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Russia's New Horizons RUSSIAN INDUSTRIAL DEVELOPMENT AND THE GLOBAL SUPPLY CHAIN Panel

JUNE 20, 2013

11:45-13:00, Pavilion 4, Conference Hall 4.3

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Moderator:

<u>Ekaterina Trofimova</u>, First Vice President, Member of the Management Board, Gazprombank (Open Joint-Stock Company)

Panellists:

<u>Choi Kyong-lim</u>, Deputy Minister for Trade, Industry and Energy, Republic of Korea
 <u>Vadim Makhov</u>, Chairman of the Board of Directors, JSC OMZ
 <u>Klaus Mangold</u>, Chairman of the Supervisory Board, Rothschild GmbH
 <u>Dietrich Moeller</u>, President, Chief Executive Officer for Russia and Central Asia,
 Siemens

<u>Vladislav Soloviev</u>, First Deputy Chief Executive Officer, UC RUSAL <u>Maxim Volkov</u>, General Director, PhosAgro

Front row participants:

Salman Babaev, Vice President for Commercial Activities, Russian RailwaysEnrique Rueda-Sabater, Senior Advisor, BCGKonstantin Ryzhkov, Director, Russian Direct Investment Fund (RDIF)

E. Trofimova:

Colleagues, good afternoon! I propose we all take our seats.

I would just like to remind everyone that this session will be conducted in Russian. Headphones are available outside the auditorium if you wish to listen to the interpreter.

Ladies and gentlemen, I welcome you all to this plenary session on Russian industrial development and its role in the global supply chain. The session was put together with the support of Gazprombank. My name is Ekaterina Trofimova, and I am First Vice President of Gazprombank. On behalf of the organizers and from all of us at Gazprombank, I welcome you to the city of St. Petersburg, which has graced us with excellent weather today.

Our conversation today will be very compressed, as we are constrained to just an hour and fifteen minutes. The topic of our discussion is Russian industry: its potential, its weaknesses, its prospects for growth, and its role in today's turbulent global economy.

A very interesting group of speakers has gathered here today, and I will go ahead and introduce all of them now. Our panelists are: Maxim Volkov, General Director of PhosAgro; Choi Kyong-lim, Deputy Minister for Trade, Industry, and Energy of the Republic of Korea; Klaus Mangold, Chairman of the Supervisory Board, Rothschild; Vadim Makhov, Chairman of the Board of Directors, OMZ; Dietrich Moeller, President, Chief Executive Officer for Russia and Central Asia, Siemens; and Vladislav Soloviev, First Deputy Chief Executive Officer, UC RUSAL.

I would like to remind everyone once again that this session is being made possible thanks to the support of Gazprombank. Now I will say a few words about the session format. Seated in the front row are the discussion participants, whom I will introduce and yield the floor to as time allows.

Please put up the first slide. We will have slides illustrating some of our discussion topics. There will be no presentations. Our intention is to have an open discussion. If time allows, we will take questions at the end of the session. Please write down your questions and send them up for the panel's consideration.

I would like to address an initial question to all of the participants, and ask each of them to give a one- or two-minute response. How do you see the role of Russian industry within the world economy as a whole, especially in the context of the era of globalization and the formation of the Eurasian Common Economic Space? What advantages and disadvantages do you see for Russian industry in the current situation?

Mr. Volkov, if I may, I would like to direct the question to you first, and then continue in order.

M. Volkov:

Thank you, Ekaterina.

I will not be saying anything very surprising. Our competitive advantages have long been well known. First and foremost is our expansive territory. In Europe and the US, there are significant limitations on where industrial facilities can be located, due to the inevitable environmental pressures that arise around industrial production. Our relatively low population density means that such limitations are not yet a factor here.

In contrast to many developing countries, we have an infrastructure. It leaves something to be desired, of course, but it is in place, as are qualified personnel to maintain it.

Recently we have seen a decrease in the quality of personnel, especially within the trades. There has been a failure on the part of central government to address the issue of technical training. Today, companies themselves are being forced to train technical staff. This problem must be solved. Nevertheless, the level of education in our country is far higher than in many developing countries.

Another advantage we have is our geographic location between Europe and Asia. These are the basic criteria by which we will find our place in Eurasian trade.

E. Trofimova:

Mr. Moeller?

D. Moeller:

The real sector will likely be the key to a structural reform of the Russian economy. This would involve introducing high technologies, creating highly skilled jobs, and ultimately elevating the population's standard of living. Reform would mean focusing on innovation and increasing productivity.

Of course, a large market is one of Russia's advantages. Doing business here, it is usually possible to turn a profit. Other important factors are the proximity and accessibility of raw materials, a strong base of heavy industry, and the availability of talented staff, qualified personnel.

It is worth noting that the infrastructure requires a certain amount of development. Government procedures lack transparency, and there is no shortage of bureaucracy. It is also possible to talk about certain difficulties in the structure of government procurement; about administrative barriers. These are the things that go under the category of complaints. So a certain amount of development is required, but we are very optimistic about Russia's potential for becoming a good base for our exports, at least within the CIS.

Thank you.

E. Trofimova:

Thank you very much. We will have time to discuss that in greater detail.

Next slide, please. Mr. Makhov, I am yielding the floor to you.

V. Makhov:

Thank you, Ms. Trofimova.

I represent the company OMZ. Heavy machine-building is a branch of the manufacturing industry. Manufacturing accounts for only 16% of global GDP, and 14% of GDP in Russia. However, the importance of this sector lies in the fact that it accounts for 70% of exports and a majority of the world's research activity. Manufacturing plays a very important role in the development of trade and scientific

research. It is central to improving labour productivity, where it has an impact on various other sectors of the economy as well as within manufacturing itself. The positive foreign trade balance on exports of high-tech manufactured goods from developed countries exceeds USD 700 billion.

