

**PHARE 2004
STANDARD PROJECT FICHE**

1. Basic Information

- 1.1 CRIS Number:** PHARE 2004/016-772.03.10
- 1.2 Title:** Consolidation of the energy sector
- 1.3 Sector:** Energy
- 1.4 Location:** Romania
- 1.5 Duration:** 24 month

2. Objectives

2.1 Overall Objective(s):

The fundamental objective of this programme is to bring about restructuring and reform of the electricity and gas sectors in Romania, with the introduction of market mechanisms, private capital, and integration with Western European energy networks.

2.2 Project purpose:

- to support regulatory authorities in energy sector to put in place a transparent and predictable regulatory framework in line with the objectives set out by the approved "Road Map for the Energy Field in Romania";
- to progressively ensure the compatibility of Romanian natural gas market with the European one in the perspective of Romania's adhesion to EU.
- To complete privatisation of the electricity distribution companies
- To increase the electricity exchanges on the European and Regional market.

2.3 Accession Partnership (AP) and NPAA priority (and implementing measures envisaged by the Action Plan for AP priorities related to strengthening administrative and judicial capacity)

- The *Accession Partnership 2003* with Romania sets the following priority for the energy sector:
 - “- *strengthen the administrative capacity of the newly established bodies in the sector (in particular the energy regulators and the energy efficiency body)*
 - *continue the progressive opening of the gas and electricity market. Complete the legislative process including adoption of secondary legislation “,*
- The *Roadmap for Romania* stipulates:
 - “*Romania should take the necessary measures to ensure the full and timely implementation of legislation in the energy sector as well as strengthening the administrative capacity of the newly established bodies (in particular the energy regulators, the energy efficiency body and the nuclear safety authority)*”,
 - elimination of the present distortions for the prices of natural gas and ensuring the transparency of transactions.*
- The *National Programme for Accession of Romania to the EU* identifies short and medium-term actions to be taken in energy sector in order to align the Romanian legislation and energy infrastructure to the EU requirements.

2.4 Contribution to National Development Plan (and/or Structural Funds Development Plan/SDP)

Not applicable

2.5 Cross Border Impact

Not applicable

3. Description

3.1 Background and justification:

Sub-project 1-Consolidation of the regulatory capacity of ANRE

Based on the primary legislation passed in 1998 the regulatory authority for electricity and heat, ANRE, was established and became operational in March 1999. The Electricity Law no. 318/2003 was approved by the Parliament and published in Romanian Official Gazette no.511/16.07.2003.

ANRE has made substantial progress in terms of building the framework of regulations necessary for the development of the market, and the principal 'building blocks' of that regulation – the commercial code, the transmission grid code, the distribution code, the electricity metering code, the rules for connecting to the networks and the framework of licences and authorisations - are all in place. From the ANRE's founding, the institution was heavily involved in the restructuring and unbundling of the power sector through its activities: licences and authorisations, contracts between the newly established entities, contractual disputes resolutions, prices and tariffs, removal of the cross subsidies and covering the justified costs of the new entities.

ANRE is a member of the regional regulators association, ERRA, which has been established to foster cooperation between regulators in Central and Eastern Europe and the CIS and is also a member of the CEER Working Group for the development of South East Europe Energy Regulation.

The Authority has evolved from the initial founding staff of 12 in March 1999 to a present staffing level of 78, all based in Bucharest.

For the 2003-2015 horizon, the Romanian electricity market, as already was stipulated in the *Road Map for Energy Field in Romania* approved by the Government Decision no. 890/2003, will know a transition from the central scheduling wholesale power market design to a self-scheduling with a compulsory market design and finally to a self-scheduling with a voluntary market design. The transition process will include the introduction of Initial Contracts (replacing the present portfolio contracts) and Option Contracts, development of the day-ahead market (at the beginning compulsory and later voluntary), opening of a real time balancing market and introduction of a capacity contracting obligation. A set of energy accounting and settlement arrangements will be introduced to deal with all trades. The emergence of derivative markets and a suitable clearing system are envisaged. A further integration in the Internal Electricity Market of the European Union is expected.

For the same time horizon it is envisaged to have the following producers: thermal producers, one hydro producer, Nuclearelectrica for nuclear generation, cogeneration producers, other producers and self-producers.

OPCOM will act as a power exchange, part of the regional market. Transelectrica will continue to carry out HV transmission and the operation of the real-time balancing market.

All the eight regional distribution entities will be offered for privatisation. The accounts for the distribution activity will be fully separated from the supply activity and the legal separation will be implemented following the evolution of the provisions of the EU directives.

In July 2007 the electricity market will be fully opened.

The transmission and distribution activities will be regulated; the TSO and DSOs will have regulated revenues through a price -cap mechanism for a five years period.

While very good progress has been made in developing both the institution of the regulator and the body of regulations required for power market liberalization, a further project of technical assistance is required in order to support power sector reforms through the development of a competitive power market and to comply with the ambitious program of reforms set in the Road map.

Sub-project 2- Consolidation of the regulatory capacity of ANRGN

At present, in Romania the reorganization and restructuring of natural gas sector is developing, adopting the principles of market economy. The legislative framework has been improved, and by the Government Decision no. 41/2000, amended by Law no. 791/2001, the National Regulatory Authority in Natural Gas Sector (ANRGN) has been established, as public autonomous institution, in coordination of the Prime Minister.

Mission of ANRGN is to elaborate, apply and monitor the regulatory system, necessary to functioning of natural gas sector and market on terms of efficiency, safety, competition, transparency and consumers' and environment protection.

Since its establishment, ANRGN has been recognized as an important structure at the level of correct understanding of economic efficiency in natural gas sector and also as a fair and correct regulator that wishes to ensure the necessary balance during the stage of vital changes that our country is passing over.

The need to place ANRGN's entire activity within the general context of the effort regarding European accession lead to an augmentation of the actions toward implementation of universally accepted principles and, in this regard, both the monitoring of the implementation of the existing regulations, and promoting the necessary regulations for ensuring the service quality represent basic coordinates of the actions that ANRGN carried out.

Five territorial branches of ANRGN have been established, having headquarters in the following cities: Bucharest, Arad, Târgu Mureş, Iaşi and Constanţa. The objective of territorial branches is effectively to control and verify gas companies on complying with

legal framework, to contribute to the harmonization of relationships between gas companies and consumers and to educate the consumers.

Natural gas sector in Romania was unbundled during the period 2000-2003, from a monopolistic structure, represented by a single operator on natural gas market, vertically integrated and state owned, into:

- 3 producers, from which 2 entirely or majority state owned, holders of oil agreements, covering about 75% from total consumption of natural gas in Romania, and one private owned;
- 1 company for the transmission, dispatching and transit of natural gas, state owned, holding a supply license for the quantities of natural gas obtained as a payment for transit services;
- 1 state owned operator, integrated within producer SNGN Romgaz, which operates six underground deposits for natural gas, and 1 joint-venture operator that operates the seventh deposit. The capacity of these seven deposits is 2,5 billion c.m. These deposits are located as follows: three in Transylvania, three in Muntenia and one in Oltenia, at depth between 600 and 2,000 meters;
- 18 companies for distribution and/or supplying of natural gas to captive consumers, from which: two entirely state owned and a market share of 98%, 15 companies mostly or entirely private owned and a market share of 1,75 % and a vertically integrated company, mostly state owned and a market share of 0,25%;
- 30 suppliers, licensed for the whole territory of the country.

