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This report presents the performance of GAZ-SYSTEM S.A. acting as the Coordinator of the Świnoujście project which is of strategic importance for the Polish economy. The investment consists of the construction of an external port and a liquefied gas (LNG) Terminal in Świnoujście and the Szczecin-Świnoujście gas pipeline. When the Terminal and its connecting pipeline have been built, they will make an important component of the national gas transmission network. For Poland, the investment means opening the door to gas supply source diversification. The coordination tasks arise directly from the 24 April 2009 Special Purpose Act on the investments in the liquefied natural gas regasification terminal in Świnoujście, and from the corporate strategy of GAZ-SYSTEM S.A.

The report is made of three parts. The first part describes the reasons why the decision on construction the LNG Terminal in Świnoujście was taken and why GAZ-SYSTEM S.A. was appointed the Project Coordinator. The second part describes the tasks imposed on GAZ-SYSTEM S.A. as the Project Coordinator by the 24 April 2009 Special Purpose Act on the investments in the liquefied natural gas regasification terminal in Świnoujście as well as the coordination methods required thereunder. The final part deals with the outcomes of the activities performed so far and the plans made for the system improvements and for the Terminal operation.
For years on end, each Polish government presented its vision and concept of making Poland independent from the good faith of external suppliers of natural gas. After those years of debate, the government now in power decided to act. This gave rise to a practicable, coherent and consistent strategy of energy infrastructure development, which has been implemented since 2008 and whose key component is the LNG Terminal in Świnoujście.

The LNG Terminal in Świnoujście will be the first project of this type in the Central and Eastern Europe, which is the best possible proof that Poland is adopting a new, far broader policy of energy security. We are aware that isolated actions, unsupported by infrastructure development coupled with connections to West European networks, are doomed to failure. Without cooperation, such isolated components cannot make a whole.

Therefore, the LNG Terminal now under construction in Świnoujście is not intended to make a domestic infrastructural project only, but also a significant component of the planned North-South gas corridor which is to integrate the gas markets of Poland, the Czech Republic, Slovakia, Hungary and Croatia in line with the EU Energy Security and Solidarity Action Plan. In this context, I decided to supervise, under my own auspices as the Polish Minister of Treasury, the timely implementation of the LNG Terminal construction.

Before this strategic investment started, the Ministry of Treasury took care of its legal and political environment.

This was necessary because already at the project preparatory phase we faced a number of adverse factors which called for prompt and efficient actions. In this respect, the key initiative of the Treasury was the preparation of the 24 April 2009 Special Purpose Act on the investments in the liquefied natural gas regasification terminal in Świnoujście.

The Special Purpose Act not only facilitated the procurement of necessary permits (zoning permit, building permit, environmental licence) and the Investors’ procurement of land, but also defined the scope of investment and introduced the principle of continuous monitoring of the investment progress.

The history of performance by all the four Project Partners and the efficient coordination delivered by GAZ-SYSTEM S.A. allows the belief that in mid-2014 the LNG Terminal in Świnoujście will be ready, as planned, to receive the first methane carrier loaded with LNG.

At the same time, this will evidence the fact that Poland is able to implement complex, ambitious and innovative infrastructural projects. What really counts is practicable concepts, brave decisions and efficient financing. It is just those factors which make our vision of Poland as a key player on the European energy scene is coming true.

Mikołaj Budzanowski
Minister of Treasury
Dear Ladies and Gentlemen,

I have the honour to invite you to read a report which demonstrates how we designed and implemented the Project Coordination System for LNG Terminal in Świnoujście. The project is an element of the Corporate Development Strategy by the year 2014 and 2020 perspective as adopted by GaZ-sYsTeM s.a. The strategy's priority is extension of the national gas supply network and connecting it to the transmission networks of other EU members. We propose to achieve this goal through implementation of three key initiatives.

The first and indeed crucial one is the extension of Polish gas transmission network by over 1,000 kilometres of new pipelines by the year 2014. The strategic pipelines will be constructed in north-western and central Poland as well as in Lower Silesia in the south-west.

The second element of this action plan is to build intersystemic connections to the neighbouring countries. In September 2011 the Polish-Czech gas pipeline connection was commissioned for use. After the Lasów connection at the German border, this will make the second pipeline connecting the Polish network to the EU gas transmission system. With regard to intersystemic connections, we are also analysing the option of building the Polish-Lithuanian and Polish-Slovak pipelines, which in the future could become components of the North-South gas corridor to connect the LNG Terminal in Świnoujście with the proposed Adria LNG terminal in Croatia via the domestic transmission networks of individual countries. The corridor would facilitate integration of the regional gas markets and increase gas supplies security by providing access to new sources in northern and southern Europe.

Therefore the LNG Terminal in Świnoujście, as an investment of strategic significance for the whole region and for the Polish economy, requires an effective and efficient Coordination System, managed in line with the principles of sustainable development and environment protection.

This is the only way to perform the tasks imposed on us by the Polish government as a result of the government energy policy. It should be added here that coordination will be considered successful if the external part in Świnoujście is able to receive the first methane carrier with LNG by the project deadline and the Terminal is ready to unload the LNG from the carrier into the gas transmission network.

The primary characteristics of the project we are coordinating is its complexity resulting from the fact that there are four project partners: Maritime Office in Szczecin, Zarząd Morskich Portów Szczecin i Świnoujście S.A. (Szczecin and Świnoujście Seaports Authority), Polskie LNG S.A. and GAZ-SYSTEM S.A.

An additional factor is that at the moment of our taking over the project coordination, the progress of individual investment components was much varied. Therefore we had to design an efficient system which would not disturb our Partners' on-going work. I feel certain that our efforts are already bringing the desired results. Thanks to the introduction of a straightforward and efficient system of progress reporting we collect only the data that are significant for progress evaluation and threat identification. What is more, the collected data are standardised. Project managers prepare their reports against pre-defined templates that allow Project Sponsors to evaluate work progress promptly. The consolidated reports are sent not only to the Minister of Treasury but also to the Component Project Sponsors, i.e. the management of our partner organisations. Unification of the reporting system is a major integration tool which now provides our Partners with a complete picture of not only their own Component Project but also of the progress made by the other Partners.

When embarking upon the design of a Project Coordination System for Świnoujście LNG Terminal, we employed people who had specific experience in the construction and operation of similar projects. We have built an efficient and highly motivated team who introduced new standards into our corporate culture.

Today I am ready to declare that thanks to the new coordination and management processes we have overcome the challenges that would pose a significant threat to the timely investment completion. Coordination of such a complex project is, however, an evolutionary process and I am sure that we will still face a number of challenges in the days to come. Even so, our past experience lets us look forward at the scheduled date of commissioning the LNG Terminal for use with assurance.

Jan Chadam
President
In order to present the origin of the construction of the Świnojście external port and LNG terminal, this part of the report describes the legal and political background of the project launch, and especially the measures aimed at ensuring the energy security for Poland. The major underlying cause of the initiative were the Polish government’s efforts towards diversification of natural gas sources. The project’s impact on the European energy markets is also presented in full detail. Finally, this part also presents the partners involved in project preparation and implementation.
As early as in 2006 the problem of Poland’s energy security was discussed by the Council of Ministers. A resolution initiating the preparatory work on investment and trade regulations for diversification of the natural gas supply sources, and in particular for the construction of a liquefied natural gas terminal and for securing gas supplies from other sources, was taken on 3 January 2006. On 31 May 2006 the Council of Ministers passed a resolution on the compliance of constructing an LNG Terminal on the Polish coast with the general concept of gas source diversification and the energy policies of the Polish government. The subsequent resolution of the Council of Ministers, dated 19 August 2008, stressed the importance of LNG Terminal construction and of the need for the government’s strategic control over the project. Due to the project’s critical importance for the Polish economy, the project of the LNG Terminal construction was contracted to Półskie LNG S.A., a company fully owned by Gas Transmission Operator GAZ-SYSTEM S.A., who in turn is a fully Treasury-owned organisation.

**SPECIAL PURPOSE ACT**

Defining the actions to enhance the security of Poland’s energy supply and the development of domestic market for natural gas, both construed as national priorities, resulted in passing the Act of 24 April 2009 on the investments in the liquefied natural gas regasification terminal in Świnoujście, commonly referred to as the Special Purpose Act. The justification given for the Special Purpose Act specifies the following tasks as crucial for the gas sector:

- diversification of gas supply sources through:
  - construction of the terminal to receive liquefied natural gas on the Polish coast,
  - direct pipeline connection to the Scandinavian deposits,
- expansion of the natural gas transmission system,
- increase of the capacity of the operated underground gas storage facilities.

**FORECAST BENEFITS**

The completion of Świnoujście LNG Terminal will significantly affect the country’s energy security in the gas sector. This investment will contribute to the gradual emancipation of the domestic market from the risk of adverse impact of any suspension of gas supplies by the virtually sole supplier of imported gas. Securing the flexibility of supplies, which will become deliverable by sea, will definitely improve the ability of balancing the supply and demand on the domestic and neighbouring markets of the European Union. This investment and the related projects will facilitate the achievement of EU strategic objective which is to create a common gas market. In addition, it will help to ensure the free flow of gas within the framework of a competitive common energy market. Investments recommended in the draft Special Purpose Act match the Community’s strategic objectives stated in the European Economic Recovery Plan of 26 November 2008 (as published in the Commission Communication to the European Council No. COM(2008)800), which include the promotion of energy security.
With the adoption of the Special Purpose Act of 24 April 2009, Poland got more efficient in implementing the project which promises a real improvement in the country’s energy security. In practice, the construction of LNG terminal in Świnoujście requires carrying out of the four component projects managed by four different entities. To ensure effective implementation of the project, its coordination, under the said Act, was contracted to GAZ-SYSTEM S.A.

**Polish energy security requires not only the diversification of raw materials supply, but also the search for alternative technologies of their production or processing. The choice to rely on the LNG technologies, and thus to invest in Świnoujście LNG terminal, promises Poland an opportunity to launch new channels of natural gas supply and reduce the dependence on the existing suppliers.**

**LNG TECHNOLOGY**

Liquefaction of natural gas as LNG may be a gas supply solution alternative or complementary to the supplies from traditional sources.

LNG is a complex mixture of gases extracted from natural gas; it contains aliphatic hydrocarbons having between one and four carbon atoms in the molecule. Those are mainly methane and ethane.

The main stages of LNG processing include:

- Liquefaction of natural gas from its natural form in the condensing cooling tower through cooling down the gas to about minus 160°C. During the condensation process, the gas gets compressed to about 1/600 of its original volume. The condensing cooling towers are located in the gas-exporting regions such as the Middle East, Africa or Australia.
- Transportation of LNG is done with the LNG/methane carriers equipped with special-purpose gas tanks which keep the gas in its chilled liquid phase.
- The loading and unloading of LNG/methane carriers requires special-purpose port facilities.
- LNG regasification takes place in an LNG terminal where the LNG is first stored in cryogenic tanks, expanded to the gaseous phase on demand, and then pumped into the existing transmission network. For the purposes of the local gas supply, LNG can also be loaded onto special-purpose road vehicles or railway wagons with tanks designed for LNG transport.

**PROVEN SOLUTIONS**

The construction of Świnoujście LNG Terminal is the first investment project of this type not only in Poland but also in Central and Eastern Europe. In the western part of Europe there are now twenty regasification terminals in operation, of which as many as six are located in Spain. The oldest Spanish LNG terminal was built in 1969 (Enagas, Barcelona), the youngest in 2007 (El Ferrol), and three more are under construction (Enagas in Gijon and two Gascan in the Canary Islands).

For the last decade, the European market for LNG has been growing fast: 11 new plants, and another five are under construction (1 in Poland, 3 in Spain, 1 in Italy). The youngest terminal in Europe is now the Dutch Gate terminal in Rotterdam, launched in September 2011 (re-gasification capacity of 12 billion m³, three tanks with a total capacity of 40,000 m³). In addition, more than 30 new terminals are at the planning or design stage. The annual re-gasification capacities of the existing and currently constructed terminals are within the range from 1.3 billion m³ (both Gascan terminals in the Canary Islands) to as many as 21 billion m³ (South Hook, United Kingdom). The European terminals can hold from 100,000 m³ of LNG (Panigaglia, Italy) to 1,000,000 m³ of LNG (Isle of Grain, UK).

The processes of gas liquefaction, transport, storage and regasification are well known and used in many regions of Europe and the world. The positive experiences of the European market indicate that the LNG technologies will become an effective and secure way to meet the energy needs for Poland.
The system that connects

Using natural gas as a fuel is less environmentally harmful than other fossil fuels such as coal or oil. Emissions from burning the gas include fewer pollutants and lower volumes of CO₂. An increase in gas consumption will have a positive impact on the environmental objectives set forth in a document called Polish Energy Policy until 2030.

TAKING THE TERMINAL CONSTRUCTION

The activities related to the Świnoujście LNG Terminal construction were initiated by the Council of Ministers’ Resolution No. 3/2006 of 3 January 2006, in which the minister responsible for economic affairs was obliged to take the steps necessary for the preparation of investment and trade decisions. Subsequently, on 31 May 2006 the Council of Ministers adopted Resolution No. 77/2006 on measures to enhance energy security of the Republic of Poland; the resolution officially declared the work undertaken by the Polish Oil and Gas Company (PGNiG S.A.) in relation to the coastal LNG terminal to be compliant with the governmental policies. The Council of Ministers made the Minister of Economy responsible for monitoring the activities of PGNiG S.A. related to the LNG Terminal in Świnoujście.

In 2006 PGNiG S.A. received the ordered feasibility study and techno-economic analysis of LNG imports to Poland. The study conclusions included recommendations for Świnoujście to become a future location for the LNG Terminal (Gdansk was an alternative location). As a result, on 15 December 2006 the Management Board of PGNiG S.A. decided to locate the investment in Świnoujście.

To ensure effectiveness of the planned investment, the decision taken on 12 April 2007 by the Management Board of PGNiG S.A. specified the functional principles of the operation of LNG Terminal in Świnoujście. The assumed parameters of the regasification Terminal were as follows:
- total tank capacity – 300,000 m³;
- initial maximum transfer capacity – 656,000 m³/h;
- annual regasification capacity – 656,000 m³/h;
- capacity to receive and unload ships carrying up to 200,000 m³ of liquefied gas.

The study also accounted for a potential extension of the installation to receive up to 7.5 billion Nm³ of gas per year, which is about 50% of the current annual demand for gas in Poland.

