Chapter 2 Oil and Gas

2.1.Oil Terminal

Oil Terminal Constanta was founded in 1898, under the name Steaua Romana. It is a joint-stock company, having the state as the major shareholder, represented by the Ministry of Economy.

The main activity of the company is transportation of crude oil, petroleum products, liquid petrochemicals and other products and raw materials for import, export and transit.

The company is strategically located in the Black Sea area, being the largest sea operator and one of the largest terminals in the South-Eastern Europe.

It owns 3 storage farms through which the following products are handled: crude oil, gasoline, diesel oil, fuel oil, chemical and petrochemical products, oils from import or for export and transit.

In the context of the export increasing tendency for crude oil from the Caspian Sea area towards Western Europe, the actual facilities of Oil Terminal (floating roof shore tanks with capacities ranging between 1.500 cm and 50.000 cm for crude oil, jetties or pipelines) will take over a part of the crude oil quantity, the remaining one being deposited and transported to a new platform which the company intends to develop.

The new investments include the acquisition of command and control equipments, high accuracy flow-meters, pumping units, pipelines and the development of environmental projects.

Oil Terminal and Conpet Ploiesti will represent the Romanian State within the Permanent Working Group which will prepare the documentation for the company that will develop the Pan-European Oil Pipeline project.

The experience of Oil Terminal has determined the development of partnerships with international companies such as Air British Petroleum Sales Romania, Constant Oil Limited Cyprus, Shell Romania, Vitol Switzerland, Glencore Energy UK LTD and Litasco Geneva.

In Figures State share: 56,62% Joint stock - *RON – 58,243.03 - *EUR – 14,614.83

	2007		2008		2008/2007
Financial					
Situation	*RON	*EUR	*RON	*EUR	%
Turn-over	123,494.56	30,988.30	134,573.36	33,768.28	108.97
Net profit	7,496.11	1,880.99	1,025.68	257.37	13.68
EBITDA			16,768.37	4,207.66	
EBIT			2,215.82	556.10	

* in thousands

Projects

OG.OT.01.09 Modernization of the Pipeline Connection Network between South Storage Area and Port Terminal

OG.OT.02.09 Replacement of Coupling Arms at Vessels

OG.OT.03.09 Consolidation of Protection Slope for Pipelines Network between South Storage Farm and no.6 Port Gate

OG.OT.04.09 Installing of Double Sealing Systems at 50,000m3 Shore Tanks in South Storage Farm

OG.OT.05.09 The Modernization of the Gasoline Flow-Metering System

OG.OT.06.09 Modernization of the Shore Tank no.23 South Storage

OG.OT.07.09 Installation of Water Treatment. Port Storage

OG.OT.08.09 Construction of a New 5,000 m3 Shore Tank. Port Storage

OG.OT.09.09 Systematization of the Crude Oil Installation, KSB Area. Port Storage

OG.OT.10.09 Separation of Soda Installation Pipeline from the Chemical Products Installation. Port Storage

OG.OT.11.09 Ecological Works at Storage Area no.2 North Storage

OG.OT.01.09 Modernization of the Pipeline Connection Network between South Storage Area and Port Terminal

Project description

The project intends to solve the most urgent environmental protection problems, by stopping the water and soil pollution. In the port area, most of the pipelines are underground and leakages are not easily detected.

The actual investment refers to digging out the existing network, excavating on the network direction, setting of concrete foundations to support the pipelines and setting the pipelines of these foundations on order to obtain a surface pipeline connection network. The project also implies arranging the access over the pipelines to the area objectives and arranging a tank to collect the pluvial waters.

By carrying out this project, maintenance costs will decrease and loading/unloading time will be reduced by eliminating the dead period due to technical accidents (pipes breaking).

Estimated duration of the project is 4 years.

To support this project, a Feasibility Study has been drawn up, 'Feasibility Study for the Oil Terminal Modernization, Romania' elaborated by HLP Parsons and funded by the U.S.Trade and Development Agency.

Value and funding

The project value is 16 million Euros and the financing will be fully provided by external sources.

OG.OT.02.09 Replacement of Coupling Arms at Vessels Project description

Coupling arms at vessels connect the pipelines system for transporting petroleum products with the maritime vessels. The project's target is to replace the 12 coupling arms from Oil Terminal Constanta.

The project consists in replacing the existent arms with arms for loading/unloading which will ensure the proper mobility, a binging sealing to avoid leakages of products, a fast decoupling system in case of emergency and a parameters monitoring system for working fluid and for their position.

