	Status	In opera-tion
ELECTRICITY NETWORKS											
1.11		EL3	ES	ES	**Barcelona/valencia(ES)-Mallorca (ES)**	03-002	E161/03	856.000		A	2009
2.9	b07	EL3	ES	FR	**Bescanó-Baixas**	00-005	E118/00	394.150		A	2007
2.9	b07	EL3	FR	ES	**Baixas-Bescano-Sentmenat**	96-001	E035/96 (2 projects)	220.000		A	2007
2.9	c06	EL3	ES	ES	**Bescanó-Vic**		cf E035/96			A	2007
2.12		EL 3	PT	ES	**Valdigem (PT) – Douro Internacional (PT) – Aldeadávila (ES) line and Douro Internacional Facilities**		E196/05		75	A	2009
2.14	b.12	EL.2	AT	IT	**Lienz (AT) - Cordignano (IT) line**				75	Study	2011
2.17	b.14	EL.2	AT	DE	**St Peter (AT) - Isar (DE) line**				32	A	2020
2.18	b15	EL5	NL	UK	**Holland-S-E England**	97-006 00-004 01-002 02-004 03-001	E044/96 E117/00 E132/01 E155/02 E160/03	500.000 2.053.000 2.000.000 800.000 1.625.000	480	A A A A A	2006 2006 2006 2006 2006
3.5	c05	EL2	IT	IT	**Trino Vercellese (IT) - Lacchiarella (IT) line**				25	Study	2005
3.7	c05	EL2	IT	IT	**Voghera (IT) - La Casella (IT) line**				15	Study	2005
3.9	c05	EL2	IT	IT	**Venezia Nord (IT) - Cordignano (IT) line**				25	A	2005
3.18	c06	EL3	ES	ES	**Güeñes-Itxaso**	95-013	E024/95	125.000		A	2008
3.18	c06		ES	ES	**Enlace Asturias-Galicia**	00-006	E119/00 2 projects	527.000		A	2007
3.18	c06		ES	ES	**Mesón-Puentes**					A	2007
3.18	c06		ES	ES	**Penagos-Güeñes**	95-012 99-008	E023/95 E104/99(5 projects)	150.000 284.000		A	2007
3.18	c06		ES	ES	**Muruarte-Vitoria**					A	2008
3.19	c06		ES	ES	**Fuendetodos-Morella**					A	2007
3.19	c06		ES	ES	**Morella-La Plana**					A	2006
3.19	c06		ES	ES	**Pinilla-Ayora**					A	2007
3.20	c06		ES	ES	**Tordesillas-San Sebastián de los Reyes**					A	2006
3.20	c06		ES	ES	**Trives-Tordesillas**					A	2008
3.20	c06		ES	ES	**Brazatortas – La Paloma**					A	2009
3.20	c06		ES	ES	**Almaraz-Garrovilla**					A	2009
3.20	c06		ES	ES	**Garrovilla-Brovales**					A	2009
3.20	c06		ES	ES	**Brovales-Guillena**					A	2010
3.20	c06		ES	ES	**Arcos-Cabra**					A	2008
3.20	c06		ES	ES	**Cabra-Guadame**					A	2009
3.22	c06		ES	ES	**Morella-Teruel**					A	2008
3.28	c07	EL3	PT	PT	**Pego (PT) - Batalha (PT) line and Batalha facilities**	02-001 (financial	E150/02 support	96.631	18	A	2006
3.36	c08		GR	GR	**Thessaloniki substation**				50	A	2008
3.41	c10		ES	ES	**Abanto - ln/ Penagos-Güeñes**		Cf E104/99			A	2006
3.41	c10		ES	ES	**Abanto-Zierbana**		Cf E104/99			A	2006
3.41	c10		ES	ES	**Castejón-Muruarte**					A	2005
3.41	c10		ES	ES	**La Serna-Magallón**					A	2007
3.41	c10		ES	ES	**Aguayo-Penagos**					A	2008
3.46	c12	EL7	DE	DE	**Hamburg-Schwerin line**				50	A	2007

