PHARE/2005/017-553.03.10

PROJECT FICHE FOR PHARE 2005

for

Assistance to the energy sector: improvement of energy efficiency and gas internal market

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1. Basic Information

1.1 CRIS Number:
PHARE/2005/017-553.03.10

1.2 Title:
Assistance to the energy sector: improvement of energy efficiency and gas internal market

1.3 Sector:
Energy

1.4 Location:
Romania

1.5 Duration:
24 month

2. Objectives

2.1 Overall Objective(s):

The overall objective of the project is to support the application of EU energy acquis in Romania

2.2 Project purpose:

The purpose of the project is twofold:

1. Deepen and consolidate the restructuring and operation of the energy market
2. Promote energy efficiency and renewable

Purpose to be achieved by the following Tasks:

1.1 Technical and Economic Study of a SCADA System for the Gas Network
1.2 Information System for the Gas Market Operator (GMO)
1.3 Awareness Raising in View of the Full Liberalization of the Electricity Market

2.1 Development of Financial Incentives Mechanism for Energy Efficiency
2.2 Technical and Economic Potential of RES in Romania

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*
- *Support improving energy efficiency by increasing energy savings and enhancing the use of renewable energy sources. ",*

- 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 Coherence with National Plan development

Not applicable

2.5 Cross Border Impact

Not applicable

3. Description

1.1 Background and justification:

Task 1.1. Technical and Economic Study of a SCADA System for the Gas Network

In the gas sector progress has been made in the reform of the former vertically integrated Regie Autonome Romgaz, which has been broken up into 6 companies – 2 exploration and production companies, a transmission system operator, 2 distribution companies, and an underground storage company.

It was recognized at an early stage that in order to introduce market mechanisms and a competitive gas market, and to attract the required foreign investment into the sector, it is crucial that a stable and transparent regulatory regime be established in order to create the conditions for a market to operate. Accordingly an independent regulatory authority, ANRGN (National Regulatory Authority for Natural Gas) was established and became operational from early 2000.

The institutional background has been developed through the establishment of a regulatory authority for the gas sector (ANRGN).

From the beginning of August 2001 the gas market was opened by 10%. In addition a gas market operator (D.N.G.N. - O.P.) was set up in March 2001, as a unit within TRANSGAZ.

The Order of the Minister of Industry and Resources no.85/2001 established main tasks to be performed by the Operator (D.N.G.N.-O.P. - named bellow "Operator"). The Operator establishes / monitors monthly, (as a result of the difference between demand and domestic production), non-discriminatory ratio of domestic and imported natural gas in consumption structures of all the licensed and authorized distributors and eligible consumers, with the following principal responsibilities:

- Supervision of the ratio between purchases and sales, maintaining a non discriminatory regime for all the players on the Romanian gas market;
- Monitoring the interdependence between sources (domestic/import) – parameters (flows, pressures, underground storage activity, hourly/daily/seasonal fluctuations, peak demand-gas consumption):
- Forecasting of the dynamics of gas demand on the Romanian gas market.

Transgas is managing the main gas transmission network and acts as a technical operator to the gas system. In this quality, it is essential for Transgas to develop the capability to have a thorough system for data acquisition and supervisory control.

This system should give the company the ability to view on line the operation of the system and opens the capability to control and react fast to any potential risk of activity interruption. A SCADA system developed for Transgas is strongly contributing to increase the safety of the operation as well as to a better operational and financial management of the company.

Task 1.2 – Information System for the Gas Market Operator

PHARE 2001 Project "Development of Competitive Gas Market" has provided the design for the IT system required for the carrying out of the activities of the Natural Gas Market operator which has been set up within Transgaz. The IT system is necessary for TRANSGAZ/D.N.G.N.-O.P. in order to comprehensively operate the gas market. This system must be reliable, easily implemented, operated and maintained to be cost efficient and ensure the achievement of all tasks comprised by the role mentioned.

The IT system has to be properly dimensioned according to the information quantity exchanged continuously between the gas market operator and the market participants and also according to the internal operation requirements of the market operator (including archiving and keeping the information for a long period).

