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## Estonia

### Economy in serious problems

According to a preliminary estimate by Statistics Estonia, GDP decreased by 1.1% in the second quarter of 2008 compared to the second quarter of 2007. This was one of the worst figures in several years, as the decline of the Estonian economy steepens. Small domestic demand and the decrease in exports of goods and services were the main factors in the decrease of the GDP. During the same comparison time, domestic demand decreased by 2.8% mainly because of the decrease in private consumption and capital investments. Major factors influencing the decrease in private consumption were the decrease in expenditures on transport and clothing and footwear. Capital investments in the financial and household sector faced a decrease. However, investments by manufacturing were approximately on the same level.

The Estonian economy is gathering mainly cloudy assessments from official sources. According to the IMF World Economic Outlook, Central and Eastern European economies are facing a significant slowdown. Like all the Baltic countries, Estonia will face some of the steepest challenges due to a wide current-account deficit, excessive government spending and a high inflation rate.

News from private actors is also negative. Firstly, Fitch Ratings has downgraded the long-term foreign and local currency issuer default ratings and the country ceiling for Estonia. The country ceiling was downgraded from 'AA' to 'AA-'. Secondly, Swedbank is planning its operations in Estonia based on the assumption that GDP will not grow in 2008 or 2009. And Hansabank representatives have stated that the current high inflation level is a key obstacle for Estonia's goal of Euro adoption in 2011.

The Bank of Estonia sees some key issues in the recovery of the economy. First, the question is if Estonian companies can maintain their competitiveness. Second, will the labour market be flexible enough in its reaction. The worldwide financial crisis has also hit Estonia and one key question is if the economy can manage while the trust in financial markets returns.

### Industrial production decreases by 3%

The data of Statistics Estonia shows that industrial production decreased by 3% in August compared to August of the previous year. Manufacturing fell by 2% which was mainly caused by the decrease in orders, both in the domestic market and abroad. The decrease in manufacturing was mainly affected by a decrease in the production of food, wood and construction materials. The most significant fall, 26%, was recorded in the production of building materials which reflects the decrease in construction volumes. However, like in the previous months, some export-oriented industry branches still enjoyed growth. The production of electrical machinery (25%), metal products (16%) and chemicals (5%) grew when compared to August of the previous year.

### Inflation soars – still over 10% annually

The increase in the consumer price index was 10.5% in September y-o-y according to Statistics Estonia. The annual index was mainly influenced by the price increases of food which accounted for a fourth, the price increases of alcohol and tobacco products and by the increased rates of excise duties, which accounted for a fifth of the price rise. Motor fuels, heat energy, heating fuel and electricity grouped together gave a fourth of the total price change. The increase in the index from August to September was 0.6%. This was mainly influenced, among other things, by price increases in tobacco products proceeding from the change in the excise duty rates and the seasonal price increase in clothing and footwear. The prices for vegetables and motor fuel, however, decreased.

According to the Bank of Estonia, the consumer price index will increase by approximately 11.0% this year. Inflation will remain high mainly due to the globally rising prices of food and energy. However, the Central Bank forecasts that the inflation rate will drop to 4.8% in 2009 and close to the Maastricht inflation criteria by the end of 2010.

### Change of the consumer price index in selected commodity groups in September 2008 (%)

Commodity group	y-o-y	Previous month
Food and non-alcoholic beverages	13.9	-0.3
Clothing and footwear	3.7	2.9
Housing	11.9	0.0
Transport	12.1	-1.3
Hotels, cafés and restaurants	13.0	1.0
TOTAL	10.5	0.6

Source: Statistics Estonia

### Some business highlights

- Mobile operator Elisa is planning an investment into the development of a 3.5G mobile internet network. The investment is estimated to be worth tens of million euros and the time span for the investment is estimated to be three years.
- The Estonian confectionery producer AS Kalev has reported a profit of EUR 12 million. The profit originates, for the most part, from a successful compensation claim from another company.
- The remaining 50% of Gild Real Estate, the real estate investment funds managing company, have been bought by GILD Bankers. The company already owned 50% and has now purchased the remaining share from Uus Maa.
- Estonia's once booming call centre business has stagnated lately. For instance, hotel chain Hilton closed its 120-person operation in Tallinn a year ago. Experts say that Estonian wages have grown so that call centres are not as profitable as they used to be earlier in the decade.
- The World Bank report entitled "Doing Business 2009" ranks Estonia as 22<sup>nd</sup> out of 181 countries in the ranking of the easiest countries to invest in. Last year Estonia ranked slightly better in 18<sup>th</sup> position. It takes approximately seven days to establish a company in Estonia.

Estonia - main economic indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
GDP (y-o-y %-growth, constant prices)	7.9	6.5	8.0	7.2	8.3	10.2	11.2	7.1	-1.1	Q2/2008
Industrial production (y-o-y %-growth)	14.6	8.9	8.2	11.0	10.5	11.0	7.3	6.1	-3.0	8/2008
Inflation (CPI, end of period, y-o-y %-change)	5.0	4.2	3.6	1.3	3.0	4.1	4.4	9.6	10.5	9/2008
General government budget balance (% of GDP)	-0.6	0.3	1.5	2.0	2.3	2.3	3.8	2.8	n/a	1-12/2007
Gross wage (period average, EUR)	314	352	393	430	466	555	596	784	840	Q2/2008
Unemployment (% end of period)	13.9	11.9	11.3	9.3	8.5	7.9	5.9	4.7	4.0	Q2/2008
Exports (EUR million, current prices)	3445	3698	3642	4003	4770	6190	7647	8028	5605	1-8/2008
Imports (EUR million, current prices)	4615	4798	5079	5715	6704	8213	10576	11278	7345	1-8/2008
FDI inflow (EUR million, current prices)	425	603	307	822	775	2255	1341	1817	783	H1/2008
Current account (% of GDP)	-5.5	-5.6	-10.6	-11.6	-12.5	-10.5	-14.8	-17.4	-10.0	Q2/2008

Sources: Statistics Estonia, Bank of Estonia, Eurostat, author's calculations

## Latvia

### Economy stagnates

The second quarter GDP growth was only 0.1 % according to the Central Statistical Bureau of Latvia. These statistics indicate that the Latvian economy is still suffering from economic deceleration. Major factors contributing to the decline in growth were the shrinking manufacture sector and retail trade as well as the troubled construction sector. The Bank of Latvia forecasts low growth later this year. The Central Bank has revised its GDP forecast for 2008 from 2.5-2.7% to a modest estimate of 0.5-1.0%. The development trends in export and manufacture will be decisive for the country to be able to facilitate a balanced return to a path of moderate growth.

The Latvian economy gathers grim assessments from other sources as well. According to the IMF World Economic Outlook, the Central and Eastern European economies are facing a significant slowdown. Latvia and the other Baltic states will face some of the steepest challenges due to a wide current-account deficit, excessive government spending and a high inflation rate. In addition, Fitch Ratings has downgraded the long-term foreign and local currency issuer ratings and the country ceiling for Latvia. The country ceiling was downgraded from 'A+' to 'A'. In addition, Danske Bank has stated that they forecast a diminishing GDP for both this and next year.

### Inflation still high but diminishing

The consumer price level in September 2008 increased by 14.9% compared to September of the previous year the Central Statistical Bureau of Latvia reports. Hence inflation has been diminishing moderately in the past months. The price increase of housing, water, electricity, gas and fuels (28.9%) as well as hotels and public catering (19.3%) were the largest. However, the price level of clothing and footwear (-1.0%) decreased. The rise in the price level in September 2008 compared to the previous month was 1.1%. The price increase of clothing and footwear (9.8%) as well as hotels and public catering (2.0%) were the largest. However, the price level of transport (-0.6%) decreased.

### Change of the consumer price index in selected commodity groups in September 2008 (%)

Commodity group	y-o-y	Previous month
Food	18.2	0.1
Clothing and footwear	-1.0	9.8
Housing, water, electricity, gas and fuels	28.9	0.5
Transport	11.1	-0.6
Hotels and public catering	19.3	2.0
TOTAL	14.9	1.1

Source: Central Statistical Bureau of Latvia

The Bank of Latvia projects that the second half of the year will see a decreasing inflation rate which will gradually moderate further. The forecast of the Bank of Latvia remains unchanged: an annual inflation of 13-14% in December is projected. The Bank expects that inflation will be less than 10% earliest during the summer of 2009.

### Foreign trade decreasing

The value of exports decreased by 5.9% and the value of imports decreased by 11.1% in August 2008 y-o-y according to the Central Statistical Bureau of Latvia. According to the Bank of Latvia, the weakening domestic demand is reflected in decreasing import figures. The largest increase in commodity exports in June compared to the corresponding period of the previous year was in base metals and articles of base metals (up by 57.1%) and in transport vehicles (up by 23.2%). Exports in wood and wood products went down by 27.7% and in textiles and textile articles by 8.9%. The largest increase in imports in August was in mineral products with a 40.7% increase. Imports of wood and articles of wood went down by 55.9%.

Compared to the previous month, exports decreased by 6.0% and imports by 8.3%. The largest increase in commodity exports was in textiles and textile articles (up by 15.0%) and base metals and articles of base metals (up by 6.3%). The largest decrease in exports was in products of chemical and allied industries which went down by 24.2%. The largest increase in commodity imports was in mineral products (up by 7.1%). The largest decrease in imports was in products of base metals and articles of base metals which went down by 25.1%.

### Industrial output plummets 11% y-o-y

The data of the Central Statistical Bureau of Latvia shows that industrial production has decreased by 11.1% in August 2008 compared to August 2007. The decrease was mostly influenced by the volume reduction of furniture (-30.7%) and the manufacture of wood and of products of wood and cork (-19.1%). Compared to the previous month, industrial production has decreased by 2 % in August 2008. The most significant decrease was noted in manufacturing of electrical machinery and equipment (-38.7%).