3.52		EL1	NL	NL	**Borssele substation (NL); Upgrade**					A	2008
3.54		EL2	AT	AT	**St. Peter - Tauern**				310	A	2010
3.55		EL2	AT	AT	**Südburgenland (AT) - Kainachtal (AT) line**				126	A	2007
4.1	d02		DE	PL	**Neuenhagen (DE) - Vierraden (DE) - Krajnik (PL) line**				100 on DE side only	A	After 2010
4.5		EL4	GR	BG	**Philippi/Nea Santa (GR) – Maritsa East 3 (BG) line**				45	A	2008
4.11	d08	EL4	GR	FYROM	**Florina (GR) - Bitola (FYROM) line**	97-014	E059/96	125.000	10	A	2006
4.12		EL4	GR	TR	**Filippi (GR) – Babaeski (TR)**				70	A	2007
4.16		EL7	DE	DE	**Halle-Schweinfurt line**				210	A	2010
4.18			DE	PL	**Hagenwerder-Mikulowa Installation of phase shifting transformers**					A	After 2010
4.18			DE	PL	**Third 400 kV AC connection PL - D**				200	A	2010
4.21	d15	EL7	SE	NO	**Järpströmmen-Nea**				66	A	2009
4.24			AT	HU	**Wien Südost - Györ**				30	A	2010
4.24			CZ	AT	**Slavetice-Dürnrohr**				50	A	2007
4.24			SK	HU	**Moldava - (Border) - Sajoivanka**				60	A	After 2011
4.24			SK	SK	**L. Mara - Medzibrod**				29	A	2010
4.24			SK	SK	**Lemesany - Moldava**				32	A	2011
4.24			SK	SK	**Lemesany - V. Kapusany-**				46	A	After 2011
4.24			SK	SK	**V.Kapusany - UA Border**				5	A	After 2011
4.24			SK	SK	**Gabcikovo - Velky Dur**				51	A	2011
4.24			SK	AT	**Stupava -Vienna south-east**				11	A	After 2014
4.24			HU	SK	**Sajoivanka- (Border) – Rimavska Sobota**				20	A	2008
4.25			HU	CR	**Peks – (Border) - Ernestinovo**				19	A	2008
4.25			HU	RO	**Bekescsaba – (Border) - Arad**				10	A	2010
4.25			HU	RO	**Bekescsaba – (Border) - Oradea**				10	A	2007
4.34		EL2	SI	SI	**Krsko – Bericevo**				34	A	2006
GAS NETWORKS											
6.3	e04	NG4	ES	ES	**LNG terminal in Las Palmas de Gran Canaria (ES)**				152	A	2009
6.8	e06		GR	GR	**Extension of Gas Network to Corinth**		G6/95	371.436	32	A	2006
7.12	g13	NG3	GR	IT	**Interconnector Greece (GR) – Italy (IT)**		G55&G92 &G114	4.771.513	966	A	2010
7.13	E06		GR	GR	**Compression station on the main pipeline in Greece**		G34	86.000	34	A	2008
7.16		NG3	AT	TR	**Corridor Austria-Turkey: renamed Nabucco Pipeline**	03-008		1.683.000	4 600	A	Finali-sed 2010
7.21	h03	NG1	DE	SE	**Baltic gas interconnector between Denmark-Germany-Sweden**				300	A	2010
8.11	g14	NG4	IT	IT	**LNG terminal near Trieste**				580	A	2008
8.14	g14	NG4	IT	IT	**LNG terminal at Taranto**				496	A	2006
8.15	g14	NG4	IT	IT	**LNG terminal at Gioia Tauro**				365	A	2006
8.16	g14	NG4	IT	IT	**LNG terminal at Livorno (offshore)**				250	A	2006
8.16	g14	NG4	IT	IT	**LNG terminal at Rosignano**	02-007	G076/02	1.372.000	270	A	2006
8.27		NG5	ES	ES	**Underground gas storage Reus (G08A)**	01-010	G66/01	432,9	180	A (given 2005)	2013
8.34	g13		AT	AT	**Underground storage Haidach (new site), including pipeline to European grid**	99-020	G047/99	741.000	250	A	2007