As a result, all previous financing for Phare technical assistance that was aimed at the market design, the market model and the rules will remain as a theoretical exercise the implementation of which can not take place if the IT software and hardware system is not provided to consolidate and conclude the development of the new gas market.

Under the Interim Evaluation of the European Union Pre-Accession Instrument Phare, the evaluation was conducted by ECOTEC. The consultant recommended that the Ministry of Economy and Trade should request additional Phare support to strengthen the capacity of the future gas market operator and to endow the IT infrastructure. In this way the sustainability of the previous projects will be secured.

Task 1.3 Awareness Raising in View of the full liberalization of the Electricity Market

The full liberalization of the electricity market is due in the near term, as well as the finalization of the necessary legal and regulatory framework. These developments will have a major impact on energy market actors, i.e. generators, suppliers, consumers, etc. Due to the complexity and the fundamental changes in the operational regime of the market it is required to properly inform market actors on the provisions of the regulations. This is especially important regarding consumers

who have to be informed on both the opportunities created and their rights and obligations. The dissemination of information and the creation of awareness among all market actors are also necessary in order to safeguard the smooth operation of the energy market and the avoidance of creating distortions. The proposed action aims at the development of a communication strategy for the Romanian Energy Regulatory Authority (ANRE), the development of the necessary information material specifically tailored to the different groups of market actors, the organization of information dissemination events in order to inform market participants and the realization of an information campaign, with a special focus on the changing supplier process and protection of vulnerable consumers.

Task 2.1 – Development of Financial Incentives Mechanism for Energy Efficiency

The Energy Development Fund has been established in Romania in 1991 and since 2001, a portion of the Fund's financial means was allocated to the support of energy efficiency projects, exhibiting quite tangible results. Since the beginning of 2005 the Fund has been cancelled, thus eliminating significant means for the promotion of energy efficiency.

The proposed action aims at identifying options for the establishment of an energy efficiency funding mechanism, compatible with EU rules, assessing the feasibility of these options and proposing the most appropriate, and preparing a complete framework for the implementation of the selected options (i.e. guides for selection of projects to be supported, mechanisms for monitoring of their implementation, etc.)

Task 2.2 – Technical and Economic Potential of RES in Romania

Recently Romania has finalized a strategy for the implementation of renewable energy sources in accordance with the provisions of the respective EU directive on renewable energy. Along the past years research was carried out by various Romanian energy institutes and international organizations in regard with the assessment of the potential of various sources of renewables. Various maps exist for wind, solar, small hydro potential in Romania, while biomass from wood, agriculture and animal farms are recognized as another important resource. No through evaluation was done related to available technologies and their generation costs, neither on the site of the resource regarding access for construction, connection to the grid, land availability, etc. Moreover, no evaluation is done on the impact of the electricity generated from renewables on the operational regime of the national grid.

The proposed action aims at assessing the economic potential for the different sources of renewables and of the specific pre-conditions required for the realization of this economic potential, with a particular focus on issues of land use, accessibility of the sites, existence, adequacy and level of complexity of the legal, institutional and regulatory framework, required development of the electricity network for the connection of RES electricity production sites to the grid, etc.

3.2 Sectorial rationale

N/A

3.3 Results:

Task 1.1 Technical and Economic Study of a SCADA System for the Gas Network

- Feasibility Study of SCADA system necessary for the Transgaz activities.

Task 1.2 – Information System for the Gas Market Operator

- Procurement and installation of the IT system for the Gas Market Operator.

Task 1.3 Awareness Raising in View of the full liberalization of the Electricity Market

- Communication Strategy for ANRE for the raising of awareness of consumers in a liberalized environment
- Awareness raising events and publicity campaign for consumers with help and participation of the electricity market actors

Task 2.1 – Development of Financial Incentives Mechanism for Energy Efficiency

- Financing mechanisms for energy efficiency

Task 2.2 – Technical and Economic Potential of RES in Romania

- Development of legal and economic framework for RES in Romania
- Development of the adequacy of the promotion and incentives framework for RES in Romania

3.4 Activities (including Means):

Task 1.1 Technical and Economic Study of a SCADA System for the Gas Network

The task will provide technical assistance for:

- Definition of IT needs/ SCADA system
- Design the SCADA system;
- Technical specifications for the SCADA system and tender dossier;

Task 1.2 – Information System for the Gas Market Operator

Among the main activities to be performed under a supply contract are:

- Procurement of IT system;
- Putting into operation of the IT system and identification of training needs for its commissioning and implementation.