Starting with August 1st, 2001, ANRGN established the initial opening degree of the internal natural gas market, representing 10% from total consumption in the year 2000. As a consequence of this opening, and according to Regulation for accrediting the eligible consumers, the Central List of eligible consumers was established. Gradual increase of the opening degree for non-household customers continued yearly to 25% in 2002, 30% in 2003, 40% in 2004 and full liberalisation is envisaged on January 1st, 2007. For household customers, natural gas market shall be fully liberalized up to July 1st, 2007, according to the provisions of the Directive 2003/55/EC.

In September 2003, the final price of natural gas was for the first time differentiated by categories of consumers (household and non-household). This measure represents a first step toward perfection of tariff system by categories of customers of natural gas, stated both in Economic Program for the year 2003, approved by Government Decision no. 673/2003, and in the Action Plan 2003-2004 of the Government Program, approved by Government Decision no. 160/2003.

Significant changes will occur in the future as a result of implementing the measures contained by The Energy Road Map of Romania, approved by Government Decision no. 890/2003.

All these changes will take place within the context of the establishment of a regional gas market for South Eastern Europe, set up in The Athens Memorandum.

The increasing heterogeneity of Romanian gas companies will impose to ANRGN to evaluate more accurately the annual activity of these companies, by analysing the indicators reported by them.

The purpose of this evaluation is to increase the performance of gas companies, to ensure consumers' protection and to improve the quality of specific services in natural gas sector.

Also, ANRGN will need a strong administrative capacity in order to identify and correct the dis-functionalities that may appear on internal gas market and to participate in solving the structural problems that affect the natural gas sector.

Sub-project 3. Further electricity distribution privatisation

As part of the overall economic policy of the Government, the restructuring and modernisation of the energy sector is a key priority. The structural adjustment actions of the government include accelerating privatisation, with the objective to attract strategic investors and maximizing sale proceeds.

According to the Government Decision nr. 1342/2001, S.C. Electrica S.A. was restructured into 8 regional electricity distribution companies.

Under Phare Programme 1998, two regional electricity distribution companies (Dobrogea and Banat) were selected as the beneficiaries of a project for providing technical assistance for privatisation (RO9805.01.03). For these electricity distribution companies the final negotiations with ENEL are ongoing.

A further two regional electricity distribution companies were selected from the 6 companies remaining for privatisation (Moldova and Oltenia) under Phare Project RO0005.01.03. These two companies were selected based on the information provided by the sector analysis performed by the consultants recruited under the RO9805.01-03 project. The criteria for selection, and the selection itself, were agreed by the European Commission and the Ministry of Economy and Trade.

For another electricity distribution company (Muntenia Sud), the technical assistance for privatisation is financed by S.C. Electrica S.A.

In order to complete the privatisation in the electricity distribution sector and for the liberalisation of this sector, the privatisation of the remaining three regional electricity distribution companies (Transilvania Nord, Transilvania Sud and Muntenia Nord) is necessary.

According to the Road Map approved by the Government Decision 890/2003 the privatisation process of the electricity distribution companies has to be completed by 2007.

Sub-project 4. Construction of the over head line 400 kV single circuit Arad – Nadab.

The European power industry is facing nowadays the challenge of developing the electricity market at the international level. In the last years the European Commission and UCTE perceived the interconnection constraints as the main barrier to create a fully-functional European internal power market. Therefore UCTE has constantly focused on the development of the interconnection capacities between national transmission grids.

After the resynchronisation of the two UCTE zones and co-related to the privatisation process in the Romanian power sector forecasts indicate that the

interconnection between Romanian and Hungarian power systems will face load flows exceeding the actual capacity limits.

Therefore the Romanian and Hungarian TSOs are looking forward to develop the existing interconnection tie and have decided to build a new interconnection 400 kV OHL. In order to fully exploit the potential of this new interconnection link the structure of the project should be more complex consisting actually of 3 new 400 kV OHL and one 400 kV substation, as follows:

- 400 kV OHL Oradea – Nădab: ~ 75 km
- 400 kV Nădab (RO) – Bekescsaba (HU): ~ 60 km
- 400 kV Nădab – Arad: ~35 km
- 400 kV substation in Nădab: 3 bays

Also, some small developments are necessary in 400 kV Arad and Oradea substations.

The above investment in the electricity transmission project is a joint project to be funded by EBRD, Phare, MVM and Transelectrica. The EBRD loan is currently in the final phase of negotiation and has passed initial review by the bank.

On the Romanian territory, the 400 kV OHLs Oradea-Nadab and Nadab - Hungarian border (with the connexion to the Hungarian power system to 400 kV Bekescsaba substation) will be financed by an EBRD loan to Transelectrica. MVM will finance the 400kV OHL between the Hungarian border and Bekescsaba substation.

The 400 kV OHL Nadab - Arad and the 400 kV Nadab substation investment will be a **parallel co-financing** by PHARE and Transelectrica's own contribution.

Adopting this project structure will allow both power systems (Romanian and Hungarian) to maximize the economic and technical benefits provided by the new interconnection.

The joint analysis performed by C.N. Transelectrica S.A. and MVM Rt proved this project as economically efficient (6 – 7 years for the investment payback) while increasing the safety for both Romanian and Hungarian power systems operation.

The fulfilment of this project, allowing the direct link between Arad and Oradea substations through the new Nădab substation, will significantly increase the net transfer capacity between the Romanian and the Hungarian power systems after the resynchronisation of the 2 UCTE zones is put in operation. This new interconnection will assure the back up to the existing interconnection between Arad (Ro) and Sandorfalva (Hu). The construction of the 400 kV Nadab substation and the 400 kV OHL Arad - Nadab will allow Transelectrica to close the internal transmission ring in the Romanian northwest area and increase the reliability of the system operation.

Transelectrica's substantiating studies have pointed out the following advantages for the Romanian and Hungarian power systems, by carrying out 400 kV Nadab substation and the 400 kV Arad-Nadab OHL:

- Decrease of non-scheduled transits from Romania through Hungarian PS
- Increase of the Romania –Hungary interconnection reliability of about 3 times
- Creation of favourable conditions for taking out of operation the OHL in the area for maintenance activities

to further on install the second interconnection circuit

- Significant increase of the operating flexibility. Depending on the operational requirements, one line section can be disconnected without affecting the interconnection
- Creation of a support node for the future „Tarnita Hydropower pump storage”

We mention that recently was started the process for the privatisation of 2 large power plants located in the Southern part of the Romanian power system (Turceni and Rovinari). At the end of this project we may presume that these power producers will play a significantly increased role on the both domestic and international electricity market.

In the same environment, in the neighbourhood region (Tarnita) it is proposed to be built a large (~1000 MW) pump storage hydro power plant. The existence of a strong link between Romanian power system and Central European power system will provide great incentives for this type of power producer.