9.1		NG1	DK	SE, NO	**Scandinavian Gas Ring**				500	A	2010
9.4	H13	NG1	DK	LT	**UE Amber - 2nd version Niechorze - Gdansk - Suwalki – Jauniunai Former Amber project is outdated**					A	
9.14	h06		SK	SK	**Transport pipeline upgrading: Increase of the transport capacity and link to the underground storage**				40	A	2009
9.21		NG3	BG	SB	**Dupnica (BG) – Nis (Serbia) gas pipeline**				100	A	2008
9.27		NG1	DK	PL	**BalticPipe EIA (2000/5.7100/Z/00-0012)**					A	
9.31	h05	NG2	DZ	IT	**TRANSMED from Enna(Sicilia) up to Minerbio(IT) - NTN's new compression units**				539	A	2006 - 2008

F = finalised; C = under construction; A = authorisation phase; D = abandoned (= deleted)

Table 6: Cross border projects in authorization

New TEN code Annex III	Old TEN code	Axis	Country A	Country B	Priority project (guidelines)	Estimated Cost (M€)	Status	In operation
ELECTRICITY NETWORKS								
2.9	b07	EL3	ES	FR	**Bescanó-Baixas**		A	2007
2.9	b07	EL3	FR	ES	**Baixas-Bescano-Sentmenat**		A	2007
2.12		EL 3	PT	ES	**Valdigem (PT) – Douro Internacional (PT) – Aldeadávila (ES) line and Douro Internacional Facilities**	75	A	2009
2.17	b.14	EL.2	AT	DE	**St Peter (AT) - Isar (DE) line**	32	A	2020
2.18	b15	EL5	NL	UK	**Holland-S-E England**	480	A	2006
3.52		EL1	NL	NL	**Borssele substation (NL); Upgrade**		A	2008
4.1	d02		DE	PL	**Neuenhagen (DE) - Vierraden (DE) - Krajnik (PL) line**	100 on DE side only	A	After 2010
4.5		EL4	GR	BG	**Philippi/Nea Santa (GR) – Maritsa East 3 (BG) line**	45	A	2008
4.11	d08	EL4	GR	FYROM	**Florina (GR) - Bitola (FYROM) line**	10	A	2006
4.12		EL4	GR	TR	**Filippi (GR) – Babaeski (TR)**	70	A	2007
4.18			DE	PL	**Hagenwerder-Mikulowa Installation of phase shifting transformers**		A	After 2010
4.18			DE	PL	**Third 400 kV AC connection PL - D**	200	A	2010
4.21	d15	EL7	SE	NO	**Järpströmmen-Nea**	66	A	2009
4.24			AT	HU	**Wien Südost - Györ**	30	A	2010
4.24			CZ	AT	**Slavetice-Dürnrohr**	50	A	2007
4.24			SK	AT	**Stupava -Vienna south-east**	11	A	After 2014
4.24			SK	HU	**Moldava - (Border) - Sajoivanka**	60		2011
4.24			HU	SK	**Sajoivanka- (Border) – Rimavska Sobota**	20	A	2008
4.25			HU	CR	**Peks – (Border) - Ernestinovo**	19	A	2008
4.25			HU	RO	**Bekescsaba – (Border) - Arad**	10	A	2010
4.25			HU	RO	**Bekescsaba – (Border) - Oradea**	10	A	2007
GAS NETWORKS								
6.3	e04	NG4	ES	ES	**LNG terminal in Las Palmas de Gran Canaria (ES)**	152	A	2009
7.12	g13	NG3	GR	IT	**Interconnector Greece (GR) – Italy (IT)**	966	A	2010
7.16		NG3	AT	TR	**Corridor Austria-Turkey: renamed Nabucco Pipeline**	4.600	A	Finalised 2010
7.21	h03	NG1	DE	SE	**Baltic gas interconnector between Denmark-Germany-Sweden**	300	A	2010
8.11	g14	NG4	IT	IT	**LNG terminal near Trieste**	580	A	2008
8.14	g14	NG4	IT	IT	**LNG terminal at Taranto**	496	A	2006
8.15	g14	NG4	IT	IT	**LNG terminal at Gioia Tauro**	365	A	2006
8.16	g14	NG4	IT	IT	**LNG terminal at Livorno (offshore)**	250	A	2006
8.16	g14	NG4	IT	IT	**LNG terminal at Rosignano**	270	A	2006
8.27		NG5	ES	ES	**Underground gas storage Reus (G08A)**	180	A (given 2005)	2013
8.34	g13		AT	AT	**Underground storage Haidach (new site), including pipeline to European grid**	250	A	2007
9.1		NG1	DK	SE, NO	**Scandinavian Gas Ring**	500	A	2010
9.4	H13	NG1	DK	LT	**UE Amber - 2nd version Niechorze - Gdansk - Suwalki – Jauniunai Former Amber project is outdated**		A	
9.14	h06		SK	SK	**Transport pipeline upgrading: Increase of the transport capacity and link to the underground storage**	40	A	2009
9.21		NG3	BG	SB	**Dupnica (BG) – Nis (Serbia) gas pipeline**	100	A	2008
9.27		NG1	DK	PL	**BalticPipe EIA (2000/5.7100/Z/00-0012)**		A	
9.31	h05	NG2	DZ	IT	**TRANSMED from Enna(Sicilia) up to Minerbio(IT) - NTN's new compression units**	539	A	2006 -2008