Task 1.3 Awareness Raising in View of the full liberalization of the Electricity Market

The task will provide technical assistance for:

- Establishment of communication goals and development of a communication strategy for ANRE.
- Options and tools via which the communication strategy will be implemented. Prioritization and analysis of those tools.
- Strategy implementation through:
  - Development of information materials tailored to different groups of electricity consumers
  - Organization of information dissemination and awareness raising events

Task 2.1 – Development of Financial Incentives Mechanism for Energy Efficiency

This task aims at identifying options for the establishment of an energy efficiency funding mechanism, compatible with EU rules, assessing the feasibility of these options and proposing the most appropriate, and preparing a complete framework for the implementation of the selected options (i.e. guides for selection of projects to be supported, mechanisms for monitoring of their implementation, etc.)

Among the main activities to be performed under this task by means of technical assistance should be:

- Review of financial incentives mechanisms in EU
- Assessment of financing options applicable in Romania;
- Development of the legal and institutional framework required;
- Development of a guide for the evaluation and selection of energy efficiency projects;
- Design of a mechanism for monitoring and evaluation of results of energy efficiency projects

Task 2.2 – Technical and Economic Potential of RES in Romania

The task will provide technical assistance for:

- Assessment of the regulatory and economic framework regarding RES in Romania and the prospects for its development
- Identification of applicable technologies for RES in Romania, including technical and economic data, conditions for application, etc.
- Assessment of the economic potential for each RES in Romania classified in accordance with parameters related to investment cost, technical characteristics of each RES, etc. and development of a corresponding database.
- Assessment of the adequacy of the promotion and incentives framework for RES in Romania and proposals for improvement

3.5 Linked activities

Previous PHARE assistance:

Project	Status
Phare 2002 Programme ***"Supporting energy efficiency at local level"*** provides technical assistance for the local branches of the Romanian Agency for Energy Conservation and Local Energy Management Agencies created through SAVE Programme, in order to support further their development and strengthening and to increase their impact in improving energy efficiency at local level.	On going
Phare 2001 Programme ***"Development of a 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 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.**	Completed

3.6 Lessons learned:

See also Annex 4

The first two projects ("Technical and Economic Study of a SCADA System for the Gas Network" and "IT system for the Gas Market Operator") are compulsory infrastructure for the functioning of the gas market, which is now dealt based on assumptions and estimated data. According to the Last Interim Evaluation report, the sustainability of the model proposed under Phare 2001 project *"Development of a competitive gas market"* will be secured only if additional financial support is made available to put in place the IT infrastructure of the new model and to train the personnel.

The 2004 Regular Report on Romania towards accession stipulates that Romania should further improve the energy efficiency and promote the use of renewable energy sources. Also, the 2003 Accession Partnership stipulates that Romania should further reduce the energy intensity at all stages of the energy cycle and support the improvement of the energy efficiency by increasing energy savings and enhancing the use of renewable energy sources.
Also, according to the Last Interim Evaluation report, the impact of energy efficiency related programmes, though good, is generally diminished by the lack of a coordinated approach of the energy efficiency aspects and by the lack of understanding and awareness of local authorities with respect to the measures to be applied in this field and the potential benefits to be obtained; in the near future, a coordinated programme addressing priorities such as financing mechanisms for energy efficiency projects; building capacity amongst potential applicants for energy efficiency projects at local level, i.e. local authorities, institutions etc; continuously raising the awareness of local authorities and end-users concerning the benefits of applying energy efficiency measures should be developed.

According to the Romanian Commitments in negotiations with reference to the energy sector, Romania committed itself to open the electricity market by 2007. There is a real need to inform the household consumers and the small business on the effects of a fully liberalized electricity market.