### Some business highlights

- A new business park is being realised in the vicinity of the Riga airport. The giant business park investment called Rixpark is worth an estimated EUR 400 million and it is being built by an investor consortium led by the Norwegian EBO.
- Latvian railways are to be split into two companies according to a EUR 19 million plan by the Latvian government.
- Latvian officials have permitted Latvijas Krajbanka to take over the Baltikums Dzīvība life insurance company in a deal worth EUR 35 million.
- The World Bank report entitled "Doing Business 2009" ranks Latvia as 29<sup>th</sup> out of 181 countries in the ranking of the easiest countries to invest in. Last year Latvia ranked slightly better in 26<sup>th</sup> position.

Latvia - main economic indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
GDP (y-o-y %-growth, constant prices)	6.9	8.0	6.5	7.2	8.5	10.6	12.2	10.3	0.1	Q2/2008
Industrial production (y-o-y %-growth)	3.2	6.9	5.8	6.5	6.0	5.6	4.8	0.5	-11.1	8/2008
Inflation (CPI, end of period, y-o-y %-change)	1.8	3.2	1.4	3.6	7.3	7.0	6.8	14.1	14.9	9/2008
General government budget balance (% of GDP)	-2.8	-2.1	-2.3	-1.6	-1.0	-0.4	-0.2	0.0	n/a	1-12/2007
Gross wage (period average, EUR)	268	282	297	298	314	350	430	683	697	6/2008
Unemployment (% end of period)	13.3	12.9	11.6	10.3	10.3	8.7	6.8	5.4	6.3	Q2/2008
Exports (EUR million, current prices)	2020	2232	2416	2559	3204	4085	4594	5727	4178	1-8/2008
Imports (EUR million, current prices)	3453	3910	4284	4634	5671	6879	8828	10986	4981	1-8/2008
FDI inflow (EUR million, current prices)	n/a	n/a	223	248	489	568	1324	1797	970	1-8/2008
Current account (% of GDP)	-4.8	-7.6	-6.6	-8.1	-12.9	-12.3	-21.1	-22.8	-15.6	Q2/2008

Sources: Central Statistical Bureau of Latvia, Bank of Latvia, Eurostat, author's calculations



## Lithuania

### Gloomy scenarios for the economy

According to the revised statistics of Statistics Lithuania, the second quarter GDP growth was 5.2% compared to the corresponding quarter of the previous year.

Gloomy assessments of the Lithuanian economy have been made, by among others, the IMF, Fitch Ratings and Danske Bank. According to the IMF World Economic Outlook, the Central and Eastern European economies are facing a significant slowdown. Lithuania and the other Baltic states will face some of the steepest challenges due to a wide current-account deficit, excessive government spending and a high inflation rate. Fitch Ratings has downgraded the long-term foreign and local currency issuer ratings and the country ceiling for Lithuania. The country ceiling was downgraded from 'AA' to 'AA-'. In addition, Danske Bank has noted that the multiplying price of electricity after the shutdown of the Ignalina power plant could cut 3%-units from the GDP.

### Foreign trade deficit 24% in Jan-Aug 2008

According to the non-final data of Statistics Lithuania, the value of Lithuanian exports rose in January to August in 2008 by 32.8% compared to the corresponding period in 2007. The total value of exports during that same time period was EUR 10 941 million. Respectively, the value of imports rose by 23.2% to EUR 14 389 million. The foreign trade deficit was only 0.3% higher than in 2007 y-o-y. The seasonally adjusted monthly data for August indicated an increase of 2.3% in exports and 0.2% in imports when compared to July 2008.

Growth in exports in January-August 2008, when compared to the corresponding time in the previous year, was mostly influenced by the increase in petroleum oils and oils obtained from bituminous minerals which rose by 2.3 times and by fertilisers (up by 96.6%). The imports of crude oil and natural gas rose by 2.5 times and natural calcium phosphates and crude sulfur rose by 3.5 times.

The largest share of exports in January-August 2008 fell per mineral products (26.7%) while machinery, mechanical appliances and electrical equipment came in second with a 10.3% share of total exports. The same commodity groups had the biggest shares in imports as well - the biggest share fell per mineral products (30.4%) while machinery, mechanical appliances and electrical equipment came in second with a 14.0% share of total imports.

### Wages grow in Q2

According to the data of Statistics Lithuania, the average monthly gross earnings in the whole economy in the second quarter made almost EUR 650 which is an increase of 22.5% compared to the corresponding period in 2007. In the public sector, the average monthly gross earnings were EUR 662 (up by 23.8%) and in the private sector EUR 640 (up by 21.7%)

### Inflation soars high

The consumer price level in September 2008 increased by 11.0% compared to September of the previous year Statistics Lithuania reports. The annual inflation is now slightly smaller than in recent months. The price increase of housing, water, electricity, gas etc. (18.4%) as well as food and alcoholic beverages (15.7%) were the biggest. However, the price level of clothing and footwear (-3.3%) decreased. The rise in the price level in September 2008 compared to the previous month was 0.5%. The price increase of clothing and footwear (3.8%) as well as food and alcoholic beverages (0.4%) were the largest. However, the price level of transport (-0.4%) decreased.

### Change of the consumer price index in selected commodity groups in September 2008 (%)

Commodity group	y-o-y	Previous month
Food and non-alcoholic beverages	15.7	0.5
Clothing and footwear	-3.3	3.8
Housing, water, electricity, gas etc.	18.4	0.5
Transport	13.4	-0.4
Hotels, cafés and restaurants	17.3	1.5
TOTAL	11.0	0.5

Source: Statistics Lithuania

### Some business highlights

- The Corruption Perception Index by Transparency International ranks Lithuania as 58<sup>th</sup> among 180 countries. Lithuanian Prime Minister Kirilas has commented that Lithuania does need more action against corruption.
- The World Bank report entitled "Doing Business 2009" ranks Lithuania as 28<sup>th</sup> out of 181 countries in the ranking of the easiest countries to invest in. This is just ahead of Latvia and somewhat after Estonia.
- The World Economic Forum competitive index 2008-2009 ranks Lithuania as 44<sup>th</sup> in ranking for the most competitive countries. Last year Lithuania ranked slightly better in 38<sup>th</sup> position. Lithuania's ranking was somewhat better than the Latvian ranking but over 10 rankings worse compared to Estonia.
- Lithuanian banks like SEB Bankas, Snoras, Hansabankas and DnB Nord Bankas have been pumping money into their capital lately. This has been done in an effort to cushion against possible losses.

Lithuania - main economic indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
GDP (y-o-y %-growth, constant prices)	4.1	6.6	6.9	10.3	7.3	7.9	7.7	8.0	5.2	Q2/2008
Industrial production (y-o-y %-growth)	2.2	16.0	3.1	16.1	10.8	7.3	8.9	7.2	-3.6	8/2008
Inflation (CPI, end of period, y-o-y %-change)	1.4	2.0	-1.0	-1.3	2.9	3.0	3.8	8.1	11.0	9/2008
General government budget balance (% of GDP)	-2.5	-2.0	-1.4	-1.3	-1.5	-0.5	-0.3	-1.2	n/a	1-12/2007
Gross wage (period average, EUR)	263	274	293	311	335	421	459	594	648	Q2/2008
Unemployment (% end of period)	16.9	17.9	13.0	11.6	10.6	8.3	5.6	4.2	4.5	Q2/2008
Exports (EUR million, current prices)	3841	4778	5526	6158	7478	9502	11250	12522	10941	1-8/2008
Imports (EUR million, current prices)	5650	6767	7943	8526	9959	12446	15384	14341	14389	1-8/2008
FDI inflow (EUR million, current prices)	439	516	772	160	623	826	1448	1645	700	1-8/2008
Current account (% of GDP)	-5.9	-4.7	-5.1	-6.8	-7.7	-7.2	-10.8	-13.7	-17.0	Q2/2008

Sources: Statistics Lithuania, Bank of Lithuania, Eurostat, author's calculations

## Poland

### GDP growth may decline

According to the National Bank of Poland, Polish economic growth might markedly decline in the near future despite better than expected data on GDP growth in Q2. The Monetary Policy Council of the Central Bank sees a deepening economic slowdown in the external environment of the Polish economy. The Euro area data indicates a decline of GDP growth, thereby affecting Polish foreign trade on an important export market. Also the United States economy is suffering from a decline in GDP growth. In addition, the turmoil on the world financial markets is another factor contributing to a decline in GDP growth.

### Inflation decreases slightly to 4.5% y-o-y

The Central Statistical Office reports that the prices of consumer goods and services rose by 4.5% in September 2008 when compared to September 2007. The highest price increases were in the commodity groups of dwelling (up by 7.8%) and in restaurants and hotels (up by 6.7%). The most notable decrease in prices was in clothing and footwear which was down by 6.2%.

The price level in September compared to the previous month increased slightly by 0.3%. The commodity group with the highest price increase was clothing and footwear (up by 1.4%) and food, all beverages and tobacco (up by 0.7%). The highest price decrease was found in transport (down by 1.7%).

### Price changes in selected commodity groups, September 2008 (%)

Commodity group	y-o-y	Previous month
Food, all beverages and tobacco	5.5	0.7
Clothing and footwear	-6.2	1.4
Dwelling	8.4	0.6
Transport	2.6	-1.5
Restaurants and hotels	6.7	0.5
TOTAL	4.5	0.3

Source: Central Statistical Office

The National Bank of Poland has noted that inflation has stayed over the limit values set by the Central Bank. This has been mainly due to the high annual growth of food and fuel energy prices and increasing growth of prices of energy and some services. The Central Bank forecasts that in the coming months inflation will stay over the upper limit for deviations (3.5%). However, in the medium term, inflationary pressure is expected to ease due to the economic slowdown of both the global and Polish economies.

### Foreign trade up by a sixth in Jan-Aug 2008

Polish exports rose in value to almost EUR 77 billion in January to August in 2008 which is 16.2% more compared to the corresponding time of the previous year the Central Statistical Office informs. This was almost the same growth percentage as in the first half of the year when exports grew only a couple decimals faster.

Imports rose in value to over EUR 90 billion in January to August 2008 which is 18.9% more compared to the corresponding quarter of the previous year. This was almost the same growth percentage as in the first half of the year when imports grew only a couple decimals faster. Hence foreign trade has been able to roughly sustain its volume despite the volatility experienced in the world economy.