Now I would like to outline the role of industrial production in Russia. Russian imports amount to almost USD 300 billion annually, and slightly more than half of that total is in the category of machinery and equipment. This category does not include cars, which add another 12%. This is the flip side of the often mentioned dependence on oil. Russia spends an enormous proportion of the proceeds from exports of oil, gas, and valuable minerals on developing commercially viable technologies for the extraction, processing, and transport of raw materials. I see the role and significance of Russian industry as being tied to its ability to offer such commercially viable technologies, since the future of the Russian economy will in large part depend on securing the competitiveness of our extractive industries. Thank you.

E. Trofimova:

Thank you. Mr. Choi, now over to you.

C. Kyong-lim:

Thank you. I am afraid I will have to speak in English. Very briefly, I think that energy and resources can work both as an advantage and a handicap for Russia. Obviously, an easy supply of abundant and cheap energy and resources can work very well for the industries who use them as an input, but on the other hand, over-dependence on energy and resources can take away valuable investment from other industries, including knowledge-based industries which are key to helping Russian industries move up the value chain.

Hence, I think the key challenge for Russia will be taking advantage of energy and resources in such a way that Russian industries can move up the value chain. I think that Norway's experience can provide an excellent example in this regard,

because Norway, based on the experience of developing its oil reserves in the North Sea, has also succeeded in establishing a world-class industry in designing and manufacturing exploration and excavation equipment. Thank you.

E. Trofimova:

Thank you very much. Mr. Soloviev?

V. Soloviev:

Thank you.

We have already noted the competitive advantages of our country. Its geographical location between the Middle East and the Asia—Pacific region is unique. Given that the Asia—Pacific region currently accounts for 60% of global GDP and 40% of the world's population, it is clear that we should accrue benefits from such a geographic position. Our second competitive advantage is related to where our manufacturing and extractive industries have historically been situated. The bulk of our capacity is located beyond the Urals, relatively close to the Asia—Pacific region.

The main challenge lies in the fact that these advantages are necessary but insufficient in themselves. Success requires having the infrastructure to deliver our resources to China and on to the Asia-Pacific region as a whole. Despite the fact that we have inherited this infrastructure, this railway network, the volume of deliveries to the east is not sufficient to meet demand. Rather than moving resources eastward, Russia and the Soviet Union were always focused on transporting resources westward, to western Russia. Now we find ourselves needing to transport resources to the east. Throughput capacity is currently 80 million tonnes. Of course, the rebuilding of the Kuznetsovsky Tunnel will be of great help, increasing the throughput capacity. These figures are laughable when compared to the volume of demand for coal in China, which exceeds a billion tonnes. The government must prioritize investment in Eastern Siberian and Far East infrastructure. I would like to see concrete steps taken to break ground on projects

in these areas, and to see them bear fruit. Building up port infrastructure in the Far East is a key issue.

E. Trofimova

I completely agree. Let us return to this topic later.

Mr. Mangold, could you please respond to the same question?

K. Mangold:

Ekaterina, thank you. I believe that certainly infrastructure is very important, certainly a lot of improvement in bureaucracy is important, but if we are talking about industry, and coming from a country that has strong industrial commitment, I believe the first thing that one should have is a different mindset, to push industry.

Up to now, Russia has always focused very much on raw materials and energy. Now, I believe it is time to change the mindset of the government and the people and to look for a new industrialization of Russia.

I would just like to mention two things. First, if you are looking to see export numbers, Russia depends on 75% – stable over the last decades – from raw materials and energy. It is only, to put it the other way around, 25% integrated in manufacturing in the worldwide value chain of worldwide business. I believe that this has to change.

Second, the successful countries of this world have a portion of round about between 23% and 30% of industry contributing to the GNP. If you fall below this level, you will have problems in the long run, because you will be unable to employ all of the people you have, only in resources and taking important things out of the earth, just to export it. In particular, recent examples, in Europe as well, have showed that if you do not have this portion, you are going down.

Look at what has happened to France's business. France always had a portion of round about 23-24% contribution of industry to the GNP. Today it is at 16%. This is one of the factors behind the fact that French industry is not as successful as it was a decade ago.

Just in a nutshell: I believe that a change in the mindset for the priorities where the Russian Government wants to see its economic development in the future is of extreme importance, and afterwards, all other things can follow, such as infrastructure, less bureaucracy, and so on. But if you do not do this, and if you are always only looking to raw materials, to energy, to gas, and to oil, I believe that this country will not be on the level of its overall opportunities, especially bearing in mind the huge asset of human resources capital. This is what I believe the first priority should be from my perspective.

E. Trofimova:

Absolutely. One cannot but agree wholeheartedly.

May we have the next slide, please?

To what has been listed so far, I have added the question of underinvestment and the volume of investment, which really is at a low level. The problems are, to some degree, related. The ability to attract additional resources from abroad depends on the quality and competitiveness of production inside the country.

Mr. Makhov, I would like to turn to you now. We have spoken a lot about Russia's natural resources and the competitive advantages that Russia's economy and industry has inherited. Are these the only factors that determine our ability to compete on the European, Asian, and American markets? What will be the determining factors of our success or lack thereof?

V. Makhov:

Thank you, Ms. Trofimova.

I will begin by discussing the state of contemporary Russian industry. The question should be posed thus: what is the state of the extractive and manufacturing industries? These two sectors are in rather disparate situations. The era of high prices for raw materials, which has been linked to the rapid growth of China and other Asian countries, is now giving way to more moderate growth. We are hoping for stable medium-term growth. The money from exports of raw materials and

resources were invested very effectively into the modernization of our ore and hydrocarbon extractive industries. Look around, and you will see that Russian oil and gas companies, ore extraction firms, and metallurgical companies are equipped with the latest technologies. I have a very positive outlook on the current situation. Labour productivity, however, still lags behind that of the West.

The state of affairs in manufacturing is very different. There, it is necessary to rely on innovation, human capital, enterprise management, and on deeper integration with the global economy. In this area, there is plenty of work to be done.

I will propose a brief outline of what we have been through over the past 12 years. The average wage for industrial jobs has risen from RUB 2,100 in the year 2000 to RUB 25,000 today, meaning that it has grown by a factor of twelve. There has been a similar increase in the rouble cost of hydrocarbon energy, as well as transport tariffs. And throughout this time, the rouble exchange rate against the dollar has remained practically unchanged. I am citing official statistics here. The basis of our competitive advantage, then, has changed radically. Whereas our strategy 12 years ago was largely to compete on the basis of our relatively cheap resources and relatively inexpensive labour, today everything has changed. We are no longer being given a head start, but rather we are giving our competitors one.