4. Institutional Framework

The institutions involved in the implementation of these projects are:
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.
For the Task s 1.1 and 1.2 - Transgas is the direct beneficiary.
For the Task 1.3-The Romanian Energy Regulatory Authority is the direct beneficiary and the technical counterpart of the consultants who will provide the technical assistance.
For the Tasks 2.1, 2.2 - The Ministry of Economy and Trade is the direct beneficiary and the technical counterpart of the consultants who will provide the technical assistance.

5. Detailed Budget

MEURO

	Phare/Pre Accession Instrument support	**Co-financing**		**Total cost**
MEURO		**National Public Funds (*)**	**Total Co-financing of project**	

Year 2005 – Institutional Building support				
Task 1.1	0.50			0.50
Task 1.3	0.40			0.40
Task 2.1	0.50			0.50
Task 2.2	0.40			0.40
Total project 2005	**1.80**			**1.80**

	Phare/Pre Accession Instrument support	**Co-financing**		**Total cost**
		National Public Funds (*)	**Total Co-financing of project**	
Year 2005 – investment support jointly co funded				
Task 1.2	1.20	0.40		1.60
Investment support sub-total	**1.20**	**0.40**		**1.60**
Total Budget 2005	**3.00**	**0.40**		**3.40**
% of total public funds	***75%***	***25%***		

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, authorization and payments of invoices).

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

The Ministry of Economy and Trade, the Romanian Energy Regulatory Authority and Transgaz are the projects beneficiaries and are involved in: the preparation of: the Terms of Reference/technical specifications, the evaluation criteria, the evaluation of offers, in the implementation of the 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
Task 1.1	February 2006	February 2007	December 2007
Task 1.2	February 2006	September 2006	February 2008
Task 1.3	February 2006	August 2006	April 2007
Task 2.1	February 2006	August 2006	May 2007
Task 2.2	February 2006	August 2006	July 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.

10. Rates of return
Not applicable

11. Investment criteria (applicable to all investments)

11.1Catalytic effect
Not applicable

11.2 Co-financing
Not applicable

11.3 Additionality
Not applicable

11.4 Project Readiness and size
PHARE 2001 Project “Development of Competitive Gas Market” has provided the design for the IT system required for carrying out the activities of the Natural Gas Market operator which has been set up within Transgaz.
Under this project, the detailed design of the IT system was set out, including the estimated cost for the acquisition of the system.

11.5 Sustainability

Not applicable

11.6 Compliance with the State Aid provisions

Not applicable

12. Conditionality and sequencing

Not applicable

ANNEXES TO PROJECT FICHE

1. **Annex 1. Logframe Matrix**
2. **Annex 2. Detailed time implementation chart**
3. **Annex 3. Cumulative disbursement schedule by quarter**
4. **Annex 4 – Lessons learnt**
5. **Annex 5 – Needs assessment for equipment**

Annex 1. Phare log frame

LOG-FRAME PLANNING MATRIX FOR Project		**Programme name and number**	
Improvement of energy efficiency and strengthening of energy market operation		**Contracting period expires**	**Disbursement period expires**
		Total Budget: 3.4 MEURO	**PHARE Budget: 3.0 MEURO**
Overall Objective	**Relates to Copenhagen Criterion and chapter**	**List of other projects with same objective**	
The overall objective of the project is to support the application of EU energy acquis in Romania	Chapter 14 "Energy"	Phare funding has provided substantial technical assistance to the regulatory authority ANRE (through Phare projects RO9504.01-01-01, RO9805.01-02, RO005.01.01 and RO005-551.04.09 –contracting in progress), in order to develop and improve the body of secondary legislation and regulation necessary to allow the operation of an electricity market in Romania. Phare project RO 0005.01.01, finalized in April 2004, and the technical assistance under the World Bank programme – Electricity Market Project - contractor Transelectrica - were concentrated on establishing the suitable mechanisms for a well functioning wholesale electricity market. The consultation process and implementation of the new transmission and distribution tariffs set up based on cap methodologies were developed under a technical assistance financed by the World Bank through PPIBL project – Dutch grand for ANRE. Related with Phare project RO0005.01.01 was the Phare project RO 0005.01.08 - Transmission Grid Modernisation -	