Due to the increase of loading speed, the vessel's waiting time will be reduced.

Duration

The duration of the project implementation is 6 years.

The 'Feasibility Study for the Oil Terminal Modernization, Romania' was prepared by HLP Parsons and funded by the U.S. Trade and Development Agency.

Value and funding

The total project value is 6 million Euros, and financing will be fully provided by external sources.

The investment is expected to be recovered in 10 years.

OG.OT.03.09 Consolidation of Protection Slope for Pipelines Network between South Storage Farm and no.6 Port Gate

Project description

The intense traffic of equipments and heavy machines affected by the stability of the slope, which is moving in some areas. The slope's instability endangers the pipelines network integrity, obstructs rain waters and their drainage through the water gate at sewerage to the sea.

It has been decided to build a concrete steel supporting wall of 330 m length. To shorten the execution time and allow working on shorter portions, avoiding the digging in the slope for a long time, the supporting wall will be built from concrete prefab parts, these ones working separately. The project also ensures a decrease of the maintenance costs.

Duration

It is estimated that the implementation will last for 1 year.

In order to sustain this project, the 'Feasibility Study for the Oil Terminal Modernization, Romania' was prepared by HLP Parsons and funded by the U.S. Trade and Development Agency.

Value and funding

The estimated value of the project is 0.3 million Euros and has an entirely external funding.

OG.OT.04.09 Installing of Double Sealing Systems at 50,000m3 Shore Tanks in South Storage Farm

Project description

The project provides 50,000 m3 shore tanks with double sealing, according to the European regulations for emissions reduction.

The main sealing system will prevent the product vapours from spreading into the atmosphere.

The secondary system will ensure the protection of the main system against mechanical shocks and will prevent the rain water infiltration.

The implementation of the project will reduce product loss by evaporation, fire risks and maintenance costs.

Duration

The project implementation is estimated to last for 4 years.

Value and funding

The estimated value of the project is 0.6 million Euros and has external financing sources.

The investment is expected to be recovered in 10-12 years.

OG.OT.05.09 The Modernization of the Gasoline Flow-Metering System Project description

According to the National Institute of Metrology, the usage condition of the equipments (physical and moral) that measure the quantity of gasoline does not allow minimum performance in the approved standard.

The modernization project provides:

- Replacement of the working meters and of the master meter with meters with separated lubricating system bearing;
- Replacement of valves for flow regulation with digital control ones;
- Installation of the dosimeters in flow;

- Installation of a supervisory system to integrate all signals on the three existing measurement skids and of the six Geo Flow computers;
- Recovery of connection pipelines and signal according to new apparatus.

A modern metering system will be achieved, allowing a correct evidence of handled gasoline quantities and elimination of the litigations related to the measurements correctness.

Duration

The project implementation is expected to last for 1 year.

Value and funding

The estimated value of the project is 0.9 million Euros and has external financing sources.

OG.OT.06.09 Modernization of the Shore Tank no.23 South Storage Project description

According to technical evaluations, the shore tank can no longer be used in safe conditions. For this reason, a proposed solution is to replace the lid and the bottom of the tank, the pluvial water, the fire safety system as well as to install a double sealing system and a second anti-rotating pillar.

Increasing the storage capacity will lead to increasing the company revenues. The project also eliminates the risk of accidental leakages and environmental pollution.

Duration

The project implementation is expected to last for 1 year.

The study 'Modernization of tank no.23 at the South Storage' was prepared by Conrep Ploiesti.

Value and funding

The total investment is 2 million Euros and will be provided by external sources. The investment is expected to be recovered in 9-10 years.

OG.OT.07.09 Installation of Water Treatment. Port Storage

Project description

The actual installation is outdated and no longer assures the neutralization of the alkaline wastewater and the parameters required by the Maritime Ports Administration Constanta.

The proposed solution if to build up a modern water treatment installation, fully automatic, capable to ensure an efficient treatment of the alkaline wastewater which will allow evacuation into the Black Sea.

The project implementation is expected to last for 1 year.

Value and funding

The total project is 1 million Euros, and will be provided by external sources.

OG.OT.08.09 Construction of a New 5,000 m3 Shore Tank. Port Storage

Project description

The project's objective is to increase the storage capacity by building up a new shore tank on the existing foundation according to the latest environmental protection standards.