COMPONENT PROJECTS

The starting point for the preparation of the Component Projects, in particular those related to the construction of a protective breakwater and a ship docking station, was the decision of PGNiG S.A. taken in December 2006, which set the location of the Świnoujście LNG Terminal. The next step of PGNiG S.A. was the establishment of a special-purpose company that was to carry out the main part of the project. On 17 April 2007 the Memorandum establishing Polskie LNG Sp. z o.o. was signed. The company was set the task of preparation and execution of the project called “Construction of the regasification terminal for liquefied natural gas in Świnoujście”.

The project of “Construction of a protective breakwater for the external part in Świnoujście” was initiated by the Council of Ministers Resolution No.167/2007 of 20 September 2007. The investor responsible for its implementation was the Maritime Office in Szczecin. Accomplishment of this task is necessary to protect and provide sea access to the planned port. It also offers the possibility of becoming a site for unloading LNG tankers and possibly other vessels as well.

During the same year 2007 PGNiG S.A., the Maritime Office in Szczecin and Zarząd Mor- ski Portów Szczecin i Świnoujście S.A. (Szczecin and Świnoujście Seaports Authority) executed an agreement on coordination of activities related to the Świnoujście LNG Terminal construction. Under these arrangements the Szczecin and Świnoujście Seaports Authority began its preparatory work for the construction of a ship docking station necessary for LNG unloading. The preparatory work included ordering an Environmental Impact Assessment and also contracting the Projekt Design Office to develop the concept and prepare the building and detailed design for the investment. On 31 October 2008 the Szczecin and Świnoujście Seaports Authority filed an application for an environmental permit for the proposed project. Another investment task is the responsibility of Gas Transmission Operator GAZ-SYSTEM S.A. Under the Council of Ministers Resolutions No. 3/2006 and No. 77/2006 which, among other things, require the transmission network operators to diversify the sources of gas supplies to Poland and take action to enhance the energy security of the country, GAZ-SYSTEM in M. was given the task of constructing the Szczecin-Świnoujście pipeline. That commitment was detailed in the document adopted in March 2007 and called “Policy for the natural gas industry”, which established guidelines for the governmental authorities and the strategically important companies in the gas sector in relation to the activities aimed at improving Poland’s energy security. The adopted guidelines resulted in ordering an “Area Planning and Development Concept” for the construction of a pipeline connecting Świnoujście LNG Terminal to the entry point of gas transmission system as well as a “Feasibility Study for the Świnoujście- Szczecin high-pressure gas pipeline”.

The estimated total cost of the investment is €1.032 billion (as in August 2011).
Poland’s energy security is affected by implementation of the Świnoujście LNG Terminal construction which consists of the 4 component projects:

► Construction of a Protective Breakwater for the Świnoujście Port – project owner: Maritime Office in Szczecin;

► Construction of a Ship Docking Station – project owner: Szczecin and Swinoujście Seaports Authority;

► Construction of the Świnoujście LNG Terminal – project owner: Polskie LNG S.A.;

► Construction of the Świnoujście – Szczecin Pipeline – project owner: Gas Transmission Operator GAZ-SYSTEM S.A.

It was also decided that such control will be best ensured by a transfer of the majority shares in Polskie LNG Sp. z o.o. (later on transformed into a joint stock company) to Gas Transmission Operator GAZ-SYSTEM S.A., whose shares are one hundred percent Treasury-owned. Therefore the government made a decision requiring the Polish Oil and Gas Company to sell Polskie LNG Sp. z o.o. Acquisition of 100% shares by GAZ-SYSTEM S.A. took place on 8 December 2008.

EXTENDED RESPONSIBILITIES OF GAZ-SYSTEM S.A.

Upon preparing the draft Special Purpose Act of 24 April 2009, the government saw the need not only for a formal nomination of individual investors, defining the scope of their responsibilities and facilitating the process of project preparation, but also the need for project coordination. Under this Act, Gas Transmission Operator GAZ-SYSTEM S.A., was given extended responsibilities that included project coordination. The Special Purpose Act on the construction of a liquefied natural gas regasification Terminal in Świnoujście – adopted to facilitate the project implementation – has eliminated a number of formal barriers and streamlined the formal procedures for us. The Act has also introduced the function of the Project Coordinator, whose job is to monitor the investment progress and to support the project partners.

Timely implementation of the project within a very short – I would even say ambitious - timeframe is a huge challenge. It requires a lot of effort and cooperation, both from all the four project partners and from their contractors. The Project Coordinator’s role is therefore to provide us with consistent tools for collaboration.

Moreover, the use of best practices in project management has enabled Polskie LNG S.A. to build good relationships on the basis of a well-designed time schedule which accounts for the interactions that occur between the single projects. We have hired top specialists – not avoiding international recruitment – among whom there are many experienced Poles. The people directly involved in the operational management of the project have been additionally trained and subjected to an international examination, which they passed with very good results.

Implementation of the best practices of social responsibility has let us stand up to the challenge of winning the public approval for our project. Already at the planning stage of the project, the Company entered into a dialogue with the local community and the local authorities of Świnoujście and the West Pomerania region. Thanks to this approach – and in particular the full transparency of our activities – the percentage of supporters of the Świnoujście LNG Terminal construction has exceeded the number of people opposing and neutral, a fact confirmed in an opinion poll.

Construction of the LNG Terminal is progressing very rapidly. Everything indicates that by mid-2014 it will be ready for operation. Already today we can say that this investment is setting new standards in the planning and implementation of such projects, not only in Poland, but also in this part of our continent. The experience it brings – in particular the implementation of best practices developed by Polskie LNG S.A. and other partners – will set a valuable example for other public investment projects in Poland and in our region of Europe.

Zbigniew Rapciak
President of Polskie LNG S.A.

Polskie LNG S.A. company, acting in liaison with the Maritime Office in Szczecin, Szczecin and Świnoujście Seaports Authority and GAZ-SYSTEM S.A., is responsible for construction of the Świnoujście LNG Terminal together with an external port in Świnoujście. This is a complex project in terms of technology and organizational structure and moreover, the first project of this type implemented in this part of Europe.
Operator GAZ-SYSTEM S.A. became the Coordinator of all the four Component Projects. The presented justification of such a nomination was that GAZ-SYSTEM S.A. and Polskie LNG Sp. z o.o. (the latter already being a subsidiary of GAZ-SYSTEM S.A.) were responsible for the predominant Component Projects of the whole project. Projects carried out by the other partners are functionally linked to the Terminal. The document also clarified the Coordinator’s responsibilities within the general control of the project, defined the simplified and streamlined procedures for project administration and public procurement rules for the entire LNG Terminal project.

At the same time, the Special Purpose Act entrusted the project control to the minister competent for the Treasury issues, who was to act in liaison with other relevant ministers (Economy, Infrastructure) and governmental bodies.

Responsibilities of the Project Coordinator and of the component project owners are regulated by the Special Purpose Act of 24 April 2009 on the investments in the liquefied natural gas regasification terminal in Świnoujście.

1.3. COORDINATION

SCOPE

The appointment of Gas Transmission Operator GAZ-SYSTEM S.A. as the Project Coordinator for the individual component projects incorporated into the Świnoujście LNG Terminal construction allowed the introduction of a project coordination system and the development of effective, new standards of project partners cooperation. The Project Coordinator became responsible for the development of a consolidated time schedule for the project, implementation of a consistent methodology of project management and communication and also a reporting system.

COORDINATION TASKS

Due to the high degree of interdependence between the investment component projects, an important primary task of the Coordinator under the Special Purpose Act was to prepare a consolidated time schedule for the entire investment project. When GAZ-SYSTEM S.A. was taking over its coordination duties, individual Component Project Schedules were not only at various levels of detail, but they were also prepared in different formats and with different tools. An added difficulty resulted from the fact that the Component Projects were at various progress stages.

Another important coordination task set before GAZ-SYSTEM S.A. was to develop a project reporting system. This task was performed during the initial period, before the Project Coordination System for the LNG Terminal construction was implemented, and with a huge work effort. From the very beginning, the Project Partners delivered high-quality information in terms of content, often very extensive and detailed. The problem was the lack of a structured form and scope of the data. Project Partners differed in their methods of project management, which influenced the scope and form of information provided by them. In addition, there were no standardised methods and tools for information exchange between Partners or procedures for mutual arrangements, risk management, resolving critical issues or coordination in implementing the adopted solutions.

Due to the lack of a uniform and agreed upon standard of information exchange and processing, in the course of coordination:
The system that connects

**Report on implementation and operation of the Project Coordination System**

**Under the Special Purpose Act, the main responsibilities of GAZ-SYSTEM S.A. include** development of a consolidated schedule for the project and the design and implementation of a system to ensure the construction of the Świnoujście LNG Terminal in line with such a time schedule.

- materials received differed in their form and level of detail
- verification of the data to be used in reports for the Stakeholders was difficult
- time necessary for the preparation of the Consolidated Progress Report on Component Projects was extended
- information exchange between Partners was difficult (due to the non-standardised methods of communication).

A careful analysis of the existing situation and the adoption of modern, yet proven, project management practices helped GAZ-SYSTEM S.A. develop a user-friendly Coordination System for the Świnoujście LNG Terminal construction. The new system has been designed to minimise the interference with Project Partners’ work and allows the development of standards for project coordination and management, and, in particular, standards for the exchange of critical information between all the Project Stakeholders.

The first stage of streamlining and formalizing the methods of performing the obligations imposed on all the Partners by the Special Purpose Act began on 20 August 2009 with all the Project Partners signing a Cooperation Agreement at the initiative of GAZ-SYSTEM S.A. The document set out the mutual obligations and outlined the time frame, within which the subsequent project stages would be performed. In addition, it defined the deadline for the Terminal to achieve full operability by 30 June 2012. The Świnoujście LNG Terminal construction comprising the four component Projects, each carried out and managed by a different Project Partner. The task of GAZ-SYSTEM S.A., as the Project Coordinator, is to organise and see to a harmonious performance of the joint actions of all Partners. On the other hand, the Project Partners have undertaken to manage the individual Component Projects, with the management tasks comprising planning, organising, motivating and monitoring the efforts aimed at tasks completion.

It should be noted that the Project Coordinator, in contrast to the Project Manager, does not enjoy the executive authority in their relations with Project Partners. This means that their cannot issue or enforce orders – except in a situation where the Project Partners delegate to the Project Coordinator some of their own powers, for example for the determination of the deadlines and forms of presentation of reports on the implementation of organizational arrangements. The Project Coordinator is not responsible for the autonomous (in the sense of discretion) activities of Project Partners; however, he remains responsible for organizing the cooperation in the areas typically defined by a formal agreement establishing a system of coordination. In project management, unlike in project coordination, organization is not implemented in the form of organizational arrangements but rather in the form of formal orders on how the subordinates should cooperate. Moreover, to ensure the efficient cooperation between Entities implementing individual Projects, the basic mechanisms were adopted in the form of:

- action in concert (Project Partners inform one another of their decisions, plans or activities);
- action agreed (Partners mutually agree their plans or activities);
- action approved (pre or post factum approvals of certain activities, etc.)

**Coordination and Management**

Projects carried out by more than one entity require a clear specification of responsibilities and accountability. The Project Coordinator is responsible for the cooperation among all the project partners, but it is Project Manager who is accountable for the individual Component Project implementation. The Special Purpose Act of 24 April 2009, on the investments in the liquefied natural gas regasification terminal in Świnoujście has imposed on GAZ-SYSTEM S.A. the task of coordinating the Świnoujście LNG Terminal construction comprising the four Component Projects, each carried out and managed by a different Project Partner. The task of GAZ-SYSTEM S.A., as the Project Coordinator, is to organise and see to a harmonious performance of the joint actions of all Partners. On the other hand, the Project Partners have undertaken to manage the individual Component Projects, with the management tasks comprising planning, organising, motivating and monitoring the efforts aimed at tasks completion.

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- action approved (pre or post factum approvals of certain activities, etc.)

**Coordination – responsibility for the efficient cooperation between Entities implementing individual Projects.**

Basic mechanisms:
- organizational arrangements between Partners – cooperation;
- reporting the performance of organizational arrangements.

Organizational arrangements may take the form of:
- action in concert (Project Partners inform one another of their decisions, plans or activities);
- action agreed (Partners mutually agree their plans or activities);
- action approved (pre or post factum approvals of certain activities, etc.)

**Management – responsibility for project implementation at the executive level.**

Basic mechanisms:
- decisions (orders);
- reports on the implementation of the decisions (orders).

Obydwa mechanizmy są podstawą sprawowania obowiązków. Obydwa mechanizmy są podstawą sprawowania obowiązków. Obydwa mechanizmy są podstawą sprawowania obowiązków.
In contrast to the Project Coordinator, the Project Manager is responsible for the operation of their staff and resources entrusted to them.

**COOPERATION FOR EFFICIENCY**

Thanks to the principle – proposed by the Project Coordinator and gradually implemented by the Project Partners – of using the same methodology for Component Project Management as for Project Coordination, the range of coordination activities to be performed by the Project Partners largely overlaps with their management activities.

GAZ-SYSTEM S.A. decided that the conditions, which it is facing as the Project Coordinator, make cooperation the only effective method of coordination. This approach to coordination and management makes both coordination and management activities more efficient. Upon providing the Project Partners with a new tool in the form of methodology and the operating procedures based on it, a training programme was developed to prepare them for its use. The training cycle began in April 2010 and was completed in February 2011. At the end, all training participants underwent the certification process. In this way, all those trained in the methodology used to develop the management and coordination procedures have been certified at the international level. Now, with the training completed, all Project Partners are prepared to manage projects and their project teams use the common language of methodology, which will help them continue work on their joint venture which is the LNG Terminal.

To make sure that the persons implementing the coordination and management processes of the Świnoujście LNG Terminal and External Port construction have the necessary expertise and skills in the Coordination System procedures, a training system with certification was developed.

**Jarosław Siergiej**
President / CEO
Szczecin and Świnoujście Seaports Authority

The construction of port infrastructure and technological facilities for the handling and operation of Świnoujście LNG Terminal is part of one of the most important investment projects, implemented by the Polish government in recent years. This task requires the Szczecin and Świnoujście Seaports Authority to mobilise exceptional resources and overcome many challenges.

The first challenge we have faced is the imposed project timeframe indicating that the entire project will have to be completed by June 2014. A prerequisite for the timely implementation of the Master Project, however, is the completion of our part of construction works by the end of 2012. Such a demanding timeframe required a significant mobilization of our project team. To meet these requirements, our specialists have participated in training, as a result of which they have gained international certificates attesting to their expertise and skills in project management.

Another challenge posed by such a huge and complex investment project – involving four Project Partners implementing the four interrelated Component Projects – was building the relationships between the Partners. In this context, the communication between all the Partners and Stakeholders to the Project plays an important role.