F = finalised; C = under construction; A = authorisation phase; D = abandoned (= deleted)

Table 7: Abandoned projects

New TEN code Annex III	Old TEN code	Axis	Country A	Country B	Priority project (guidelines)	Contract Nr	Status	In operation
2. 8	b07	EL3	FR	ES	**Cazaril-Aragon**	95-015 95-016	D	
2.10	Co7	EL3	PT	ES	**Recarei-Pocinho-Aldeadavila**	95-018	D	2008
3.21	c06	EL.3	ES	ES	**Graus-Isona**		D	
3.46			DE	DE	**Lübeck/Siems (DE) — Görries (DE) line**		D	
3.47	c12	EL7	DE	DE	**Lübeck/Siems (DE) - Krümmel (DE) line**		D	2020
4.2	d03	EL7	DE	NO	**Brunsbüttel (DE) Southern Norway link (VIKING)**	98-005	D	2010
4.13	d10		UK	NO	**N-E England-S Norway**	97-007; 97-029; 99-012; 00-003; 01-003	D	2010
4.22 - 4.23	d15	EL7	SE	NO	**Grundfors-Rossåga**		D	2003
4.36			IT	HR	**Submarine cable Italy and Croatia**			
7.12	f13	NG3	IT	GR	**Otranto(IT)-Lamia(GR) interconnection pipeline** Replaced by the Interconnector Greece-Italy		D	
8.14	g14	NG4	IT	IT	**LNG terminal on the Ionian Coast: Incorporated into the Gioia Tauro project**		D	2006
8.14	g14	NG4	IT	IT	**LNG terminal at Corigliano: Incorporated into the Gioia Tauro project**		D	2006
8.15	g14	NG4	IT	IT	**LNG terminal on the Tyrrenian Coast : Incorporated into the Rosignano project**		D	2006
8.15	g04	NG4	IT	IT	**LNG terminal at Montalto di Castro**		D	
8.15	g14	NG4	IT	IT	**LNG terminal Tyrrenian (Lamezia Terme): Incorporated into the Gioia Tauro project**		D	2006
8.15	g14	NG4	IT	IT	**LNG terminal Tyrrenian (S. Ferdinando): Incorporated into the Gioia Tauro project**		D	2006
8.16	g14	NG4	IT	IT	**LNG terminal at Vado Ligure: Withdrawn**		D	2006
9.2	h03		NO	FI	**Mid-Nordic pipeline: Norway, Sweden, Finland**	00-011	D	
9.20	h10	NG3	GR	GR	**Extension to GR/TR border** Replaced by the Interconnector Turkey-Greece		D	
9.24	h14		RU	IT	**Russia - Italy (VOLTA)**	97-016	D	

F = finalised; C = under construction; A = authorisation phase; D = abandoned (= deleted)

4. Community funding

In this section the impact of Community funding with special attention of priority projects is discussed.