Duration

The project will be implemented during a 6 months period and it is sustained by the study 'Project for 5000m3 shore tank installing' prepared by Elvimenx Transgroup, Constanta.

Value and funding

The estimated value of the project is 0.7 million Euros and has external financing sources.

The investment is expected to be recovered in 5-6 years.

OG.OT.09.09 Systematization of the Crude Oil Installation, KSB Area. Port Storage Project description

The existing installation is old, of almost 40 years, having cracks and breaches and can no longer be used. It has been proposed to place the installation on the surface and to replace all the equipments.

Duration

The estimated duration of the project implementation is 6 months.

The study prepared to support the project is 'Modernization project of the crude oil installation' issued by DARO Proiect, Ramnicu Valcea.

Value and funding

The estimated value of the project is 2 million Euros and has external financing sources.

The investment is expected to be recovered in 9-10 years.

OG.OT.10.09 Separation of Soda Installation Pipeline from the Chemical Products Installation. Port Storage

Project description

The actual facility does not provide an efficient separation of flows due to transited products diversification. Therefore, the proposed solution is to connect the existing installation to the new built no.1 and 2 railway lines.

The project will be implemented in 12 months.

The study prepared to support the project is 'Technological pipes, connected lye pipes at Port Storage' issued by Corep 07 Proiect, Ploiesti.

Value and funding

The estimated of the project is 1 million Euros and has external financing sources.

The investment is expected to be recovered in 4-5 years.

OG.OT.11.09 Ecological Works at Storage Area no.2 North Storage Project description

Following the environmental requirements to stop the handling activity in the store farm no.2, the existing installations will be dismantled and the contaminated soil will be cleaned and treated through neutralization.

Duration

The estimated period of implementation is 2 years.

Technical-economical documentation was prepared by the company 'Ellis 92' in 2008.

Value and funding

The environmental works require an investment of 40 million Euros. Financing will be provided by external sources.

2.2.TRANSGAZ

Transgaz is a trading joint-stock company of national interesting having the state, represented by the Ministry of Economy, as the major shareholder.

The company's main object of activity is transmission, international transit and dispatching of natural gas and research and design in the field of natural gas transmission.

In is the technical operator of the National Gas Transmission System and it is responsible for its operation under quality, safety, efficiency and environmental conditions.

The projected capacity of the National Gas Transmission System is approx. 30 billion m3/year.

The company's main development directions are: development of the natural gas transit activity, rehabilitation, development and modernization of the National Transmission System as well as its interconnection with the transmission systems of the neighbouring countries, in order to diversify the import supply sources.

Transgaz Medias is the second utility company from the Romanian state's portfolio who initiated a public offering of up to 10% of its share capital, i.e. 1,177,384 shares.

On March 26th, 2007, Standard & Poor's Ratings Services granted Transgaz the BB+, positive outlook credit rating, for long-term corporate loans.

The sole licensed status of the National Transmission System operator, the company's strong financial position and the predictable cash-flows are some of the advantages that contributed to the rating upgrade.

In 2010, Transgaz shall be a gas transmission operator on the international gas transmission market, having a developed and rehabilitated national gas transmission system and an advanced management system, in line with the international standards.

In Figures

State share: 73,52% Joint stock - *RON – 117,738.44 - *EUR – 29,543.92

	2007		2008		2008/2007
Financial					
Situation	*RON	*EUR	*RON	*EUR	%
Turn-over	1,038,866.79	260,681.22	1,119,390.00	280,886.78	107.75
Net profit	224,006.45	56,209.59	239,007.10	59,973.68	106.70
EBITDA			368,948.91	92,579.78	
EBIT			318,511.28	79,923.54	

* in thousands

Projects

OG.T.01.09 NABUCCO

OG.T.02.09 SCADA Implementation

OG.T.03.09 Gas Transmission Pipeline Craiova-Segarcea-Bailesti-Calafat

OG.T.04.09 Interconnecting Pipeline of the National Gas Transmission System from

Romania with the South European System on the Giurgiu – Ruse direction

OG.T.05.09 Gas Metering Station. Negru Voda IV

OG.T.06.09 Inline Inspections of the Natural Gas Transmission Pipelines

OG.T.07.09 Projects on the Optimization of the Natural Gas Transmission Operations in the National Transmission System

OG.T.08.09 Arghiresu-Huedin-Alesd Gas Transmission Pipeline

OG:T.09.09 Campulung-Vatra Dornei Gas Transmission Pipeline

OG:T.10.09 Modernization of the Natural Gas Odorizing System in the National Transmission System