The ongoing discussions about energy efficiency and labour productivity are generally the correct ones to be having. Russia is now among the countries which have fallen into the middle-income trap. Only 18 out of 114 countries have been able to escape this predicament in the past 30 years. What happens is that once a country reaches about USD 6,000–12,000 in per capita GDP, further growth tends to shrink to 2% annually. Escaping from this trap requires a whole new high-tech base: as my distinguished colleague Klaus Mangold put it, a new reliance on human capital and innovation. For the near future, the most pressing problem is overcoming this difficult situation in which we are trapped. Modernization of industry is not enough; we need a modernization of thought. I would like to indulge in an aphorism, the famous quote by Albert Einstein: "We cannot solve our problems with the same thinking we used when we created them." The first step will be to

reconsider the significance of industry in creating jobs and increasing competitiveness, and to take the necessary steps going forward.

Now I will address your question about the limitations on Russian industry entering the European and Asian markets. In some ways, this question is linked to the first question about our competitive viability and our products. We see here the first part of the global trade balance: energy and raw materials. We have invested sufficiently in modernizing our extractive industries so that they will bring resources to market at competitive prices in the medium term. Another issue is the need to increase the share of manufacturing in our economy and to move away from our dependence on energy.

What is preventing us from making this progress? First, I would point out the high degree of protectionism in the manufacturing sector around the world. This reflects the fact that this sector accounts for 70% of global exports despite representing only 16% of GDP. Look at what is going on here: foreign producers of heavy machinery, with all due respect to them and their products, offer their customers long-term credit at highly competitive rates. In Russia, financial mechanisms must be genuinely established by committing the necessary financial resources and opening up access to cheap money. Support is also needed for the export of Russian goods. Our competitors enjoy such support, but we, unfortunately, do not. It has been put on the agenda, but needs to be backed up with the required resources.

My second point is this. When we get down to sensitive types of products, for all the talk about free trade, there are many obvious and hidden barriers, such as anti-dumping laws for metallurgical products, as well as various technical standards and specifications, et cetera. Another obstacle or limitation for Russia lies in the fact that it is a very expansive territory, which drives up costs. For example, to transport coal from the Kuznetsk Basin costs USD 20 more than the coal itself. We need to modernize our transport infrastructure and logistics systems. Our potential depends on how successful we are in utilizing our geographical advantage in Eurasia, constructing a logistics system capable of giving us the boost we need to start exporting manufactured goods.

In closing, I can report that OMZ Group is fairly successfully exporting a wide array of products, including innovative technologies for air separation and extraction of rare gases: krypton and xenon mixtures. We also export excavators and equipment for nuclear and petrochemical plants. A lowering of barriers would lead to significant growth in our business, and help to increase our competitiveness. Thank you.

E. Trofimova

Thank you very much. Our territory is both our blessing and our curse.

We can put up the next slide.

Mr. Volkov, we have already alluded to what seems to be, if not a reorientation, then at least a distinct movement in the direction of Asia. In talking about the total volume of trade and Russia's role in the global economy, we must not omit the fact that we have finally managed, after years of trying, to join the WTO. To what extent does this impact the alignment of powers today? What are the factors that could help or hurt Russian companies' chances of gaining a more prominent place in the global marketplace?

M. Volkov:

You have to understand that just joining the WTO cannot be an automatic solution to any company's problems. Membership in this organization is merely a tool allowing us (with the support of our government, I would add) to fight for our interests. Today, more than 20 WTO member countries are taking restrictive measures against Russian products. Some of them are quite absurd and curious. For example, we pay a 6% import tariff in Brazil and Latin America because our fertilizer does not contain arsenic, which is highly poisonous to human beings. We do not use it because we use environmentally friendly supplies of raw materials, and therefore we have to pay the tariff. We have to fight against such things, and our President, Mr. Putin, has worked on these issues. We hope the situation will resolve itself, but it will not happen automatically.

We also see potential problems for the Russian market resulting from WTO accession. Our justice system does not yet have full command of the tools needed to work with WTO regulations. WTO regulations place certain restrictions on our actions in the domestic market. We are required to follow market principles, end industrial subsidies; that is, we cannot deliver goods for export at one price, and set another price for the domestic market. Our Group is currently involved in several lawsuits relating to this issue, and we will wait and see what trickles down. For now, it is clear to us that the legal system does not yet possess the expertise required to resolve these issues. Simply joining the WTO does not grant us any kind of preferential treatment.

I would like to second my colleagues in calling for expansion of infrastructure. I can lay out a few examples of what is holding us back. In the USA, the average weight of a through goods train of fertilizer is about 7,000 tonnes. For us, it is around 3,500. Therefore, our colleagues across the ocean are twice as competitive as we are. If we compare our infrastructure to Europe's, we see that the density and quality of their motorways is several orders above ours. If transport of goods by truck in Europe is economically viable up to a distance of 500 kilometres, compare that to north-west Russia, where it is not more than 150 kilometres. We are only 150 kilometres from the port, but we cannot transport our goods by truck because our load per axle is lower than it is in Europe. While a standard European load is 50 tonnes per vehicle, ours is only 30, and congestion means that traffic speeds leave something to be desired.

I think it is very important to develop container shipments, especially for Eurasian trade. Mr. Babaev may correct me, since, if I am not mistaken, he is an expert in this field: container trains in the US are bi-level. We cannot launch bi-level trains because of technical specifics: our overhead wiring is low-hanging, and our overpasses and tunnels are too low. Huge resources are required to resolve this problem, but it is essential that we do so; otherwise we will remain in the current situation forever.

Wherein lies the paradox of our situation? We load our fertilizer onto containers heading overseas, and witness the increasing development of niche commerce in Africa, Asia, and Latin America. A container of fertilizer can be delivered to the field of a specific farmer. We were not able to unload a single tonne on the domestic market, because our container shipments are not competitive. Significant funds must be invested here.