Also, nowadays is in full development the process for the synchronisation of the power systems from the former CIS and the UCTE power systems, forecasted to be in operation in 5 ÷ 7 years. Following the synchronisation significant load flows are expected from East to West.

The assessed benefits for the new interconnection line project are:

- increasing the transit capacity through Romanian power system (both South → West and West → South) with about 500 MW.
- better means to manage the power flows between Romanian and Hungarian power systems in order to minimize (eliminate) the required payments for these situations.
- Increasing the safety of the power system in the Oradea area.

We mention that nowadays Oradea is an industrialized area with an important load and low production capacities. Also, the mid-term and long-term forecasts show a further development of the consumption in this area.

3.2 Results:

Sub-project 1-Consolidation of the regulatory capacity of ANRE

- the Romanian wholesale and retail power market designs supporting the integration of the national power market in the Electricity Market of the European Union,
- ANRE's capacity as a regulatory authority strengthened in avoiding any abuse of a dominant position, in particular to the detriment of consumers, and any predatory behaviour, in close cooperation with Competition Council,
- Mechanisms to ensure long term security of supply in the event that sufficient power generation capacity is not built on the basis of the authorization procedure, in line with the EU practice,
- An improved customer's protection activity,
- Well-trained regulatory staff.

Sub-project 2- Consolidation of the regulatory capacity of ANRGN

- Harmonization of regulations in natural gas sector with those in EU, ensuring transparency and non-discrimination in applying correctly the decision and regulatory document, for creating and developing a competitive market, to offer services on quality and economic efficiency terms;

- Common minimum standards for companies acting in natural gas sector;
- A better protection of natural gas consumers and improving the specific services in natural gas sector;
- Measures and mechanisms in place to ensure that eligible consumers have a real and effective right to choose their supplier;
- Diversification of contractual relationships on the free-market.

Sub-project 3. Further electricity distribution privatisation

- Privatisation of the remaining three electricity regional distribution companies;

Sub-project 4. Construction of the overhead line 400 kV single circuit Arad – Nadab.

- Construction of the overhead line 400 kV Arad – Nadab, single circuit.

3.3 Activities:

Sub-project 1- Consolidation of the regulatory capacity of ANRE

Well-functioning wholesale and retail power markets are an integral component of Romania's strategy to attract and sustain private sector participation in power sector renewal and to develop a more efficient and increasingly competitive power sector. The success of Romania's power reform will be greatly influenced by ANRE's ability to develop fair and transparent rules for a competitive design of the electricity market, in line with the EU legislation requirements.

The project will provide technical assistance for:

1. Transition from restrained eligibility to full liberalization of retail market

The restructuring of the electricity sector is designed to encourage competition in the wholesale market. To fulfil the commitment of "real choice for retail customers", competition in the retail sector must develop. This means removing the franchise to give every customer, regardless of the level of electricity use, a choice of service provider.

Romania will operate a wholesale market with hourly pricing. The eligible customers taking supplies from retailers will require an hourly meter. Arguments put forward for metering are that it allows customers to respond directly to pricing signals, giving them the opportunity to implement demand management strategies.

For the majority of small and domestic customers, installing an hourly meter may not be an economic option for some time to come, at least based on today's costing. On the other hand, in the transition period there may be customers who want metering but who are unable, because of installation delays or meter non-availability, to have a meter supplied immediately. These situations impose constraints on the uptake of competitive supply. In the absence of full hourly metering, some alternative will be needed to ensure that customers wishing to change retailer are not disadvantaged. Load profiling would seem to be such an alternative.

Where profiles are predictable, deemed load profiles together with sampling (to audit consumption) could be used satisfactorily as an interim measure in the contestable market.

On a macro level, there are various approaches to using profiles in the settlement procedure. These are either assigning profiles to all, or assigning profiles only to those

who choose other retailer than the retailer in their distribution area. As with requiring hourly metering, in this process an advantage may be given to the incumbent retailer. All these issues must be considered.

The consultant should examine the feasibility of load profiling as an interim or more permanent solution for Romanian consumers. The consultant should advise on determination and the choice of profiles, the introduction of a mechanism for dispute resolution, details regarding how often meters are read.

Other aspects to be considered by the consultant are related to the difference between hourly quantities transacted on the wholesale market by a supplier and the aggregated consumption of the customers supplied by respective supplier. Both the algorithms for the establishment of these quantities (differences) and the procedures for the treatment on the hourly market of these differences should be analysed by the consultant.

2. Mechanisms to identify and prevent market power and to avoid any abuse of a dominant position

Under this task the consultant will

- design the procedure to identify, prevent, monitor and control the market power on the wholesale electricity market.
- set out the necessary data to be gathered and will implement the data gathering system.

3. Security of supply

Sub-task 3.1. Rules for monitoring security of supply

The consultant will:

- design the procedure for monitoring security of supply
- set out the necessary data to be gathered and will implement the data gathering system
- propose a content for the report regarding security of supply in line with the European Commission requirements.

Sub-task 3.2. Mechanisms to ensure security of supply

The consultant will:

- evaluate the existing mechanisms on wholesale electricity market to ensure security of supply (ex. capacity payments),
- propose ways to ensure security of supply by demand-side measures : main provisions for interruptible supply contract, tariffs design for customers accepting interruptions,
- design procedures and rules for organization, monitoring and control the tendering procedure (or an equivalent transparent, non-discriminatory process) for new generation capacities in the event that sufficient electricity generation capacity is not built on the basis of the authorization procedure.

4. Tariffs

Sub-task 4.1. The evaluation of new investments for transmission and distribution networks

The report of consultant will establish criteria for the regulator to accept or reject new investments for transmission and distribution networks, based on the analysis of their opportunity, efficiency and evaluation of the impact against tariffs taking into consideration that the network tariffs are established based on a cap methodology. The consultant will also provide models, software and training.

Sub-task 4.2 Regulatory accounts

The consultant will review the existing regulatory accounts in order to ensure the necessary monitor activities for applying the price cap methodology to distribution activity and revenue cap for transmission.

The consultant report will present at minimum a review of international practice of regulatory accounts, will assess the accounting framework conditions in Romania and will propose the regulatory accounts for transmission and distribution activities and the specific rules to records data and to report the data to the regulator.

Sub-task 4.3. Price elasticity studies – customer's behaviour

The market opening degree will increase gradually until 2007. Taking into account the impact of new investment needed at distribution and transmission level but also at generation, the impact of environment issues of increasing fuel prices, cross-border trades and others, it is expected that the tariffs at the end user will increase. As a result, the customers might act unexpectedly and the forecast of demand could be very inaccurate. This could have a negative impact upon the revenues of the economic agents within the sector and of course upon the tariffs predictability. That's why it is a need to have such studies as soon as possible.

The reaction of the costumers to price movements is important and strictly related with investment in both transmission and distribution. This reaction of the customers is also used to determine after 1st of January 2007 the requirements for supplier of the last resort. Customer's behaviour is dealing with load curve and load pattern. Load curve and load pattern are also related with investment plan in distribution and transmission grid. It may be possible to use some of the results from task 1.