### Industrial output down by almost 4%

Industrial production decreased by 3.7% in September 2008 compared to the corresponding period in 2007. The output was down in 20 of the 29 industrial sectors and production shrank most in manufacturing (-3.8%). The highest growth in manufacturing sub-sectors was noted in production of other transport equipment and in the manufacturing of medical and precision equipment. The decline of sub-sector production was most notable in electricity, gas and water supply and mining and quarrying which were both down approximately by 3%.

### Some business highlights

- Chinese car manufacturer JMC is planning to build a factory near Opole in south-western Poland with an annual production capacity of 400,000 cars. The investment would be worth roughly EUR 1 billion.
- Koksownia Czeszochowa Nowa (KCN), a coke plant, part of the steel maker Huta Stali Czeszochowa (HSC), will invest EUR 148 million in two new modern and environmentally friendly coking batteries over the next three years. The KCN will also supply one third of the gas used by Huta Czeszochowa.
- The global supplier of power and automation technologies, ABB, will invest almost EUR 18 million in building an electric motor plant in Łódź in Central Poland. 160 new jobs will be created when the plant launches its production in the first half of 2009.
- Abriso, the Belgian packaging producer, will invest EUR 8.5 million to construct a new factory in Góra in the Western Wielkopolska region. The new plant will need around 100 employees.
- The World Bank report entitled "Doing Business 2009" ranks Poland as 72<sup>nd</sup> out of 181 countries in the ranking of the easiest countries to invest in. Last year Poland ranked slightly better in 76<sup>th</sup> position. Poland's ranking is just above Pakistan and below the Czech Republic. It takes approximately one month to establish a company in Poland but only seven days in Estonia.
- The Banker magazine's list of world's leading banks has shown that Polish banks pale in global size comparisons. Poland's top retail bank PKO BP ranked as 191<sup>st</sup> on the list from 253<sup>rd</sup> place last year. Other banks were even smaller: BGZ ranked as 794<sup>th</sup>, Bank Gospodarstwa Krajowego ranked as 863<sup>rd</sup> and Bank Ochrony Srodowiska ranked as 871<sup>st</sup>. In Central and Eastern Europe, Russian Sberbank was the largest bank and Polish PKO BP the fifth largest.

Poland - main economic indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
GDP (y-o-y %-growth, constant prices)	4.2	1.1	1.4	3.8	5.3	3.5	6.1	6.5	6.1	H1/2008
Industrial production (y-o-y %-growth)	6.7	0.6	1.1	8.3	12.6	4.1	5.7	9.7	-3.7	8/2008
Inflation (CPI, end of period, y-o-y %-change)	8.5	3.6	0.8	1.7	4.4	0.7	1.4	4.0	4.5	9/2008
General government budget balance (% of GDP)	-0.7	-3.7	-3.3	-2.9	-3.3	-6.1	-3.9	-2.0	n/a	1-12/2007
Gross wage (period average, EUR)	472	557	544	497	505	591	692	825	888	1-8/2008
Unemployment (% end of period)	16.0	18.5	19.7	19.3	18.0	16.7	12.2	11.4	9.3	8/2008
Exports (EUR billion, current prices)	34.4	40.4	43.4	47.5	59.7	71.4	87.5	101.1	76.5	1-8/2008
Imports (EUR billion, current prices)	53.1	56.2	58.3	60.4	71.4	80.6	100.0	118.8	91.7	1-8/2008
FDI inflow (EUR billion, current prices)	10.3	6.4	4.4	3.7	10.0	8.3	15.1	12.8	6.4	1-6/2008
Current account (% of GDP)	-6.0	-2.9	-2.6	-2.1	-3.5	-1.7	-2.3	-3.7	-5.5	H1/2008

Sources: Central Statistical Office, National Bank of Poland, Eurostat, author's calculations

## St. Petersburg

### Economy at breaking point

The regional economy continued to slow down in June-August 2008. In January-July 2008 deceleration in many sectors (except construction) was rather modest, following the general trend of Russia's GDP: in the first quarter of 2008 it grew 8.5%; in the second quarter it increased by 7.5% y-o-y. Nevertheless, in August the situation changed dramatically. Although national GDP and St. Petersburg's GRP changes are not estimated yet, certain basic sectors of the regional economy experienced a significant decline at the end of summer. In August 2008 industrial output in St. Petersburg dropped down by 8.2% y-o-y, the regional construction sector decreased by 4.5% y-o-y. Consequently, the aggregate regional industrial output index of January-August 2008 fell down to 2.7%.

#### Economic development by sector, y-o-y % change

	Jan-Aug 2008	Jan-Aug 2007
Industrial production	2.7	7.9
Manufacturing	2.9	8.2
Utilities	2.3	7.1
Construction	6.3	21.2
Transport	42.7	18.4
Communication	15.0	23.2
Retail trade	14.1	19.7

Source: Petrostat, 2007, 2008

If the crisis trend persists, 2008 annual results might shift closer to zero, or even become negative. Some service sectors of St. Petersburg's economy, however, kept crisis immunity. These were transport and communication, growing in January-August by 42.7% and 15.0% y-o-y respectively. Although the bulk of this surplus refers to rising transport and communication tariffs, physical volumes of transported cargoes in St. Petersburg kept increasing by 7.6% y-o-y only in January-August 2008. An 8.7% y-o-y growth of regional retail trade in August 2008 was moderate, compared to a 12.3% y-o-y growth in June 2008.

### Financial sector stricken by crisis

The global crisis finally penetrated into regional and Russian economies in September 2008. Before that, its approach was perceived through the certain deceleration of economic growth, rising inflation, and constantly increasing interest rates. In mid-September the crisis struck the financial sector and became quite apparent, even to average citizens. Russian major stock indices, RTS and MICEX, performed a four-month rally downward. While in May 2008 they reached the levels of almost 2500 for RTS, and more than 1900 for MICEX, on September 15, 2008, they fell to nearly 1100 and 800 respectively, losing 55 to 60% of their value. On September, 17, Russian financial authorities interrupted trade at national stock markets to stop panic. However, St. Petersburg's fourth largest bank, namely KIT Finance, failed

to honour its commitments on the financial market. Ranked 29<sup>th</sup> by capital in all Russia, the bank was saved from bankruptcy by a EUR 600 million urgent loan from state-owned Gazprombank. After this, many regional and national banks ceased certain types of services, e.g. mortgage lending, to secure their quick assets in an uncertain environment. The others raised interest rates for all types of consumer credits.

### Construction: fast freezing

The current financial crisis might have an additional negative impact on the regional construction sector, which is already suffering from decreasing demand. Demand had been falling from relatively high levels in early April 2008 (380 points for the primary market and 4900 for the secondary market) for six months in a row down to abnormally low rates (nearly 120 and 1980 points respectively) at the end of September 2008. Regional developers expected a seasonal increase in the first month of autumn, but failed. In addition to this, both developers and buyers of real estate faced a significant worsening of bank crediting conditions. Under these circumstances, many large St. Petersburg developers started to cut down their projects. Several leading construction companies introduced numerous discounts; in some cases reductions exceed 15% of average market prices. The latter, nevertheless, are still stable, even increasing at a minimal rate.

### Exports still high

Regional foreign trade kept on expanding in the first half of 2008, in spite of the worrying events taking place on global markets. Moreover, exports of St. Petersburg resident companies, especially of fuel sector holdings like Gazpromneft, grew 50% y-o-y due to rapidly increasing oil prices. In mid-July 2008 a per barrel price of Urals, a main type of Russia's exported oil, reached its historical maximum of USD 140. Imports increased a bit more moderately in the first half of 2008: by 39.6% y-o-y.

### Some business highlights

- St. Petersburg Administration adopted a long-term Programme aimed at renovating the communal infrastructure in four southern districts of the city. The Programme has a concession basis: the regional budget covers EUR 400 million out of a total of EUR 1.2 billion, required for the renovation plan. The remaining money is expected to come from private investors.
- Europort, a European company owned by French bank Societe Generale and a Polish developer Global Trade Centre, contracted Colliers International to consult on its development project in St. Petersburg. Europort intends to build three business parks of "A" class in the city; this would be the first business park of its kind in the region. Planned investment totals EUR 330 million.
- Company Sestra River Developments, a member of the Danish Jensen Group, started the largest ever redevelopment project in St. Petersburg. The investor redevelops the territory formerly owned by the Sestroretsk Armour Plant, one of the oldest factories in Russia founded by Tsar Peter I. The Plant is relocated to a new industrial park, and the excessive space would be used for residential construction. The budget of this project is EUR 220 million.

St. Petersburg - main economic indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
Regional GDP (y-o-y %-growth, constant prices)	10.5	4.5	17.7	8.4	7.2	8.4	8.4	9.1	n/a	1-12/2007
Industrial production (y-o-y %-growth)	26.2	0.2	31.4	5.8	14.1	4.2	-7.0	10.0	2.7	1-8/2008
Regional inflation (CPI, y-o-y %-change)	23.5	16.3	16.6	13.0	12.7	12.0	10.0	10.9	14.7	1-8/2008
Gross average wage (monthly, EUR)	n/a	n/a	217	209	285	345	407	510	609	7/2008
Unemployment (% average annual)	7.9	4.4	3.5	4.3	2.8	2.4	2.4	2.0	2.0	H1/2008
Exports (EUR million, current prices)	2736	2134	1839	2429	3210	3954	5499	12977	7971	H1/2008
Imports (EUR million, current prices)	2693	4423	5158	5123	5560	8081	10299	15092	7759	H1/2008
FDI inflow (EUR million, current prices)	158.4	126.8	88.9	62.1	90.0	200.5	512.4	566.5	352.0	H1/2008

Source: Petrostat, Rosstat, Central Bank of Russia, European Central Bank, author's calculations

In 2002 and 2004 average wage is for December; in 2003, 2005, 2006 and 2007 wage is for November of corresponding year



## Leningrad region

### Stagnation persists

The last months of summer 2008 brought slight improvement to the negative results of the first half of 2008. In August 2008 construction grew 16.1% y-o-y; transport went up 23.0% y-o-y. This, however, did not change the basic trend: compared to previous years, the regional economy increased at a minimum rate. The industrial sector remained stagnant; its output decreased in August 2008 0.7% y-o-y. The aggregate result of January-August 2008, however, demonstrated a slight growth of 0.8% y-o-y. The majority of the main branches of Leningrad province's industrial sector remained stagnant in January-August 2008. The only exceptions were the automobile industry and fuel producers. The automobile cluster, dominated by Ford Motor Company, suffered from an uncertainty caused by workers' strikes. It contracted during the first 8 months of 2008 by 12.7% y-o-y. Activities by Ford's trade union, nevertheless, led to a substantial increase of the workers' salaries in the third quarter of 2008. Fuel producers raised their output in January-August 2008 by 12.5% y-o-y. But the bulk of this surplus was related to high fuel prices. The transport sector of Leningrad province rose by 23.0% y-o-y in August 2008, thus overcoming the fall of previous months of the year. One of the reasons for the recovery was the termination of a fuel price rise: in August 2008 the diesel price stopped its upward rally, and even decreased by 0.5% y-o-y. Regional automobile carriers, in turn, raised their tariffs by 11.3%, thus compensating their losses in the first half of 2008. Automobile transport companies were the only carriers who contributed to the sector's recovery; both marine and pipeline transporters experienced stagnation or even slight recession by the end of summer 2008. The aggregate volume of transport services in January-August 2008 rose by only 1.5% y-o-y, while a year ago the corresponding increase accounted for 20.5% y-o-y.