		Electricity Market Operator (OPCOM), on the delivery and implementation of the IT system for the operation of the physical market, in accordance with the above new Commercial Code. The main objective of the Phare project RO 0107.10-01- *Strengthening of the Electricity Commercial Market Operator* - was the development of a financial power market integrated with the existing wholesale power market. The project assessed the needed adjustments of the physical power market to ensure a smooth integration, recommended a strategy for the establishment and operation of the financial power exchange and identified the specific instruments, applicable processes, functions and activities to be performed by the Romanian financial power exchange. The necessary hardware and software for the financial power market will be delivered under a Phare 2002 project. The restructuring process of the generation sector will be influenced by the results of the Phare project RO 0107.10.04 – "Technical assistance for restructuring of Termoelectrica

Project Purpose	**Objectively Verifiable Indicators**	**Sources of Verification**	**Assumptions**
The purpose of the project is twofold: 1. Deepen and consolidate the restructuring and operation of the energy market 2. Promote energy efficiency and renewables Purpose to be achieved by the following Tasks: Technical and Economic Study of a SCADA System for the Gas Network Information System for the Gas Market Operator (GMO) Awareness Raising in View of the Full Liberalisation of the Electricity Market Development of Financial Incentives Mechanism for Energy Efficiency Technical and Economic Potential of RES in Romania	**OVI Task 1.1** • Approved Technical Design and Specifications for the SCADA system by February 2008 **OVI Task 1.2** • Information System of the Gas Market Operator (GMO) fully operational by June 2008 **OVI Task 1.3** • Increased awareness regarding their rights and obligations of electricity market actors, and especially of electricity consumers **OVI Task 2.1** • Financing Mechanism for Energy Efficiency Project put in place by December 2007 • **OVI Task 2.2**Increased interest for investments in RES project in Romania	• ANRE and ANRGN annual reports • Transgaz annual report • ARCE Annual Report • EU Delegation reports • EU Commission reports • Consultants Task Reports • Electricity Market Participants reports • Investor's reports	➢ **Task 1.2:** Decision on the gas market model to be adopted by Romania

Results	**Objectively Verifiable Indicators**	**Sources of Verification**	**Assumptions**
Results Task 1.1 • Feasibility Study of SCADA system necessary for the Transgaz activities; **Results Task 1.2** Procurement of the IT system for the Gas Marke Operator. **Results Task 1.3** i. Communication Strategy for ANRE for the raising of awareness of consumers in a liberalized environment ii. Awareness raising events and publicity campaign for consumers with help and participation of the electricity market actors **Results Task 2.1**	**OVI Task 1.1** • Technical Design of SCADA • Technical Specifications of SCADA **OVI Task 1.2** • Installed and operating IT system for Gas Market Operator **OVI Task 1.3** • Events for electricity consumers with participation of involved market actors • Information Material for consumers • Mass Media Awareness Campaign for electricity consumers **OVI Task 2.1** • Drafted Regulation for Setting up of Financial Incentives Mechanism	• Consultants Task Reports • PIU Reports	

iii. Financing mechanisms for energy efficiency **Results Task 2.2** iv. Development of legal and economic framework for RES in Romania v. Development of the adequacy of the promotion and incentives framework for RES in Romania	• Guide for the evaluation, and selection of energy efficiency projects for financing • Guide for monitoring of results of energy efficiency projects financed **OVI Task 2.2** • Database of applicable RES technologies • Database of sites with economic RES potential • Proposals for improvement of RES promotion incentives and measures		**Task 2.2:** Availability of data on theoretical RES potential