The process of building the proper relationships and modes of communication has been the responsibility of GAZ-SYSTEM S.A., who serves as the Project Coordinator, who suggested a model based on cooperation in resolving all the major issues related to the project implementation. Coordination, including communication, between all Project Partners implementing their individual Component Projects, follows the rules developed by the Project Coordinator and subsequently agreed on by all Project Partners and the operational procedures introduced by our joint decision.

Today, after eighteen months from the date, on which we started negotiating and implementing the principles of Project Coordination System, I can say that this System brings positive results. Project risks are identified and managed proactively and all the problems are resolved as they occur. The Investment Project is implemented in accordance with the operating schedule worked out jointly. It should be noted that during the project work the employees of my company have gained new qualifications that are very useful for managing complex investment projects. This expertise and skills are the more valuable since we intend to rapidly capitalise on our business opportunities.
The second part of the report describes how GAZ-SYSTEM S.A., as the Coordinator of the LNG Terminal Construction, defines the scope of duties performed and the resulting operational activities. It also presents coordination and management processes, together with their application and describes the tools and techniques used to implement those processes. It goes on to demonstrate efficiency of the solutions adopted within the Coordination System.

GAZ-SYSTEM S.A. is a modern and socially responsible company, with a vision to participate in the process of ensuring energy security and integrating the transmission systems in the Central and Eastern Europe. For this reason, the company has not only committed to effectively perform the duties imposed by the Special Purpose Act and consisting in coordinating the performance of the LNG Terminal construction, but also expanded them by the projects related to implementation of its strategic objectives. Despite the fact that the additional commitments do not arise literally from the Special Purpose Act, they enhance the efficiency of coordination and ensure that the entire project is executed with respect to the principles of sustainable development. Implementation of all those tasks will in the future make the LNG Terminal an important component of the European gas transmission system.
2.1. COORDINATION SYSTEM CONCEPT

Upon defining the role of the Project Coordinator in the LNG Terminal construction, the Special Purpose Act also imposed some responsibilities on GAZ-SYSTEM S.A. These include designing and scheduling the entire project, supervising performance, organizing the project information flow, and finally progress reporting.

COORDINATION SYSTEM CHARACTERISTICS

The purpose of the Management Board of Gas Transmission Operator GAZ-SYSTEM S.A., which determined the choice of a coordination model, was an efficient performance of the obligations to harmonise the progress of the LNG Terminal construction. In this sense, efficiency means timely implementation of the project by all Project Partners. Therefore the Coordination System had to be simple and transparent, and at the same time able to quickly identify any risks and ensure efficient prevention of their impact. Moreover, an important characteristics of the proposed Coordination System was minimum coordination workload for the Project Partners implementing their own Component Projects.

COORDINATION SCOPE

Even before the Coordination System introduction in December 2009, the Project Partners would provide high-quality information but there was no uniform, agreed upon standard of information exchange and processing. This method of cooperation neither ensured compliance with all the requirements imposed by the Special Purpose Act nor met the expectations of the Sponsor or the Company Management Board. Upon assuming the task of effective coordination of the Świnoujście LNG Terminal construction, GAZ-SYSTEM S.A. developed a range of activities introducing a new standard of cooperation between Component Project owners. The transparency and effectiveness of the System will ensure performance of the following actions:

• standardizing the coordination processes: scheduling, reporting, communication, risk management and document flow through agreeing on the form, content, time, frequency and distribution of information, as well as identifying and assigning the tasks and the scope of powers to individual business roles;
• providing the coordination process participants with communication tools;
• ensuring identification and implementation of all the tasks necessary to achieve the Master Project objective;
• designing a monitoring and warning system for project risks to facilitate achievement of the Master Project objective.

Thanks to a clearly defined scope of works, the coordination process has been limited to the necessary activities, and the system generates a flow of relevant information only. The unified communication system also uses only verified information which allows a reliable interpretation of facts. Efficiency of this process was additionally secured by the systematic way of preparing communications which predetermines their components and the assigned responsibilities.

In accordance with the authorization to contract some coordination tasks to an independent contractor having the necessary expertise and experience, provided by the Special Purpose Act, we embarked on selecting such a contractor. However, the relevant selection process has been nullified. In such a situation, GAZ-SYSTEM S.A. has created its own LNG Division responsible for the task of coordinating the LNG Terminal construction in Świnoujście. The LNG Division was made to design, implement and operate a Project Coordination System for the

1 Article 2(5) the Act of 24 April 2009 on the investments in the liquefied natural gas regasification terminal in Świnoujście.
The system that connects

The LNG Division established by Gaz-System S.A. was assigned the task of designing, implementing and operating the Coordination System. The first action of the new team was to choose and introduce a uniform methodology common for all projects which made the foundation of the entire coordination process.

The methodology selected by Gaz-System S.A. puts a strong emphasis on action pragmatism. Its significant advantages are simplicity, adherence to procedures and flexibility. Moreover, its use allows a comprehensive analysis of processes and a reduction of activities that do not serve the objectives of the Master Project.

LNG Terminal construction based on a uniform methodology for all the Component Projects. When starting its work, the LNG Division faced a choice of tools that would best of all facilitate the development of a new Coordination System, common to all the projects within the LNG Terminal construction. Due to its adherence to procedures, flexibility, comprehensiveness and proven record, the TenStep® methodology based on the international PMI standard was selected as the optimum tool. The selected tool, ready-made and repeatedly used by the managerial teams around the world, allowed us to start defining coordination processes immediately, without the need to spend time on creating procedures from scratch. The adopted coordination methodology is also remarkably simple and practicable. What is more, its application ensures that the analysis covers a complete set of processes associated with project management and not its larger or smaller portion.

The GRI Group management procedures have been prepared by the Project Coordinator, and then assessed by the Project Partners and Contract Engineers in order to adapt them to the contractual provisions. The flexibility of this solution is also apparent in its adaptability to the project size and to the conditions, under which such project is implemented. Thus it offers a possibility to use only the appropriate and not necessarily all the available processes. In practice, of the ten processes available, only three were implemented at the preliminary stage of the Coordination System implementation – two of those for project definition and scheduling and a third one describing how the proposed project will be implemented. The other processes have only been included in the course of project implementation.

**ADAPTATION PROCESS**

With the project methodology already selected, the Project Coordinator faced the task of adapting its solutions to the specific nature and requirements of their task. Thanks to the methodology adopted and the appointment by Gaz-System S.A. of an interdisciplinary team of people with considerable experience in the management and implementation of projects of similar size, we have built a unique Coordination System, based on the best available
practices. The new system offers a small team not only the possibility to perform its statutory duties effectively, but also to meet the challenges of GAZ-SYSTEM S.A. Corporate Strategy. While developing the Coordination System for the LNG Terminal construction, out of the ten processes available in the basic methodology, three major ones were developed and implemented during the initial phase: Defining, Scheduling and Schedule Management. These were subsequently followed by Communication Coordination and Risk Management, and then – as complementary mechanisms we developed Change Management and Critical Issues Management. The other three processes have been prepared, but their implementation is scheduled for the time when the system has been tested and proven in its

Preparation of the Coordination Process Participants to Use Its Basic Procedures in Line with the Selected Methodology was entrusted to experts, which left the LNG Division Core Team free to concentrate on the design and implementation of a Coordination System for the LNG Terminal construction (‘Project Coordination System’).

The system processes are designed to link the system components so as to form an interconnected and fully operational whole. This was precisely the approach we took in designing the Coordination System for the LNG Terminal construction. The current system functionality allows standardization of activities resulting in their simplification. Thanks to using a complete and proven methodology with ready-made action templates for the development of our Project Coordination System, we can be sure that all the processes are handled comprehensively. Only such a design of the System gave us the confidence of effectively fulfilling our commitments.

At the beginning, every attempt at unification and systematization of actions encounters difficulties. People have their habits and proven practices which produce good results as long as their work is performed in a fixed environment. Unfortunately, it often appears that in a new team these individual habits are an obstacle to a uniform understanding and performance of the tasks assigned. Sometimes the changes are far-reaching and require restructuring of the work culture of individuals or even entire teams. However, when the initial reluctance has been broken, it can be fairly quickly noted that the new, systematic way of working produces better results, and all the participants discover that they speak a common language.

Wojciech Droź
Chief Coordinator of Operations, GAZ-SYSTEM S.A.

A single man cannot do everything, but when everybody does their part, everything will get done. However, it is important that these parts fit together and form the desired whole.

The system that connects

Report on implementation and operation of the Project Coordination System
THE SCOPE OF RESPONSIBILITIES ARISING FROM THE SPECIAL PURPOSE ACT

On defining the role of the Project Coordinator in the process of the LNG Terminal construction, the Special Purpose Act provides that GAZ-SYSTEM S.A. shall supervise the investment performance in the scope of:

- scheduling the construction and implementation phases of the LNG Terminal construction;
- monitoring the Project Partners’ works for compliance with the time schedule;
- coordinating the document and information flow between the Coordination process participants, including the Project Partners;
- monitoring progress of the LNG Terminal construction, preparing reports and making recommendations for actions to streamline the project implementation.¹

The analysis of these responsibilities, performed in view of the component processes of the project methodology adopted, allowed clarification of the scope of Project Coordination System. Six areas of GAZ-SYSTEM S.A. responsibility were identified:

- project defining and designing and updating the project’s time schedule;
- monitoring the Project Partners’ works compliance with the time schedule;
- coordinating document and information flow between the Coordination process participants, including the Project Partners;
- monitoring the project risks and determining their significance for the fulfilment of Project Deliverables or solution of the time schedule. These include:
  - the preparation and implementation phases of the LNG Terminal construction;
  - monitoring the project risks and determining their significance for the fulfilment of Project Deliverables or solution of the time schedule;
  - informing the Project Sponsor about the solutions adopted for critical issues affecting the achievement of Project Deliverables or about failure to obtain an agreement or rejection of a developed solution from any of the coordination process participants. The coordinating team has also extended the range of tasks set forth in the Special Purpose Act by risk monitoring and by informing the Master Project Sponsor, who, in this case, is the Minister of Treasury, about the solutions applied for critical issues. The former of the added responsibilities is a detailed method of meeting the responsibility for monitoring the project progress which allows prompt identification and alleviation of project risks. The latter arises directly from the nature of coordination, which consists in organizing the process of arriving at a mutual agreement rather than in issuing direct orders.

OBJECTIVES OF THE PROJECT COORDINATION SYSTEM

The scope of the Project Coordination System was divided into six independent tasks which streamline solving the main issues that arise in the course of project implementation. We also defined their interpretation in the system as well as their significance for the fulfilment of coordination responsibilities.

1. Defining the project and building and updating its time schedule

With regard to the first responsibility, the Special Purpose Act declares that the Project Coordinator shall be responsible for scheduling the preparation and implementation phases of the LNG Terminal construction, and goes on to provide that Gas Transmission Operator GAZ-SYSTEM, a joint-stock company with its registered office in Warsaw, shall draw up the time schedule referred to in subsection 3(1) in consultation with the other entities referred to in subsection 1. The time schedule shall become binding for the entities referred to in subsection 1 upon its approval by the minister responsible for the Treasury.

The analysis of the Special Purpose Act in view of the responsibility for and methods of project scheduling has allowed identification of the tasks whose performance is a prerequisite for the proper development and implementation of the time schedule. These include:

a. Defining the scope of Projects and elements (in the terminology of the methodology applied – Project Deliverables) in a manner ensuring full operability of the facilities erected. The task should be implemented not only in the technical, but also in the organisational terms (e.g. procedures implemented, responsibilities agreed upon, resources made available);

b. Establishing such implementation deadlines for the Component Projects and their Deliverables as will allow timely achievement of full operability of the Świnoujście external port and LNG Terminal. Scheduling is done on the basis of the Open Season procedure and on other agreements between the Project Partners, whereby the project is to be completed by 30 June 2014.

c. Determining the interaction points between the works carried out within the individual Component Projects and of the corresponding implementation deadlines for the inter-related tasks in order to provide the Project Partners with proper conditions for timely implementation of their tasks (harmonization of the Component Projects).

d. Establishing a set of tasks which are beyond the scope of individual Component Projects and whose completion is necessary to achieve the full operability of the external port and LNG Terminal. These can include, for example, the tasks which cannot be assigned to a single Project Partner as a party responsible for their implementation or the nature of which goes beyond the Partners’ scope. For the purpose of implementing such tasks, it was considered necessary to establish Supporting Projects.

As results from the above and from the coordination methodology adopted, project scheduling should be preceded by defining the Component Projects and the Master Project, the latter consisting of the total of the Component Projects as supplemented by the Supporting Projects that ensure
PREPARING A PROJECT DEFINITION, I.E. ITS DETAILED DESCRIPTION, BEFORE DEVELOPING A PROJECT SCHEDULE ALLOWS TO UNDERSTAND THE PROJECT BETTER, DETERMINE ALL ITS PHASES AND THE TASKS NECESSARY TO PRODUCE THE EXPECTED PROJECT DELIVERABLES, AND TO SEQUENCE THE TASKS PROPERLY. THEREFORE THE PROJECT DEFINITION ALLOWS TO DEVELOP A BETTER TIME SCHEDULE, AND THIS TO IMPLEMENT THE PROJECT MORE EFFICIENTLY.

Projects, updated on the monthly basis are the second important type of document, confirming the information on work progress. Monitoring the project activities for compliance is also based on other sources of information: reports from Contract Engineers and Investor Supervision, participation in the site councils and Partners’ meetings, site inspections and photo documentation of the Project progress. Collection of data from different sources allows building a comprehensive image of the Project and gaining a fair assessment of work progress. The collected information is also used for diagnosing the problems affecting the timely implementation and effectiveness of the proposed improvements.

The obligation to monitor the Partners’ work performance against the schedule analysis, performed using the aforesaid documents and techniques, allows to conclude on the impact of current events – including any problems faced – on the entire project. This allows not only keeping the Project Sponsors informed about the Project’s Progress, but also making suggestions and recommendations for any improvements.

3. The coordination of document and information flow between the Coordination Process participants, including the Project Partners

In the Project Coordination System this task is also specified in more detail than required under the Special Purpose Act. Efficient internal communications within the LNG Terminal construction in necessary for the proper and efficient functioning of the Project Coordination System. It also secures compliance of project management with the adopted time schedule.