E. Trofimova

Thank you very much. To continue with the topic of Russian–Asian cooperation I would like to pose a question to Mr. Choi. How do you view the potential for developing Russian–Asian and especially Russian–Korean cooperation in the near-term as well as the long-term perspective?

C. Kyong-lim:

Thank you. In 2009, bilateral trade between Korea and Russia was about USD 10 billion. Last year, it reached USD 22 billion, representing a more than 100% increase over three years. This is a very welcome development, but this is not large enough, given the fact that Korea's total trade with the world stands at more than USD 1 trillion. So, USD 22 billion is about 2% of Korea's trade with the whole world. On the investment side as well, the two-way flow of investment between Korea and Russia is not very large, despite the fact that recently, some Korean companies, including Hyundai Automobiles, Samsung Electronics, and LG Electronics have made sizeable investments in Russia.

I think that from a more positive perspective, this indicates that there is a lot of room for expanding the flow of trade and investment between Korea and Russia, and there are other elements that facilitate economic interaction between the two countries.

For example, both countries have sizeable domestic markets. Russia, as I understand, is the ninth largest economy in the world. Korea is the fifteenth largest

economy in the world. And both countries are very close to each other, geographically.

I think there are two areas which offer the best prospects for closer interaction. The first is the most obvious one: energy and resources. Korea does not have any natural resources, so we have to import huge amounts of natural resources, including foodstuffs, sources of energy, etc. from outside, which Russia can supply in plenty. On the other hand, Korea has world-class engineering and plant industry, which, I think, can help Russia make better use of its abundant natural resources and energy.

The second area for closer economic cooperation is technology. Russia has made great achievements in many areas including medical science and space science, and Korea has world-class manufacturing technology that can translate the science and ideas into concrete products. For example, if we can combine the great achievements that Russia has made in the area of medical science with the information technology of Korea, I think we will see some very interesting and very popular products in the world market.

Of course, having an institutional framework which can facilitate the two-way flow of trade and investment between the two countries would be very helpful. For example, if we had a free trade agreement between Korea and Russia, I think we would have a much larger flow of trade and investment between the two countries in the near future.

Thank you very much.

E. Trofimova

Thank you.

Indeed it is hard to argue with the facts: not only the volume of trade, but also the exchange of technology and know-how, and the normalization of relations, even in the cultural sphere, should help to improve the economic outlook for all trade and business partners.

Mr. Soloviev, you have already spoken about the increase in the number of joint operations with Western partners. We can move on to the next slide. How would you rate progress so far? What are some of the specific issues in this partnership, and what role does development in the eastern regions of Russia play in it? What would you choose to highlight?

V. Soloviev:

We do indeed have a great deal of experience in working with the Asia-Pacific region. Over the course of the past five years, we have established ties with many partners, particularly in China. Two years ago, we began a partnership with Norinco to promote our goods within China. The Chinese market is unique: it has its own commodities exchange; it sets its own prices; and there are special conditions for refunding the goods and services tax. It is imperative to work with a local partner. Norinco has become that partner for us, and we are continuing to work together. We must understand that we are entering a fairly competitive market, and the competitive advantages Chinese companies have over us are quite substantial. It would be interesting to compare the competitive advantages we as a country or sector had ten years ago against the advantages we have today. Since we are operating in a global marketplace, our partners are specifically interested in this. We have already spoken about infrastructure, and I will not repeat myself. Doubtless, there is much work to be done here. Let us look at two other resources: the cost of electricity and the cost of labour. Our colleagues have already spoken about this. The cost of energy has grown enormously, not even over the past decade but just in the past five years. We must understand that our industries are slowly losing that same competitive edge. Eastern Russia holds fairly large reserves of hydrocarbons, which drove prices down below historic levels. But even there, we have seen a huge rise in prices. This is related to a set of reforms which, in my view, remain unfinished. One of our tasks now is to review the reforms, which are in need of major corrections. We are told, "We need to work on energy efficiency; we need to work on labour productivity!" I completely agree: we must work on energy efficiency and labour productivity. But let us remain realistic: no gains in energy efficiency or productivity could outweigh the 30% increase in electricity prices over the course of two years. It is simply impossible. This raises some questions about what kinds of corrections to energy reform are needed.

Productivity is increasing, but wages in Russia are rising quickly, outpacing the growth in productivity. In my view, this is a good thing. People should be paid a respectable wage. But the problem is that we must either compensate for this rise with corresponding productivity gains, or the government must step in. Since the majority of our industries are geared towards export, a necessary immediate step might be changing the relative value of the rouble to the dollar. Energy reform, productivity, and energy efficiency are all long-term projects, and cannot be accomplished in the space of a year or two. The exchange rate might be used to help exporters, the core of our industry, to weather the crisis. I would not hesitate to look further into this option, and recommend weakening the rouble against the dollar, since it might get us out of this tough situation.

Our Chinese partners are very interested in operating in Eastern Siberia, where we have a new partnership with Chalco. We are looking into building new aluminium facilities and hydropower generation plants. Our partners want to know what the future holds for our reform process. What will our productivity be like? What will happen to wages? What will happen to the exchange rate? All of these things present risks for them. Creating long-term stability is also a task for the government. I have already touched on the development of Eastern Siberia. We must turn our focus to Eastern Siberia and the Far East, because most of the resources are now located there. Our task is to also attract human resources to the area. This means developing urban centres and building up social infrastructure. We are currently building a factory in Taezhny, near the Boguchansk Hydroelectric Plant. There is nothing there. Our mission is to build a city in the taiga. We cannot do this alone. We need the support of business as well as regional and federal governments. We must develop our cities and make them attractive places to live. People must want to go there for more than simply money, as was the case in the USSR, and they

should find a comfortable lifestyle in the region. The task is to develop the Far East regions not only through investments in infrastructure, but also through investing in the social project as a whole.

Thank you.

E. Trofimova:

Thank you.