4.1 Impact of Priority Projects

Table 8 shows the TEN-E support by sector for the year 1995 to 2004. A total of about 174 million Euros was awarded. This budget has mainly been spent on co-financing studies.

The TEN-E guidelines that came into operation in June 2003 introduced the novel concept of 'axes for priority projects'. It is, therefore, of interest to find out whether the projects that were previously supported are consistent with these axes or whether a shift in priority was introduced. Table 9 shows the amount spent on priority projects in the period 2001-2004. About 64 % of the available budget was awarded to priority projects. The larger part of this amount was spent on the gas network, namely 62.8 %, and the smaller part of 37.2% was spent on the electricity network

Under the 2004 call for proposals, the priority projects selected for funding received close to 64% of the total budget. The gas network received close to 65% of the amount spent on priority projects. The break-down according to the electricity and gas priority axes is shown in table 10. Therefore, it is confirmed that the priorities set previously are in accordance with the priority axes defined in the 2003 decision.

In conclusion, the concept of focussing the support on priority projects is being implemented.

Table 8: TEN-E support by sector (in EUR million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Electricity	6.484 (18 studies)	3.730 (8 studies)	9.171 (22 studies)	10.845 (9 studies) (2 projects)	7.911 (14 studies)	7.467 (9 studies)	6.424 (6 studies)	3.463 (6 studies)	5.950 (7 studies)	10.205 (9 studies) (1 project= 1.006 m€)
Natural gaz	5.682 (6 studies)	5.177 (7 studies)	15.028 (11 studies)	7.775 (5 studies)	18.407 (12 studies)	6.300 (4 studies)	10.436 (6 studies)	11.570 (6 studies)	12.365 (5 studies) (1 project = 1.042 m€)	9.902 (8 studies)
TOTAL	12.166 (24 studies)	8.907 (15 studies)	24.199 (33 studies)	18.620 (14 studies, 2 projects)	26.318 (26 studies)	13.767 (13 studies)	16.860 (12 studies)	15.033 (12 studies)	18.315 (12 studies, 1 project)	20.107 (17 studies, 1 project)
Grand TOTAL (1995-2004)										174.292
Grand TOTAL (2001-2004)										**70.315**

Table 9: Support for Priority Projects 2001-2004

Priority Axis	TEN-E Support (in EUR Million)	%
Electricity		
EL.1.	1.046	2.3%
EL.2.	4.162	9.2%
EL.3.	1.248	2.8%
EL.4.	0.290	0.6%
EL.5.	8.015	17.8%
EL.6.	1.910	4.2%
EL.7.	0.136	0.3%
Total	16.807	37.2%
Gas		
NG.1.	1.287	2.9%
NG.2.	2.000	4.4%
NG.3.	11.437	25.4%
NG.4.	2.172	4.8%
NG.5.	11.404	25.3%
Total	28.300	62.8%
Grand total	45.107	100%

4.2 Interventions by other Community Financial Instruments

The Community financial instruments and mechanisms available to support studies or investments regarding TEN-Energy projects outside the TEN-Energy budget line are:

– the Structural Funds (in the framework of regional policy);

– the European Investment Bank (EIB);

– the European Investment Fund (EIF);

– the co-operation programmes with third countries (PHARE - TACIS - MEDA

- CARDS - Synergy).

The total amount contributed from the EIB to financing of Trans-European Energy Networks amounted to about 4 billion EUR during the period 2000-2004. In table 11 the corresponding contributions to projects that were (or still are going to be) finalised after 2000, i.e. coming into operation in the year 2001 or later, are shown. EIB loans for gas networks are 3.409

Million Euros and for electricity networks 620 million Euros. A major part of the EIB loans is dedicated to LNG terminals and to pipelines from Norway. Concerning electricity networks, EIB loans support one cross-border project and upgrades in Spain, Portugal, Italy and the United Kingdom. Further, the support given through other EU grants was about 820 Million Euros.

However, a significant fraction of the loans from the EIB and the grants from other Community sources are often dedicated to energy infrastructure in general including distribution networks and not exclusively to interconnectors. Therefore, the figures given in Table 11 are on the high side with regard to TEN-E projects. It also indicates that the coordination between EIB grants and TEN-E priorities can be improved.