### Slowdown of growth leaders

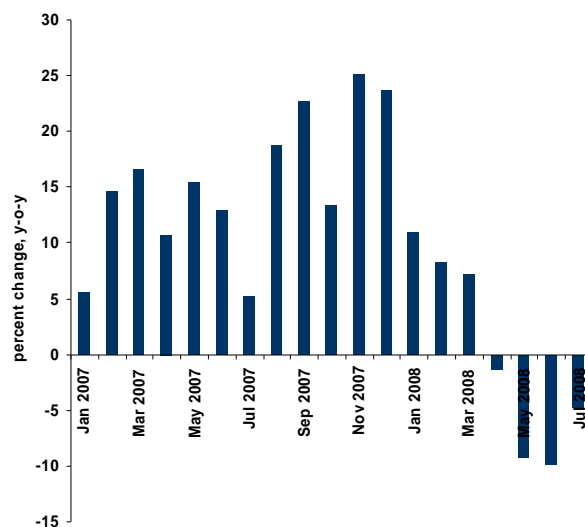
The construction sector experienced a certain improvement in August 2008, increasing output by 16.1% y-o-y. That, however, just compensated for its negative performance in the first half of 2008. Regional agriculture demonstrated a slight growth of 1.4% y-o-y in January-August 2008, despite its promising revival in the previous year. In the last summer month agricultural output fell by 4.9% compared to that of August 2007. Communication rose by 6.5% y-o-y in January-August 2008, but the result was rather modest for this fast developing sector. Retail trade, also a dynamically growing sphere, expanded in the first 8 months of 2008 by only 7.0% y-o-y, reflecting a decrease of consumer incomes.

### Real incomes decrease

Inflation in the region had no seasonal contraction in August 2008, contrary to the previous few years. CPI stayed at 0.0% level, while a year ago it went down 0.5% in the end of summer. High inflation led to a contraction of the population's incomes: in July 2008 they experienced a fall of 4.8% y-o-y. Incomes declined despite raising nominal salaries by 32.7% y-o-y in January-July 2008. Moreover, the nominal wage was steadily increasing month-to-month since February 2008,

with a slight 0.5% reduction in April 2008. But it failed to compensate for inflation's impact.

Real monetary incomes, y-o-y % change



Source: Petrostat, 2008

The structure of residents' expenditures has also changed in summer 2008. The share of obligatory payments in July 2008 reached 18.7% of the total expenditures, while just a year ago it was 10.9%. This difference could be partly explained by a fast increase of interest on consumer loans.

### Foreign trade keeps growing

Foreign trade of Leningrad province continued to expand in the first half of 2008: its volume increased by 48.9% y-o-y. Regional exports rose by 51.2%, whilst imports demonstrated a similar growth of 47.6%. This quite positive performance was based primarily on high prices for crude oil, the basic export product of Leningrad province. However, the volume of oil exported through the regional pipeline system in January-August 2008 remained exactly the same as a year ago. A high increase of imports occurred due to a strengthening of the rouble, and it might have a negative impact on domestic producers already in the mid-term.

### Some business highlights

- The government of Leningrad province approved a Programme on the renovation and development of water supply systems in the most actively developing areas. This Programme might attract those investors worried about the region's obsolete infrastructure. Investment totals almost EUR 500 million.
- Russian company Foodline launched a new dairy plant named Galaktika. The plant located in Gatchina, Leningrad province, becomes the second largest dairy plant in Russia, with a processing capacity of 800 tonnes of milk a day. Foodline invested EUR 55 million into this project. Initially the potential investor of the new plant was Finnish Valio, but later the foreigners decided to escape from the project. Nevertheless, 20% of Galaktika's products from 2009 would carry the brand Valio according to an agreement with the Finnish company.

Leningrad region - main economic indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
Regional GDP (y-o-y %-growth, constant prices)	12.8	8.5	16.3	14.6	8.8	8.3	8.1	8.5	n/a	1-12/2007
Industrial production (y-o-y %-growth)	26.8	10.7	35.6	20.9	10.3	5.9	26.9	2.6	0.8	1-8/2008
Regional inflation (CPI, y-o-y %-change)	23.5	19.6	14.8	13.0	14.9	12.0	9.9	9.3	15.3	1-8/2008
Gross average wage (monthly, EUR)	106	141	152	173	190	259	324	403	484	7/2008
Unemployment (% average annual)	12.7	10.8	9.6	9.2	7.5	7.8	6.2	3.3	3.1	H1/2008
Exports (EUR million, current prices)	1787	2350	2301	2580	3887	4862	5443	6078	3718	H1/2008
Imports (EUR million, current prices)	328	810	939	1061	1372	2561	2858	4759	2832	H1/2008
FDI inflow (EUR million, current prices)	222.5	266.0	121.9	104.5	106.6	178.7	288.0	277	183	H1/2008

Source: Petrostat, Rosstat, Central Bank of Russia, European Central Bank, author's calculations

In 2000-2007 average wage is for November of corresponding year

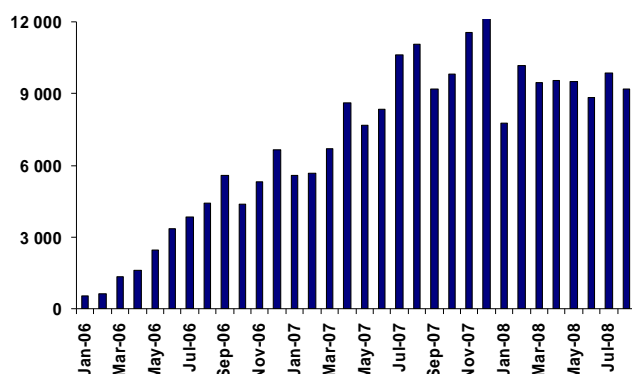


## Kaliningrad region

### Slower economic growth ahead

Signs of slowing economic growth became more and more visible on the Kaliningrad's economic picture. Industrial growth slightly picked up in July and August but the main reason for this was the end of maintenance work at the region's largest power station which helped to increase output in the power generation sector and to push up industrial output on the whole. However, oil production fell and growth in manufacturing is slowing down. It seems that Kaliningrad's oil fields reached their peak production and there are no big projects on the horizon that could add substantially to their current oil production. Expansion of the import-processing sector, which was the locomotive of the industrial growth in Kaliningrad in 2006-2007, practically ceased. For example, production of TV's in January-August of 2008 fell by 6.8% (y-o-y). Car production in the same period increased by 15.8% y-o-y but it declined by 8.2% on a rolling basis, over the last eight months of 2007 (May-Dec).

### Monthly car production, Jan 2006-Aug 2008



There are other challenges ahead for the consumer goods assembly in Kaliningrad: recent changes in import tariffs will negatively affect production of consumer electronics in Kaliningrad (see business news section) and a significant expansion of car production at Avtotor seems to be ruled out by the informal decision of the federal government.

The future of the construction sector is another reason for concern. Although the volume of contract construction works grew by 47.2% y-o-y in the eight months of the year, residential construction might be in trouble. A combination of much tougher credit conditions that make refinancing of short-term loans difficult and stalling sales of new apartments may prove terminal for some construction companies that are most indebted. Growth in completed new housing in January-August was small (+6.8%) but even the existing supply is difficult to sell as high prices and constrained mortgage financing limit demand.

Retail sales grew by a robust 15.5% in January-August (y-o-y) that is in line with the average growth rate for 2004-2007. This growth, however, did not protect many retail companies from problems with raising new finance and, as a result, their expansion plans might suffer.

Kaliningrad region - main economic indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
Regional GDP (y-o-y %-growth, constant prices)	15.2	3.4	9.5	9.3	12.6	3.6	11.6	n/a	n/a	1-12/2006
Industrial production (y-o-y %-growth)	32.4	12.9	4.2	4.7	22.5	27.4	66.6	40.3	6.5	1-8/2007
Inflation (CPI, end of period, y-o-y %-change)	17.5	21.0	9.8	17.5	11.7	11.1	7.9	11.2	15.8	8/2008
Gross wage (period average, EUR)	67	99	125	137	155	193	285	358	418	Q2/2008
Unemployment (% end of period, LFS data)	15.6	10.6	7.2	7.6	6.5	6.6	4.5	3.4	n/a	Q4/2007
Exports (EUR million, current prices)	514	508	497	507	876	1470	2025	3666	89	Q1/2008
Imports (EUR million, current prices)	947	1169	1701	1894	2419	3283	4275	5714	1370	Q1/2008
Exports (sales) to Russia (EUR million, current prices)	459	691	802	989	1449	1901	2471	3901	n/a	1-12/2007
FDI inflow (EUR million, current prices)	7.1	3.6	6.3	12.4	18.0	15.1	16.9	117.9	25.1	Q1/2008

Source: Kaliningrad Statistical Office, RosStat, Central Bank of Russia, author's calculations

### Growth rates by sectors, y-o-y, %

	2008, Jan-Aug	2007
Industrial production	6.5	40.3
Mining	-0.8	1.0
Manufacturing	13.2	93.7
Utilities	7.5	0.3
Construction	47.2	9.8
Retail Trade	15.5	17.9

Source: Kaliningradstat (2007, 2008)

The net financial result of Kaliningrad's companies (profits minus losses) has significantly improved in the first seven months of the year – it increased by 72.9% y-o-y to RUR 5.8 billion (EUR 160 million). Profits in the mining sector (primarily oil extraction) grew 72.2% helped by higher oil prices in the first half of the year and accounted for 82% of all net financial results. Rapid growth in food prices led to the tripling of the food processing companies' profits. Retailers performed even better – their income jumped by more than 4 times.