The consultant will report the followings:

- a review of internationally known practice to study elasticity of prices;
- recommend one to three methods to be applied in Romania with a in-depth descriptions of these methods;
- describe in detail a statistical methodology to build load curve at different voltage level for electricity distribution systems and transmission system.

5. Customer's protection

The consultant will evaluate the activity of the ANRE customer's protection department and will propose specific procedures and rules for this activity, in line with EC requirements. The consultant will design and implement an information system for customer's complaints management and will analyse the opportunity to establish inside the regulatory authority a call centre.

6. Updated training for ANRE's staff

The consultants should examine (based on discussions with the management and staff of ANRE) the training needs within the time frame of this project, and based on this analysis should propose a training program for each task of the project.

Sub-project 2- Consolidation of the regulatory capacity of ANRGN

The implementation of this project will strengthen the administrative capacity of ANRGN to observe and action for correcting the difficulties that could arise on internal market of natural gas, and will help solving the structural problems of natural gas sector.

In order to achieve this objective, technical assistance is necessary to increase the capacity of ANRGN to analyse, interpret and synthesize data and information provided by the management information system within the process of monitoring the natural gas market in Romania.

Activities:

Task 1. Development of Gas Network Code

ANRGN needs technical assistance in order to develop the Gas Network Code. In this context, the consultant will undertake the following activities:

- Detailed description and regulation of the System Operator's functions, distinguishing between operation under normal and emergency conditions;
- Description of all services provided by infrastructure operators;
- Definition of mechanisms for allocation of capacity;
- Drafting procedures for nomination;
- Drafting procedure books and procedural norms for management of crisis situations that may appear on the market;
- Establishing procedures for balancing the natural gas system;
- Establishing procedures to be followed for communication between the System Operator, other operators and the users;
- Development of detailed rules on the information to be exchanged between suppliers and distribution companies in relation with customer migrations;
- Procedures for updating of the Network Code.

Task 2. The organisation of specialised hub-type gas market in Romania

For this task, the following activities will be carried out:

- Technical and functional analysis of the National Transmission System in order to identify the possible transaction centres (the hubs);
- The organisation of this specific market, by establishing the legal framework for hubs functioning. It is important to address the following two issues: definition of procedures and rules for physical trade with natural gas and draft framework contracts to be applied within hubs. The framework contracts shall contain provisions regarding the maximisation of partners' legal rights, the systems of risk identification in real time, the policies of risk management and the administrative procedures.

Task 3. Improvement of the performance of natural gas sector and of the quality of specific services - licences compliance monitoring system.

This task's activities will provide technical assistance to ANRGN for:

- Definition of performance indicators and criteria for economic activity developed by licensed gas companies;
- Definition of performance indicators for quality of services in natural gas sector;
- Building and implementing an electronic database and a dedicated software in order to process in real time all the information regarding the performance

indicators;

- Recommendations for the establishment of the minimum acceptable level of the above defined indicators and the signification of this level;
- The models for licensees annual performance/activity reporting and the annual financial reporting, as well as Guidelines for ANRGN in the evaluation of monitoring reports, including:
 - Licensees' model reporting requirement forms, reporting frequency and reporting methods.
 - Security issues regarding the commercial confidentiality of some historical data, balancing the need for transparent reporting of compliance (i.e. the open publication of compliance reports) with the commercial sensitivities of the licensees in appropriate areas.
- Provision of the necessary tools for comparative assessment of performance indicators realised by different gas companies from Romania.

Task 4. Regulatory framework for shipping of natural gas

For this task, the following activities are necessary:

- Definition of gas shipper;
- Presenting case studies referring to gas shippers' regulatory regime in two EU Member States;
- Drafting the standard conditions for gas shippers' licence, taking into account the European experience and the characteristics of Romanian transmission system;
- Drafting the rules for transactions with capacities on secondary market (both for transport and underground storage). The outcome of this activity must specify if this type of transactions is allowed, under which terms and under which forms these transactions are performed etc.
- Recommendations on further development of regulatory framework for natural gas shipping activity.

Task 5. Improvement of the skills of ANRGN staff through a training program

The training program shall be correlated with the themes addressed by this project and will consists of courses, seminars, workshops, etc.

Sub-project 3. Further electricity distribution privatisation

The Romanian government has decided to privatise the 8 existing electricity distribution companies. While privatisation is not by itself a panacea, it is clear that the market discipline, which strategic investors in an electricity distribution company would impose, will contribute to improve collections and help to attract funding for financing investments required for the modernisation and refurbishment of the electricity distribution network.

A pilot project to assist the privatisation process of the first two electricity distribution companies was funded under the Phare 1998 Programme (RO9805.01.03) for S.C. Electrica Dobrogea S.A. and S.C. Electrica Banat S.A. Phare 2000 also funded assistance for privatising two additional companies.

The privatisation advisers funded under the Phare 2004 sub-project will have a mandate for the privatisation of the remaining electricity distribution companies (Transilvania Nord, Transilvania Sud and Muntenia Nord). The Phare funds will cover the

retainer fee of the advisers, while the Ministry of Economy and Trade will pay a separate success fee from the proceeds of the privatisation transaction.

Activities:

- Technical assistance from privatisation advisers (requiring input from investment bankers, lawyers, financial advisers and engineers) to prepare three electricity distribution companies for privatisation (Transilvania Nord, Transilvania Sud and Muntenia Nord) and to complete the privatisation transaction. This will include advising the Ministry of Economy and Trade on the negotiation and closing of the sale.

Sub-project 4. Construction of the overhead line 400 kV single circuit Arad – Nadab.

The following activities should be financed by Phare:

Activity 1 - Technical assistance component

Taking into account the need for timely implementation of this overall project, technical assistance will be required for the following tasks:

- Review of the technical design for the proposed investment prepared by Transelectrica
- Review of the technical specifications prepared by Transelectrica and prepare the tender documents (having FIDIC conditions of contract) for the works component (activity 2) including the necessary equipment for the overhead line 400 kV single circuit Arad – Nadab.
- Assistance in tendering and contracting process
- Assistance during the implementation of the works contract by employing a “FIDIC Engineer” and carrying out the supervision of the works

Particular attention shall be paid to the timely coordination with the related investments financed by the EBRD loan and Transelectrica. The IA and the PMU of Transelectrica will ensure regular consultations of the Phare consultants with the project engineers contracted under EBRD and Transelectrica funding.

Activity 2 – Infrastructure investment (based on the activity 1)

- Procurement, installation, construction works, testing and putting into operation of the overhead line 400 kV single circuit Arad – Nadab. Particular attention shall be paid to the timely correlation with the EBRD and Transelectrica’s financed related projects.