OG:T:11.09 Marasesti-Focsani Gas Transmission Pipeline

OG.T.12.09 Mintia-Brad-Stei Gas Transmission Pipeline

OG.T.13.09 Negru Voda-Techirghiol-Constanta Gas Transmission Pipeline

OG.T.14.09 National Transmission System Interconnection with the Serbian Gas Transmission System

OG.T.15.09 Modernization of the National Transmission System Technical Equipment in order to Operate in Compliance with the Relevant Legal Regulation

OG.T.01.09 NABUCCO

Project description The Nabucco pipeline system consists of: the main pipeline and the gas supply pipelines from Georgia and Iran.

The supply pipelines shall ensure the transmission of the natural gas from the Georgian-Turkish border and the Iranian-Turkish border, the starting point of the Nabucco main pipeline. Gas shall be transmitted through the centre of Turkey and shall under.cross the Marmara Sea, and then it shall continue through Bulgaria, Romania and Hungary, up to Baumgarten, Austria. All along this route, gas shall be delivered to each country crossed by the transmission pipeline.

In Romania, the pipeline's length shall be of approx. 457km and shall cross the territory of 5 counties: Dolj, Mehedinti, Caras-Severin, Timis and Arad.

Diversifying the import supply sources has as objective the decrease of gas price imported from the Russian Federation.

Duration

The system shall be built in 3 stages. In 2010 shall end the development stage and the design works and during 2011-2012 shall start the building of the pipeline and of its related equipment from Ankara to Baumgarten.

The third stage shall be implemented during 2013-2014 and it consists in building the pipeline from the borders of Turkey with Georgia and Iran. At the same time the pipeline operation shall start by using the existing Turkish infrastructure. Value and funding

The total value of the investment is 7,900 million Euros.

Funding shall be secured 17% from own sources and the rest from external sources.

The investment is expected to be recovered in 12 years.

OG.T.02.09 SCADA Implementation

Project description

The implementation of the SCADA System will provide Transgaz the possibility to monitor in detail and in due time the network. It will also improve the company's capacity to command and respond timely and efficiently to any potential risk of interruption.

The system will substantially contribute to the increase of operation safety and to the improvement of the company's financial and operational management.

The SCADA system includes three main components: field instrumentation and the remote terminal units, SCADA hardware & software and the telecommunication system.

Duration

The estimated project duration is 2 years, starting with June 2009.

By PHARE 2005 Program, the European Commission approved the financing of the 'Technical and Economical Study for the SCADA System afferent to the National Transmission System'. The study was elaborated between May 2007 and March 2008. The final result of the study was the elaboration of the Specifications for the purchase of the SCADA System.

Value and funding

The project's required investment is 18.6 million Euros and shall be provided 25% from own sources and the rest from external sources.

The investment is expected to be recovered in 10 years.

OG.T.03.09 Gas Transmission Pipeline Craiova-Segarcea-Bailesti-Calafat

Project description

This pipeline will be built in order to develop the National Gas Transmission System, equally ensuring the natural gas supply for Calafat town and for other villages from the Southern part of Oltenia.

Duation

The work shall be divided into 3 sections and for each section shall be assigned a period of 12 months.

The Feasibility Study is in process.

Value and funding

The required investment for this project is 15.8 million Euros and shall be provided 25% from own sources and the rest from external sources.

OG.T.04.09 Interconnecting Pipeline of the National Gas Transmission System from Romania with the South European System on the Giurgiu – Ruse direction

Project description

The pipeline ensures the interconnection between the Romanian National Gas Transmission System and the similar Bulgarian system.

This pipeline shall provide the import of gas from Bulgaria to Romania in order to ensure the gas supply for the Southern part of the country. The project consists in the execution of an under-crossing of the Danube river with the gas transmission pipeline and a gas metering station located inside the metering and regulating station that supplies Giurgiu town.

The proposed duration for implementation of the project is 2009-2010.

Following discussions between Transgaz and Bulgargaz EAD in February 2009, an agreement has been signed to resume the activities related to the project, deciding to carry out together a joint Feasibility Study, starting this autumn.

Value and funding

The project's required investment is 1.4 million Euros and shall be provided 28% from own sources and the rest from external sources.