### Higher inflation eats into household income

Household incomes suffered from higher consumer inflation: at current prices they grew by 16% in January-July but real disposable incomes increased only by 0.2% in the January-July of 2008. Real wages in July 2007 were 10% higher than a year earlier.

On a more positive note, food prices fell both in July and August. It helped to ease consumer price inflation in August to 15.8% from 17.3% in June. The consumer price index fell in August for the first time since September 2006.

### Some business highlights

- Russian state corporation, Rosatom, issued an order for the construction of the Baltic nuclear power station in the eastern part of the Kaliningrad region, near the Russian-Lithuanian border. The station will include two power blocks with a total capacity of 2.4GW. Rosatom will offer 49% of the equity in the station to private investors including foreign ones. The first reactor should come on line in 2015.
- Russian gas monopoly, Gazprom, and Inter RAO UES signed an agreement on the construction of the second stage CHP-2 power station. Gazprom will invest approximately RUR 22 billion (EUR 0.6 billion) in a new natural gas-fired power block with a capacity of 450MW.
- Kia Motors and Avtotor signed a memorandum on resuming assembly of some Kia models at Avtotor's plant in Kaliningrad. Production of the first model, Kia Sportage, should start in October this year and reach 18,000-24,000 cars a year.
- Kaliningrad's DIY retailer, Klondaik, started its regional expansion by opening a hypermarket in Rostov. It invested EUR 12 million in the project. The company plans to have 50 hypermarkets in various Russian cities by 2013.
- The Russian government issued decree №659 dated September 11, 2008 on lifting import tariffs for major components used in assembly LCD and plasma TV sets. This decision removes the main competitive advantage of the Kaliningrad consumer electronics manufacturers and is likely to cause a significant decline in production of flat panel TV's in Kaliningrad.

## EU Strategy for the Baltic Sea Region

By José Manuel Durão Barroso

The European Commission is preparing a European Union Strategy for the Baltic Sea Region, following the invitation made by the European Council.

The existing cooperation structures in the Baltic Sea Region have already produced numerous studies, reports and action plans. However, actual coordinated and concrete action has been limited to date. The Commission will therefore focus the Strategy on achievable actions built on relevant analysis, in order to address the major challenges the Region is facing.

Action is needed to meet four objectives:

1. To make the Baltic Sea Region a cleaner place. This relates to the environmental status of the Baltic Sea, which has the reputation as suffering heavily from pollution. The Sea is shallow, with very low salt levels, and its only connection to the oceans is the straits between Denmark and Sweden/Norway. This makes it very vulnerable to pollution whether from industry, agriculture or from ships crossing the sea. Untreated, or insufficiently treated, waste water reaches the Baltic from both urban and rural areas, adding to the problems.

2. To make the Baltic Sea Region more prosperous. At present economic development is decidedly unequal in the region. Full implementation of the freedoms and opportunities embodied in the EU internal market directives, active labour market and human resource development policies and harmonised rules on capital movements will stimulate investment both from within the Region and from the outside world. Moreover the area has not yet fully benefited from economic and monetary union (only two of the eight Member States surrounding the Baltic Sea are in the eurozone) so the need to change currency inhibits trade and tourism. Implementation of the Services Directive will also boost the area by reducing red tape both in trade relations and when establishing new enterprises across borders. On top of these passive benefits from membership of the European Union, the investments in business infrastructure, human resources and information technology financed through cohesion policy can have a synergistic effect in equipping the weaker, as well as the stronger economies of the region to succeed in the competitive global environment.

3. To make the Baltic Sea Region more attractive and accessible. This means improving internal and external communications not only within the Region, but also between the Region and the rest of the world – in terms of transport links and information technology. Currently, the population is falling in many parts of the Baltic Sea Region. The Region should be able to maintain its labour force, be attractive to encourage those who emigrated in recent years to return, and even attract skilled new labour from third countries. Regional cooperation in research, education and training and public services is required. Moreover, the resources of the Union, notably through cohesion policy, and the Member States for improving economic infrastructure are already having a transforming effect on the attractiveness of the region. This can only be enhanced through better co-ordination. People can already travel much more easily thanks to the extension of the Schengen area to all the Member States in the region.

4. To keep the Baltic Sea Region safe and secure. In comparison with many other regions of the world, the Baltic Sea Region is relatively safe. To maintain this, cooperation is needed to combat organised crime and also to develop civil protection systems in case of natural and man-made hazards. The improvement of maritime safety, where risks are multiplying due to the ever-increasing traffic flows is particularly urgent.

We do not need to create new financing instruments for the implementation of the Strategy but rather to make better use of existing financing sources. European Union structural funds, other EU financing sources, national funding and loans from international financing institutions are all available and should all contribute. By working together in the preparation of national and EU policies, the Commission, Member States and private partners can create synergies and avoid overlaps.

In the preparation of the Strategy, the Commission needs the expertise of all the concerned parties in the Baltic Sea Region. We are therefore organising stakeholder conferences and a series of roundtable discussions during the coming months, in cooperation with various organisations and local and regional bodies. The aim of these events is to gather information to help improve the Commission's approach and get feedback on the issues presented. The Commission services will participate actively in the discussions and take full account of the positions and results of these discussions as it prepares the Strategy.

The Strategy for the Baltic Sea<sup>1</sup> region shows the direction of European policy development. The territorial dimension of policy decisions is becoming increasingly more important as the added value of taking an integrated territorial approach towards fostering development opportunities becomes evident. In this context, the Baltic Sea Region could become a test case for wider-regional development policy. If the Commission and the regional actors can successfully work together to create the Strategy, and then implement it efficiently, the approach could serve as a source of inspiration for other EU macro-regions in the future.

*José Manuel Durão Barroso*

*President of the  
European Commission*



<sup>1</sup> To follow developments in the preparations of the Strategy, please see the webpage [http://ec.europa.eu/regional\\_policy/cooperation/baltic](http://ec.europa.eu/regional_policy/cooperation/baltic)

## Cleaner, safer and brighter future of the Baltic Sea

By Paula Lehtomäki

The Baltic sea is an arena of an active trade as well as an arena for vivid economic and cultural co-operation. All countries in the Baltic Sea region have committed to strengthen the co-operation to maintain the booming economy of the area. Regardless of the flourishing economy, the sea itself is nothing but flourishing. Baltic Sea is more fragile than ever.

One of the greatest challenges for the Baltic Sea region countries is to protect the sea and improve the state of the marine environment in upcoming years. This is one of the highest priorities of the Government of Finland. Our aim is to intensify the EU cooperation and focus on the improvement of environmental safety – hand in hand with the development of economic collaboration. This is the most effective strategy to create a brighter future for the Baltic Sea region: not only for the many species of sea but also for the countries and their future interests.

The good ecological status of the Baltic marine environment requires goal-orientation in all nine riparian countries. We need active implementation and political commitment both nationally and in co-operation in Baltic Sea region. The existing platform for the co-operation is the Helsinki Com-mission (HELCOM), which is the governing body of the Convention on the Protection of the Marine Environment of the Baltic Sea Area.

HELCOM's main goal is to protect the marine environment of the Baltic Sea from pollution, and to restore and maintain its ecological balance. In pursuing this vision the nine riparian countries have jointly established HELCOM to supervise and coordinate the protection of the Baltic Sea.

After a long preparation and a series of negotiations the HELCOM Baltic Sea Action Plan was adopted in November 2007. The Action Plan sets an overall goal of achieving a Baltic Sea in good environmental status by 2021. The programme of actions was approved by every member state and the European Community.

I believe that the Baltic Sea cooperation, in many respects, and the Action Plan as its most concrete outcome, can be observed as a source of inspiration to other organizations and cooperation frame-works addressing similar challenges.

The main challenge of the Baltic Sea is twofold. On the one hand eutrophication and nutrient substances worsen the condition of the sea constantly and on the other hand maritime activities, including the growing maritime transport brings closer the risk of the ultimate threat, a major oil spill.

With regard to the eutrophication the Action Plan proposes country-wise annual nutrient input reduction targets for nitrogen and phosphorus. For the other challenge, particularly maritime safety, we need effective cooperation of the riparian countries,

The transport of oil and chemicals which has increased so dramatically and is still increasing in the Gulf of Finland and the Baltic Sea is heightening the risk of oil spills. The volume of oil consignments in the Gulf of Finland rose from 20 million tonnes in 1995 to 140 million tonnes in 2006. It has been estimated that by 2015 it could be as much as 260 million.

If a major oil disaster occurs, the resources we have at present in the Gulf of Finland for tackling the problem would not necessarily be sufficient to bring the situation under control satisfactorily. Russia's facilities for dealing with oil spills are still fairly poor and the situation in Estonia is not very satisfactory either. Finland and Sweden are reasonably capable of dealing with an emergency but it would not be enough if a large-scale accident happened.

Every action we make costs money, but inaction costs even more. The costly management measures have only partially been effective to improve the status of the Baltic Sea. The information on how much the improving the status of the Baltic Sea will cost is needed as much the hard economic facts about how much it would cost not to remedy the problems in the Baltic Sea.

This evaluation can be carried out in the similar ways as done in the global warming issue by the British economist Nicholas Stern in his report on the costs of climate change. In Finland and Sweden the work towards "the Baltic Stern report" has underway.

Among other policy tools and instruments highly relevant to the Baltic Sea cooperation I would like to stress the impact of our own action. Even the minor actions can generate a major effect. We surely have challenges. The scientists from different fields conclude that air temperature in the Baltic Sea basin have already risen and the warming is greater in the sea area than what is the average global temperature increase.