Let us return to the question of the government's monetary policy. The question of exchange rates is a very complicated one, especially given the tendencies of the market. Let us take another look at the issue of tariffs. We are all aware that one of the most recent directives from the President of the Russian Federation was to conduct an in-depth study of this matter, with an eye to its effects on energy companies. What is the potential fallout for the energy sector from any possible changes, and what would be the effect on the real economy?

We can now display the next slide.

We have spoken at length about the direction in which things are moving, but we must not forget that the European Union is one of the Russian Federation's most important economic partners. I would like to give the floor to Mr. Moeller, and perhaps discuss in more detail the European aspect, as well as the company Mr. Moeller represents.

What is Russia's role in European economic cooperation? Are European companies expanding their presence on the Russian market? Which sectors, formats, or directions show potential for such expansion?

D. Moeller:

Thank you, Ms. Trofimova.

Indeed, Russia is an important player in the European economic system. Siemens operates in 190 countries, and views Russia as a strategic partner. We are looking ahead to the possibility of a single European economic zone from Lisbon to Vladivostok. A majority of the companies operating in Russia are planning to

expand their operations. There is a lot of demand in Russia for modern, high-tech products, solutions, and services provided by Western European countries. There is also available financing, and profits from exporting gas, oil, and raw materials. Siemens and many other players are focusing on large infrastructure projects: energy (generation, distribution networks), oil, gas, and a transport infrastructure that requires development. We are interested in other areas as well, including manufacturing. Siemens is implementing a billion-dollar investment programme in Russia. We plan to create 4,000 new, highly skilled jobs within the next few years. This includes the production of rolling stock in partnership with Sinara Group. We are investing EUR 200 million in the project, and our partner Sinara is contributing another EUR 200 million. The production facility for the high-speed train, Lastochka, comprises an entire cluster for producing electrical components, high voltage transformers and switches for the Federal Grid Company. Aside from being a production facility, our site at Voronezh is also an R&D centre. We are creating eight high-tech production facilities and two R&D centres. This is direct evidence that despite all the discussions and problems, we see great potential in Russia and the Russian economy. In the long run, imports will not be sufficient to keep up with demand. That is why it is important to foster local production and, if you like, all the value-added stages.

While remaining optimistic, it is important to ask what steps should be taken to boost future GDP growth and to attract investment. I see what other countries are doing in this regard, and Russia can follow their example. I see a large public sector not as a minus, but as a potential plus, if the government sector introduces an industrial policy of guaranteed orders. The customs regime, tax benefits, streamlined bureaucratic procedures, and support for exports to third-party markets: all of these tools have been discussed and are available, but are far from being used to their full potential to help the Russian economy.

To conclude, I will return to the remarks that were made about changing the exchange rate between the rouble and the dollar or euro. What does the investor need? The investor needs long-term stability. This is why I am very wary of these

kinds of discussions. One can play on various factors here, but the main concern is the stability of Russia's economic development.

E. Trofimova:

Thank you.

I would like to rephrase my statements about predictability. It is also exceptionally important, as we know at Gazprombank through our work with various partners and with our clients. Unsurprisingly, this word comes up over and over in our discussions with them.

I would like to turn our attention to the graph here on screen, to the red line. This seems to be a very good confirmation of what has just been said. Many experts have claimed that one of the factors contributing to the relative health of the EU in these difficult times is the significant increase in the ratio of net exports to total GDP in the region. This also has potential in terms of the growth of the Russian economy. Next slide, please.

I would like to yield the floor to Mr. Mangold. You get the most difficult and pointed question, which will require of you the utmost honesty. It is also the shortest question, namely: to what extent is Russian infrastructure, which has been a topic of much discussion, attractive to investors?

K. Mangold:

When I travel in Russia, in the provinces - and I have just been over the last few months in cities such as Yekaterinburg, Rostov, Perm and Tyumen - these areas have developed in an unbelievable way. I believe that you will always find a lot of things that are not working, but if you look around the world, as a foreign investor, where do you find much better infrastructure than that in Russia?

Go to China, go to India, go to Brazil: you do not find an ideal world, as a company that is looking to intensify its business. And if I look back to five or ten years ago, in all of the cities in the Russian provinces, a lot of things have been done.

So I believe that infrastructure is very important, but it is certainly not the major point by which Russia is lagging behind, on an international benchmark comparison.

I believe that what Russia really needs are other things. I believe that you must think about the mentality to develop a middle class. If you do not develop a middle class which is taking innovation, entrepreneurial leadership and which has a spirit to change with innovative products, I believe this is much more important than anything else.

And the backbone, for example, in Germany, is the middle class. These are not the very big companies - and I am speaking on behalf of a company where I have worked for most of my career, which is Mercedes Benz - the drivers of innovation in German companies are not the big heroes, it is the middle class which are the suppliers and those who have a very good share of the work, and a split responsibility just in innovation. Very often, they are the drivers.

If you look at industrial products, Korea has made a strong effort; China has too. But where is this product on behalf of the Russian industry, where you have developed in a broad way some high visibility? I have not seen this yet. And I really believe that this is something that we have to work on. Everything we have is about energy and good brands, but for industrial products, we are missing this.

I believe one should look to some of the examples around the world. Korea has done a great job in investing in industry. China has done so as well. Brazil is just on their way to doing it. So why is Russia not up to speed in doing so?

This is my point that I mentioned before, as did Ekaterina: I believe that we have to change the industrial concept of this country, if we want to take a step forward. Energy is a huge asset for us as investors, because everybody is looking for cheap energy, and today in many companies the price of energy, gas, and oil is more important than the price of labour. So this is a huge advantage, and just as well for integrating Russia in the global picture, but the industrial mindset is key, as well as developing – and Vadim and myself have had a lot of discussions about this – how to organize innovation.

Innovation does not fall from the sky. It is a very tough job and is to be done on a daily basis. And it is very much linked with a lot of transfer of technology and openness, and bringing foreign investors to Russia as well. I am also talking about not only bringing technology to Russia, but also encouraging Russian companies to be more active in doing joint ventures outside the country. Looking forward, you can bring a Russian company into a strategic alliance with a European company, American company, or whatever. And if you follow what the Chinese, for example, are doing, in one way they are pushing Chinese industry out of the country, but they are bringing technology back afterwards. This is, I believe, something that is in the interests of everybody. And Russia should be more active in FDI outside of Russia and developing this transfer of technology.