The following activities should be financed by Transelectrica’s own contribution:

- Land acquisition for the overhead line 400 kV Arad – Nadab and for the 400kV substation Nadab
- The technical design for the overhead line 400 kV Arad – Nadab and for the 400kV substation Nadab
- The construction of the 400kV substation Nadab

Linked activities:

Previous PHARE assistance:

Project	Status
Phare 1998 Programme RO9805.01-02 – 1.4 MEURO	
<i>Assistance in the development of secondary legislation for the regulation of electricity and heat markets - assistance with drafting of licenses and authorisations, methodologies for setting tariffs, assistance with establishing the necessary legal basis for concessions in the electricity and heat sector</i>	Completed in 2001
PHARE program RO 9805-01.01.01- 1 MEURO	
Assistance in the establishment of Gas Regulatory Authority in Romania	Completed in 2002
Phare 1998 Programme RO 9805.01.03 - 2 MEURO	
Strategy for restructuring and privatisation in the electricity distribution sector-have provided technical assistance for the privatisation of Electrica Dobrogea and Electrica Banat	Completed
Phare 2000 Programme RO 0005.01.01 – 0.9 MEURO	
<i>Consolidation of the Electricity and Heat Regulatory Authority – revision of the existing commercial code in order to take account of the developments within the wholesale power market, implementation of the tariff methodologies elaborated in the previous Phare project, development of a Quality Management System and a management information system</i>	Completed in 2004
PHARE program RO 0005.01-02 - 1,1 MEURO	
“Technical Assistance for National Regulatory Authority in Natural Gas Sector”-the project is implemented through several tasks referring to market opening and development of competition, market regulation and tariffs, technical regulations, security of supply, development of a Management Information System, public participation in the regulatory process, twinning activities and training of ANRGN’s staff.	Completed in 2004
PHARE program RO 0005.01-03 - 2 MEURO	
“Further electricity distribution privatisation”-technical assistance for the privatisation of other two distribution companies (Electrica Oltenia and Electrica Moldova).	On going
Phare 2001 Programme	
“ Development of competitive gas market ” project is intended to provide specialized technical assistance to the National Gas Transmission Company TRANSGAZ S.A. to further develop: the system necessary for the operating	On going

and monitoring of gas market, in order to control the interdependence between sources (domestic/import) and the technical parameters, taking into account the interoperability of the Romanian gas system with the gas systems of EU Member States; a blueprint for the development of the gas market in Romania in, say, 5 years time, together with a broad strategy for achieving this end; and to design an IT system for the operation of this gas market.	
Phare 2003 Programme	
<i>Strengthening regulatory capacity of ANRE</i> – necessary steps to pass from the self-scheduling with a compulsory market design to the self-scheduling with a voluntary market design, development of the secondary legislation related to regional power market development, designing the appropriate regulatory framework to promote and sustain renewable energy sources and cogeneration, studies for introducing externalities costs in the electricity and heat prices.	Under preparation
<i>Strengthening regulatory capacity of ANRGN</i> - to develop rules and regulations related to protection and safety zones of capacities in natural gas sector; to develop secondary legislation concerning the management of congestions in the national gas system; to adopt regulations designed to guarantee all gas network users freedom of access under conditions of impartiality, neutrality and transparency required by EU Gas Directive; to design regulatory framework for supplier of last resort; to develop procedures for monitoring the non-compliances with the regulations in natural gas sector; to continue the development of the knowledge base and skills of ANRGN professionals through training.	Under preparation
USAID, USEA, UK-DFID and IBRD provided also technical assistance for ANRE and ANRGN.	Completed
RO 20.864 - B1 - 3 / C21 Supply and installation of insulators (400 kV and 220 kV) and ground wires with optical fibres. - Second stage- realisation of the telecommunication infrastructure in between the Romanian and Hungarian System Operators	Completed

3.5 Lessons learned:

The finalized project RO 20.864-B1-3/C21, represent the first step of the needed process to strengthen Romanian – Hungarian interconnection.

4. Institutional Framework

The institutions involved in the implementation of these projects are:

- (i) The Ministry of Economy and Trade as Implementing Authority (IA) will be responsible for overall coordination of the projects. The Ministry of Economy and Trade is responsible for the co-ordination of the projects findings and results with the energy policy goals, through participation in the Steering Committees.
- (ii) for the sub-project 1 - The Romanian Energy Regulatory Authority – ANRE is the direct beneficiary and the technical counterpart of the consultants who will provide the technical assistance,
- (iii) for the sub-project 2 - The National Regulatory Authority in Natural Gas Sector – ANRGN, is the direct beneficiary and the technical counterpart of the consultants who will provide the technical assistance. For the implementation of the first two tasks the regulator and the TSO Transgaz will equally participate and benefit of the results.
- (iv) for the sub-project 3 - The Ministry of Economy and Trade is the owner of the electricity industry and of the gas industry. The Office for privatisation within the MET, the companies to be privatised and SC Electrica SA will be the direct counterparts of the advisers, and will establish counterpart teams (in each company to be privatised) to work with the advisers;
- (v) for the sub-project 4 - The CN Transelectrica SA, is the direct beneficiary of the investment and the counterpart of the consultants who will provide the technical assistance. The Project Management Unit (PMU) within Transelectrica is responsible for the overall timely implementation of the investment projects financed by EBRD, Phare and Transelectrica and for controlling the quality of works and equipment procured and installed. The role of the PMU in Transelectrica is to provide the necessary technical input to control design and technical specifications for the supplies and works delivered. The PMU should conduct regular on-site inspections of work-in progress, identify any problems in implementation and advise the Implementing Authority on any remedial action to be taken by contractors.
The IA and the PMU of Transelectrica will ensure regular consultations of the Phare consultants with the project engineers contracted under EBRD and Transelectrica funding.

5. Detailed Budget

	EU Support			National Co-financing*	IFI*	TOTAL
	Investment Support	Institution Building	Total EU (=I+IB)			
Sub project 1- Consolidation of the regulatory capacity of ANRE	-	700,000	700,000	70,000	-	770,000
Sub project 2- Consolidation of the regulatory capacity of ANRGN	-	700,000	700,000	80,000	-	780,000
Sub-project 3-Further electricity distribution privatisation		2,500,000	2,500,000			2,500,000
Sub-project 4- Construction of the overhead line 400 kV single circuit Arad – Nadab	6,000,000	500,000	6,500,000	2,500,000*)	22,000,000	31,000,000
Sub-project 4-Component 1		500,000	500,000			500,000
Sub-project 4-Component 2	6,000,000		6,000,000	2,500,000*)		8,500,000
Total Project	6,000,000	4,400,000	10,400,000	2,650,000	22,000,000	35,050,000

*) parallel co-financing

6. Implementation Arrangements

6.1 Implementing Agency

The Romanian Implementing Agency is the Central Finance and Contracts Unit (CFCU) within the Ministry of Public Finances, which retains overall responsibility for the implementation of the project (approval of tender documents, of evaluation criteria, of evaluation of offers, signature of contracts, authorisation and payments of invoices).

The Implementing Authority for the energy programme is the Ministry of Economy and Trade. The IA is fully responsible for the technical issues of the above projects implementation, including any related policy support, monitoring and execution. .

ANRE, ANRGN, Office for privatisation within the MET and C.N. Transelectrica SA are the projects beneficiaries and are involved in: the preparation of: the Terms of

Reference/technical specifications, the evaluation criteria, the evaluation of offers, take part in the implementation of the specific projects.

6.2 Twinning

Not applicable.

6.3 Non-standard aspects

There are no “non-standards aspects”. The “Practical Guide to Phare, Ispa and Sapard contract procedures” will be strictly followed.