Within the meaning of the Project Coordination System, internal communications mean the exchange of information between:

• The Coordinator and the Minister of Treasury and other governmental bodies (where the obligation to organise such communication has been agreed upon):

  • People directly involved in the coordination process (e.g. employees of the LNG Terminal and the port infrastructure. The project schedule developed is not a closed construct – we provided for the possibility to update it in response to the current needs of the Project Partners. Under the Special Purpose Act, recommending actions to streamline project implementation or the management of risks and critical issues is another responsibility of the Project Coordinator.5

This task is performed with the use of three processes provided by the adopted project methodology:

• Defining the project,
• Developing the Project schedule,
• Managing the schedule.

2. Monitoring the Project Partners’ works for compliance with the time schedule

This task was literally copied from the Special Purpose Act to the Coordination System for the LNG Terminal construction. Performing this task basically translates into performing two methodology processes:

• Managing the schedule,
• Coordinating the management.

The basis for performing the task of monitoring work progress are two types of documents. The first type is Component Project Progress Reports. Prepared and submitted by the Component Project Managers. These reports have a standardised form based on a template provided in the Project Coordination System. The information contained therein is the primary source of data on the Project progress. The Project Coordinator’s analyses of the operating schedule of Component Projects, updated on the monthly basis are the second important type of document, confirming the information on work progress.

Monitoring the project activities for compliance is also based on other sources of information: reports from Contract Engineers and Investor Supervision, participation in the site councils and Partners’ meetings, site inspections and photo documentation of the Project progress. Collection of data from different sources allows building a comprehensive image of the Project and gaining a fair assessment of work progress. The collected information is also used for diagnosing the problems affecting the timely implementation and effectiveness of the proposed improvements.

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Internal communication in the Project does not include the collection of information from Contractors and Investor Supervision or from Contract Engineers by persons in charge of a Component Project (Sponsor, Component Project Manager, members of the Project team and other Partners’ staff). This information is transmitted within the framework of individual Project Communication Schemes.

PROPER COMMUNICATION IS A CRITICAL FACTOR AFFECTING THE PROJECT. GOOD COMMUNICATION ALLOWS SYSTEMATIC MANAGEMENT OF THE EXPECTATIONS OF PROJECT SPONSOR AND STAKEHOLDERS. IN MANY CASES, THE EMERGING CONFLICTS ARE NOT RELATED TO ACTUAL PROBLEMS AND STEM FROM THE FACT THAT THE PROJECT SPONSOR OR MANAGER WAS NOT INFORMED SOON ENOUGH OF THE EMERGING CIRCUMSTANCES.

Division of GAZ-SYSTEM S.A. and officers of the Project Coordination System (e.g. Operations Coordinator, Chief Coordinator of Operations, Head of the LNG Division) in matters related to implementing the coordination process:

• The Project Coordinator and Partners’ representatives involved in the coordination process (Component Project Manager, Sponsors, people authorised by the Component Project Manager), who receive from or provide to the Project Coordinator the information necessary for managing the coordination process;

• Individual Project Partners with the Project Coordinator’s participation, where in the Project Coordinator’s opinion such participation is necessary due to the information significance for the entire project, or where any Project Partner considers such participation advisable.

4. Monitoring of the project risks and determining their management strategy

The Special Purpose Act does not explicitly pose such a requirement. However, this responsibility logically arises from two other responsibilities provided for therein:

• monitoring the Project Partners’ work for compliance with the time schedule;

• monitoring progress of the LNG Terminal construction and making recommendations for actions to facilitate the Project implementation.

While defining the objectives of the Project Coordination System it was assumed that the main responsibility of GAZ-SYSTEM S.A. is coordination of the activities leading to timely project

Effects of the monitoring process result from its nature. Early identification of project risks and getting ready to prevent or minimise their consequences are indicative of due diligence and improve the effectiveness of project work.

5 Article 27(4) of the Special Purpose Act of 24 April 2009 on the investments in the liquefied natural gas regasification terminal in Świnoujście.
A well-prepared report is not only a document passively recording the work progress, but also an important tool for distributing information on all the events affecting project performance and on the implemented or proposed improvements. It allows informing project partners about any events occurring in related projects and affecting their own work, and therefore is not merely a tool to build a vertical channel for information flow.

Implementation by the Project Partners. Fulfilling such a responsibility requires a proactive approach to the problems which may arise in the project and translates into taking preventive actions wherever possible. This objective may be achieved through implementation of the mechanisms for monitoring and warning against any future threats to the Master Project objective. This provides an opportunity to eliminate the risks before they actually occur or to alleviate their impact when they occur. Even if a complete elimination of risks is not possible, a majority can be predicted and this provides an opportunity to prevent or counteract them in good time. For this purpose, the scope of responsibilities was clarified by making the Project Coordination System responsible for monitoring project risks and defining a strategy for risk management. Risk management is a separate process of the methodology applied for the coordination process.

5. Project reporting and developing recommendations for actions to streamline project implementation as well as organising the approval processes for these recommendations

The Project Coordinator is not equipped with management powers in relation to the entities implementing the Project (with the exception of GAZ-SYSTEM S.A. and to some extent Polskie LNG S.A., where the provisions of Commercial Companies’ Code apply). Also the Special Purpose Act, while defining the obligation to recommend measures to streamline the project implementation process, does not provide for any management mechanisms that would ensure implementation of the recommended solutions.

In the absence of relevant provisions it was assumed that before any recommendation is issued, some approval process will take place. This offers a higher probability of implementation for the recommendations elaborated jointly with the entities to implement them than for those which would be developed by the Project Coordinator alone without accounting for the conditions of performing the contracts or without taking into account the views or capabilities of the Project Partners and their Contractors.

The methodology provides two processes for fulfilling this responsibility:

• Managing the Project
• Coordinating the communication

6. Informing the Project Sponsor about the solutions adopted for critical issues affecting the achievement of Project Deliverables or about failure to obtain an agreement on or rejection of a developed solution from any of the coordination process participants.

In a project as large and complex as the Świnoujście LNG Terminal construction, there may occur critical issues, the solution of which requires decisions not from the person directly managing the Project, but from the people operating at the Project Sponsor level. The methodology provides that a critical issue is a formally defined problem that cannot be resolved without external assistance by the person managing the project or their team.

In the Project coordinated by GAZ-SYSTEM S.A. the critical issues requiring the Project Coordinator’s decisions are the problems involving more than one Component Project. This includes, in particular, unpredictable risks, the impact of which may adversely affect the timely implementation of individual tasks and thereby jeopardise the timely achievement of the full operability of the LNG Terminal or any of its supporting facilities. Resolution of critical issues involves the procedures resulting from the fourth process of the methodology adopted – the process of critical issue communication management. In resolving the critical issues, an important component of the developed procedures are the mutual agreements on the proposed solutions arrived at by the Project Partners. The top-level Project Sponsor, i.e. the Minister of Treasury, should be involved only where it proved impossible to obtain an agreement on or rejection of a developed solution from any of the coordination process participants. However, in accordance with the principles of the methodology applied, the Project Sponsor is typically not involved in solution development, although he may get involved voluntarily.

This responsibility results from the nature of coordination, understood as the process of organizing mutual arrangements. As the Project Coordinator is not authorised to issue direct orders, he shall inform the top-level Project sponsor about:

• Solutions applied for critical issues;
• Failure to develop solutions through mutual arrangements;
• Refusal by any of the coordination process participants to implement the solutions developed.

Supporting Projects

In the course of defining individual component projects aimed at the implementation of the Świnoujście LNG Terminal construction it was decided to extend the scope of functions and responsibilities imposed on the Project Coordinator by the Special Purpose Act. In support of the direct coordination activities several Supporting Projects have been established and additional streamlining actions have been implemented, as detailed below.

Identification of additional responsibilities

The analysis of the Special Purpose Act provisions in view of the responsibility for and methods of developing the project schedule shows that one of the major responsibilities of the Project Coordinator is to check whether there are any tasks necessary to achieve the full operability of the external
port and LNG Terminal which go beyond the scope of Component Projects. Such additional tasks have been identified in the course of defining the Master Project and its Component Projects, and also in the course of managing coordination processes. For the purpose of implementing such tasks several Supporting Projects have been set up, some of which support the performance of the responsibilities resulting directly from the Special Purpose Act. They include for instance such Supporting Projects as Implementation and operation of the Coordination System for Świnoujście LNG Terminal, or Coordination of Internal Communication for the LNG Terminal. Others support the achievement of coordination and LNG Terminal coordination system.

2. Coordination of internal communication for the LNG Terminal construction

This is a Supporting Project for the Project Coordination System for the LNG Terminal construction, which was set up to meet the responsibilities provided for in section 2.1.14 of the Supplementary Agreement. It is related to the development and on-going implementation of the Communication Schedule for the Master Project. The core purpose of defining this Supporting Project is to reduce the risks generated by the participants to the LNG Terminal construction and resulting from inconsistent and poorly organised internal communication. The strategic objectives of GAZ-SYSTEM S.A. This is e.g. Integrated System for LNG Terminal Security and Continued Operation. There are also some actions implemented that result from GAZ-SYSTEM S.A. adaptation of the principles of social responsibility and sustainable development, e.g. Environmental Coordination, as well as the action related to GAZ-SYSTEM S.A. appointment of a liaison officer for direct contacts with the local community.

1. Implementation and operation of the Project Coordination System for Świnoujście LNG Terminal

The objective of the Supporting Project called “Implementation and operation of the Project Coordination System for Świnoujście LNG Terminal” is the preparation and application of tools for GAZ-SYSTEM S.A. to perform the obligations and duties related to the construction. This responsibility of the company was provided for in the Special Purpose Act for the purposes of timely implementation of the project. The Project o-system regulates cooperation between the Project Coordinator and Project Partners within the framework of LNG Terminal construction.

2. Coordination of internal communication for the LNG Terminal construction

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3. Managing the risks of the LNG Terminal construction

The objective of the Supporting Project is to create a system for efficient monitoring of the risks of Component Projects and for managing the risks of Master Project throughout the lifecycle of LNG Terminal construction. Within the Supporting Project framework we developed a document entitled “Risk Management Policies for the LNG Terminal Construction” and containing detailed guidelines for the risk management process, an action plan and templates for forms and process supporting tools.

In the initial phase of the Supporting Project we carried out the analysis that covered:
- risk identification;
- risk assessment;
- risk owners designation;
- risk prioritising;
- creation of risk metrics;
- development of a risk response strategy;
- development of a risk management plan for each Component Project.

In the second phase, after the primary risks identification and the risk response strategy have been developed and approved, regular reviews of project risks will be performed. It is also possible to run the risk response strategy. In order to have the system efficiency confirmed, we also provided for regular risk audits.

4. Integrated System for LNG Terminal Security and Continued Operation

The objective of the Supporting Project is to provide the Project Coordinator and Project Partners with tools for the on-going control of the financial aspects of Component Projects. The establishment of the Supporting Project will allow implementation of a financial model based on the Consolidated Project Schedule, suitable for monitoring and evaluation of the cost-effectiveness of projects implemented on the basis of Earned Value Method (EV). Application of the Earned Value Method will make it possible to:
- integrate the data on the Component Projects implementation in terms of deadlines, the scope of work performed and financial expenditures made;
The most important activities carried out within the framework of the Project include:

- development of the detailed principles for and subsequently implementation and operation of the Monitoring System for the Master Project Budget, implemented through systematic collection, consolidation and analysis of information on the Component Projects and the Master Project in terms of their financial and physical aspects;
- supporting the Project Partners and coordinating the work related to the acquisition and application of financing from various sources, as well as coordinating the reports on financial resources application, including the performance of the obligations arising from the funding allocated to Component Projects within the framework of the European Energy Programme for Recovery (EEPR) and the Infrastructure and Environment Operational Programme (POIŚ).

6. Coordination of environmental issues

Construction of the LNG Terminal in Świnoujście, together with the supporting infrastructure, is managed in a comprehensive and modern way, based on the key principle of sustainable development. The LNG Terminal construction since the very beginning has been carried out in accordance with the principles of environmental protection, since even such a high objective as national security cannot be achieved without a sense of responsibility for the environment.

One of the key analyses prepared by the Project Coordinator was a detailed study of all the component projects in terms of their cumulative environmental impact, also in terms of cross-border impact. The study was carried out by Polish experts on the basis of a detailed survey of the environmental impact assessments prepared by all the investors and the Regional Directorate for environment Protection in Szczecin (RDOŚ) has issued environmental permits for individual investors.

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In accordance with the provisions of environmental permits, the investors are obliged to submit annual environmental reports to the competent authority for environmental protection. The nature of monitoring, as presented in the reports, should make a coherent whole, which requires an appropriate division of tasks and the use of common methodology and standards for documenting the monitoring results.

**NATURAL ENVIRONMENT**

It clearly demonstrated the lack of any significant environmental impact.

**ENVIRONMENTAL IMPACT OF THE PROJECT**

For the purposes of environmental impact assessment of the Project, an environmental inventory was carried out, i.e. an assessment of the status of local natural resources. It was based on the environmental information collected through a survey of abundant professional literature performed by authors of the reports as well as through taking a physical inventory of the natural environment. Research was conducted for the marine environment, for the land part of the Project and for bird-life. Results of the inventory were presented in reports submitted individually for each Component Project implemented by the Project Partners. On the basis of administrative procedures, the Regional Directorate for Environment Protection in Szczecin (RDOŚ) has issued environmental permits for individual investors. In accordance with the provisions of the environmental permits, the detailed conditions for environmental monitoring implementation will be agreed upon within the framework of the environmental supervision on the basis of ‘the Environmental Protection Plan’. This is a document to be approved by the RDOŚ which sets out an action plan aimed not only at preserving the existing status of natural environment, but also at improving them.