OG.T.05.09 Gas Metering Station. Negru Voda IV

Project description

The gas metering station represents the 3rd stage of the 'Gas transmission pipeline Negru Voda-Techirghiol' project.

It has a wide objective, supporting the rapid development of the Romanian seaside by supplying gas to the towns and villages from the Black Sea coast. The system will have the possibility to be operated manually and automatically. The equipment will be endowed with a process computer with remote data transmission module, that shall provide local monitoring, remote transmission of all working parameters required to supervise and operate under safety conditions of the technological equipment and will allow remote driving of the insulation fittings of the meter runs.

Duration

The duration proposed for the project implementation is 2009-2010.

In 2006, the solution proposed was 'The Technical Feasibility Study regarding the natural gas supply of some settlements from Southern Dobrogea area', updated in 2008.

Value and funding

The value of investment is 1.16 Million Euros and funding shall be made 25% by own sources and the rest from external sources.

OG.T.06.09 Inline Inspections of the Natural Gas Transmission Pipelines

Project description

The project proposes the rehabilitation of the National Transmission System by evaluating the technical status of the tubular material and of the exterior insulation system. This implies the interior inspection using special equipment, as well as exterior inspection using equipment to determine the insulation condition.

Following the technical condition reassessment for the affected areas, repair programs were drawn up, with the purpose to reach the maximum pressure for which the pipelines were designed.

The program is part of the company's stratedy for the period 2009-2012.

Value and funding

The value of investment for this project is 75 million Euros.

OG.T.07.09 Projects on the Optimization of the Natural Gas Transmission Operations in the National Transmission System

The Subsystem 1 South-East

Increasing the transmission capacity of the system South-East by building a pipeline of 28 from Coroi to Bucharest in order to take over and to transport additional gas quantities from Transylvaninan Basin, due to the increasing of the storage capacity of the Sarmasel, Cetatea de Balta and Targu Mures deposits.

The implementation period for this project is 2009-2013 and the investment value is 13.7 million Euros.

The Subsystem 2 South-Oltenia

Implies building a pipeline from Hurezani to Podisor to ensure the possibility to take over additional gas from the Oltenia Deposit. Also in Hurezani, a compressor station shall be built in order to increase the production in the area.

The implementation period for this project is 2010-2014 and the investment value is approximately 40 million Euros.

The Subsystem 3 West

It consists in building a pipeline from Bacia to Masloc and installing a compressor station on the pipeline's route. It will allow the maximum quantities of gas to be transported through Csanopalota point located on the Szeged-Arad route.

The project implementation period is 2009-2012 and the investment value is 6.8 million Euros.

The Subsystem 9 Central

Increasing the transport capacity on Moldova direction by building a pipeline from Coroi to Bordosiu, thus having the opportunity to clean and examine the Coroi-Onesti pipeline.

The project implementation period is 2010-2012 and the investment value is approx. 13.2 million Euros.

OG.T.08.09 Arghiresu-Huedin-Alesd Gas Transmission Pipeline Project description

The completion of this gas transmission pipeline will ensure the increase security of gas supply to the Western parts of the country and the economical and social development of the area.

The project implementation period is 2010-2011.

In April 2008 the 'Arghiresu-Huedin-Alesd gas transmission pipeline no.16 Study' was concluded, based on the Approval of the Technical-Economic Committee.

Value and funding

The total value of the project is 24.6 million Euros.

OG:T.09.09 Campulung-Vatra Dornei Gas Transmission Pipeline Project description

The achievement of this pipeline will develop the National Gas Transmission System, also supplying gas to Campulung Moldovenesc, Vatra Dornei, Vicovul de Sus and to other towns of the Northern Moldovia region.

Duration

The project implementation period is 2009-2011.

Value and funding

The value of investment is 4.7 million Euros.

OG:T.10.09 Modernization of the Natural Gas Odorizing System in the National Transmission System

Project description

In accordance with the company's development strategy, the implementation of a new gas odorizing system has been decided, in compliance with the relevant EU laws on environmental protection and with the requirements for the security of gas supply to consumers.

The modernization of the existent odorizing system shall increase the safety of the gas transmission and distribution network operation by avoiding the risk of accidents.

The usage of the new performing gas odorizing systems will ensure a reduction of the specific consumption and a decrease of the costs related to the odorant handling, transport and storage.

Duration

The project implementation period is 2010-2012.