6.4 Contracts

Five contracts will be financed by Phare national budget: see list under point 5- “Detailed Budget”

7. Implementation Schedule

COMPONENT	Start of tendering	Start of project activities	Completion
Consolidation of the regulatory capacity of ANRE	November 2004	December 2005	December 2006
Consolidation of the regulatory capacity of ANRGN	January 2005	November 2005	December 2006
Further electricity distribution privatisation	January 2005	November 2005	November 2006
Construction of the over head line 400 kV single circuit, Arad – Nadab.	January 2005	November 2005	November 2007

8. Equal Opportunity

Equal participation in the project by the minorities, women and men will be assured in all stages of implementation, including participation in seminars and trainings.

9. Environment

All investments financed under this project will have to comply with EU regulations in the field of environment. The engineering solutions adopted for the new 400 kV over head line Arad – Nadab have in view the reducing of the potentially negative effect of this objective on the environment. The values of the expenses for the environment protection direct and indirect actions are estimated to about 5.17 % of the project value.

10. Rates of return

The economic indices for the interconnection investment project were estimated by C.N. Transelectrica S.A. as follows:

Payback Duration: 7 years

Net Present Value: 12 M€

Internal Rate of Return: 20 %

Profitability Index: 2,00

The feasibility study is in development under the coordination of C.N. Transelectrica S.A.

11. Investment criteria (applicable to all investments)

11.1 Catalytic effect

This programme of investments has a very significant catalytic effect. Without this investment the Regional Electricity Market activity will be hindered.

11.2 Co-financing

The investment component is a complex project with the goal to provide incentives to the European Electricity Market and South East Regional Electricity market as well, developed under the **parallel co-financing** of Phare, Transelectrica and EBRD.

11.3 Additionality

The availability of important Phare support will act as an encouragement to C.N. Transelectrica S.A. to finalize negotiations on the EBRD loans.

12. Conditionality and sequencing

Concerning sub project 3 - Further electricity distribution privatisation - ,

- 1/ the TORs shall be submitted to the Commission services by 15 January 2005,
- 2/ the contractor will have to be selected by 1 November 2005,
- 3/ the privatisation strategy will have to be elaborated and approved by 1 September 2006.

In case conditionality 1 or 2 is not met, the foreseen budget (2,5 M€) will be decommitted.
In case conditionality 3 is not met, the Commission reserves the right to reallocate (or decommit) the remaining funds.

Before the TA contract is signed, an agreement will have to be concluded between the Romanian authorities and the contractor regarding success fees. If the contract is not signed by 1 March 2006, the foreseen budget (2,5 M€) will be decommitted.

Concerning the Sub-project 4- Construction of the over head line 400 kV single circuit Arad – Nadab

The project is a completion of the project financed by EBRD regarding the new 400 kV interconnection overhead line Oradea (RO) – Nadab (RO) – Bekescsaba (HU).

Transelectrica shall obtain all the necessary approvals and land ownership. The Phare works contract shall be placed after Transelectrica obtains the building permit.

Upon completion of the project, the investments will become assets of the CN Transelectrica SA, which is planned to remain in state ownership.

COST ESTIMATION OF THE 400 kV ARAD-NADAB

Considering the length of the OHL Arad-Nadab of 35 km (see the attachment 2) and the specific cost per/km: 170 000 EURO/km, as evaluated by Transelectrica's consultant Fichtner Romelectro Engineering (see the table bellow), the total cost of the 400 kV OHL Arad-Nadab single circuit is estimated at **6 mil.EURO**.

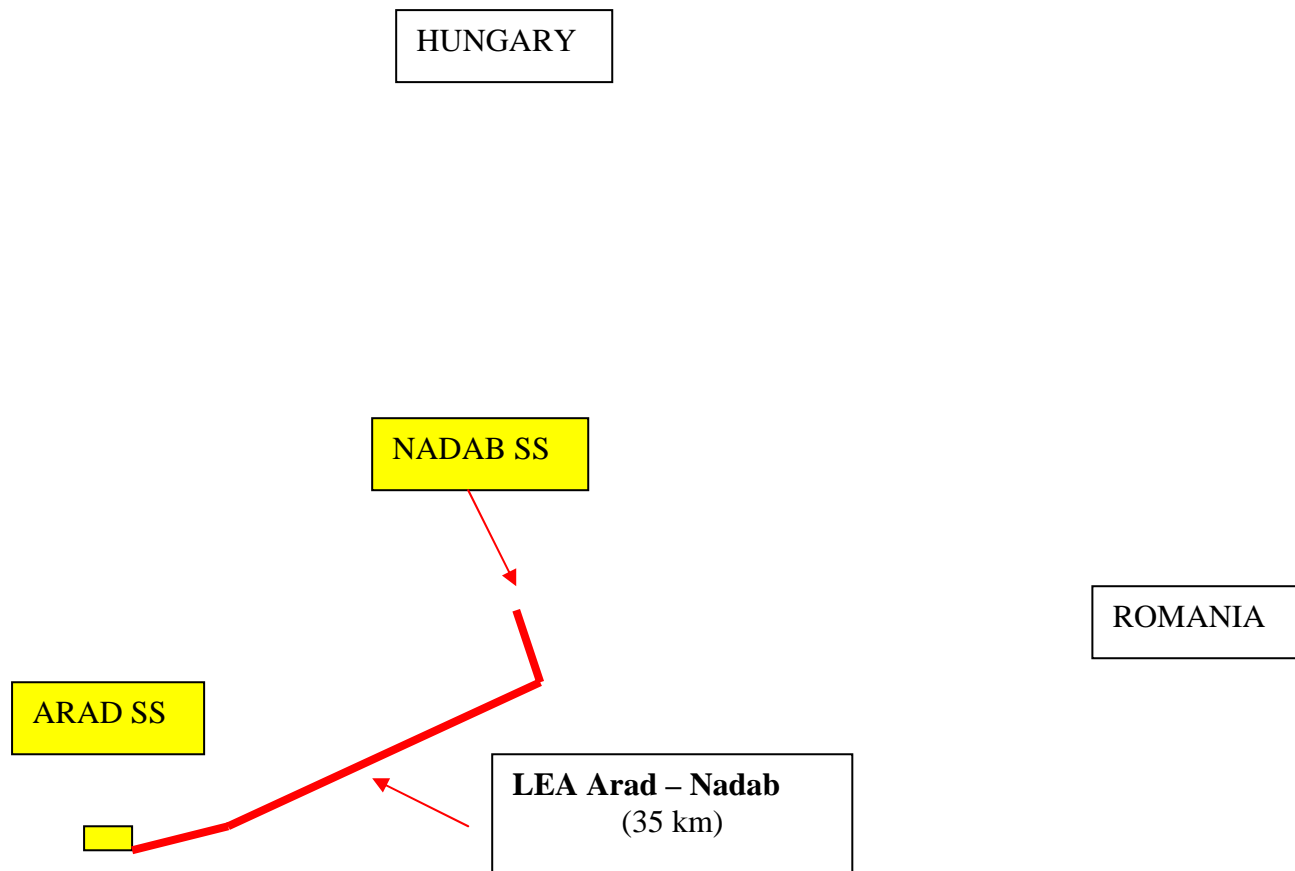
TRANSELECTRICA		400 kV SINGLE CIRCUIT OHL ARAD - NADAB		FICHTNER ROMELECT RO ENGINEERIN G			
CONCEPTUAL STUDY		Line cost	(per km of line)		Annexe A - 1		
Line	Components	Line cost for standard s spans of:					
		250 m	300 m	350 m	375 m	400 m	
	Conductor	Conductor	41877	41877	41877	41877	41877
	Joints	300	300	300	300	300	
	Spacers	4500	4500	4500	4500	4500	

