#### Address by Viktor Timoshilov, Head of the East-Oriented Project Coordination Directorate

at the meeting of Gazprom's top executives with chief editors of Russian regional mass media

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#### **Basic Scheme of UGSS in Eastern Russia**

#### Good afternoon, dear ladies and gentlemen!

Over the last two years Gazprom has had a notable progress in implementation of the Eastern Gas Program approved by the Russian Government in 2007. The main goal of our activities in Eastern Russia is to develop gas supply and gasification of the Russian Far East as well as to get access to the Asia-Pacific markets. Developing the gas industry in the East is a component of the governmental plans on socioeconomic development of Siberia and the Far East, and many projects of the Eastern Gas Program have now been made part of the Development Strategy for the Far East and the Baikal Region until 2025 approved by the Russian Government. Speaking at the Yuzhno-Sakhalinsk meeting this March, Vladimir Putin, Russian Prime Minister announced the prioritized task in the gas industry – developing the gasification and gas supply to Russian consumers through building the Russian Unified Gas Supply System (UGSS) in the East of the country and its subsequent connection to the existing UGSS. He emphasized that implementation of the Eastern Gas Program would make it possible to create in the future a really Unified Gas Supply System from the Baltic Sea to the Pacific Ocean. Diversification of Russian gas sales markets and consumers in Asia-Pacific countries is also a crucial objective of the Program.

## Project for gas supply to Kamchatka Krai

The project for gas supply to Kamchatka was the first comprehensive project for gasification and gas supply to Eastern Russia. In September 2010 under the Gas Supply to the Kamchatka Krai, Phase 1. Gas Supply to Petropavlovsk-Kamchatsky project the 400-kilometer gas trunkline connecting the CGTU-2 of the Nizhne-Kvakchikskoye gas and condensate field with the automated gas distribution station of Petropavlovsk-Kamchatsky was commissioned.

As part of the second startup complex, well drilling and pre-development of the Nizhne-Kvakchikskoye gas and condensate field (GCF) continued in 2011. 11 wells were drilled in 2011. In October 2011 gas was supplied to the gas trunkline from the cluster of wells No.1 of the Nizhne-Kvakchikskoye GCF. The methanol pipeline was put into operation. By the end of 2011 the performance of the production complex at the Kshukskoye and Nizhne-Kvakchikskoye GCF will reach 335 million cubic meters.

In 2012 construction of facilities within the third startup complex will continue that will increase the productivity of the production complex at the Kshukskoye and Nizhne-Kvakchikskoye GCF to 750 million cubic meters, ensure the load of the gas trunkline in line with the schedule for gas supply to the Kamchatka Krai consumers and help to reach the design capacity by 2020.

This creates a foundation for reliable energy supply to Kamchatka in future.

# Zapadno-Kamchatsky block

Gazprom operates at offshore and onshore fields of Kamchatka. Within the Zapadno-Kamchatsky block seismic survey was performed in 2010. The Reconnaissance Program and the Comprehensive Project for Geological Exploration have been elaborated and the engineering survey has been completed. In 2011 we continue the construction of the Pervoocherednaya well No.1 in the Pervoocherednaya geological structure within the Zapadno-Kamchatsky license block.

# Sakhalin Oblast gasification

In March 2011 a gas lateral and the Dalneye gas distribution station (GDS) of the Yuzhno-Sakhalinsk city were put onstream and ensured gas supply to consumers of the municipality of the urban district of the Yuzhno-Sakhalinsk city including to CHPP-1 of Yuzhno-Sakhalinsk.

## First startup complex of Sakhalin – Khabarovsk – Vladivostok GTS

The Sakhalin - Khabarovsk – Vladivostok gas trunkline construction is over and first gas was supplied to consumers on the Russky Island, and CHPP-2 of Vladivostok on September 8, 2011.