GAZ-SYSTEM S.A. AS A MODERN COMPANY HAS THE AMBITION TO CARRY OUT THEIR ACTIVITIES WITH RESPECT TO THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT AND SOCIAL RESPONSIBILITY AND ON THE BASIS OF THE TOP WORLD STANDARDS.
Environmental Monitoring

Environmental monitoring is a prerequisite for regular systematic evaluation of the status of the biotic and abiotic components of the environment. It covers the pre-, mid- and post-investment period starting five years in advance. In accordance with the provisions of environmental permits, the monitored biotic components of the environment include:

1. Species of plants and fungi that are of interest to the European Community (Natura 2000), the preservation of which is essential for the conservation of biological diversity of the land on which the project is carried out, e.g.:
   - Sand couchgrass (Elymus farctus) – co-financed within Natura 2000, the preservation of which is regarded as indicators of important processes within ecosystems. Monitoring also covers the flatfish species – the investor should participate in the volume increase and in the costs of sea restocking, carried out by the Restocking Committee affiliated with the Minister of Agriculture and so far fully financed from the national budget. The increase in restocking should be not less than 20% of the amounts allocated by the Restocking Committee in subsequent years for the stocking of the Oder basin and the Szczecin Lagoon. The restocking period should last for a minimum of three years from the works completion;
   - Talitrus saltator – a fully protected species in Poland upon completion of the construction works, beach biotic communities must be reconstructed, which will recreate the natural habitat for this species;
   - Natura 2000 special area of bird species conservation – ‘Wolin and Uznam’, code: PLb990003;

2. Animal species

Records are kept of all the animal species present on the Red Lists and in the annexes to the EU directives as well as the key species, regarded as indicators of important processes within ecosystems. Monitoring also covers the

- Bat species – in order to minimise the project impact on the hibernating bats, seasonal bars should be put in place at the selected object, located within 300 metres from the ‘first’ shore battery so as to increase the number of available bat hideouts and natural gaps at the site;
- Observation of changes in the quality and quantity of bird species and their habitats should be conducted with the standard methods. This applies particularly to the species listed in Annex 1 to the Birds Directive and at the same time falling within SPEC categories by the Birdlife Federation.

3. Natural habitats

Environmental monitoring covers all the protected habitats in the area:
- seashore drift lines (1210);
- embryonic shifting of white dunes (2110);
- grey coastal dunes (2130);
- wooded dunes (2180);
- humid dune stacks (2190);

4. Marine bio systems

Due to the partial Project location within the Baltic Sea, environmental monitoring is performed in order to assess the Project impact on the comprehensively analysed marine environment. Qualitative and quantitative monitoring is carried out for the following bio systems:
- Pelagic zone (coastal and open waters);
- Benthic zone (sea bottom);
- Arenal (sand beach).

5. Monitoring the integrity of Natura 2000 sites

Within the Project framework, monitoring is performed for the processes that are essential for the functioning and integrity of Natura 2000 sites located in the vicinity of construction sites. These include:
- Wolin National Park;

In accordance with the provisions of the environmental permit, the abiotic items subject to monitoring include:
- ground water environment;
- air emissions;
- acoustic impact;
- waste management.

6. Support for project financing process

Apart from monitoring the Component Project budgets, the Project Coordinator also deals with coordination and support activities related to the acquisition and application of financial resources from various sources.
These include e.g., EU funds from the European Energy Programme for Recovery (EERP) and the Operational Programme Infrastructure and Environment (OPiS), financed by the European Investment Bank (EIB), European Bank for Reconstruction and Development (EBRD) and some commercial banks. The Project Coordinator also participates in the preparation of reports prepared for the Component Projects and demonstrating the application of funds from these sources. In connection with the Project financing by international financial institutions, a detailed audit was carried out for the technical, market, environmental, social, legal and insurances of the Project (the so-called due diligence). As a result of this process – compatible with the requirements of the European Bank for Reconstruction and Development – each of the investors, in the form of thematic action plans. The guidelines implementation will be reviewed by independent experts. These guidelines are aimed at collecting pictures and the system of index covering the commercial banks which are interested in co-financing the project.

7. Community Liaison Officer

One of the challenges of such large projects as the construction of LNG Terminal is developing and maintaining positive relationships with the local community directly affected by the project impact. This type of relationship is built through dialogue with the local Stakeholders. It is important to exchange views and opinions, to understand different perspectives, mutual expectations and needs and the possibilities for implementing alternative solutions, as this leads to a better mutual understanding and helps to build the atmosphere of confidence and cooperation.

When designing the model of communication coordination for the LNG Terminal construction, the Project Coordinator established a dedicated team for dialogue with the local community (Community Relations) with an officer responsible for direct contacts with the public (Community Liaison Officer – CLO). The Community Liaison Officer is responsible for accepting comments, proposals and complaints from the representatives of local communities and transferring them to the Partners implementing the Component Projects. The Partners’ task is to consider and prepare responses to the queries received. The CLO monitors the manner of query management and ensures that no issue reported by Stakeholders remains without response. In addition, the CLO participates in, and sometimes also organises, the process of settling the disputes that arise in relation with the project.

The CLO follows the procedures designed by the Community Relations team and approved by all the Project Partners. In accordance with the approved guidelines, every query from the Stakeholders is recorded and processed, and then responded to within ten working days of its receipt. In addition, the CLO participates in response preparation and monitors the manner in which the responses are given. The CLO prepares granted guidelines and receives reports on the quality of local Stakeholder relations. The process of communication with the local community within the framework of the LNG Terminal construction will last till the project completion and Terminal commissioning. Communication will be then taken over by the Terminal operator so that high standards of cooperation with the local community would be maintained.

8. Gas carrier entry to the port

Creating proper conditions for the delivery and acceptance of LNG in Swinoujście requires development of a coherent management system based on the proven principles of ‘Safety – Quality – Planning’ applied in the implementation of LNG-related projects. To this end, the Project Coordinator has initiated the appointment of a Working Group, composed of the representatives of: Maritime Office in Szczecin, Zarząd Morskich Portów w Szczecinie i Świnoujściu S.A. [Szczecin and Świnoujście Seaports Authority], Polskie LNG S.A. and PGNiG S.A.

The main responsibility of the Working Group is the identification and coordination of the activities to ensure safe entry and unloading of various types of LNG carriers. Another responsibility of the Working Group is to maintain the good cooperation for implementing alternative solutions, as this leads to a better mutual understanding and helps to build the atmosphere of confidence and cooperation.

9. Photo documentation – visualization

The Project Coordinator’s experience gained in the implementation of the Project Coordination System shows the need to collect the resources necessary for objectivization of subsequent project stages. Photo documentation helps to objectivize and visualize the information prepared within the reporting process, which constitutes an essential element of the project monitoring.

In this regard documenting the project progress in a consistent manner with the use of digital photography techniques provides great retrospective material for comparison. Due to the size and dispersion of project sites, the number of pictures collected is very large. It is therefore necessary to organise the collection, both along the organizational and topographical lines and to create standard databases for sorting and filtering the photos. The result of maintaining cohesion between picture files collected and the system of indexing project documentation is creation of a systemic link between individual photos and the components of technical designs, mock-ups or drawings.

One of the techniques that allow taking a series of digital photos to verify the topography (or location) of the objects constructed is a georeferencing system. This system offers an effective
Visualization is also very useful in the very active area of project logistics. The sequential analysis of the project course is a process which demands for each subsequent step a check of the project schedule logic and a reference to the current state of the project site, not only for the progress of construction and assembly work, but also for the possibilities to operate transport equipment. Therefore, the visualization of the construction site allows to schedule project logistics more efficiently and to predict the risks that may materialize in the course of its implementation.

A graphical presentation of the whole project, including the four Component Projects, in conjunction with schedule visualization, provides the Stakeholders with an opportunity for qualitative and quantitative interpretation of the current project status. At the same time it allows coordination at the meeting points of individual Component Projects, identification of risks and of the underlying causes of discrepancies revealed.

The visualization of successive stages of construction work constitutes for the Project Coordinator one of the essential components of project monitoring documentation.
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- internal regulations in the form of procedures and rules governing the cooperation between the Project Stakeholders, together with templates of Project documents and forms;
- expertise and skills to apply these regulations and a dedicated functional structure consisting of the Project Coordinator, the project teams applying these regulations, the educated system clients and the expert teams;
- It tool to support the Project Coordination System (however, it is assumed that the system is functional even without such supporting tool);

In order to achieve all the designed parameters of the Project Coordination System, its designers used a ready-made, simple and easily implementable methodology of project management. The properties of selected project methodology allowed to build a system that significantly simplified the work of entities involved and also offered maximum control of the Project Status. The new procedures were also used for identifying and eliminating any delays resulting from imperfect project coordination.

**COOPERATION MODEL**

A characteristic feature of the Project Coordination System is cooperation between the Project Coordinator and the Executive Committee, who is responsible for the supervision of compliance with the approved schedule in the preparation and implementation of the LNG Terminal construction and cooperation between the Project Coordinator and the Project Partners, outside the Project Coordination System but affecting it, and the cooperation between the Project Partners and their Contractors. Due to the nature of Project which consists of four Component Projects, the implementation of which is the responsibility of the Project Partners who are independent economic and legal entities, the Project Coordinator has no tool to exert any direct influence on the Contractors in their performance of Contracts. What’s more, since the commercial responsibility for implementing Contracts belongs to the Project Partners being parties to these Contracts, the Project Coordinator should avoid such influence.

In order to ensure efficient development of recommendations for the actions to improve the project and efficient organisation of the processes of agreeing upon these recommendations, the Project Coordinator proposed the appointment of an Executive Committee composed of people responsible for Project implementation. Therefore, it became necessary to regulate the cooperation between the Project Coordinator and the Executive Committee.

It follows that cooperation within the Project Coordination System takes place at several levels:

- The top level is the cooperation between the Project Coordinator and the Minister of Treasury, which is regulated by the Special Purpose Act, which imposes on GAZ-SYSTEM S.A. coordination responsibilities and holds the Ministry of Treasury responsible for supervising the preparation and implementation of the investment related to the Terminal.
- At the second level, agreements are reached on the issues common to the Project Partners and the Contractor responsible for the project success. This level is the level of the Executive Committee and their cooperation with the Project Coordinator. The mode of operation of the Committee is defined by the relevant Partner Agreement, which is described in the section on legal regulations concerning arrangements between the users, clients of the Project Coordination System.
- Then, there are three areas of cooperation at the operational level, governed by the procedures of the Project Coordination System.

Already at the initial stage of the work aimed at developing a Project Coordination System we found it necessary to establish a working structure that would facilitate the exchange of information and making arrangements between senior policy makers of the entities implementing the Component Projects. However, it was only the Supplementary Agreement entered by the Project Partners that sanctioned the final creation of the proper Executive Committee. The document also established the final form of this structure and formally defined its powers and responsibilities.

Our intuition, confirmed by the principles of project methodology, which we used to build the system, turned out to be correct. Today, the Executive Committee is fully operative and plays a vital role in the Project Coordination System. It proved to be a good practice to include in the Committee not only the Component Project Sponsors, but also the Component Project Managers. Besides, a significant increase in the efficiency of this structure has been achieved by inviting representatives of the Ministry of Treasury and Minister of Infrastructure to participate. This made it possible to quickly resolve difficult issues that previously required consultations with supervisory bodies.

**Slawomir Madura**

Deputy Head of the LNG Division, GAZ-SYSTEM S.A.

The Executive Committee plays an important role in the Project Coordination System. The comprehensive consultation mechanism and effective cooperation models allow reaching an agreement on even the most difficult issues.

The system that connects

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1 The set of procedures and conditions that describe the course of construction projects based on mutual obligations and relations between the Employer as an Investor, the Contractor as the party performing the construction work and the Project Engineer as the administrator of the relevant investment project, published and distributed by FIDIC - Federation Internationale des Ingenieurs Consults (International Federation of Consulting Engineers).
KEY COORDINATION AND MANAGEMENT PROCESSES

The primary components of the Project Coordination System are internal legal regulations in the form of procedures which govern the cooperation between the Stakeholders, together with templates of relevant documents and forms. The Project Coordination System makes use of all the processes resulting from the project management methodology selected, but the intensity of their use varies. Their goals, methods of their implementation and the resulting benefits for the implementation of the Master Project are identified here. This report describes seven most commonly used processes.

Procedures corresponding to the first process of the project methodology applied, i.e. the process of creating a Project Definition, allow to describe the project course in a standardized manner. Thanks to the unification of the project scope, all the formulated definitions are composed of correlated information, as thus constitute a comprehensible conceptual basis for all project participants.

The model Project Definitions attached to each Project procedure specify its main components:
• defining Project objectives and criteria for their achievement – the definition author describes the project status constituting a successful attainment of Project objectives;
• determining the Project scope, which indicates which tasks are included in the project scope (and consequently should be performed outside the project scope);
• determining the Project Deliverables, i.e. specification of the products to be delivered within the project framework;
• describing, by the Project Manager, the selected methodology of project implementation;
• identifying project risks and developing strategies for their management in case of their occurrence;
• determining both the subject and method of acceptance of the product (acceptance object), the completion of which is the project objective.

The procedures governing this process determine the procedures to collect the information necessary to prepare a Project Definition. They also designate the manner of its consultation and verification, and as a result of its approval. They also specify the most important roles in the process of project defining or specify the method of selecting the persons responsible for cooperation within its framework.

Apart from unifying the scope and mode of preparation of the Project Definition, the procedures enforce the activities related to harmonizing all the Component Projects. Under this regulation, already in the process of working out the individual definitions of each project, it is necessary for the Project Partners to cooperate during the so-called consultative meeting. Its outcome should be an agreement regarding at least one of the following issues:
• defining individual project scopes, including the scope of activities to be carried out jointly by the Project Partners;
• determining the inter-relations between tasks in the schedules of Component Projects;
• unifying terminology applied in the individual projects;
• determining the internal organization of the Component Projects, including the substantive content of the Communication Schedule.

An important step is checking if all the tasks that must be completed within the Master Project were included in the scopes of respective Component Projects. However, due to the fact that upon initiation of the defining process each Component Project was already at a very advanced stage of preparation, this procedure was omitted.

The most important results achieved in the Project Defining process were related to setting milestones to assess the Project progress. As a result, using the definitions established for the Component Projects, we identified the meeting points and inter-dependencies (interfaces) between them. This has also created a tangible opportunity to harmonize the work carried out by all the four Project Partners.

Process 2: Project Scheduling

The Consolidated Project Schedule is one of the most important Coordination tools used in the Project Coordination System, and its development is a part of the Project Scheduling process.

The Special Purpose Act imposed a duty to develop the Consolidated Project Schedule on the Project Coordinator – Gas Transmission Operator GAZ-SYSTEM S.A. The Special Purpose Act also provides that the Consolidated Project Schedule shall be drawn up after consultation with the Project Partners and that it becomes binding on them only upon its approval by the minister competent for the Treasury.

Developing Project Schedules

Developing Project Schedules belongs to the second process of the project methodology adopted – Project Scheduling. Thus, in the Project Coordination System scheduling is governed by the procedures for schedule building and by the methods adopted for agreeing, evaluation and approval of the schedules for the Component and Supporting Projects and the Consolidated Project Schedule for the Master Project. In accordance with a relevant procedure, the process of building a Component Project Schedule covers the activities starting from the collection of existing basic documentation of the project and ending with the submission of the final version to the Project Coordinator. Subsequent scheduling activities, provided for and strictly regulated in the Project Coordination System, include:
• preparing the Work Schedule, i.e. a hierarchical list of tasks and project milestones which are a major component of the Project Schedule;
• determining the time required to complete each task;
• building a project flowchart.