So, in a nutshell: innovation, the entrepreneurial mindset, and pushing forward so that a middle class develops fast. In some areas it is developing quite well. But there is a question of speed and developing this even more, and not always looking for what energy and energy supply can do in terms of trade. If I look at this curve, I can see that it looks very nice, but you have to look at what the portion of manufacturing is in this straight curve. And it will be small.

Thank you, Ekaterina.

E. Trofimova:

Our analysis of this complex issue would be incomplete without discussing the role of the government and of public policy. I have another question for all of the speakers. A number of studies and polls conducted with directors of Russian and international companies have shown that public policy is one of the most important factors in the predictability we were talking about earlier.

Mr. Volkov, once again we will start with you. Very briefly, please address the issue of public policy. What kind of impact does it have on the success of Russian industry, and what are your expectations for the future?

M. Volkov:

If my time is limited, I would just like to support the earlier statements made by my colleagues to the effect that public policy must be stable. It matters less if the rules are good or bad than if they are followed, and if everyone understands that the rules will be followed.

E. Trofimova:

Of course, one wants the rules to be effective.

M. Volkov:

The main thing is that the rules are followed, and effectiveness will come out of that process.

E. Trofimova:

Go ahead.

D. Moeller:

I have already mentioned some ways to stimulate economic growth. I would like to add a couple of examples, the first being guaranteed orders from state companies. Mr. Yakunin, the President of Russian Railways, has said, "I would like to see largely local production of Lastochka electric trains – in the order of 80–90% local production." We responded, "OK, but we would need a certain volume of production." Then he asked, "How many trains or carriages?" And we replied, "Twelve hundred." We signed a deal for 1,200 carriages by 2020, and we have joined Sinara Group in investing EUR 200 million each to build a new production facility. That is what I mean when I say guaranteed orders.

The next issue is customs regulation. When it is cheaper to import a large gas turbine than to import the parts and produce it locally, then there is little incentive for local production.

Now I will talk about the issue of tax incentives. There exist regions in the world where for every euro of investment you get a euro of tax incentive. We are in an

international competition to attract investment. There is a need to make concrete plans. Among these should be providing financing for local producers to export to third-party countries.

There are many aspects to this: the energy sector, energy efficiency, transport. But we need concrete policies to stimulate the investment climate, which we all know is so crucial.

E. Trofimova:

Thank you.

Please show slide number two again, please.

Mr. Makhov.

V. Makhov:

I would like to highlight some elements that I see as very important.

There are many very good, useful, successful programmes in Russia which require massive budgets. It is crucial that there be a policy of transferring the majority of those budgets to Russian companies. We have to keep an eye out for this, because these are the early days of large-scale interdependence, and because a large market is needed. China was ahead of us in joining the WTO, and became integrated into the global system earlier, finding its place in the export market. We do not have the option of such an easy path, and are in a much different situation. That is why the market has to be the primary concern.

My second point can be summed up in the words of Alexander Solzhenitsyn: "The main goal is to retain people and to retain talent." Hundreds of thousands of people have left the country in recent years and found employment abroad. These people create huge value. We must establish conditions where Russian people can exercise their creativity, and lower administrative barriers. We need a policy to stimulate small and medium-sized businesses where talent can be put to good use. I would again like to echo the sentiments of my colleagues regarding the growth of

tariffs. When they rise by 15% annually, it is impossible to compete. Everything

costs more: labour per unit of production when productivity is taken into account, energy, building costs, permits, and capital. Those things, as well as everything else, cost more, keeping the conditions for production here at a nadir. Under these conditions, the only option is to shift from an extensive approach to an intensive one.

Finally, I would like to call for the creation of a good educational system, and for investment in infrastructure.

Thank you.

E. Trofimova:

Thank you!

I can make the personal observation that people are coming back. I myself worked in France for more than fifteen years. Also here in the auditorium is Denis Shulakov, who heads up capital markets at Gazprombank. He has recently returned from London, where he worked for many years. People are coming back to create value within the borders of Russia.

V. Makhov:

It seems, then, to be an effective policy which has already begun to produce results.

E. Trofimova:

Mr. Choi, what are your thoughts on the government's role? As a government representative yourself, this may be a difficult question to answer publicly.

C. Kyong-lim:

Thank you. I think that one of the things that the government can do for long-term industrial development is to create and maintain a competitive environment, because in Korea's experience, we have learned that in the absence of a competitive environment, it is very difficult to have competitive industry.

I agree with those who say that you need to give protection to an industry in the early stage. Yes, this is true. You cannot develop a domestic industry with free competition. You have to provide support and you have to protect them from competition from the outside so that they can establish themselves and grow up to a certain point. But after a while, you have to start to reduce and remove the protection.

Once the industry realizes that there is going to be protection forever, they will stop their efforts to enhance their competitiveness. They will stop making efforts to create innovation.

I think that the case of the Korean electronics industry provides a good example. The Korean government provided quite a high level of protection to the electronics industry in the form of high tariffs and various forms of non-tariff barriers. They were successful in a sense, but they remained a second-class player for an extended period of time, and it was only after the Korean government started to reduce the protection and support that they started to make breakthroughs and compete on equal terms with companies from the United States, Europe, and Japan.

Of course, you cannot remove protection overnight. The industry will need time to adjust. But I think it is very important for the government to provide a very clear and predictable time schedule for the reduction, and ultimately the removal, of the protection, so that the industry can prepare itself.

Thank you.

E. Trofimova:

Thank you very much. Mr. Soloviev?

V. Soloviev:

Thank you.

I, of course, agree with the statement that state policy should be both stable and effective. But it is equally important that it focus on those decisions that are most pressing. I still maintain that infrastructure development is our most important task.