The first startup complex of the Sakhalin – Khabarovsk – Vladivostok gas transmission system (GTS) with the total length of 1,350 kilometers includes the Sakhalin – Komsomolsk-on-Amur section with a submerged crossing under the Nevel Strait (2 lines with 1,000 mm in notional diameter and 23 kilometers in length each) the Khabarovsk – Vladivostok section, the Sakhalin main compressor station, a gas lateral (116 kilometers) and the GDS of Vladivostok.

In order to ensure the reliability of gas supplies to consumers in Khabarovsk an interconnector was built between the Okha – Komsomolsk-on-Amur and the Sakhalin – Khabarovsk – Vladivostok gas trunkline.

## **Construction of submerged crossing under Eastern Bosphorus Strait**

In parallel with the gas trunkline, medium- and low-pressure networks have been built in Vladivostok as well. The slanted drilling techniques were used to place the gas pipeline from the continent to the Russky Island via the Eastern Bosphorus Strait.

## **Resource base for Sakhalin – Khabarovsk – Vladivostok GTS**

At the initial stage the Sakhalin – Khabarovsk – Vladivostok GTS will be filled with the Russian state entitlement gas from the Sakhalin II project. The Russian Federation Government adopted the relevant Directive No.1539-r on September 6, 2011. In addition, gas from the Kirinskoye GCF will be also supplied to the gas trunkline.

Intense geological exploration is underway at the Kirinskoye GCF. The field's natural gas reserves have been doubled through geological exploration. For the first time in Russia gas will be produced in the Kirinskoye GCF from subsea production systems instead of drilling platforms. The field contains 137 billion cubic meters of gas.

With a view to arrange gas deliveries from the Kirinskoye GCF as well as from the Kirinsky license block into the Sakhalin – Khabarovsk – Vladivostok gas trunkline the Company launched in 2011 the construction of a gas pipeline between the onshore processing facility of the Kirinskoye GCF and the Sakhalin main compressor station. The 150-kilometer gas pipeline will be brought to nominal capacity of around 19 billion cubic meters per year.

Later on, the resource base will be expanded through promising subsurface areas of the Kirinsky license block. Drilling of the first well in the Yuzhno-Kirinskaya geological structure resulted in the discovery of the Yuzhno-Kirinskoye gas and condensate field with 160.9 billion cubic meters of C1 category reserves.

Thus, Gazprom's aggregate proven reserves of C1 category amount to 300 billion cubic meters on the continental shelf of the Sakhalin Island, and they are expected to increase as geological exploration continues.

## **Reserves and resources in Republic of Sakha (Yakutia)**

In the Republic of Sakha (Yakutia), the follow-up exploration is in progress at the unique Chayandinskoye field with gas reserves exceeding 1.2 trillion cubic meters.

In 2010 seismic survey in the Chayandinskoye oil, gas and condensate field (OGCF) increased the local reserves by around 73 billion cubic meters of gas (C1 category) and by 8.8 million tons of liquid hydrocarbons. In the first half of 2011 the C1 gas reserves were increased by 178.2 billion cubic meters and condensate reserves were increased by 2.6 million tons through drilling of four wells. Therefore, the C1 gas reserves in the Chayandinskoye field exceed today 630 billion cubic meters. We are beginning to pre-develop the oil rim of the field.

The Chayandinskoye OGCF together with the adjacent Taz-Yuryakhskoye Srednebotuobinskoye and Verkhnevilyuchanskoye fields create the foundation for establishing the Yakutia gas production center and developing the eastern part of Russia's Unified Gas Supply System.

Another important objective is to extract associated petroleum gas from the Talakanskoye and Verkhne-Chonskoye OGCF.

As a result, it will be possible to arrange gas supplies to southern regions of Yakutia, the Amur Oblast and the Jewish Autonomous Oblast.

# Yakutia – Khabarovsk – Vladivostok gas trunkline

Construction of the Yakutia – Khabarovsk – Vladivostok gas trunkline will create the underlying infrastructure for this.