Up to now, the following studies have been prepared:

- Study on the efficiency of the gas odorizing process in Bucharest, System I-South East, System III-West and System IV-Moldavia;
- Study on the improvement of the gas odorizing process delivered from the National Transmission System to: Pylon 89 – Valea Prahovei, Urziceni-Corbu, Paltin-Pitesti-Corbu, Corbu-Bucharest and Bucharest;
- Solution Study on the gas odorizing process related to the Transmission Systems West and North;

- Solution Study on the gas odorizing process related to the Transmission Systems Moldova, Transit, North-West, Targu Mures-Cuci, Sibiu-Victoria-Fagaras and Central
- Solution Study on the modernization of the Botorca Central Odorant Storage Facility

Value and funding

The value of the project is 5.9 million Euros.

OG:T:11.09 Marasesti-Focsani Gas Transmission Pipeline Project description

The Marasti-Focsani gas transmission pipeline was commissioned in 1973 for the gas supply to Focsani and it is connected to the Marasesti pipeline which is further connected to Sendreni-Onesti pipeline.

Given the fact that the gas demand has increased in Focsani in the latest years and that a series of towns in the region have started actions to ensure gas supply thereto, the existent pipeline shall be resized and a new pipeline shall be built on the same route, in order to meet the gas demand of the region.

Duration

The proposed duration for the project implementation is 3 years starting with 2011 and the Technical Design is in progress.

Value and funding

The works' estimated value is 36.5 million Euros.

OG.T.12.09 Mintia-Brad-Stei Gas Transmission Pipeline

Project description

The project consists in the construction of the Mintia-Brad-Stei gas transmission pipeline. This project is meant to ensure the interconnection of the future pipeline with the Western Gas Transmission System, the balancing of the Romanian Gas Transmission System an to increase the flexibility of the consumption peak coverage in the Western and North-Western areas. In this way, it raises the availability of the gas supply to the industrial consumers and to the household consumers of Hunedoara, Arad and Bihor counties through the two gas import points, i.e. Mediesu Aurit Gas Metering Station (Satu Mare County) and Horea Gas Metering Station (Arad County) and of the central part of the country through System 3 West.

Duration

The duration proposed for the project implementation is 3 years starting with 2011.

The Solution Study on 'The safety of gas supply to the Western part of Romania' has already been conducted.

Value and funding

The works' estimated value is 71.4 million Euros.

OG.T.13.09 Negru Voda-Techirghiol-Constanta Gas Transmission Pipeline Project description

The Southern Dobrogea, part of Constanta County is a region with towns whose economic potential is in a full development process. It is a region where the supply of fuels (wood, gas cylinders or liquid fuel) for households needs and heating is getting more expensive due to the higher transportation costs and the lack of forests.

The building of the Negru Voda-Techirghiol-Constanta Gas Transmission Pipeline and its interconnection with Isaccea-Constanta gas transmission pipeline creates a system from Negru Voda to Isaccea, parallel with the gas transmit system.

Duration

The duration proposed for the project implementation is 3 years as of 2008, Negru Voda-Pecineaga pipeline section being already 80% completed. The Technical Designs for Negru Voda-Pecineaga and Pecineaga-Techirghiol pipeline sections were already completed and the Technical Design for Techirghiol-Constanta pipeline section is in progress.

Value and funding

The works' estimated value is 28.9 million Euros.

OG.T.14.09 National Transmission System Interconnection with the Serbian Gas Transmission System

Project description

The construction of the interconnecting pipeline with the Serbian Transmission System shall allow the transit of the Russian gas to Serbia on the Romanian territory, thus improving the usage of the National Transmission System available capacity. On the other hand, this interconnection will ensure the possibility of gas supply to Serbia through the future Nabucco pipeline.

Duration

The project's estimated duration is 3 years (2010-2012).

The idea to conduct a Pre-feasibility Study on possible interconnection options came up during discussions with the NIS Gaz representatives.

Value and funding

The financial value will be estimated as a result of the Pre-feasibility Study.

OG.T.15.09 Modernization of the National Transmission System Technical Equipment in order to Operate in Compliance with the Relevant Legal Regulation Project description

The modernization of the technological equipment ensures the remote monitoring and transmission of the technological parameters. As a result, the manually operated valves shall be replaced with remote, electrically controlled valves and the existent regulation equipment shall be replaced with remote controlled equipment. Such upgrading works shall be performed in the National Transmission System entry-exit points, in the

Metering.Regulating Stations and in the Compressor Stations, thus ensuring SCADA operability.