In conclusion, the EIB is well suited to play a major role in integrating better the EU gas and electricity markets. Financing of the gas and electricity transmission infrastructure is already a traditional activity of the EIB, which should be pursued with regard to priority projects even more strongly in the future.

Table 10: Support for Priority Projects 2004

Priority	N° Project	TEN-E Support (in EUR Million)
Electricity		
EL.1.	2.2	1.006
EL.2.	2.6	588
EL.2.	4.34	468
EL.2.	4.4	724
EL.5.	2.18	1.000
EL.6.	1.1	610
EL.7.	4.16	136
Total		4.532
Gas		
NG.1.	7.17	363
NG.1.	9.15	925
NG.2.	9.13	2.000
NG.3.	7.12	3.225
NG.3.	9.19	1.026
NG.4.	6.2	800
Total		8.339
Grand total		12.871

Table 11: EIB loans and other Community grants

Annex III Nr.	TEN code	Axis	Country A	Country B	Priority project (guidelines)	Contract Nr	Proposal Nr	TEN-E Financial support allocated (€)	Estimated Cost (M€)	Other EU grants (M€)	EIB loan (M€)	Status	In operation
ELECTRICITY NETWORKS													
1.2	a04		GR	IT	Ipiros-Puglia					114	100	F	2002
1.4			PT	PT	Expansion of power generation and distribution in the Azores				140		70	C	2008
3.15			IT	IT	The project consists of multiple schemes aimed at maintaining and upgrading the very high voltage (VHV) and high voltage (HV) system (380kV down to 132 kV) of Italy.				620		300	C	2008
3.19			ES	ES	Reinforcement and extension of electricity transport network in Spain				1 574		150	C	2007
3.20	c06		ES	ES	Cartelle - ln/ Castrelo-Velle					1		F	2002
3.41	c10		ES	ES	Mesón-Cartelle II					2		F	2003
3.48	c13	EL6	UK	UK	Connections in Northern Ireland, in relation with the interconnections with Ireland	99-006	E101/99	295.500	20	1			2010
3.50	a01	EL6	UK	UK	Island Magee-Coylton (MOYLE)				225	81		F	2002
								Total:	**2 579**	**199**	**620**		
GAS NETWORKS													
6.1			IE	UK	Extension of the natural gas transmission network in Ireland and of the UK-Ireland Gas Interconnector				358		177	F	2003
6.1			IE	IE	Extension of the natural gas transmission network in Ireland				428		200	F	2004
6.7	e06	NG3	GR	GR	Developing gas networks including LNG terminals and storage facilities				1 417	484	208	F	1996-2001
6.7	e06		GR	GR	Extension of Gas Network to Komotini		G6/95	742.873*	54	21		F	2000
6.8	e06		GR	GR	Extension of Gas Network to Corinth		G6/95	371.436*	32	6		A	2006
7.6			PT	PT	Expansion of the natural gas transmission and distribution network in north western Portugal				154		40	C	2006
7.6			ES	ES	Reinforcement and extension of the gas transport network in Spain				976		450	C	2005-2007
7.13	e06		GR	GR	Compression station on the main pipeline in Greece		G34	86.000	34	8		A	2008
7.16		NG3	AT	TR	Corridor Austria-Turkey: renamed Nabucco Pipeline	see 9.19		1.700.000	420		170	A	After 2008
7.19			DK	NL	Construction of Danish and Dutch natural gas transport systems in the North Sea				196		67	F	2004