At present, we are developing the investment rationale for the Chayandinskoye OGCF pre-development, gas transmission and processing. The investment rationale is to be issued this year. The document also studies possible options for deploying gas processing and gas chemical facilities and addresses the issues of helium extraction and storage as well as arranging the optimal scheme for gas export via pipelines and in liquefied form. Completion of the investment rationale was rescheduled from June 2011 to March 2012.

## Wider use of natural gas in Far East

So far, with the Sakhalin – Khabarovsk – Vladivostok interregional gas pipeline, the first major project of the Eastern Gas Program, commissioned, the Far Eastern regions and potential investors have an opportunity to plan and develop gas-related projects including in the power generation, gas chemistry, metallurgy, machine building, and transportation sectors. Among other things, new projects are now underway to generate thermal and electric power in Khabarovsk and Nakhodka. By the end of this year, gas will be available for CHPP-1 of Vladivostok and the Severnaya boiler house in the continental part of Vladivostok. Transition of boilers at CHPP-2 of Vladivostok and CHPP-1 of Yuzhno-Sakhalinsk to natural gas will be continued.

Japanese and South Korean companies are examining options to develop gas chemistry in the Primorye and the Khabarovsk Krais.

Gazprom has received messages from the Governors of the Khabarovsk and Primorye Krais with requests to consider gas demand in these regions when planning the long-term gas balance. The gas demand in the Primorye Krai is above 9 billion cubic meters, in the Khabarovsk Krai – 7 billion cubic meters, and in the Sakhalin Oblast – around 2 billion cubic meters.

# Creating gas processing plants/gas chemical complexes and gas supply to southern regions of Irkutsk Oblast from Kovykta group of fields

Currently, conditions are available for the Company to intensify its efforts in the Irkutsk Oblast in a sustained manner.

The general scheme for gas supply and gasification of the Irkutsk Oblast and a series of pre-investment studies of 2007-2010 proved the expediency of creating gas processing and gas chemical facilities to be based on the Kovykta group of fields and deployed within the premises of Sayanskkhimplast. The Company's Management Committee resolved to develop in 2012 the Investment Rationale for the Comprehensive Project for Gas Supply to Southern Regions of the Irkutsk Oblast with Due Consideration for Gas Processing and Gas Chemical Capacities (the IR).

Currently, the technical specifications for the relevant IR is ready and is pending approval by the Company's structural units, preparation of the tender documents is in progress.

# Sakhalin II project

The Sakhalin II project where Gazprom holds 50 per cent plus one share is progressing successfully. In 2010, 15.6 billion cubic meters of gas was extracted, 10.5 million tons of LNG was produced, oil and condensate production made up 4.57 million tons. Since 2011 oil and gas condensate output amounted to 4.2 million tons. Over three quarters the production was as follows: gas – 11.6 billion cubic meters, oil – 3.1 million tons and condensate – 1.1 million tons. Production of liquefied natural gas (LNG) stood at 7.5 million tons, with 121 shipments of LNG (9 shipments above target) and 47 shipments of oil (1 shipment above target) sent. Before the end of the year LNG production is expected to reach 10.9 million tons, which equals 160 standard LNG shipments.

Underway is repair and retrofitting of the Molikpaq platform as well as development of the production well stock. Additional LNG shipments were sent this year to Japanese buyers after the disastrous earthquake in Japan.

In 2011 the southern and northern gas transfer facilities were put into operation in Sakhalin as part of the project. This made it possible to start supplying a part of the Russian state entitlement gas from the Sakhalin II project to Russian consumers.

## Sakhalin II project LNG plant

Continuous loading of two trains of the Sakhalin II LNG plant over its entire lifecycle, according to the Production Sharing Agreement, is an indisputable priority for Gazprom within the project. In this connection it is important for us to ensure that the project's fields were developed strictly according to the approved project documents.

This approach will guarantee performance under the long-term contracts signed by the project operator to supply gas to consumers.

# **Prospects for natural gas supply to Asia-Pacific markets**

In parallel, we are developing the projects to arrange Russian gas exports to Asia-Pacific countries. A progress has been achieved in the project for gas supplies to the Korean Peninsula.