It would be so easy to renounce climate change, say that our actions are simply not enough, but there is no alternative. I believe that meeting the challenges climate change has created, can also present a window of opportunities for innovations and technological development. Not to mention promoting employment and regional policy goals. This is possible in particular with energy questions, because solutions to those can turn out to be win-win situations.

It would be extremely hard to fight climate change if we wouldn't have any tools to operate. Fortunately we have a kit full of them. The international agreement on the fight against climate change, the Kyoto Protocol, does not cover emissions from international maritime traffic. This has been left for the International Maritime Organisation (IMO) to regulate.

Fortunately within the IMO, there has been headway made with discussions. The greenhouse gas index for ships has voluntary trial use status and talks on possible emissions trading or other forms of financial control between shipping companies and countries are going on.

Furthermore, there is an overwhelming need for international regulation to improve maritime safety and environmental protection. The Baltic Sea is a good example of one where we need special measures to protect what is an exceptional environment. A shallow, cold sea with a low salt content, one that is divided by thousands of islands and is heavily polluted, requires more effective protection solutions than, for example, the open seas of the Atlantic.

Such a commitment can only be truly made if the needs of all major users of the Baltic Sea are considered and balanced in a fair and transparent way. This is where spatial planning comes into the picture, a tool which, similarly to its use on land, is becoming one of the key means for cross-sectoral management of human activities in the sea and coastal areas. Regardless of all challenges I believe that the countries of the Baltic Sea region can look toward the future with confidence and optimism.

*Paula Lehtomäki*

*Minister of the Environment*

*Finland*



## Events in Georgia provoke discussions on security in good, old, peaceful Europe

By Jaak Aaviksoo

In April of this year, the NATO member states decided to assure Georgia's NATO perspectives. Georgia's aspirations were handled in the same way as were the Ukraine's. They were not granted Membership Action Plans, for which they had both been applying for some time, the granting of which Estonia and several other member states, especially the United States of America, had been strongly supporting.

The formulation, which reached the final declaration of the Bucharest Summit and stated firmly and clearly the perspective for accession for Ukraine and Georgia, was a compromise between the more cautious countries (mostly Western and Southern Europe) and more energetic countries. This was the maximum that could be achieved at the given moment, both then and today.

Of course, the conviction and resolve of the United States of America, which has strived to create support to the NATO aspirations of Georgia and Ukraine, is quite remarkable. This is based on a simple and attractive principle: those European countries that strive to gain NATO membership should be admitted to the alliance, regardless of their history and geopolitical considerations, provided that they meet certain quality requirements. The very roots of this standpoint can be found in the treaty that established NATO, which states that any European country that contributes to the security of the North-Atlantic space and promotes the principles established with the Treaty should be admitted to the most powerful security organisation in the world. Differences aside, all NATO member states share basic values and both Georgia and Ukraine are countries that share this common value base and are prepared to contribute thereto.

Since the Bucharest Summit, but especially since Russia's aggression in Georgia, it has been asked whether such a decision, as that adopted in Bucharest, enhanced the security of NATO and the Central and Eastern European countries and Georgia and Ukraine as two countries striving for NATO membership or whether the decision only served to diminish it. Two political hypotheses, both of which undermine our interests, are currently being circulated. According to the first hypothesis, the promised perspective for accession, given to Georgia by NATO member states, is a political step too short and it rather confirmed to Russia that its immediate neighbourhood is still within Russia's legitimate sphere of interest. According to the second hypothesis, Central and Eastern European countries that have several challenges in their relations with Russia are troublesome as members of NATO and would in the long-term cause even more problems and strain the otherwise good and pragmatic relations between Western Europe and Russia. Therefore, we need to ask even more directly what the consequences of the events in Georgia are for Estonia's security.

For Estonia, the events in Georgia shouldn't, in principle, come as a surprise – due to our historical experiences and developments – since the last war in Chechnya to the war in Georgia and the consequent recognition of Abkhazia and South-Ossetia is just a logical sequence to the chain, which was started by Ivan the Terrible, Peter the Great, Vladimir Lenin and Joseph Stalin. The listed names weren't chosen in random – these are the heads of state that are mentioned most often in an Internet survey conducted in Russia as the greatest historical personalities. The Russian media, which largely reflects and magnifies the opinions from the Kremlin, has mentioned the rebirth of Russia as a “geopolitical subject” as the most important outcome of the war in Georgia. Indeed – the western states are now coming to

Moscow to plead, either for a truce, withdrawal of the military troops, or simply adherence to international agreements. This is seen by Moscow as a strategic victory – in comparison to a situation ten years ago where the IMF, EU, Amnesty International or just some of the Western politicians were giving patronising lectures on the meaning of democracy and market economy. The very nature of this “rebirth” is stated by Russia's own self-definition: “We don't need your democracy; we have our own sovereign democracy”. Such confrontation is clearly deliberate and visible in practically everything that Russia says or does: the confrontation is uncompromising and principal in nature.

Russia's described self-determination and self-validation, based thereupon, clearly makes geopolitical sense. The status of the USA, perhaps temporarily weakened, for multiple reasons; the continuously growing economic and political self-awareness of the Third World; opposition to a unipolar world order; China and India's forceful demands for their own place and truth; the struggling Near and Middle East; and additionally supported by the oil dollars, have all built the window of opportunities that allow for yet another attempt to reintroduce a supreme statehood. And let us not forget, that Russia has an international, broad audience, while she goes about her ventures. Russia wants to be Russia, to identify itself as a geopolitical subject and have it done based on its best historical experiences. That ambition has considerable domestic support, which is magnified by the systematic and all-exhaustive socio-political manipulations of the Putin-Medvedev administration. Russia is Russia. Both today and in the foreseeable future, as its today's reality, leaves no alternatives. The first realistic opportunity for westernisation was ruined by the October Revolution and the second by the inability of Yeltsin's administration to share the fruits of the market economy with the majority of the population.

Yet, this is merely a socio-political narrative and already, in the victorious haze of the post-Georgian aggression, there appear many problems for Russia. Massive capital flight, extremely low western business confidence in Russia and the lowering demand for oil because of the almost inevitable global economic recession demonstrate that Russia can talk the talk, but not walk the walk. She is inherently weak, open to the winds and storms of the “outer-world”, interlinked with the rest of us. She cannot exist autonomously and independently of the global economy and attempts to tinker with political and administrative borders of neighbouring countries does not come without a heavy price – and more can be expected, if this simple fact is not recognized in the Kremlin.

Russia did not succeed in instilling fear in her neighbours in North-Eastern Europe. In the long-term, we have to consider that staying true to the basic values, as written down in the Charter of the North-Atlantic Treaty, should assure security more effectively than hesitant appeasement politics or the search for beneficial compromises. I am convinced that Estonia's positions, which have consistently served to support the efforts of Georgia and Ukraine, are correct, not merely due to remaining true to ideological principles but also because it increases our national security in the long-term perspective.

In principle, such an aggressive and revanchist attitude is always characterised by a uniform course of events. As such behaviour sees compromise as a weakness, any humouring on principle issues would only contribute to increase the aggressor's hunger. Therefore, one should take the parallel, as pointed out by the Swedish Minister of Foreign Affairs, Mr.



Carl Bildt, who compared the aggression and annexation in Abkhazia and South-Ossetia with the fate of the Sudetes before the outbreak of the World War II. As the Munich Treaties could not avoid the onset of the Second World War in Europe, one could assume that any compromises made now would be as dangerous for Central and Eastern European countries today. Therefore, I do think that the consistent and principal attitude of Estonia and our NATO allies regarding the issue of basic values, including consistent conformation of the sovereignty and territorial integrity of countries, are not issues on which we should seek compromises, as these could become very expensive later. These compromises shouldn't smell of gas or oil.

It has nothing to do with the profits gained or to be gained or the success granted by cheap energy carriers with regard to other partners. It comes, above all, down to the spineless attitude, expressed by such attitude in one-way or another. Spinelessness injects self-confidence and increasing aggressiveness to an aggressor.

Considering everything said above – it's not quite correct to say that the security situation in the world did change considerably after the events in Georgia. It would be more appropriate to say that the situation changed long ago, but now the required changes in understandings and beliefs are also taking place in the western capitals of Europe. Here, Estonia will continue its work to stress the growing importance of the co-ordination of NATO defence planning, while not forgetting the efforts we need to make ourselves and all together to enhance NATO's security.

For me, one the most important outcomes of the conflict in Georgia was the realisation gained at the price of sufferings of the people of Georgia and Ossetia – Russia really is, above all, Russia. Europe has learnt its historic lessons and therefore, a war between Germany and France or, for example, Estonia and Latvia, would be unthinkable – but we can't apply this experience to relations with Russia and vice versa. It is, however, much better and safer to be aware of this difference, instead of entertaining delusions about shared experiences and values.

For these very reasons, I am convinced that Estonia's security political position, supported by our consistent position, which states that the efforts that democratic states make on NATO direction should be supported and the aggressors should be stood up to, has contributed to the improved security of Central and Eastern European countries. Our clear and transparent behaviour has revealed the nature of today's regime in Russia with the related threats. And let's also keep in mind that our sense of threat has been verified – this also shows that we have taken the right way to improving our security.

I would like to end with a brief train of thought, concerning the long-term perspective of the relations between Russia and the Western countries. It's quite obvious that mutual sense of threat is sharper today than it used to be a couple of months ago and while the nature of the sense of threat is conflicting – from one side, above all, physical and, from the other hand, conceptual – this sense of threat is, in fact, real and regrettable. At the same time it seems that the geo-political spectre of threats of Russia and the Western countries, based on wider and, above all, demographic trends, largely overlaps while a number of security threats of both Russia and the Western countries would be easier to manage by co-operation instead of opposition. Therefore, may strategic security partnership, as real and strategic as possible, provide some hope and air for breathing. This would definitely serve Estonia's best interests.