Human Resources Management
• Quality Management
• Metrics Management

OPTIONAL PROCESSES (LESS FREQUENTLY USED)

Process 1: Defining, Initializing and Starting-Up the Project

A good project definition facilitates its uniform interpretation by all the Stakeholders. In practice, this means that all parties implementing the project know what and how they should perform in the project to make it unambiguously successful.
There is one of the priorities of the Polish energy policy implemented by the Polish government. Additionally, it is a very complex investment, which since the very beginning has required efficient and comprehensive coordination.

Therefore, in December 2009 we appointed a dedicated team to develop and implement a Project Coordination System. As a member of the Management Board, both for the Project Coordinator GAZ-SYSTEM S.A. and for the company implementing one of the Component Projects – Polskie LNG S.A., I think that the established system is extremely effective. This is especially due to the application of two very important tools: the Consolidated Project Schedule (developed on the basis of the schedules of the four Component Projects) and the reporting process. Thanks to these solutions, I can see the change that occurred in both the Component Project Managers and in the Project Sponsors supervising them.

Initially, the Consolidated Project Schedule was seen as a dead document. It was believed that the document should be formulated at the highest level of generality, and the obligation of following its provisions in the on-going work was considered redundant and time-consuming. A similar evaluation was given to the reporting mechanisms. Today, everyone agrees that a reliable, evidence-based report is an important managerial tool that allows continuous monitoring of the progress of project work and its effective control. Thanks to the up-to-date reports, decision-makers have access to the information without which it would be impossible to adequately respond to the emerging threats.

As a result, the tools implemented by GAZ-SYSTEM S.A. within the Project Coordination System form an efficient mechanism for informing about the progress of the entire project and about its potential risks. With the new solutions it was possible to establish an effective cooperation between all the Project Partners, which, in my view, will lead to timely project implementation in accordance with the Project Schedule. I am sure that in the middle of 2014 Świnoujście port will be ready to receive the first methane carrier with LNG load.

The process of the schedule consolidation is a statutory obligation of the Project Coordinator who coordinates the Component Projects Schedules, paying particular attention to the worked-out coordination points between tasks to be implemented within individual Component Projects. Additionally, s/he supplements the Consolidated Project Schedule with any actions related to the Supporting Projects that are either directly supervised or locally implemented by him/her. After schedule consolidation and prior to the Consolidated Project Schedule approval phase, the Project Coordinator runs consultations on the Consolidated Project Schedule. The purpose of such consultations is the confirmation that each of the Project Partners has a clear understanding of the actions related to their Component Project in close conjunction with other Component Projects. The consultation mechanism covers both the Component Projects and the Supporting Projects. The procedure for approval of the Consolidated Project Schedule starts with the Schedule evaluation by the Executive Committee and then, if required or if there have been changes in the strategic tasks, it is conducted in accordance with the Special Purpose Act.

Moreover, it is organised by the Project Coordinator, just like the harmonization of the Component Project Defining process.

In the current work, harmonization of work between the various projects involves both the Project Teams and the Contractors. In this context, the Project Coordinator’s responsibility is to ensure that all the possible meeting points (interfaces) between the projects have been identified. Actions related to the interfaces are not limited solely to the scheduling process. In many cases, the Project Coordinator also engages

between the Project Partners in harmonizing their tasks so as to minimize disruption in the current work lies with the Project Coordinator. Moreover, it is organised by the Project Coordinator, just like the harmonization of the Component Project Defining process.

In the current work, harmonization of work between the various projects involves both the Project Teams and the Contractors. In this context, the Project Coordinator’s responsibility is to ensure that all the possible meeting points (interfaces) between the projects have been identified. Actions related to the interfaces are not limited solely to the scheduling process. In many cases, the Project Coordinator also engages in the agreement-making process carried out at the operational phase, mainly by organizing it and monitoring its outcomes. This brings good results in the form of acceleration of decision-making and consequently elimination of potential problems in the implementation of project tasks. In this area, the leading role is played by the Technical Department of the Project Coordinator.
Process 3: Operational Coordination of Project Implementation

The third methodological process, playing an important role in the Project Coordination System, is the operational coordination of the implementation of the Master Project Schedule as well as the Component Project Schedules. This model was implemented in conjunction with the procedures applied in other management processes. We utilized components of the following processes:

- coordination of communication, which regulates the preparation of status reports for the Component Projects, the Support Projects, and the Master Project;
- coordination of managing the risks which it identifies and which occur during the implementation process;
- Project scheduling, since the application of the operational procedures may result in the necessity to adjust the Project Schedule.

Updating Project Schedules

The process of operational management of the Component Project Schedule implementation covers the Schedule review, regular Schedule updates performed on the basis of the Contractors’ reports and the information gathered while participating in the Construction Councils and also the required corrective actions together with their documentation. It also allows implementation of additional review of risks and quality of work in the Project.

When updating the Schedule in accordance with the established rules of operation, the Component Project Manager selects the status of individual tasks, introduces new tasks or updates the deadlines for tasks delayed. At the same time he describes:

- reasons for non-compliance with the Project Schedule;
- symptoms of potential problems;
- any changes occurring in the critical path;
- emergence of any new risks;
- disappearance of the risks previously identified due to achieving a specific stage of project implementation.

If necessary, the Component Project Manager also prepares additional reports, generated with the scheduling tools provided by the Project Coordinator.

Process 4: Communication Coordination

Internal communication is generally constituted as the exchange of information between the Project Coordinator and the Project Partners, or between the Project Partners with the Project Coordinator participating. At the same time, the process of information exchange takes account of the Stakeholders who implement tasks for the Master Project as well as the external Stakeholders who get involved within the framework of the Liaison Officer work. The internal coordination also includes all the communication processes involving the Project Coordinator and related to the implementation of their coordination responsibilities as imposed by the Special Purpose Act.

The purpose of the procedures governing the Communication Coordination for the LNG Terminal construction is to standardize the activities related to communication and documents and information flow. Within this process there are also procedures implemented for communication scheduling and implementation. In practice, the scheduling process involves identifying Stakeholders of the LNG Terminal construction so as to determine their communication needs and to develop modes of communication relevant to the Project. The procedures for implementing a Communication Schedule cover in particular activities such as reporting and organization of the Status Meetings.

Communication Schedule

The Communication Schedule for the LNG Terminal construction covers and imposes tasks and responsibilities on persons implementing the coordination processes provided for in the special Purpose Act as well as on some representatives of the Project Partners. Its purpose is to provide:

- methods of internal communication within the Project;
- available tools;
- procedures to ensure integrity, consistency and transparency of the communication activities which support the Project Coordination System and the communication activities in the LNG Division of GAZ-SYSTEM S.A. which result from the needs of the key Stakeholders of the Project Coordination Process.

The Communication Schedule developed within the Project Coordination System covers the communication activities ‘inside’ and ‘about’ the LNG Terminal construction.

The internal communication ‘inside’ the Project is a mandatory process, necessary for the correct and efficient functioning of the Project Coordination System and consequently for managing the Project in line with the Project Schedule adapted. The application of the procedures assigned to this process increases the efficiency of Project management, reduces the occurrence of risks arising from lack of communication between the Project Partners and fosters relationships based on mutual understanding and trust among all Project Stakeholders. It is also the basis for effective external and crisis communication.

Within the meaning of the Project Coordination System, communication ‘inside’ the Project takes place between:

MISSION OF COMMUNICATION IN THE LNG TERMINAL CONSTRUCTION

Thanks to a consistent, effective and scheduled communication and cooperation the Project Partners minimize the occurrence of risks in the Project and ensure compliance with external requirements, and thus increase the Project effectiveness and strengthen the social acceptance of its implementation.

VISION OF COMMUNICATION IN THE LNG TERMINAL CONSTRUCTION

Building a cooperation mechanism for the team working together within a certain framework, on an equal basis with respect for one another’s subjectivity and seeking a common goal, while supporting the timely and effective implementation of the LNG Terminal construction.
The communication schedule is intended to integrate all communication activities so that every stakeholder receives precisely the information that is necessary to him in the execution of their responsibilities within the project.

- the Project Coordinator and the Minister of the Treasury and other governmental authorities;
- the LNG Division team and the officers of the Project Coordination System, in matters related to meeting the responsibilities imposed by the Special Purpose Act;
- the Project Coordinator and Project Partners’ representatives involved in meeting the coordination responsibilities imposed by the Special Purpose Act, from whom the Project Coordinator acquires the information necessary for the conduct of the coordination process or to whom he transmits information within this process. It should be noted that internal communication ‘inside’ the project does not include the process of collecting information by persons in charge of the Component Projects from the Contractors and the Investor Supervision or from Contract Engineers. This information shared at that level of management is exchanged on the basis of individual Project Communication Schedules, prepared in a manner resulting from Contracts entered into by the Project Partners. Conversely, communication ‘about’ the project is intended for building and streamlining the knowledge about the Project among its participants, and additionally aims to create a sense of commitment to a joint venture. It includes all the Stakeholders of the Project Coordination System and the Stakeholders of the Master Project and Component Projects (e.g. Project Partners’ spokespersons and employees and the local communities).

An efficient implementation of communication ‘about’ the Project will also result in the increased expertise and competence of persons involved in building relationships with the Project environment, for instance promoting a positive image of the Master Project and neutralization of social tensions that may arise in and around the Project (external communication is not covered by the Communication Schedule presented here).

GAZ SYSTEM S.A. is responsible for submission of reports on the progress of LNG Terminal construction to the minister competent for the Treasury[10] within the Project Coordination System, reporting begins with the preparation of Project Status Reports by the Component Project Managers. The reports are prepared on a monthly basis using the standard forms and on the basis of relevant procedures. In accordance with this procedure, the Component Project Manager prepares a report based on:

- significant achievements during the report period;
- reports from Investor Supervision (Contract Engineer);
- updated Operating Schedule for the period;
- updated list of Project risks;
- own observations and notes from the Project Team.

Moreover, he takes into account the contents of the Project Status Report at least for the previous reporting period and in particular the Sponsor’s recommendations. The contents of the latest Monthly Report for the Minister of the Treasury which relates to the relevant Component Project, and the minutes of the Executive Committee meetings and of the Status Meetings.

A Project Status Report drawn in accordance with the above procedure contains synthetic information about:

- current status of the Project, mainly in relation to the Schedule and Budget;
- changes to the identified risks and the threat of their materialization, problems occurring in the Project;
- impact of such problems on the Partners’ Projects;
- implementation of the recommendations from the previous reporting periods;
- streamlining activities recommended for the Component Projects by the Project Sponsors or the Main Adjudicating Committee (GKOS);
- significant achievements during the reporting period.

Component Projects Status Reports are forwarded to the Project Coordinator who can:

- Building a positive image of the entire Project and of all the Project Partners;
- Building the external Stakeholders’ confidence about the benefits arising from the Project implementation.

validates the information contained therein, and on this basis prepares a Monthly Report for the Minister of the Treasury.

The Monthly Report for the Minister of the Treasury provides an analysis of progress and information about the degree of implementation of key tasks within each Component Project. Besides, it includes descriptions of the project risks identified during the reporting period and activated as well as of the strategies adopted for their management, and finally a report on important events in the project. Information about the progress of the Master Project and each of the Component Projects is summarized with conclusions and recommendations by the Project Coordinator.

The report is forwarded to:
- The Minister of the Treasury as the person responsible for supervising the Świnoujście LNG Terminal construction;
- The Minister of Infrastructure as a supervisory authority of the Maritime Office in Szczecin, who is one of the Project Partners in the LNG Terminal construction;
- the Sponsors and Managers of the Component Projects.

Regardless of the fact that the Component Project Status Reports make the basis for the preparation of monthly report for the Minister of the Treasury, they also support implementation of other communication activities conducted during the Status Meetings, in particular in:
- conducting and discussing reviews of the project progress compliance with the Project Schedule in accordance with the process of operational management of the Component Project Schedule implementation;
- analysing the effects of the interaction between projects.

Status Meetings
Meetings of the Project Sponsors and the Component Project Managers are included in the Communication Schedule. Their aim is, inter alia:
- to submit comments to the Project Status Reports;
- to present the operational plans for the following reporting period;
- to identify and discuss issues affecting the operational plans for the following reporting period;
- to discuss any proposals for adjustment of operational plans for the Component Projects;
- to identify the links between individual risks.

Status Meetings are organized on a monthly basis by the Project Coordinator, who is responsible for their management and for their determination.

Process 5: Risk Management Coordination
Coordinating the management of risks is one of the key processes in the Project Coordination System, which was scheduled in accordance with the procedures corresponding to the seventh process of the methodology selected for building the Project Coordination System, and also with the corporate standards of GAZ-SYSTEM S.A. Within the framework of the Supporting Project called ‘Managing the Risks of the LNG Terminal construction’, we created a system for efficient monitoring of the Component Project risks and for managing the Master Project risks throughout the life-cycle of the LNG Terminal construction.

We will also create a coherent and comprehensive mechanism for risk identification and management, within which it will be possible to:
- identify and describe the risks of the Component Projects and Master Project, assess their potential impact on the project and list their determiners;
- evaluate the risks for their subsequent prioritization;
- assign personal responsibility for managing individual risks and for financing the corresponding risk management strategies;
- evaluate the adopted strategy and recommend any changes to improve the effectiveness of risk management;
- identify measures to monitor for any change in risk status over time;
- identify the links between individual risks. The Project Partners have received the document entitled Risk Management Policy for the LNG Terminal construction which provides detailed guidelines for identifying and managing project risks, as well as the tools supporting the entire process (including those providing on-line access to the risks database through the Internet). Methodological workshops have also been held with each of the Project Partners. At the moment, the Project Teams have nearly completed the preparation of the relevant Minutes. The Project Coordinator monitors implementation of the arrangements made at the Status Meetings and keeps informed the Participants and other Stakeholders in accordance with the provisions of the Communication Schedule.
process of drawing up a list of risks for each Component Project in accordance with the approved methodology. They have also prepared a change in the reporting system that will utilise the results of work related to updating the risks database for each of the Component Projects. The Implementation of the System not only provides effective identification of risks. It also provides online access to lists of risks and critical issues related to the individual projects, thereby changing the reactive ‘fire-fighting’ approach to a proactive one. The presented approach to risk management is a prerequisite of meeting the requirements of due diligence and effectiveness imposed on the Project Coordination System to achieve a timely implementation of the Project.