Shieldwire	Shieldwire	12721	12721	12721	12720.5	12721
	Joints	347	347	347	347	347
	Suspension strings	808	674	577	538.9	505
	Tension strings	303	253	217	202.1	189
	Dampers	758	632	541	505.3	474
Towers	Donau type	64658	60347	57139	58623.2	60347
	Guyed type	0	0	0	0	0
	Tests	343	343	343	343	343
	Earthing system	2526	2105	1805	1684	1579
Strings	Suspension strings	7680	6400	5485.714286	5120.0	4800
	Vee strings	3840	3200	2743	2560.0	2400
	Tension strings	9701	8084	6929	6467	6063
	Jumper strings	606	505	433	404.2	379
Foundations		36266.44737	33848.6842163	32049.17763	32881.6	33849
	Access & temporary land	2000	2000	2000	2000	2000

Total	en Euro	189235	178136	170006	171074	172673
	Contigencies					
	Implementation					
	of the project					
	supervision,					
				Optim		
				span		

No VAT tax included
(19%) is

ORADEA – BÈKÈSCSABA + ARAD – NADAB 400 kV OHL



Annex 1.

Phare log frame

LOGFRAME PLANNING MATRIX FOR Project Fiche	Programme name and number	
Consolidation of the energy sector	Contracting period expires: November 2006	Disbursement period expires: November 2007
	Total budget: 35,050 MEuro	Phare budget: 10.4 MEuro

Overall objective	Objectively verifiable indicators	Sources of Verification	
To bring about restructuring and reform of the electricity and gas sectors in Romania, with the introduction of market mechanisms, private capital, and integration with Western European energy networks.	<ul style="list-style-type: none"> Market liberalization as it is scheduled in Energy Road Map for Romania – approved by the Government Decision no. 890/2003; Finalisation of the electricity distribution privatisation modernization of networks and infrastructures. 	Ministry of Economy and Trade and ANRE's reports, Supplier's annual reports, Website of ANRE and ANRGN; Monitorul Oficial al Romaniei (Romanian Official Journal).	
Project purpose	Objectively verifiable indicators	Sources of Verification	Assumptions
<ul style="list-style-type: none"> to support ANRE to put in place a transparent and predictable regulatory framework in line with the objectives set out by the approved 	<ul style="list-style-type: none"> Fulfilment of the Road map 	<ul style="list-style-type: none"> ANRE's and ANRGN's annual reports, Investor's reports, 	<ul style="list-style-type: none"> A stable legislative framework; Maintaining the independence of the

<p>“Road Map for the Energy Field in Romania”;</p> <ul style="list-style-type: none"> to progressively ensure the compatibility of Romanian natural gas market with the European one in the perspective of Romania’s adhesion to EU. to complete the privatisation of the remaining three regional distribution electricity companies. To increase the electricity exchanges on the European and Regional market 	<p>requirements</p> <ul style="list-style-type: none"> Full compliance with the European legislation for natural gas sector; A competitive and fully operational gas market in Romania. The electricity import / export / transit volumes in the Hungarian, Romanian and Regional Electricity markets 	<ul style="list-style-type: none"> EU Delegation reports, Consultant’s task reports; EU Commission reports. The Hungarian Transmission Operator and System Operator, Romanian Transmission System Operator, other Transmission System Operators acting in the Regional Electricity Market 	<p>regulatory authority.</p> <ul style="list-style-type: none"> The commitment of the Hungarian part toward the realisation of the new 400 kV interconnection over head line Oradea (RO) – Nadab (RO) – Bekescsaba (HU), in accordance with the “Join Position Paper” signed by MAVIR and C.N. Transelectrica S.A. top representatives.
Results	Objectively verifiable indicators	Sources of Verification	Assumptions
<p>Sub-project 1-Consolidation of the regulatory capacity of ANRE</p> <ul style="list-style-type: none"> the Romanian wholesale and retail power market designs supporting the integration of the national power market in the Electricity Market of the European Union, Strengthening ANRE’s capacity in avoiding any abuse of a dominant position, in particular to the detriment of consumers, and any predatory behaviour, in close cooperation with Competition Council, Mechanisms to ensure long term 	<ul style="list-style-type: none"> Full liberalisation of the retail market Increase of the market liquidity, Improved abilities to monitor and avoid abuse of dominant position on the power market, to ensure security of supply, Staff of ANRE trained and acquainted with EU 	<p>Technical assistance reports, Monitoring reports regarding the power market ANRE’s and ANRGN’s order and decisions Consultant’s task reports.</p>	<ul style="list-style-type: none"> Continued Government commitment to reform the energy sector, Cooperation between the institutions involved in preventing predatory behaviours on the markets;

<p>security of supply in the event that sufficient power generation capacity is not built on the basis of the authorization procedure, in line with the EU practice,</p> <ul style="list-style-type: none"> • An improved customer's protection activity, • Well trained regulatory staff. 	<p>regulatory practice;</p> <ul style="list-style-type: none"> • Improvement of the customers' protection 		
<p>Sub-project 2- Consolidation of the regulatory capacity of ANRGN</p> <ul style="list-style-type: none"> • Complete harmonization of regulations in natural gas sector with those in EU, ensuring transparency and non-discrimination in applying correctly the decisions and regulatory documents, for creating and developing a competitive market, to offer services on quality and economic efficiency terms; • The increase of performance developed by companies acting in natural gas sector; • A better protection of natural gas consumers and improvement of the specific services in natural gas sector; • The increase of transactions on free market between eligible consumers and licensed suppliers; • Development of the contractual relationships of the free market type. 	<ul style="list-style-type: none"> • Drafted regulations referring to the standard conditions for gas shippers' license, to the rules for transactions with capacities on secondary market both for transport and underground storage, and to hubs functioning. • Reduced number of complaints and better services for costumers. • Elaboration of the gas network code 		<ul style="list-style-type: none"> • Further gas market opening; • Closed cooperation between ANRGN and gas system operators; • Co-operation of the involved authorities.