*Jaak Aaviksoo*

*Minister of Defence*

*Estonia*



## Gas pipeline to the Baltic Sea – should it come in a civilized way or under the dictate of the big and the powerful?

By Siiri Oviir

During the last decades the European Union's energy policy has been quite dispersed. No unified policy has been developed because of the opposition of a number of big states. Today this topic has become a burning issue as in addition to economic aspects political aspects have come into play. Some states back very strongly the interests of their private sector and in some cases they have even used their enterprises to reach their foreign policy aims.

We are not used to think of energy as part of real politic, but energy resources can be used to fulfil the states' ambitions, to influence leaders of other states or even to threaten them. That is why during the last couple of years energy security has become so relevant in the context of the future Russian-German gas pipeline to be built in the Baltic Sea.

The planned pipeline, which ever route it would take under the sea, will not considerably influence Estonia, my native country, given the present context of gas supplies. However, Poland and the other Baltic States as potential countries of transit would gain a lot in case the 1200 km long under- water gas pipe were built on the land. Estonia is first and foremost interested in avoiding the environmental damage to the marine environment of the Baltic Sea. Among the main sources of threat there are the sunken containers with chemical weapons that can start leaking, intensive traffic and rusty bombs lying on the seabed let alone the interaction with the technical infrastructure. As to the latter the Estlink sea cable is not the most vulnerable infrastructure object in the Baltic Sea, as the optical cable connecting Sweden and Poland has much greater relevance in this respect.

After following the dispute over the gas pipeline one cannot avoid asking the question to whom the seabed belongs. What are the states' duties and rights in connection with the sea? The Baltic Sea and also the territory under the sea have been divided between the surrounding states and are subject to international or national law and there is practically no 'open' sea left in this area. The sovereignty of coastal states applies also to their territorial waters and the seabed. The direction and the installation plan of the gas pipe will have to be approved by the coastal states of the Baltic Sea. It is also up to these states whether and to what extent to allow under water exploration, including drilling the part of the continental shelf in their territorial waters. A number of coastal states in the Baltic region have not given their consent to the above project as the full documentation has not been made available to them. There have already

been some cases in international practice where the states have not given a permission to carry out offshore exploration in their territorial waters or in their economic zone to foreign companies. The reasons vary from potential environmental damage caused by the drilling mechanisms to reluctance to share the information about the underlying national interests in a given territory.

The International Maritime Organisation has declared the Baltic Sea a vulnerable sea area yet there is no international treaty that would deal specifically with the question of environmental impact of a submarine pipeline. There are still some international agreements very close to this topic. The Espoo Convention of 1991 foresees international consultations in case of the projects with a cross-border environmental effect. The countries concerned have also the right to participate in the environmental impact assessment. This Convention has taken effect in Germany, Sweden, Finland and Estonia. Russia has signed the Convention. In addition to the rights given by this international agreement the parties have also taken an obligation to protect the environment that may prove to be difficult to fulfil unless they have a full say in the environmental matters. Considering the above the Estonian Government decided not to give permission for offshore exploration in its economic zone to the Nord Stream in 2007. In July 2008 the European Parliament requested the environmental impact assessment of the pipeline project in the Baltic Sea. In this context it remains unclear why the former Finnish Prime Minister and now Adviser to the Russian-German gas pipe project Nord Stream has expressed an opinion that the opposition of Estonia, Sweden and Poland to the project cannot undermine it and the decisions of these three states can be by-passed.

The problem of energy security will remain important both globally and in the Baltic Sea region for a long time to go and I can only hope that the states will be wise enough to avoid a situation where all parties are in conflict with each other.

*Siiri Oviir*

*Member*

*European Parliament*

*Estonia*



## Baltic security reflections in the aftermath of the Russian-Georgian conflict

By Artis Pabriks

The Russian-Georgian war strengthens the argument that the current Russian leadership prefers an alternative regime to the liberal democratic system. Despite hopeful predictions after the collapse of the Soviet Empire, not everybody in Russia is willing to embrace democracy. This certainly increases the feeling of insecurity among many Russian neighbours. Security is back on top of the agenda in the Baltic region replacing the short period of relaxation after the successful integration of Estonia, Latvia, Lithuania, and Poland into the EU and the North Atlantic Alliance.

Following the collapse of the Soviet Union, Francis Fukuyama published a book on "the end of history and the victory of liberal democracy" as the only valid model of life. Joining the EU and NATO, the Baltic nations saw for themselves the end of the history as end of insecurity and injustice, and the beginning of life as free individuals.

But today like never before, liberal democracies find themselves challenged by successfully developing authoritarian systems. Russia leaders are reminding the world that Russia will follow its own path of development. Factors like high oil and gas prices have successfully allowed Russia to avoid developing a full liberal democracy. More than this, the Russian leadership quite blatantly and aggressively uses energy policy as a means to regain the national strength and "glory" once enjoyed by the Soviet Union. Russia is becoming an increasingly difficult international partner when dealing with the Middle East, Iran or in fact any other issue where consolidated opinion and the action of international institutions are required.

Bearing this in mind, the recent Russian war with Georgia should be judged as a litmus test for any Russian relationship with her immediate neighbours. The war showed clearly that Russia is ready to use military force in her immediate neighbourhood and is ready to interfere in the domestic affairs of others on behalf of Russian citizens, a Russian ethnic population, or any other grounds she can manufacture if she deems necessary. The region bordering Russia is again feeling intimidated by this newly assertive neighbour whose non-democratic political leadership is increasingly overtaken by memories of "power" as a raw tool.

The war turned out to be a strong test for the European Union's ability to find a common point of view and form a common reaction to the new challenges on its borders. The fragmentation of EU opinion showed both the difficulties of collective decision making, and the broad range of differing national interests. Many European decision makers were simply on their holidays and out of touch. During the early days of the conflict a number of larger EU nations were taking pro-Russian stances whilst EU members geographically closer to Russia used every effort to mobilize Brussels against the Russian advance into Georgia. Today, many are convinced that it was actually the visit of the Baltic and Polish Presidents to Tbilisi which ultimately stopped the Russian forces at the suburbs of the Georgian capital. NATO and the Americans were both caught unprepared and politically outflanked.

Many analysts in the Baltic Countries believe the EU has been engaged too little in the Caucasus in recent years

whilst Russia has had clear plans using political tools like trade, passports and visas in new more aggressive ways. The European Union was simply behind the Russian political game and proved unable or unwilling to take any real decision regarding Georgian territorial integrity.

Another serious blow to European security was dealt by the Bucharest NATO Summit. Officially NATO announced Georgia to be a future member country but significantly did not expand MAP to Georgia because of resistance from some EU member countries and weak US diplomatic persuasion. Russia correctly interpreted this as a weakness of the Alliance in the Caucasus region and as authority to act and use military force

The war showed that Russia will continue to use the ethnic card aggressively to promote its interests abroad. In all three Baltic countries, particularly in Estonia and Latvia there are a large number of ethnic Russians remaining after the collapse of the USSR. Political integration of parts of this population into the main stream population is challenging. But it is deliberately being made more difficult by a large and consciously aimed Russian economic and media influence on these minorities from across the border.

The mood in the Baltic region about EU and NATO membership can be characterized by the saying of Benjamin Franklin: "If we do not hang together, we will hang separately. The Baltic nations want to be certain they will receive NATO and also EU support in the event of crisis." The striking absence of common EU foreign and defence policy, the continuing political/military isolation of Sweden and Finland, the disagreements about further enlargement and questions about contingency planning within the Alliance worry Baltic nations about the seriousness of these institutions. They want to be sure of serious support regardless if it is the holiday season in Europe.

The Baltic nations are more than anyone else willing to see a good relationship between NATO, the EU and Russia. NATO must re-establish and restate its Article V core values. The EU must prevail not only as a united institution but also as capable, strong, and globally influential union in the 21st century. It must not always yield its interests to those of Russia. The current stance of both organisations towards Russia fail to reflect these goals and the Baltic nations are among the first to worry about this failure. In long term Russia itself would benefit from less appeasing and more value orientated international stance. Maybe and hopefully, liberal democratic system might also fit the Russian people one day.

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## Busy Baltic to benefit from global pollution measures

By Efthimios E. Mitropoulos

The Baltic Sea is one of the busiest in the world and shipping activity within it has been steadily expanding, in particular over recent decades. This reflects the dramatic increase in oil transport through the Baltic, the economic prosperity of the Baltic Rim States and the influential role they play in international trade.

Current statistics reveal that around 2,000 sizeable ships are normally at sea at any one time in the Baltic, including large oil tankers, ships carrying dangerous and potentially polluting cargoes, as well as many large passenger ferries. Navigation in the Baltic Sea can be challenging, with narrow straits, winding passages, shallow depths, archipelagos, fishing activity and areas where shipping lanes cross, all adding to the difficulties. But, although a number of shipping accidents do, regrettably, occur in the Baltic from time to time, fortunately, only a few of these incidents have so far resulted in loss of life or serious pollution.

To ensure the safety and security of navigation and the protection of the environment, various measures have been adopted by IMO, by HELCOM at the regional level, and at the national level by the Baltic Sea States themselves. As a result, maritime transportation is generally recognized as the safest, most effective and environmentally friendly way of transporting goods within the region.

However, the increase in shipping activity has, quite rightly, raised concerns about the effect it may have on the environment, particularly on air quality. Exhaust emissions from shipping, due to the combustion of marine fuels that contain a high sulphur content, contribute to air pollution in the form of sulphur oxide (SOx) and particulate matter. These can harm the environment through the formation of smog, acid rain and acidification, as well as adversely affecting human health, particularly around coastal areas with dense ship traffic and busy ports.

Nitrogen oxide (NOx) emissions from ships also cause acid depositions that can be detrimental to the natural environment and contribute to eutrophication. In addition to SOx and NOx, shipping, like other major industries, also contributes to the emissions of greenhouse gases (mainly CO<sub>2</sub>), volatile organic compounds (VOCs) from petroleum cargoes and, to a lesser degree, ozone-depleting substances.

Globally, air pollution from ships is addressed by IMO's MARPOL Convention (Annex VI), which contains regulations for the prevention of air pollution from ships, an instrument which has been in force since May 2005. Annex VI covers ozone-depleting substances, SOx, NOx and VOCs. And, while air pollution is a global problem, it has assumed a heightened significance for the littoral states of the Baltic, a sea which is almost land-locked. Annex VI, therefore, addresses this and makes the Baltic a "SOx emission control area", demanding, as of 19 May 2006, that all ships operating there either use fuel oil with a low sulphur content (not exceeding 1.5 per cent) or exhaust gas cleaning systems offering equivalent standards.