Our country is enormous, and our infrastructure – both energy and transport – is relatively dispersed. We somehow managed to modernize much of what was built during the Soviet era, but overall the system is in need of far-reaching modernization. We must take into account the fact that projects throughout the country that were originally financed through a centralized budget cannot be funded solely by fees. Now is a perfect time for the government to realize that it needs to be active. The budget must be actively harnessed to modernize our energy and transport infrastructure. There are many measures by which we are currently uncompetitive. If we continue to pay for the cost of infrastructure projects with fee hikes, we will soon lose what competitiveness we still have. Of course, the first area of focus should be infrastructure.

The second is the modernization of which we just spoke, and innovation. I consider innovation to be the right direction to go in, but for the moment it might be even more important to invest not in technologies that do not yet exist, and not to invent new ones, but rather to engage with those modern technologies that are already available globally, and to localize them within the country. This is where the majority of our resources should go, rather than towards researching something that does not yet exist in our world. This seems to me to be more important for our country at this stage.

The third direction we need to be moving in is one which I have already mentioned: social infrastructure. This is especially important when it comes to the development of Siberia and the Far East. Travelling around Siberia, I have seen the situation improve in cities like Novosibirsk and Krasnoyarsk. But let us look at what is happening outside of those cities: people are leaving villages and small towns, the population is shrinking, and the infrastructure is in decline. I believe that if we are going to develop our industry, we must focus on these towns and villages, on the factory towns that are more often the locus of heavy industry than a Krasnoyarsk or a Novosibirsk. The bulk of the production sites that we want to develop, the bulk of the deposits we want to exploit are located near small villages which are declining in population and where there are major obstacles to development. The task of the

government here, then, is to build up social infrastructure. We have to build the infrastructure that will allow people to live a normal life, so that people will live there not just for the money, but also for the environment, for the additional conditions that can be created, such as housing, which remains a major difficulty for many people. I see these as our three main challenges.

E. Trofimova:

Thank you.

Mr. Mangold, you talked a lot about innovation and developing intellectual capital. What role do you see for the government in this process?

K. Mangold:

I believe, really, that the government should have a very clear strategy which is, and I repeat, just going about industrialization. Everything is OK with the energy sector; and in the energy sector, the government has made a strong commitment and is also looking forward to how to organize matters between the major players in these countries, if you look at the recent development and what is happening in terms of the size of the main players.

But what I am missing is really the very clear industrial approach. I will give you one example. There has been a lot of talk about privatization. Privatization was a key word three or four years ago. But what happened in reality? Not so much. I believe this is a point where the government should be more orientated towards execution, compared to what it has said to the industry and the public.

This is not a problem of having the right level of knowledge, it is a problem with executing it, and getting these things done. For example, you would like to build up a middle class, which is very easy to do and a lot of countries have shown how to do it: this is not a secret. You can have tax incentives; you can provide a lot of encouragement, and you take the privatization as an outsourcing tool with young entrepreneurs coming in to do a reasonable job. If you do this, you will have a completely new picture in the industry.

So, for me, it is not something where I believe that we are talking about miracles; but for me it is a question of how to execute as fast as possible what you have to do to change the big picture.

Predictability is always something where you can have a lot of questions, but there is just one question between us: is India more predictable than Russia? Is China more predictable than Russia? I do not know. This cannot be the key barrier. I believe that the key barrier is really having access to the right tools, if it comes to very pragmatic matters.

The WTO: predictability is certainly one thing, and not changing the rules of the game in everything. If you look at what is happening in the automotive industry, where you always have the feeling and the effect that we are turning around a little bit and creating new barriers, just to bring imports down a little bit – this is something that foreign investors do not like.

But in the long run, I really believe that Russia has a high potential to develop, if it comes to the execution of a few musts to develop the industrial picture.

E. Trofimova:

Indeed, when we look at specific projects, we have to look at them very pragmatically. What will be the cost of a particular object? What is the cost of manual labour? But we cannot forget that our human capital is very valuable, and its effectiveness and productivity is under heavy scrutiny.

We have about five minutes left, and I would like to give the remaining time to comments and questions. I would first of all like to invite our special guests to give their comments. Please give your comments very briefly and pose your questions. After that, we will open it up to the audience.

K. Mangold:

May I just only make one comment to you, Ekaterina? The price of labour is not the decisive point. If this was the decisive point, Germany would be bankrupt, because we have the highest labour costs in Europe. The question is about efficiency, about

productivity, and about how you manage things. Labour costs are only one point of the game, not the key decider.

K. Ryzhkov:

Konstantin Ryzhkov, Russian Direct Investment Fund.

We have talked a lot about attracting investment and developing various industrial sectors. There is one thing you and I both encounter regularly, you in your work with foreign partners, and we in our daily challenge of getting people to invest in Russia: the issue of perception. This is the historical legacy of viewing Russia as a country with a certain modicum of risk. I probably expend the majority of my efforts being forced to explain to our international investment partners the reasons why Russia is actually a very attractive place to invest. Other BRIC countries are not much more attractive to investors, or as places to work. This includes China, Brazil, and India. Nevertheless, they have learned how to sell themselves and to attract money in significantly larger quantities than we are able to muster in Russia. Bearing all this in mind, and seeing on the ground the vast potential of the projects and companies that are trying to secure financing, I can say with confidence that there are many attractive investment opportunities in Russia. The question is how to sell these companies, and how to attract the right kinds of partners. This is a very difficult challenge. I would like to return to slide number four.

E. Trofimova:

Please go to slide number four.

K. Ryzhkov:

In 2012–2013, there was some growth in investment in Russia by foreign private investors, including in industrial sectors. We would like to think that our work has led to the situation illustrated in this graph. In the past year and a half, we and our partners have been able to attract more than two billion into the Russian economy. Manufacturing companies are among the beneficiaries of these investments. Nearly

600 million has been invested by us in our role as a sovereign fund. More than 1.5 billion has come from our partners abroad, the majority of whom are investing in Russia for the first time. We constantly have to struggle with the issue of perception. The Russian Government, as well as every single company in the Russian Federation, must contribute to changing this perception.

Thank you.

E. Trofimova:

Mr. Babaev, we have talked a lot about Russian Railways today, and cannot pass up the opportunity to give you our attention.

S. Babaev:

Thank you, Ms. Trofimova.