The target is to increase the safety of the National Transmission System operation and to reduce operating costs.

Duration

The project's estimated duration is 48 months.

Value and funding

The investment value is 15 million Euros.

2.3. ROMGAZ

Romgaz is a trading joint-stock company of national interest having the Romanian Government, represented by the Ministry of Economy, as the main shareholder.

The company's main object of activity is the exploration of hydrocarbons, underground storing of natural gas, geological research for the discovery of new gas reserves (natural gas, crude oil, condensed gas), production, intervention, major revisions of the wells from the storage areas and of the natural gas reservoirs extraction wells.

Romgaz performs geological research for the discovery of new gas reservoirs, produce methane gas by excavating the company's reservoirs, stores the natural gas in underground gas storages and performs specific services aiming at enhancing the gas production in its gas fields.

The company owns more than 3600 production wells, out of which 252 are used to store the natural gas in underground gas storages, 20 compression stations, 6 underground gas storages, 37 gas dehydration stations in the production area and 8 gas dehydration stations in the storage area. It also owns 1970km of adduction pipes and 1497 km of collecting pipes, 460 technological groups of wells, 30 separator stations, 125 injection wells of waste waters.

The condensed gas production achieved in 2008 was 2.568 tons and was the result of exploiting more than 150 gas fields located in the Transylvanian basin and extra Carpathian area with over 3300 gas extraction wells.

The company's strategy for 2009-2013 includes mainly achieving 360 thousand meters of exploration drilling, setting-up 180 new wells and executing revisions to around 720 wells.

In figures

State share: 85,01% Joint stock - *RON – 383,038.38 - *EUR – 96,115.22

	2007		2008		2008/2007
Financial					
Situation	*RON	*EUR	*RON	*EUR	%
Turn-over	3.271.662.20	820,956.08	3,280,213.48	823,098.84	100.26
Net profit	509,55.39	127,861.94	537,297.20	134,823.15	105.44
EBITDA			1,341,724	336,676.91	
EBIT			927,037.08	232,619.97	

*in thousands

Projects

OG.R.01.09 Ghercesti Underground Gas Storage OG.R.02.09 Margineni Underground Gas Storage OG.R.03.09 Increase of Underground Gas Storage Capacity in Sarmasel Buglovian VI+VII reservoirs

OG.R.01.09 Ghercesti Underground Gas Storage Project description

The project objective is the development of an underground gas storage capacity of 600 million cm/cycle in the Pontian-Ghercesti reservoir. The injection-extraction technological process consists of gas take-over form the National Transmission System through the connection pipeline Corbu-Ghercesti, which is to be built, and injection through the wells into the reservoir (during the summer), extraction, compression and injection into the transmission system (during the winter).

Thus, an increase in energy safety and daily delivery rate, an increase of natural gas supply flexibility, a reduction of energy consumption and a reduction of dependence on import gas during winter time will be achieved.

Duration

Works have been done in order to extend the capacity of the wells, to consolidade and upgrde 50 wells, to create a cushion gas and, currently, surface facilities are executed.

The expected project completion time is 4 years.

Value and funding

The project investment is 118.31 million Euros, which shall be 35% secured from own sources.

The investment recovery period is 16 years.

OG.R.02.09 Margineni Underground Gas Storage

Project description

The development of an Underground Gas Storage in the Moldovia area can cover the gas consumption of the region or, depending on the different alternatives of storage

capacities analyzed in the study, an excess of capacity may cover the regional market demand (South-Eastern Europe).

Considering that a relatively high value of investment and a large work volume is estimated, establishment and development of the storage mush be phased, based on the future development of the Romanian gas market, as well as on the storage demand.

Duration

To support the project, a bankable Feasibility Study was prepared and the Technical Feasibility Study will follow. The expected project implementation time will be determined after this study.

Value and funding

The study which will determine the estimated value of the project is estimated to cost 2 million Euros and will further establish possible participations in the project funding, depending on Romgaz participating interest.

OG.R.03.09 Increase of Underground Gas Storage Capacity in Sarmasel Buglovian VI+VII reservoirs

Project description

The project aims at increasing the working gas of Sarmasel Underground Gas System to 1,550 million standard m3, with a cushin gas of 1,139 million standard m3.

In order to increase the working gas, the following investment must be accomplished: a gas compressor station, a gas dehydration station, rehabilitation of the gas gathering pipeline system, drilling works for 6 new wells and purchase of natural gas needed to increase the gas cushion.