It has to be highlighted that pre-investment studies are in progress as part of the project for LNG supplies from the vicinity of Vladivostok. The preliminary studies carried out jointly with the consortium of Japanese companies demonstrate that the capacity of LNG plant near Vladivostok may reach at least 10 million tons per annum to supply LNG to Japan, eastern China, Taiwan, Thailand, India, and other Asia-Pacific countries. We are also going to continue negotiations with our Chinese counterparts on pipeline gas supply to China.

## Measures of government support (Part 1)

Our experience with first projects under the Eastern Gas Program has shown that for efficient gas projects delivery in the East and timely access to Asia-Pacific markets the support of federal and local executive authorities is required. The gas production and transmission infrastructure on the Far Eastern continental shelf and in Yakutia is being established from scratch; the remoteness of the region results in high costs of the necessary materials and equipment procurement; the local geological conditions are more complex than in Western Siberia.

At the same time, our business conditions in the East are the same as those for oil companies that enjoy government benefits at the initial stage of field development. Yet, the natural gas market is more complicated as compared to the oil market.

The government should provide eastern gas projects with the benefits that could be at least equal to those provided to oil producers. This, first of all, concerns the taxation issue over the payback period: exemption from the severance tax for gas produced in the Far Eastern shelf and Yakutia; introduction of income and property tax benefits; a certain reduction of rates on export customs duties for network gas produced in the shelf and in Yakutia and zero customs duties for LNG that will be produced at LNG plant in Vladivostok. Some of our proposals are represented in the slide here. We need to reduce or abolish the import customs duties on equipment and goods (having no analogues manufactured in Russia) used in oil, gas and petrochemical projects in Eastern Siberia, the Far East, etc.

It is also necessary that the facilities of electric power grid and transmission infrastructure located in the regions of oil and gas projects in Eastern Siberia and the Far East were fully covered by target-oriented Federal Programs including the following Federal Target-Oriented Program: the Economic and Social Development of the Far East and the Baikal Region. Under such programs the Government should allocate dedicated funds to regions for gasification of population centers.

#### Measures of government support (Part 2)

Adoption of the benefits described above will make gas more affordable for the eastern regions. The Eastern Gas Program deals with the gas prices shaped in the East on the basis of the interfuel competition among gas, coal and fuel oil that will enable gas to take its reasonable place in the fuel balance through its utilization, first of all, in electric and thermal power generation in large cities (on average the share of gas will not exceed 30 per cent in the balance of boiler-furnace fuel).

As we can see today, the Russian East has not built yet any pricing mechanisms that would make use of gas economically reasonable for the consumer on the one hand, and would allow the investors to recover their costs on the other hand. That's why measures of government support are a sine-qua-non.

The environmental and technological advantages of natural gas must be factored in. Today, due to the dominant role of coal and fuel oil and a low proportion of gas in the fuel balance of most major cities of Eastern Siberia and the Far East, the environmental situation there is far from perfect.

The consistent development of the natural gas market in the Far East would be strongly supported if the entire volume of the Russian state entitlement gas from the Sakhalin II project were used for gasification of the Far East. As you know, according to the Government Decree issued in September 2011, the Government is ready to use for gasification only a part of its gas revenues from the project and only for the period of three years, until 2014. Gazprom and other participants of the Sakhalin II project suggest that the Russian party collects all of its royalties in kind, as gas, as envisaged in the Production Sharing Agreement of the project, and use it for meeting the needs of the Far East over the entire lifecycle. This means at least 30 years instead of the three. Such decision is necessary to ensure stable development of gasification programs in the Sakhalin Oblast, the Primorye and Khabarovsk Krais as well as to implement projects that would switch the regions to gas supplies at least in the medium term. In addition, it is vital that the Government will be able to set flexible prices for such gas to make supplies affordable for the Far Eastern consumers that is extremely important at the initial period of gas market formation and transition from the polluting coal-fired power generation to the gas-fired one in big cities.

#### Thank you for your attention!