Russian Railways is actively engaged in localizing production, especially in our joint ventures with Siemens, Alstom, Bombardier, and many other companies which are leaders in the types of technology that Russia needs to bring in. At this moment, we are seriously applying ourselves to this task.

I believe we are the only organization to have developed a plan for the strategic expansion of transport infrastructure through to the year 2030. We have submitted this plan to the Ministry of Economic Development and Trade and other government agencies. In the strategy we outlined, there are three types of projects: those that can pay for themselves, which we can develop ourselves with the help of financing; those that cause a multiplier effect which benefits not only the railways but also the whole country, and those that need the support of the government to bring to fruition. Development in the Far East and Eastern Siberia is impossible without upgraded infrastructure. The primary product of the Russian Federation is the output of its fuel and energy complex. It is the reason we are able to implement new technologies and to pull new technologies into the country. We do not have any other products, but this product happens to be selling rather well. The best way to increase trade is to develop the Far East.

Now to the question of the attitude and mentality of our transport workers. We acquired a 75% stake in leading French company GEFCO, the holding company of an international logistics group, for the purpose of bringing the newest technologies to Russia. The Russian transportation system developed along a unique set of principles, wherein the accessibility by transport of every single population centre, no matter how small, was important. The railway was seen not as a business, but as way to enable the population to access transport. The current situation calls for us to build terminals and logistics centres that can link rail with the other forms of transport: road, water, and air. Hubs must be built alongside villages, and freight traffic must move between them. This is not only a task for Russian Railways; it is an issue that the government must resolve at a high level. Unfortunately, development in line with this model is not happening at the present time. Everybody is trying to build their own distribution network. We have heard today from some large retailers. They concentrate their distribution in a single location, and make all deliveries from there.

The challenges are substantial, and the questions raised today have been extremely relevant.

Thank you.

E. Trofimova:

Mr. Rueda, we are down to the last minute, and would like to take some questions from the auditorium.

E. Rueda-Sabater:

Thank you very much. I will be very brief, I realize that we are over time. I just have two words that I am going to leave you with, and they come from research that we have done at the Boston Consulting Group.

One is positioning: the label for the topic today was supply chains, and thinking about how you position yourself in value chains that are changing very dynamically is crucial.

The second is very related: adaptability. I think that anything that governments can do to help industry and to help its own policy to be adaptable is what is going to win in the current world, which is, again, very dynamic, where things are shifting dramatically on the global scale, and where thinking statically about industrial development is a thing of the past.

So: positioning and adaptability – I think that those will take you, together with some of the things that we have heard, many pieces of the puzzle that we have heard already. Thank you.

E. Trofimova:

Thank you so much. Are there any questions from the audience? Please introduce yourselves.

L. Zilberburg:

I am President of Bee Pitron, a representative of medium-sized business. I sent my question by email, so I will read it aloud. How do large Russian companies manage their supply chains? Are they building their supply chains in collaboration with small and medium-sized businesses? Siemens, for example, has these kinds of cooperative procedures in place, and you can view materials on their website that will take you through these procedures. Do you have any procedures like this? How can we become one of your contractors?

E. Trofimova:

That is a question for our Russian colleagues.

V. Soloviev:

Please take a look at our website. We post information about open tenders and support an open trading platform. You can submit bids and take part in the tenders which are held every quarter. This includes tenders for engineering; we have a very

large engineering centre in St. Petersburg. All of our procurements are open through the site.

E. Trofimova:

Next question, please.

A. Chuvaev:

My name is Alexander Chuvaev, Vice President of the Finnish energy company Fortum. This is a question for one of your panelists, perhaps Vladimir Makhov. You have spoken about the need to kick our addiction to oil, and have brought up the high cost of energy. We know that our gas remains about 45% cheaper than that of Henry Hub in America, notwithstanding the shale revolution. We know that our gas is half as expensive as in Europe, and one sixth as expensive as in Japan and other countries in the Pacific. So I would pose the following question: is it best to kick the oil habit and go ahead with increasing the cost of energy, facing a choice between having to improve our heavy industry know-how or selling the products at a discount? Would it not be best just to continue to depend on oil? It is no secret that in 1960, when the USSR opened the Samotlor oil field, it was ready to embark on the path of innovation. For whatever reason, this was not done. Let me state my question again: should energy be cheap, or should it be expensive?

V. Makhov:

Thank you for your question.

I just came from the B20 session, where we discussed the energy balance of the future. The subcommittee in which my company took part answered your question by recommending a significant increase in the share of natural gas in the future energy balance of the planet. As a fuel, gas is ecological, competitive, and flexible from the point of view of consumption.

I would also go back to my previous point about our reliance on imports of heavy industrial goods, machinery, and equipment as being the flip side of the

dependence on oil. These are the goods for which we exchange our energy resources. Innovative technologies are a prerequisite for gaining any kind of advantage, even the advantages in the resource sector which you were just citing. We should be able to preserve our advantage in energy resources – oil and gas – in both domestic and foreign markets. This is exactly the main mission of our heavy industry. We are actively building new oil refineries in accordance with the Euro-5 standard, as well as new gas refineries, and our innovation is focused on these particular sectors. We are in absolute agreement on this principle.

Thank you.

E. Trofimova:

Colleagues, thank you very much.

If we had tried to answer all of the questions, the discussion could have gone on forever. We are extremely grateful to you for attending, and regret the limitations on space imposed by the facilities. We hope that we have given you a fresh perspective on some well-known issues.

Gazprombank is one of the largest strategic players among Russian banks. We truly believe that the real economy is one of the cornerstones of the stable, growing Russian economy to which we are all looking forward. If you recall, I began the session with the problems facing the world economy. I truly believe that the current turmoil on the financial markets is a manifestation of deep-seated problems in the real economy. Gazprombank is investing intellectual, financial, and organizational resources in this sector. We invite you to continue the dialogue, and hope that our joint efforts will lead to better and better results of the kind Mr. Ryzhkov was talking about. We can already see certain positive trends in investment, so let us all work together to keep them going.

Thank you very much to all, and I wish you a productive time at the Forum.