Process 6: Change Management

The Change Management Process in the Master Project covers the activities from the identification of the potential need for changes in work scopes or deadlines for their implementation in the Project to communicating the current status of the Project scope changes and solutions adopted to the appropriate Stakeholders. The process includes an analysis of the Project changes’ impact on the Project Schedule and Budget, the development of alternative solutions, the decisions about selecting particular solutions and the documentation of solutions adopted.

The process is implemented in accordance with the relevant procedures which detail the required manner and sequence of implementing the activities necessary for consideration and possible implementation of a change as well as with the use of standard documents.

EXPERTISE AND SKILLS

The second component of the Project Coordination System is the expertise and skills required for the application of regulations designed for use within the Project Coordination System.

Training and certification

A significant component of the system is the expertise and skills required for the application of regulations developed within the system. This expertise must be possessed by both the Project Coordinator team and the persons responsible for the implementation of individual Projects. Moreover, it is necessary to provide a range of information on the functioning of the System to the Project Sponsors and other Stakeholders who are affected by or use the Project Coordination System.

Teaching the coordination process participants to apply the basic procedures in accordance with the selected methodology was contracted to experts. Thanks to the workshops presenting the basic rules of coordination and cooperation it was possible to implement the Project Coordination System quickly and efficiently.

In April 2010, the Project Coordinator organised a two-day workshop for the Project Sponsors, including the top-level Sponsors – representatives of the Ministry of the Treasury and the Ministry of Infrastructure. The workshop was devoted to discussing the basic principles of coordination and practising the cooperation methods. The workshop paved the way for the complete implementation of the Project Coordination System.

Within the framework of the Project Coordination System, the Project Coordinator cooperates with an external team of experts. Where appropriate, the experts provide substantive support to the Project Coordinator staff in solving serious problems of coordination, as well as in the organization of workshops and training sessions for the Project Partners representatives.
meetings together with the resolutions taken during the Status Meetings. The technical infrastructure of the IT platform allows flexible management of current information needs. The IT platform was extended to include materials on social communication, consistent environmental monitoring and visualizations of the Project sites. We are also in the last phase of implementing an EPM (Enterprise Project Management) tool dedicated for the Project Coordinator, Project Managers and working teams to manage individual Projects in accordance with the Project Coordination System.

In order to ensure reliable operation of the Project Coordination System, it was assumed that its effective functioning will be possible also without using the supporting IT tool.

The most important EPM functionalities include:

- the Document Repository module, to which materials are submitted after being described with a number of important parameters that allow their further use;
- a module to manage the project and project schedule that allows initiating and defining the manner of managing it in accordance with the methodological and procedural guidelines.


The last component of the System are the legal regulations governing the modes of making mutual agreements between the Project Partners. On 20 August 2009, the Project Partners — in recognition of the need to regulate their mutual relations arising from the responsibilities imposed on them by the Special Purpose Act — signed a Cooperation Agreement. Thereby they committed to implement the individual Component Projects in a way that ensures the transfer of the infrastructure components constructed by them within a timeframe allowing continuation of the work by another Project Partner in compliance with the Project Schedule. At the same time, the Project Partners made a commitment to cooperate with GAZ-SYSTEM S.A. as the entity responsible for project coordination in the scope of harmonizing all matters arising from the Project Schedule. As a result of the preparation by GAZ-SYSTEM S.A. of a concept of the methodology of meeting the coordination responsibilities in the form of the Project Coordination System and of obtaining the Minister’s of the Treasury approval for the proposed System, the Project Coordinator proposed the Project Partners to sign an Annex to the Cooperation Agreement of 20 August 2009 in the form of the Supplementary Agreement. The Annex set forth the responsibilities of GAZ-SYSTEM S.A. in cooperation within the process of coordinating the construction of a regasification terminal for liquefied natural gas in Świnoujście. The draft Supplementary Agreement has been prepared by the LNG Division in March 2010 and then was forwarded to the Project Partners for consultation. Following the introduction of proposed changes, on 5 August 2010 the Project Partners signed the Supplementary Agreement introductory document. The Supplementary Agreement sets forth the principles of cooperation between all the Project Partners in the scheduling, preparation, implementation and closing phases of the LNG Terminal construction which consists of parts carried out by four Project Partners, with particular emphasis on the GAZ-SYSTEM S.A. function of the Project Coordinator within the meaning of the Special Purpose Act. The Project Partners also committed to close cooperation, the scope and methods of implementation of which are set forth in the Supplementary Agreement.

In particular, the Supplementary Agreement defines the responsibilities of GAZ-SYSTEM S.A. as the Project Coordinator, assigning it the following tasks:
- to prepare employees of the Project Partners to use the Project Management Methodology that forms the basis of the Project Coordination System;
- to develop the management procedures and the related documents (forms, report templates, informational documents) to support the Project Coordinating Process;
- to prepare the relevant analyses and progress reports for the Master Project;
- to evaluate, provide consultation, elaborate recommendations for actions to streamline the LNG Terminal construction, including resolution of critical issues and organizing agreement on project changes (in so far as these issues may affect the Component Projects, and in compliance with the procedures laid down in contracts), and organise the processes of agreeing upon such recommendations;
- to develop, update and implement the Communication Schedule so as to ensure that all the identified Stakeholders receive the adequate information at the right level of aggregation with the use of the optimum information channels and at the scheduled intervals;
- to prepare the Consolidated Project Schedule, monitor the project physical progress and the implementation of the Budgets for the Component and Supporting Projects, with particular regard to the relations between individual Projects;
- to perform continuous monitoring of the cumulative project risks and develop strategies and methods for their management;
- to ensure the necessary number of qualified staff to carry out the coordination functions, including support for the Executive Committee;
- to report progress in implementing the LNG Terminal construction to the Minister of the Treasury.

On the other side, under the Supplementary Agreement the Project Partners undertook to:

- actively participate in all activities performed within the framework of this Supplementary Agreement, and in particular in the Executive Committee work, and to implement the Executive Committee decisions related to the Project Coordination Process;
- provide adequate substantive and technical resources, as necessary for effective implementation of the Project Coordination Process, including nomination and formal appointment of persons responsible for implementing the Component Projects;
- carry out the Component Project management in compliance with the Operating Procedures agreed between the Project Coordinator and the Project Partners;
- make every effort for the smooth implementation of the Project Coordination System mechanisms in relations with their Contractors, Contract Engineers, and Investor Supervision.

The Supplementary Agreement has also defined the most important roles in the Coordination Process (Component Project Sponsor, Project Manager, Head of the LNG Division, Chief Coordinator of Operations, Operations Coordinator) and has determined the extent of their rights and responsibilities.

The mode of Project Partners involvement in the Executive Committee work has also been described in full detail in the Standing Rules of the Executive Committee. The Standing Rules define the responsibilities of the Committee Members, in particular the Committee Chairman, and determine the mode of operation of the Executive Committee. Furthermore, they set forth the manner of convening the Executive Committee, its decisions, submission of proposals for consideration and adoption of resolutions, clarify the principles of providing administrative services to the Executive Committee and of keeping records for the Committee.

The Supplementary Agreement is the main document implementing and regulating the operation of the LNG Terminal Construction Coordination System.
The third part of the report presents the current effects of coordination activities and the Project Coordinator plans for the development of and improvements to the Project Coordination System. It also discusses challenges faced by GAZ-SYSTEM S.A. and the prospects for the future use of the LNG Terminal so as to increase its business potential, also in the context of current activities.
The purpose of this Report was to present GAZ-SYSTEM S.A.’s responsibilities and to demonstrate that their performance meets the coordination requirements imposed on the company and that these responsibilities are carried out effectively thanks to the implementation of an efficient coordination system based on good business practices. In preparing this report, GAZ-SYSTEM S.A., as the Project Coordinator, has analysed the current status of the Project Coordination System and the effects of coordination activities.

The Report does not give any evaluations, but it demonstrates that their performance meets the coordination requirements imposed on the company and that these responsibilities are carried out effectively thanks to the implementation of an efficient coordination system based on good business practices. In preparing this report, GAZ-SYSTEM S.A., as the Project Coordinator, has analysed the current status of the Project Coordination System and the effects of coordination activities.

GAZ-SYSTEM S.A. is a modern company, the ambition of which is to conduct business with respect to the principles of social responsibility. For this reason, the company not only committed to effectively meet the responsibilities performed and the results achieved, but also expanded its responsibilities by projects related to the implementation of its strategic objectives. Even though the additional responsibilities do not arise directly from the Special Purpose Act, they increase the efficiency of coordination and ensure that the entire project is executed with respect to the principles of sustainable development.

**EFFECTS OF THE CURRENT COORDINATION AND MANAGEMENT ACTIVITIES**

As a result of the project coordination activities, the Project consisting of four Component Projects is implemented pursuant to the Consolidated Project Schedule. Thus it is possible to identify Project inter-relationships and their location on the timeline so as to minimize any disturbance of smooth implementation of individual Component Projects. Obviously, due to the Project complexity and linkages between the Component Projects, maintaining compliance with the Consolidated Project Schedule is sometimes difficult. In the autumn of 2010, within two Component Projects: Jetty CP and Breakwater CP, the construction work was not implemented effectively enough, which resulted in disturbing delays against the Project Schedule. The Contractors then proposed to change the way they perform work. Additionally, the risk of finding large volumes of military equipment dating back to WW II at the bottom of the water basin constituting a construction site has materialised – mines and various missiles were found. The result anticipated by the Contractor could be a significant delay against the deadline for work completion. Resolving this issue involved the Project Coordinator, who monitored the process of mutual arrangements in search for a solution to the critical issue and provided aid to the Project Partners within the scope of the Coordinator’s competence.

In such a situation, the Coordination Process implemented by GAZ-SYSTEM S.A. provided a good platform, both to inform all the Stakeholders about the risks and the remedial measures implemented and to seek common solutions and make arrangements. In accordance with the procedures, all the activities performed were constantly monitored; they were also assessed in terms of care for achieving the common objective which is a timely completion of the Project. The Project Partners put a great effort in solving the problems described above. As a result, the Maritime Office in Szczecin and the Szczecin and Swinoujście Seaports Authority have agreed on a package of changes to be introduced into their respective Component Projects. In this way they managed to neutralise various hazards to the timely completion of the Project.

At present, the project work – especially in the Breakwater Component Project – goes smoothly, and any delays, occurring e.g. during operational activities.

**TOTAL QUANTITIES OF EXPLOSIVE OBJECTS EXTRACTED FROM THE SEA BOTTOM**

<table>
<thead>
<tr>
<th>Item</th>
<th>Object type</th>
<th>Pcs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aerial bomb, 500 kg</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Aerial bomb body with explosive material, ca. 140 kg</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Naval mine MARK VI</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Depth charge DM-11</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>210-mm artillery missile</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>150-mm artillery missile</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>105-mm artillery round</td>
<td>71</td>
</tr>
<tr>
<td>8</td>
<td>23-mm artillery round</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>105-mm artillery round</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>75-mm artillery missile</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>45-mm artillery missile</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>37-mm artillery missile</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>20-mm AA missile</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>20-mm AA round</td>
<td>23</td>
</tr>
<tr>
<td>15</td>
<td>80-mm mortar grenade</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>Hand-grenade</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>Artillery missile fuse</td>
<td>797</td>
</tr>
<tr>
<td>18</td>
<td>Artillery Shell With explosive material</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>Small arms ammunition</td>
<td>42</td>
</tr>
<tr>
<td>20</td>
<td>Small arms shells</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>948</strong></td>
<td></td>
</tr>
</tbody>
</table>
The construction of the protective breakwater for the external port in Świnoujście is one of the biggest investment tasks implemented so far by the Maritime Office in Szczecin. A close cooperation with the remaining Partners participating in port terminal preparation and LNG unloading is required in this project.

We coordinate our works with the Partner constructing the Terminal as well as with the Partner preparing the reloading platform, technological platform and pipe bridges for transmitting installation. Proper technical, time and space coordination of single projects, carried out by three different investors and three different contracting consortia on a common site is a real challenge and the key to timely completion of the investment. We coordinate the majority of technical issues, in particular with our closest Partner (in terms of technology), i.e. Szczecin and Świnoujście Seaport Authority, directly on the construction site and only upon reaching solutions we present them to the Project Coordinator. However, there are issues that require the development and implementation of an agreeing process by the fourth Partner to the Project, being at the same time the Coordinator, i.e. GAZ-SYSTEM S.A.

The hardest time was the process of the Coordination System implementation which is based on project management methodology, prepared for the needs of a business customer. An additional challenge was the implementation of that methodology for only one project in our Office. First of all the System was launched during the intense works on preparing to select and on the selection itself of the Contract Contractor and Contract Engineer. So we were carrying out two substantial tenders while our small team of budget unit had to face yet other new tasks. In practice, the coordinator can facilitate the entities’ work and motive to due diligence. On the other hand in such substantial and complex projects, improper communication or its lack is often one of the important reasons for failure. Effective coordination of single Component Project implementation would not be possible without the engagement of all key Stakeholders in the coordination and management processes. The Sponsors and Component Project Managers play a vital role in this process. Their work and effort for smooth investment process and prevention from occurring significant threat for the timely work completion should be appreciated.

In my opinion the majority of difficult issues is already behind us and the construction of protective breakwater for the external port in Świnoujście and reconstruction of the existing breakwater go very smoothly. We should complete our project on time.

The Coordination System of the LNG Terminal construction was designed and implemented in its basic functional scope and it took only four months to prepare it. This is quite fast if we take into account the range and complexity of the investment. The basic scope of the implementation was completed in September 2010. At the same time the Supplementary Agreement, prepared by the Project Coordinator and negotiated between the Partners, entered into force. The Agreement defined the cooperation rules in the coordination process of the investments in the liquefied natural gas regasification terminal in Świnoujście. Consequently, an Executive Committee was appointed which approved the basic set of operational procedures and all coordination activities became formally binding.

After more than 18 months since the System designing and more than 12 months since its implementations it is time to update the processes used. The first changes have been implemented since May 2011 with the change of format and contents of the report for the Minister of the Treasury. Then in the 4th quarter of 2011 when the works in the Terminal Component Project reach the phase of intensive construction works, a report from the LNG Terminal construction will be introduced as a control action. The document, as a supplement to the Project Status Report, is prepared by the Project Coordinator’s technical services.

At present, works are being carried out on the implementation of the IT system for the automation of coordination processes. The System
includes a module supporting the document flow and repository as well as a module dedicated to single coordination processes. The templates of the Component Project Status Reports will be amended soon due to launching tools for the analysis of the Component Project Schedules and for effective monitoring of risks occurring therein and managing the Master Project risks.