Activities	Means		Assumptions
Task 1.1 Activities ➢ Definition of IT needs/ SCADA system ➢ Design the SCADA system; ➢ Technical specifications for the SCADA system and tender dossier; **Task 1.2 Activities** ➢ Procurement of IT system; ➢ Putting into operation of the IT system and identification of training needs for its commissioning and implementation. **Task 1.3 Activities** ➢ Establishment of communication goal and development of a communicatio strategy for ANRE. ➢ Options and tools via which th communication strategy will b implemented. Prioritization an analysis of those tools. ➢ Development of information material tailored to different groups o electricity consumers ➢ Organization of informatio dissemination and awareness raisin events	**Means Task 1.1** • Technical Assistance **Means Task 1.2** • Supply **Means Task 1.3** • Technical Assistance		

▪ Implementation of a mass media Information Dissemination Campaign addressed to electricity consumers **Task 2.1 Activities** ▪ Design of a mechanism for monitoring and evaluation of results of energy efficiency projects ▪ Review of financial incentives mechanisms in EU ▪ Assessment of financing options applicable in Romania ▪ Development of the legal and institutional framework required **Task 2.2 Activities** ▪ Review of data on theoretical potential of RES ▪ Assessment of the regulatory and economic framework regarding RES in Romania and the prospects for its development ▪ Assessment of applicable technologies for RES in Romania, including technical and economic data, conditions	**Means Task 2.1** • Technical Assistance **Means Task 2.2** • Technical Assistance		

for application, etc. ▪ Assessment of the economic potential for each RES in Romania classified in accordance with parameters related to investment cost, technical characteristics of each RES, etc. and development of a corresponding database. ▪ Assessment of the adequacy of the promotion and incentives framework for RES in Romania and proposals for improvement			

Annex 2 Detailed time implementation chart

Calendar months	2005					2006												2007												2008												2009											
	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	J	F	M	A	M	J	J	A	S	O	N	D
Task 1.1	D	D	D	D	D	D	D	C	C	C	C	C	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I																							
Task 1.2	D	D	D	D	D	D	D	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I																							
Task 1.3	D	D	D	D	D	D	D	C	C	C	C	C	I	I	I	I	I	I	I	I	I																																		
Task 2.1	D	D	D	D	D	D	D	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I																																	
Task 2.2	D	D	D	D	D	D	D	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I																															

D=Design/Tender preparation C=Contracting I=Implementation/works

ANNEX 3

Components	**Cumulative disbursement schedule by quarter in Meuro (planned)**																			**Total Phare Allocation**
	2005		**2006**				**2007**												**2008**	
	11	12	08	09	11	12	01	02	03	04	05	06	07	08	09	10	11	12	01	02	
Task 1.1								*0,30*						*0,15*				*0,05*			***0,5***
Task 1.2				0,72						*0,36*										*0,12*	***1,2***
Task 1.3			*0,24*					*0,12*			*0.04*										***0,4***
Task 2.1			*0,30*					*0,15*			*0,05*										***0,5***
Task 2.2			*0,24*					*0,12*					0,04								***0,4***

ANNEX 4 – Lessons learnt

Identified Gaps or Recommended courses of intervention	**Action for covering the Gap or implement the recommended intervention**	**Phare Programming (Project Reference)**	
		2004	**2005**
According to the Last Interim Evaluation report, the sustainability of the model proposed under Phare 2001 project *"Development of a competitive gas market"* will be secured only if additional financial support is made available to put in place the IT infrastructure of the new model and to train the personnel.	MET requests additional Phare support to strengthen the capacity of the future gas market operator and to endow the IT infrastructure.		The proposal for 2005 Phare support include investment component for the Gas Market Operator: - "IT system for the Gas Market Operator"-supply
According to the Last Interim Evaluation report, the impact of energy efficiency related programmes, though good, is generally diminished by the lack of a coordinated approach of the energy efficiency aspects and by the lack of understanding and awareness of local authorities with respect to the measures to be applied in this field and the potential benefits to be obtained; in the near future, a coordinated programme addressing priorities such as financing mechanisms for energy efficiency projects; building capacity amongst potential applicants for energy efficiency projects at local level, i.e. local authorities, institutions etc; continuously raising the awareness of local authorities and end-users concerning the benefits of applying energy efficiency measures should be developed.	MET requests EU financial support under the Phare 2005 for -financing mechanisms for energy efficiency projects; -building capacity amongst potential applicants for energy efficiency projects at local level, i.e. local authorities, institutions etc; -communication Strategy for the raising of awareness for consumers with help and participation of the electricity market actors		The proposals for 2005 Phare support include TA on financing mechanisms for energy efficiency and awareness campaigned: - "Awareness Raising in View of the full liberalisation of the Electricity Market" -" Development of Financial Incentives Mechanism for Energy Efficiency"