The effects of this project are similar to those presented for Margineni project.

Duration

The expected project completion time is 8 years.

The 'Feasibility Study for the Increase of the Underground Gas System Capacity in Buglovian VI+VII Sarmasel Reservoirs' was prepared in 2008.

Value and funding

The project investment value is 184.88 million Euros.

2.4 CONPET

Conpet operates the National Transmission System of Crude Oil, Gasoline and liquid Ethane with old pipes (aged over a century), continuing the activity of the first Romanian transporter of crude oil.

Conpet has the status of an ordinary transporter meaning it applies an equal treatment for all the company's clients and it offers transportation services at prices established by the state through the National Agency for Mineral Resources. The objectives assumed by the company are: reinforcing the techno-economical capacity, improvement of services' quality offered to clients, increasing of safety in operating the transmission system through pipelines and economical efficiency. An important objective is the participation in executing and operating the Pan-European Oil Pipeline, Constanta-Trieste.

Along with Oil Terminal, Conpet is a shareholder and represents the interest of the Romanian party within the Project Development Company.

The technological reorganization of implementing the Rehabilitation Project of the Crude Oil National Transmission System through Pipelines in which Conpet was involved with all its resources. The objectives were the rehabilitation of the Transmission System through Pipelines, modernization of the pumping stations, installation of its own telecommunication system and a SCADA system.

In 1993, Romania and the World Bank concluded a leasing agreement for the modernization and rehabilitation of the energy sector, a part of the amount being allocated for the modernization of the Crude Oil National Transmission System through Pipelines.

In 2007 'The Integrated Management System Quality-Environment-Health, Occupational Security' was certified by the German company Germanischer Lloyd Hamburg.

In figures

State share: 58,72% Joint stock - *RON – 28,569.84 - *EUR – 7,168.99

	2007		2008		2008/2007
Financial		_			
Situation	*RON	*EUR	*RON	*EUR	%
Turn-over	275,014.65	69,009.00	316,115.00	79,322.24	114.94
Net profit	78,332.48	5,637.02	66,996.49	16,811.32	298.23
EBITDA			116,777.62	29,302.83	
EBIT			103,787.85	26,043.33	

*in thousands

Projects OG.C.01 Pan European Oil Pipeline OG.C.01 Pan European Oil Pipeline Project description

The project describes for the extension of the 20 inch oil pipeline from Constanta Black Sea port to Pitesti, up to the Pancevo Refinery (Serbia), and the reverse of the flow of the Adria Pipeline from Pancevo to Omisalj (Croatia), with the possibility of ensuring exports through Omisalj Terminal. (Interconnection of the Romanian Crude Oil Transportation System with the ADRIA Oil Pipeline System).

The main objective of the project is to ensure an increased usage of the transport capacities, supply of crude oil from the Caspian Region for refineries along the route and export to the world markets through the Omisalj Port Terminal.

The project will be carried out under the European Community support program 'INNOGATE'. A cooperation protocol was signed, at government level, between Romania, Serbia, and Croatia and the necessary joint teams were nominated to work for the preparation of a Feasibility Study.

The project will ensure the transport of about 10 million tons/year (both stages) of crude oil, available in the Black Sea basin. The clients could be the refineries along the pipeline route as well as international clients who can buy crude oil from the Omisalj hub port. Implementation of the project will also ensure an increased capacity of the existing Romanian crude oil transportation system.

Duration

The project could be developed in two stages. In the first stage, the 450 km pipeline from Pitesti (Romania) to Pancevo (Serbia) will be built, to ensure a transit capacity of 5 million tons/year and in a second stage, the 120 km pipeline from Calareti (Romania) to Pitesti (Romania) will be built, to increase the transit capacity to 10 million tons/year.

A third stage might be envisaged to increase the transit capacity to about 30 million tons/year. In this case, a new pipeline from Constanta (Romania) to Pitesti (Romania) should be considered.

The estimated completion terms for the project are: 3 years for stage one and 1,5 years for stage two.

The Romanian-Serbian-Croatian joint team elaborated two studies. A Desk Study regarding the existing pipeline systems in their countries and the Terms of Reference for the preparation of the Feasibility Study.

Based on a grant loan from US Trade and Development Agency to Croatia, HLP Parsons elaborated the Feasibility Study for the project.

Value and funding

The estimated project value is 400 million USD for stage one and 200 million USD for stage two.