According to the Communication Schedule to ensure effective implementation of the Master Project, the improvement of information flow channels will take place once a year as a result of audit an internal communication in the Project. The audit will confirm the effectiveness of the communication system if it reaches a score indicating satisfying level of Stakeholders’ satisfaction who participate in the communication processes. Regardless of that the audit report will present recommendations for changes in the Communication Schedule.

Similarly, the control of procedures valid in the System will be carried out once a year. The first review and update of the operation scope of services rendered by the Terminal, will be more and more important.

The cornerstone of this project is the Terminal for LNG in Świnoujście which is at present the most important investment being implemented in Poland. It will allow for gas unloading using marine mode from practically every direction in the world. Therefore the Terminal:
- will open the path to real diversification of natural gas suppliers;
- will permanently change the situation in the Polish natural gas market;
- will strengthen the energy security;
- will contribute to the increase of competitiveness at the natural gas market.

This investment is not only of national importance, but, as vital element of integrated transmission network in Central and Eastern Europe, constitutes a priority supported by the European Union. The implementation of such substantial and strategic programme is a long, multidimensional process requiring the engagement of several entities. However, first of all it needs effective coordination leading to efficient and harmonious cooperation between the engaged Partners. The LNG Terminal in Świnoujście is to constitute a part of North-South Gas Corridor Project, supported by the EU, the implementation of which is to substantially increase the security of gas supplies to Central and Eastern Europe. A corridor project to connect the Świnoujście Terminal (through South of Poland, the Czech Republic, Slovakia and Hungary) with analogous facilities, LNG Adria, which may be established in Croatia and with planned Nabucco gas pipeline, is being considered. At the same time the corridor will allow for the development and integration of regional gas markets. With the planned connection Europe would get access to new gas sources and the LNG Terminal in Świnoujście could be used in a wider commercial scope. Liquefied gas, purchased in global markets would flow by the network of Polish gas pipelines to the Czech Republic, Slovakia or Hungary, significantly increasing Poland’s role in the gas transmission in this part of Europe.

INFRASTRUKTUR DEVELOPMENT

The Polish transmission infrastructure (terminal, gas pipelines and interconnectors) currently constructed by GAZ-SYSTEM S.A. will constitute the basis for North-South gas connection. The Company constructs more than 1,000 km of new transmission connections, e.g.:
- Świnoujście-Szczecin gas pipeline, connecting the LNG Terminal with the national gas transmission system together with infrastructure necessary for its operation in the West Pomerania region;
- Szczecin – Gdańsk gas pipeline;
- sections Szczecin – Lwówek, Lwówek – Odolanów, Gustyń – Odolanów, Włocławek – Gdynia and Rembelszczyzna – Gustyń;
- gas pipelines in Lower Silesia which allow for the receipt of increased volumes of gas from the West.
Moreover, in September 2011 the Company launched a new intersystem connection (e.g. connector) Poland – the Czech Republic allowing for transmission of approx. 0.5 bln m³ of gas annually. GAZ-SYSTEM S.A. analyses also the construction of gas pipeline Poland – Lithuania and Poland – Slovakia. The LNG Terminal and all its accompanying investment will significantly improve the gas transmission security in Central and Eastern Europe. Benefits resulting from the investment:
- diversification of energy sources;
- improvement of Poland’s energy security;
- improvement of gas supply flexibility;
- promotion of ecological solutions complying with the EU policy.

**STRATEGIC CHALLENGES**

The LNG demand forecasts in the Baltic Sea region are promising. There is potential for the development of the LNG market in the region of both Baltic and North Sea. The Terminal in Świnoujście can become the most important element of the forecast LNG market in the region of both Baltic and North Sea. The Project Coordinator, having in mind the start-up of the LNG Terminal in Świnoujście in mid-2014 according to the schedule, is already seeking the possibilities to expand the functionalities and supplement the scope of basic services offered by the facility. Moreover, due to changes both in the Polish natural gas market and in the Central and East-European gas pipeline infrastructure. GAZ-SYSTEM S.A. needs to adopt its strategy to them and re-verify the scope of planned services. The importance of the Company in the Central and Eastern Europe market and in the Baltic Sea countries can be increased, in the long term perspective, after the alteration of the investment to the expected market requirements. Therefore GAZ-SYSTEM S.A. carries out market analyses with the view to provide additional services in the LNG Terminal in Świnoujście and to prepare initial feasibility study for the identified options. The potential direction of Terminal’s business development can be the use of liquefied gas to power the engines of sea ships. This kind of service will be in demand in regions lacking gas infrastructure.

Moreover, LNG is attractive due to its flexibility of sea transport. From May this year the Baltic Sea became the SECA area, i.e. Sulphur Oxide Emission Control Area. Ships entering the Baltic Sea must use fuel with no more than 1.5% m/m of sulphur level. In this context the increase of LNG demand as a fuel for sea transport is expected. At present LNG is used as pure ecological fuel for sea ships (Norway) and similar ships are ordered in shipyards. LNG can become important fuel in the regular sea transport market.

The replacement with LNG powered ships does not take place by means of ship conversion, but by means of constructing new, dedicated ships to replace the old ones. Therefore, the process to turn to new, low emission fuel will take years. An additional indispensable condition for the LNG segment as ship fuel will be construction of appropriate stations to refuel LNG in the ports of the Baltic and North Sea. At present there are several smaller LNG terminals enabling ship refuelling. Their number is expected to grow.
### Definitions and Acronyms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Definition</strong></td>
<td>A document in the Project Coordination System which describes the objectives, principles and conditions of Project implementation, Project scope and Project Deliverables that will be produced within the Project framework. Besides, Project Definition describes Project risks and the division of Project responsibilities.</td>
</tr>
<tr>
<td><strong>Project Deliverables</strong></td>
<td>Project Deliverables are products to be created within the Project framework as specified in the Project Definition; they have the acceptance criteria assigned to be used by the Project Sponsor for their final acceptance.</td>
</tr>
<tr>
<td><strong>Chief Coordinator of Operations</strong></td>
<td>An executive function within the Project Coordination System. The CCO is appointed by and reports to the Head of the LNG Division. s/he is personally responsible at the top level of management for implementation of all the coordination processes (LNG.R.100 series).</td>
</tr>
<tr>
<td><strong>Consolidated Project Schedule</strong></td>
<td>A schedule comprising the component schedules for Component Projects and Supporting Projects, supplemented with additional items defining the mutual relationships between Component Projects and the work-harmonising activities.</td>
</tr>
<tr>
<td><strong>Stakeholder</strong></td>
<td>Person having an interest in Project implementation or an influence on the Project course; alternatively, a person affected by the Project (e.g. a member of the local community).</td>
</tr>
<tr>
<td><strong>Project Manager</strong></td>
<td>Project Manager, the person responsible for professional management of a Component Project. A Component Project Manager is responsible for implementation of all the major steps of Component Project management.</td>
</tr>
<tr>
<td><strong>LNG Division</strong></td>
<td>A division in the corporate structure of GAZ-SYSTEM S.A. that is responsible for the coordination process.</td>
</tr>
<tr>
<td><strong>Communication Schedule</strong></td>
<td>A document describing the types, modes, time schedule for and forms of information transfer between the Project Partners and other Project Coordination System participants.</td>
</tr>
<tr>
<td><strong>Operational Procedures</strong></td>
<td>Documents describing the standardised methods of implementing the processes comprising the Project Coordination System.</td>
</tr>
<tr>
<td><strong>Coordination Process</strong></td>
<td>Organised cooperation between the Project Partners, carried out in relation to and within the framework of their own Component Projects: harmonisation of Component Projects aimed at attaining the Project objective which is timely commissioning of the Świnoujście external port and LNG Terminal.</td>
</tr>
<tr>
<td><strong>Master Project</strong></td>
<td>Project harmonising the individual Component Projects and Supporting Projects; in particular, the Master Project provides a framework for the development and implementation of Consolidated Project Schedule.</td>
</tr>
<tr>
<td><strong>Component Project</strong></td>
<td>Any of the four investment projects implemented by the Project Partners. The Component Projects include:</td>
</tr>
<tr>
<td><strong>Breakwater Component Project</strong></td>
<td>Construction of the infrastructure to secure access to the external port, consisting of a breakwater, waterway, turning basin and the navigation marks related to the said infrastructure, widening of the existing access waterway to the Świnoujście port – reconstruction of the existing breakwater in the Świnoujście port – project implemented by the Maritime Office in Szczecin.</td>
</tr>
<tr>
<td><strong>Jetty Component Project</strong></td>
<td>Construction of the port infrastructure comprising ship docking station with the related mooring, fender, and navigation systems as well as the infrastructure necessary for mounting the seawater uptake and transport installations – project implemented by Zarząd Morskich Portów Szczecin i Świnoujście S.A. in Szczecin (Szczecin and Świnoujście Seaports Authority).</td>
</tr>
<tr>
<td><strong>Gas Pipeline Component Project</strong></td>
<td>Construction of the Świnoujście-Szczecin gas pipeline to connect the LNG Terminal to the national gas transmission system, together with the infrastructure necessary for its operation within the province of Zachodniopomorskie (West Pomerania) – project implemented by Gas Transmission Operator GAZ-SYSTEM S.A. with its registered office in Warsaw.</td>
</tr>
<tr>
<td><strong>LNG Terminal Component Project</strong></td>
<td>Construction of the LNG Terminal – project implemented by Polskie LNG SA with its registered office in Świnoujście.</td>
</tr>
<tr>
<td><strong>Supporting Project</strong></td>
<td>A Project combining the supporting activities that are necessary for attaining the Project objective which is timely commissioning of the Świnoujście external port and the LNG Terminal, other than the direct civil work performed on site.</td>
</tr>
<tr>
<td><strong>Project Sponsor</strong></td>
<td>A person responsible for supervision over the implementation of Master Project, Component Project or Supporting Project and for providing the resources necessary for such implementation. The Project Sponsor works in liaison with the Executive Committee on the development or making directional (strategic) decisions related to the Master Project, Component Project or Supporting Project.</td>
</tr>
<tr>
<td><strong>Special Purpose Act</strong></td>
<td>The Special Purpose Act of 24 April 2009 on the investments in the liquefied natural gas regasification terminal in Świnoujście (Dz. U. Journal of Laws) of 2009, No. 84, Item 700).</td>
</tr>
</tbody>
</table>
A meeting of the Component Project Managers, organised by the Project Coordinator on the monthly basis within the framework of the Communication Schedule. Its objectives include e.g. submission of comments to the Project Status Reports and presentation of operating plans for the following reporting period. Discussion and agreement on issues affecting such operating plans for the following reporting period, discussion of any proposed modifications to Component Project operating plans, deciding the working mode for harmonization of Project Partners’ work, and discussion of major guidelines from Project Sponsors, those including the decisions and guidelines from the Executive Committee.

Project Coordination System

A set of methods, techniques, tools, design benchmarks, and operational coordination procedures dedicated to the Project, all aimed at securing the Master Project implementation through harmonious implementation of Component Projects in an efficient and effective manner and at the contractually agreed quality levels.

LNG Terminal

Liquefied natural gas regasification terminal in Świnoujście, together with the installations, equipment and facilities necessary for its start-up and operation.

Project Team

A group of individuals reporting to Manager of the Master Project, a Component Project or Supporting Project that is dedicated for performing the tasks specified in the respective Definition of the Master Project, a Component Project or Supporting Project.

The system that connects

TRANSLATION ONLY

Independent assurance report on the Report on Implementation and Functioning of the System for Coordinating the Construction of the LNG Regasification Terminal for the Gas Transmission Operator GAZ-SYSTEM S.A.

To the Management Board of the Gas Transmission Operator GAZ-SYSTEM S.A.

This report has been drawn up in accordance with the terms of our Contract dated 21 July 2011 (“the Contract”) for the purpose of providing assurance concerning the Report on the Implementation and Functioning of the System for Coordinating the Construction of LNG Regasification Terminal (“AGAZ-SYSTEM S.A.’s Report”) within the scope covered by the Contract on the level available for quality data. This level is referred to as “reasonable assurance.” This report has been prepared for the Gas Transmission Operator GAZ-SYSTEM S.A. (“the Company”) which acts as the Investment Coordinator in respect of the LNG Regasification Terminal in Świnoujście, based on the provisions of the Act of 24 April 2009 on investments relating to the regasification terminal of liquefied natural gas in Świnoujście (Journal of Laws 09.84.700 with further amendments).

Responsibilities

The Company is responsible for preparing GAZ-SYSTEM S.A.’s Report.

Identification of the Criteria and Description of the Subject Matter

The Company prepared GAZ-SYSTEM S.A.’s Report in order to present the Company’s fulfillment of the obligations placed on it by the provisions of Article 2, clauses 3-7 and in Article 3 of the Act of 24 April 2009 on investments relating to the regasification terminal of liquefied natural gas in Świnoujście (Journal of Laws 09.84.700 with further amendments) (“the Criteria”).

GAZ-SYSTEM S.A.’s Report contains the data for the reporting period from 1 January 2010 to 30 November 2011.

Auditor’s responsibility

Auditor’s responsibility is to express the conclusions on GAZ-SYSTEM S.A.’s Report in respect of the data relating to compliance with the obligations placed on the Company by the provisions of Article 2, clauses 3-7 and in Article 3 of the Act of 24 April 2009 on investments relating to the regasification terminal of liquefied natural gas in Świnoujście (Journal of Laws 09.84.700 with further amendments).

The procedures selected depend on our judgment and are based on the analysis of the subject matter to be verified. These have been designed in order to carry out the work in the context of the risk assessment of material misstatement of the selected data contained in GAZ-SYSTEM S.A.’s Report.

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Summary of work performed

We conducted the engagement in accordance with the International Standard on Assurance Engagements 3000 “Assurance Engagements other than Audits or Reviews of Historical Financial Information” (“ISAE 3000”). Our procedures primarily comprised:

- Assessment of the appropriateness and application of the reporting criteria as necessary;
- Evaluation of the design and effectiveness of the relevant internal controls for collecting and processing data included in GAZ-SYSTEM S.A.’s Report;
- Verification of the information included in GAZ-SYSTEM S.A.’s Report through enquiries to the relevant management of the Company, and through analytical procedures aimed at establishing the reliability of underlying documentation.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Conclusion

In our opinion, GAZ-SYSTEM S.A.’s Report complies in all material respects with the specified Criteria.

Restrictions of Use and Distribution

This assurance report has been prepared by PricewaterhouseCoopers Sp. z o.o. (“PwC”) for the Company.

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David Green
Proxy
PricewaterhouseCoopers Sp. z o.o.

Warsaw, 9 December 2011

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