<p>Sub-project 3. Further electricity distribution privatisation The technical assistance for the distribution privatisation (sub-project 3) should result into the completed privatisation of further 3 regional electricity distribution companies;</p> <p>Sub-project 4. Construction of the over head line 400 kV single circuit, 35 km, Arad – Nadab. Detailed technical design for the proposed investment Construction of the over head line 400 kV single circuit Arad – Nadab.</p>	<p>Completed privatisation transactions.</p> <p>The final reports of the studies The physical existence of the objective</p>		<ul style="list-style-type: none"> Political will to continue the privatisation Transelectrica shall obtain all necessary approvals and building permit
Activities	Means		Assumptions
<p>Sub-project 1-Consolidation of the regulatory capacity of ANRE The project will provide technical assistance for:</p> <p>Well-functioning wholesale and retail power markets are an integral component of Romania's strategy to attract and sustain private sector participation in power sector renewal and to develop a more efficient and increasingly competitive power sector. The success of Romania's power reform will be greatly influenced by ANRE's ability to develop fair and transparent rules for a competitive design of the electricity market, in line with the EU legislation requirements.</p>	<ul style="list-style-type: none"> Technical assistance Training 		<p>A closed cooperation between ANRE, ANRGN, consultant and the main actors on the market (producers, suppliers, distributors, market and transmission and system operators).</p>

<p>The project will provide technical assistance for:</p> <p>Transition from restrained eligibility to full liberalization of retail market</p> <p>The consultant should examine the feasibility of load profiling as an interim or more permanent solution for Romanian consumers. The consultant should advise on determination and the choice of profiles, the introduction of a mechanism for dispute resolution, details regarding how often meters are read.</p> <p>Other aspects to be considered by the consultant are related to the difference between hourly quantities transacted on the wholesale market by a supplier and the aggregated consumption of the customers supplied by respective supplier. Both the algorithms for the establishment of these quantities (differences) and the procedures for the treatment on the hourly market of these differences should be analysed by the consultant.</p> <p>Mechanisms to identify and prevent market power and to avoid any abuse of a dominant position</p> <p>Under this task the consultant will:</p> <ul style="list-style-type: none"> • design the procedure to identify, prevent, monitor and control the 			
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<p>market power on the wholesale electricity market.</p> <ul style="list-style-type: none"> • set out the necessary data to be gathered and will implement the data gathering system. <p>Security of supply</p> <p><i>Rules for monitoring security of supply</i></p> <p>The consultant will:</p> <ul style="list-style-type: none"> • design the procedure for monitoring security of supply • set out the necessary data to be gathered and will implement the data gathering system • propose a content for the report regarding security of supply in line with the European Commission requirements. <p><i>Mechanisms to ensure security of supply</i></p> <p>The consultant will:</p> <ul style="list-style-type: none"> • evaluate the existing mechanisms on wholesale electricity market to ensure security of supply (ex. capacity payments), • propose ways to ensure security of supply by demand-side measures : main provisions for interruptible supply contract, tariffs design for customers accepting interruptions, • design procedures and rules for organization, monitoring and control 			
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<p>the tendering procedure (or an equivalent transparent, non-discriminatory process) for new generation capacities in the event that sufficient electricity generation capacity is not built on the basis of the authorization procedure.</p> <p>Tariffs</p> <p><i>The evaluation of new investments for transmission and distribution networks</i></p> <p>The consultant will:</p> <ul style="list-style-type: none"> • establish criteria for the regulator to accept or reject new investments for transmission and distribution networks, based on the analysis of their opportunity, efficiency and evaluation of the impact against tariffs taking into consideration that the network tariffs are established based on a cap methodology. • provide models, software and training. <p><i>Regulatory accounts</i></p> <p>The consultant will:</p> <ul style="list-style-type: none"> • review the existing regulatory accounts in order to ensure the necessary monitor activities for applying the price cap methodology to distribution activity and revenue cap for transmission. 			
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<ul style="list-style-type: none"> • present at minimum a review of international practice of regulatory accounts, • asses the accounting framework conditions in Romania • propose the regulatory accounts for transmission and distribution activities and the specific rules to records data and to report the data to the regulator. <p>Price elasticity studies – customer’s behavior</p> <p>The consultant will:</p> <ul style="list-style-type: none"> • Analyse the internationally known practice to study elasticity of prices; • recommend one to three method to be applied in Romania with a in-depth descriptions of these methods; • describe in detail a statistical methodology to build load curve at different voltage level for electricity distribution systems and transmission system. <p>Customer’s protection</p> <p>The consultant will:</p> <ul style="list-style-type: none"> • evaluate the activity of the ANRE customer’s protection department • will propose specific procedures and rules for this activity, in line with EC requirements. • design and implement an information 	<ul style="list-style-type: none"> • Technical assistance • Training 		<p>Continued commitment to the development of competitive gas markets.</p>
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<p>information regarding the performance indicators;</p> <ul style="list-style-type: none"> • Provide the necessary tools for comparative assessment of performance indicators realised by different gas companies from Romania • Develop a regulatory framework for shipping of natural gas • Provide training for ANRGN staff <p>Sub-project 3. Further electricity distribution privatisation</p> <p>Technical assistance from privatisation advisers (requiring input from investment bankers, lawyers, financial advisers, and engineers) to prepare three electricity distribution companies for privatisation, and to complete the privatisation transaction. This will include advising the Ministry of Economy and Trade on the negotiation and closing of the sale;</p> <p>Sub-project 4 Construction of the over head line 400 kV single circuit Arad – Nadab.</p> <p>The following activities should be implemented:</p> <p>Activity 1 (Technical assistance component) Technical assistance will be required for the following tasks:</p>			<p>Preconditions</p>
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<ul style="list-style-type: none"> • review of the detailed project design for the proposed investment • Elaboration of the technical specifications and the tender documents (a FIDIC yellow book) needed for the works component (activity 2) including the equipment needed • Assistance in tendering and contracting • Assistance during the implementation of the works contract by employing a “FIDIC Engineer” and supervision of the works <p>Activity 2 (based on the activity 1) Procurement, installation, construction works, testing and putting into operation of the overhead line 400 kV single circuit Arad – Nadab</p>			
<p>The requirements of the Road map for 2003-2004 periods are accomplished Budget approved and available. No delays in starting date of activities.</p>			

Annex 2 Detailed time implementation chart for project number RO

Calendar months		2004					2005										2006										2007																			
		A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J			J	A	S	O	N	D		
Consolidation of the regulatory capacity of ANRE		D	D	D	D	C	C	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I																				
Consolidation of the regulatory capacity of ANRGN		D	D	D	D	D	C	C	C	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I	I																	
Further electricity distribution privatisation		D	D	D	D	D	C	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I																		
Construction of the overhead line 400 kV single circuit Arad – Nadab. TA component		D	D	D	D	D	C	C	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I						
Investment component															D	D	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I								
	D=Design/Tender preparation C=Contracting																																													

ANNEX 3

Components	Cumulative disbursement schedule by quarter in Meuro (planned)																				Total Phare Allocatio n
	2005			2006								2007									
	09	10	11	05	06	07	08	09	10	11	12	02	03	04	05	09	10	11	12		
1: Consolidation of the regulatory capacity of ANRE	0,42 0			0,21				0,07												0,7	
2: Consolidation of the regulatory capacity of ANRGN			0,42 0		0,21						0,07									0,7	
3: Further electricity distribution privatisation	1,50 0			0,75 0							0,25 0									2,500	
4: Construction of the over head line 400 kV single circuit Arad – Nadab		0,30 0			3,75 0				0,05			1,80 0						0,60 0		6,500	
Sub-project 4- Componenta 1		0,30 0			0,15 0				0,05											0,500	

Sub-project 4- Componenta 2					3,60 0							1,80 0						0,60 0		6,000
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