7.19			NO	UK	Integrated gas production and importation scheme to import Norwegian gas into the UK				7 295		500	C	2007
8.4	e04	NG4	ES	ES	LNG terminal Cartagena II					49		F	2002
8.6					Construction and operation of an LNG (Liquefied Natural Gas) import terminal in Bilbao, a priority energy project identified by the European Commission				269		200	F	2003
8.7					Construction and operation of an LNG (Liquified Natural Gas) import terminal in Sagunto, Spain.				340		255	C	2006
8.9					Construction and operation of a LNG terminal at the industrial port of Sines				252		122	F	2004
8.10	e06		GR	GR	LNG terminal Revithoussa II (extension)	01-013	G074/01	800.000	62	11		C	2008
8.14					Construction of an LNG re-gassification terminal at Brindisi in southern Italy enabling the annual import of some 8 bn m³ of natural gas sourced mainly from Egypt				520		250	C	2008
8.18			UK	UK	LNG terminal at Isle of Grain, Kent				148		43	F	2005
8.21	e06	NG5	GR	GR	Underground storage at South Kavala (conversion of an offshore depleted gas field)	95-023	G005/95	1.000.000	139	1			
8.27	g08a	NG5	ES	ES	Underground storage Murcia (new site)								
8.34	g13		AT	AT	Underground storage Haidach (new site), including pipeline to European grid	99-020	G047/99	741.000		1		A	2007
9.1			NO	DE	Development of the Asgard gas province from Kårstø, Norway, off the Norwegian coast and related transportation pipelines to Europe (Germany)				8578000		335	F	2002
9.6	h04	NG2	ES	ES	Extension N-E Spain					10			2004
9.6					Gas transportation submarine pipeline between Algeria and Europe, via Spain. 75% Article 18 project.				600		300	A	
9.20	h10	NG3	GR	GR	Extension to GR/TR border	01-012	G073/01	243.500	107	11			
9.20	h10	NG.3	TR	GR	Interconnector Turkey (TR) – Greece (GR)		G73, G 82	4,573,500	81**	20		C	2007
9.21	h11		RO	BG	Bulgaria-Romania interconnection				30		12		2010
9.21	h11		RU	GR	Expansion of transit to Greece				110		40		2009
9.21	h11		RU	SB	Serbia connection				50		20		2007
								Total:	**22 650**	**622**	**3 409**		

* This figure includes the TEN-E support for extension to both Komotini & Corinth

** The amount corresponds to the Greek part of the project only

F = finalised C = under construction A = authorisation phase

5. General Assessment

The detailed analysis of the projects that have been finalised, are under construction or are in the authorisation procedure, clearly shows that the concept of focussing the support on priority projects is being implemented.

It is observed that further co-ordination measures concerning implementation should receive a high priority for the TEN-E policy. The large number of projects in the authorisation phase implies the need for increased coordination measures with the objective of accelerating the authorisation procedure.

The detailed discussion reveals the following evidence:

Support under TEN-E:

For a very limited number of priority projects, it was justified to give TEN-E support to the construction phase.

With the exception of south-east Europe, for which few proposals were brought forward, most of the finalised cross-border electricity connections were supported by contracts under the TEN-E line. Further, one out of five cross-border gas projects received such support.

With one exception only, all cross-border electricity connections under construction were supported by contracts under the TEN-E line. Further, two cross-border gas projects (which increase supplies to Greece) received such support.

Support by the European Investment Bank:

The EIB is well suited to play a major role in integrating better the EU gas and electricity markets. Financing of the gas and electricity transmission infrastructure is already a traditional activity of the EIB, which should be pursued with regard to priority projects even more strongly in the future.

Electricity networks:

The completed connections and the connections under construction make a major contribution to removing congestion along the priority corridors. In particular, the cross-border links between France and Belgium (EL.1), between Italy and Switzerland and the phase shifter between Italy and France (EL.2), several lines between Portugal and Spain (EL.3), cross-border lines in south-east Europe (EL.4), connections increasing the transmission capacity between Ireland and Northern Ireland (EL.6), between Denmark and Germany, connections between Finland and Estonia, Finland and Russia and Sweden and Norway (EL.7) increase the transmission capacity considerably. A relatively large number of projects was finalised or is under construction on the Iberian Peninsula and in south-east Europe.

The support for the implementation of projects in isolated regions is significant and essential.

Gas networks:

The completed connections and the connections under construction make a major contribution for increasing the gas import capacity along the priority corridors. In particular the cross-

border link for gas supplies from Algeria via Morocco (NG.2), from Turkey to Greece or Austria (NG.3) and a series of new LNG terminals (NG.4) in Spain, Greece and UK increase the import capacity considerably.

The support for the implementation of projects in isolated regions is significant and essential.