The 2004 Regular Report on Romania towards accession stipulates that Romania should further improve the energy efficiency and promote the use of renewable energy sources.	MET has finalized a strategy for the implementation of renewable energy sources in accordance with the provisions of the respective EU directive on renewable energy. MET requests EU financial support under the Phare 2005 at assessing the economic potential for: -Development of regulatory and economic framework for RES in Romania ; -Identification of applicable technologies for RES in Romania -Assessment of the economic potential for each RES in Romania classified in accordance with parameters related to investment cost, technical characteristics of each RES.		The proposal for 2005 Phare support include technical assistance : "Technical and Economic Potential of RES in Romania"

ANNEX 5 – Needs assessment for equipment		
Essential components	Number	EUR (Min)
Hardware Workstation of at least 1GB RAM, 36GB HDD and a speed of 2.7GHz with local removable storage and 20" LCD screens (1600x1200 pixel).	2	€3,500
Software Design and Development		€210,000
Flexibility Trading System (assumes use of Database for Cash-out billing system)		
Hardware Server of at least 1GB RAM, 36GB HDD and a speed of 2.7GHz with CD-ROM readers and 15" LCD (low energy) screens.	2	€10,000
Off-the-shelf Software Based on published international recommended retail prices for: Mail Server 2. Middleware (application) Server		€21,000
Software Design and Development		€60,000
Transitional Support		€100,000
Cash-out Billing System		
Hardware Cluster Server configured for 'Hot Standby' of at least 8GB RAM, 36GB HDD (offering 144GB Dual-Port RAID Array of Hard Disk Drives) and a speed of 2.7GHz with CD ROM reader, Back-up Device and 20" LCD screens.	1	€33,500
Off-the-shelf Software Resilient and Scalable Relational Database		€16,000
Software Design and Development		€65,000
Transitional Support		€500,000
Web Site (assumes use of Database for Cash-out billing system)		
Hardware Server with at least 1GB RAM, 36GB HDD and a speed of 2.7GHz with CD_ROM reader and a 20" LCD screen.	1	€5,000
Software Design and Development		€65,000

System Security Monitor and General Office Use (assumes use of Flexibility trading system)		
Hardware Desk-top PCs with at least 512MB RAM, 36GB HDD and a speed of 2.7 GHz each with 20" LCD screens for general office use, data entry, communicating and trading.	23	€18,000
Off-the-shelf Software 25 user office applications, database and server access licences		€13,000
Test Environment and QA Consultancy		
Hardware 1. Test server with at least 8GB RAM, 144GB HDD and a speed of 2.7GHz with CD-ROM reader, 20" LCD screen and Back-up Device. 2. Servers with at least 1GB RAM, 36GB HDD and a speed of 2.7GHz - to be configured as required for testing. Desk-top PCs with at least1GB RAM, 36GB HDD and a speed of 2.7GHz with 10 20" LCD screens - for testing data entry, trading and monitoring systems.	1 2 10	€40,000
Off-the-shelf Software 1. Functionally equivalent Relational Database (scalability may be limited) 2. Middleware (application) Server (scalability may be limited) 3. Multi-user Test Management Software 4. 10 user office applications, database, server and test management software access licenses		€40,000
Quality Assurance Consultancy		€120,000
HR/Training Staff Training for internal support and test team (including examinations) 1. Database Administration 2. Server, e-mail and middleware application administration 3. Network administration and security administration 4. Software Testing 5. User Training 6. UPS Stand-by generator and secure and back-up telecommunications circuits.		€210,000
TOTAL		€1,530,000