Just two months after its entry into force, in July 2005, IMO agreed on the need to undertake an extensive review of Annex VI, to take account of current technological improvements and the need to further reduce harmful emissions from ships.

As a result of that review process, in April this year, IMO's Marine Environment Protection Committee (MEPC) approved amendments to Annex VI, which are expected to be formally adopted this month and enter into force 16 months thereafter (i.e. in February 2010). The main changes would see a progressive reduction in SOx emissions from ships, a reduction of the limits applicable both globally and in Emission Control Areas (ECAs) such as the Baltic Sea and progressive reductions in NOx emissions from marine engines. The revised Annex VI will also allow for ECAs to be designated for SOx and particulate matter, or NOx, or all three types of emissions from ships, in the event that the need for additional protection of human health and the environment in the area is demonstrated.

Although Annex VI does not cover the emission of greenhouse gases (GHGs) from ships, IMO has given ample consideration to this matter. Indeed, the Organization has a mandate, through the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol, to pursue the limitation or reduction of emissions of greenhouse gases from ships. To that end, IMO has approved an action plan and is now working towards the establishment of a robust regime that will regulate shipping at the global level and contribute to the deceleration of climate change.

Progress towards such a regime was made during the first intersessional meeting of IMO's Working Group on Greenhouse Gas Emissions from Ships, held in Oslo, Norway, from 23 to 27 June 2008. The week-long session was tasked with developing the technical basis for reduction mechanisms that may form part of the future IMO regime to control GHG emissions from international shipping, as well as drafts of the actual reduction mechanisms themselves, for further consideration by MEPC 58 in October 2008, which, notwithstanding the importance of the Oslo meeting, will have the final, decisive role to play on the issue.

In particular, the Oslo meeting made progress on developing a mandatory CO<sub>2</sub> Design Index for ships and an interim CO<sub>2</sub> Operational Index, and held extensive discussions on best practices for voluntary implementation and economic instruments with GHG-reduction potential. These efforts are due to culminate with the adoption, in 2009, of binding regulations for all ships, which, I hope, will successfully convey, to the Conference of Parties to the UNFCCC to be held in Copenhagen towards the end of next year, IMO's firm determination to do as much as it can about the environment.

The need for IMO and the maritime community as a whole to act in concert with, and contribute to, the wider international efforts aimed at swift and substantive action to combat climate change under the UNFCCC process, by proactively addressing the principles and objectives enshrined in the roadmap agreed at the December 2007 Bali Conference, is clear.

Nevertheless, there has been a recurrent debate over whether the GHG emission reductions agreed by IMO should apply exclusively to countries listed in Annex I to the Kyoto Protocol (in essence, developed countries) or whether their application should extend to all ships, no matter what flag they fly. The repercussions of that debate extend far and wide.

If reductions in CO<sub>2</sub> emissions from ships are to benefit the environment as a whole, they must apply globally to all ships in the world fleet, regardless of their flag. It seems completely incongruous that two ships, carrying similar cargo, loaded in the same port, sailing at the same speed and having the same Baltic Sea destination, should be treated differently simply because they are registered under two different flags – one the flag of a non-Annex I country and, the other, that of an Annex I country. They would each be releasing the same amount of GHGs, wherever they might sail to. If mandatory reduction measures were applied only to ships flagged in Annex I countries, which in today's shipping reality represent a mere 25 per cent of the world's merchant fleet, the net benefit for the global environment would be minimal and that, clearly, given the global mandate and responsibility of IMO, would not be a satisfactory outcome.

Moreover, if control measures applied only to ships flagged in Annex I countries, there might be a massive and rapid exodus from Annex I to non-Annex I registers, thus reducing even further the abatement potential. IMO should, therefore, develop a regime that will contribute positively, fairly and visibly to the endeavours of the international community as a whole to combat climate change; a regime in which, because of its unique international nature, shipping in its entirety, not a small fraction thereof, engages comprehensively to regulate GHG emissions effectively.

The Kyoto Protocol to the UNFCCC – wisely in my opinion – left the limitation and reduction of GHGs from shipping to IMO to regulate. But Kyoto expires in 2012 and will be replaced by the outcome of the Copenhagen meeting in December 2009. IMO will be reporting to that meeting and I am confident that, following the progress that is expected to be made on this issue by the MEPC in October 2008 and July 2009, we will have a positive outcome to convey, not only for Baltic Sea States, but for the global community as a whole.

*Efthimios E. Mitropoulos*

*Secretary-General*

*International Maritime Organization*





## EU focuses on the Baltic Sea

By Jari Luoto

There is fresh interest towards the Baltic Sea. Governments, regional organisations and private actors have activated around the region. Benefits of EU enlargement are especially visible around the Baltic Sea where eight out of nine coastal states are Member States.

I often think that this interest is also driven by a great contradiction: the Baltic Sea region is one of the most prosperous one in Europe and the economy is growing rapidly even if put into a global perspective. Environmental awareness among the population is at a high level. Yet the Baltic Sea is one of the most polluted seas. It is plagued by eutrophication, depletion of fish stocks and the arrival of non-native species through ballast water. As a legacy of wars hazardous substances lie in the seabed.

On a typical day, already as many as 2000 vessels sail the Baltic Sea. This is obviously a sign of good economic growth in the region. The amount of oil tankers demonstrates the growing importance of the Baltic Sea as a route for transporting energy from Russia. It is also true that single hull tankers have vanished from the Gulf of Finland and the number of accidents has been in decline for many years. Unfortunately the continuing strong growth in traffic volume increases the risk of accidents.

Something needs to be done to try to correct the result of decades of neglect. At the same time the region needs to respond to new challenges.

At the initiative of the European Parliament and supported by the governments in the region the European Union is currently in a process of producing a strategy for the Baltic Sea. The mandate given to the European Commission by the European Council of December 2007 specifies a timeframe: the strategy should be presented to the June 2009 European Council, just prior the Swedish Presidency of the EU. Work is in good progress, with wide consultations with stakeholders producing proposals for the strategy.

But here is another contradiction: we have always been good in producing papers and organising ourselves in the Baltic Sea region. A plenty of research material is available on the key problems. What we lack is coordinated action with more ambitious goals than we have set so far in the region. Enlargement of the European Union, which has had an overwhelmingly positive impact for the region, has created new possibilities and potential for cooperation. We have yet to turn all that potential into action. Here the EU's Baltic Sea Strategy can be of great assistance.

What should be the focus of the strategy? I think that the value added from the European Union would come from using the legislative power, programmes and financing in a way that is more focused on the special features of the Baltic Sea region. The region could well use a strategy that is focused on a couple of priorities: the marine environment, maritime safety, energy- and transport networks and internal safety and security. The

implementation of the strategy could also mean that the Union has a stronger role in the numerous regional forums.

The strategy should come with an action plan specifying who is going to do what and in what timeframe. We have after all a good selection of tools available. Just think of HELCOM, CBSS, the Nordic Investment Bank, the Nordic Council of Ministers, the Task Force on Organised Crime, to name just a few. Non-EU states in the Baltic Sea region would have to be committed into joint problem solving efforts. This is precisely why the EU has the Northern Dimension with Russia, Norway and Iceland as equal partners.

It will easily take a decade or two before the ecological state of the Baltic Sea can be described as good. But immediate action is needed to attain this goal and prevent setbacks. HELCOM, with all the coastal states as members, has recently adopted an ambitious Baltic Sea Action Plan in order to step up the work for restoring a healthy state of the marine environment.

The steady growth of transport of oil and chemicals constitutes a risk that needs to be reduced by more stringent rules on maritime safety. Finland is putting forward proposals to develop further the Gulf of Finland Mandatory Ship Reporting System and to explore the possibility of extending the system to cover the whole Baltic Sea. At the same time maritime safety in the Baltic might benefit from the several initiatives aiming at creating a real time maritime traffic image for controlling vessel movements.

Economic development, enhanced energy security and the response to climate change go hand in hand in the Baltic Sea Region. Energy security and a better diversity of energy sources require more interconnections within the region and cooperation in building new capacity. The joint task of increasing the share of renewable energy means building sea based wind mill parks in the region. This requires a good amount of Marine Spatial Planning.

When you add the challenges of getting the maximum benefit from the investments in higher education, IT technology and R&D funding in the region, you have recipe for a forward leaning strategy with an ambitious action plan. The EU Baltic Sea Strategy should be seen as a catalyst and a tool for increased and more focused cooperation. The next couple of years will show whether the Baltic Sea States and indeed the whole European Union seize this opportunity and give a big boost for this macro-region.

*Jari Luoto*

*Ambassador for  
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## A role for the Energy Charter in a new Russia-EU Partnership Agreement

By André Mernier

Negotiations between Russia and the European Union on a New Partnership Agreement to super-cede the Russia-EU Partnership and Cooperation Agreement (PCA) of the 1990s will some day resume. While both parties aim to conclude an agreement which will provide a strengthened legal basis and binding commitments covering all areas of their relationship, energy will remain at the core of the agenda. This should not come as a surprise, since Russia is the EU block's primary energy supplier and energy demand within the EU will continue to rise in the foreseeable future. A highly inter-dependant, albeit at times testing, consumer-supplier relationship now exists between the two sides. The challenge facing the negotiators of the New Agreement will be to make this relationship durable in the long term in order to ensure their mutual energy security. To do this, they will need to structure the relationship through appropriate legal and political instruments so that Russia-EU energy relations will develop as a genuine factor of cooperation, as opposed to a factor of tension.

At first glance, it appears that such instruments are readily available for Russia and the EU to strengthen their energy ties. The Energy Charter Treaty (ECT), a legally binding multilateral agreement which both Russia and the EU signed in 1994, provides the foundation for all aspects of cross border relations in the energy sector.<sup>1</sup> It covers investment, trade, transit, energy efficiency and provides for international arbitration in the event of disputes between its members. There seems little doubt that both Moscow and Brussels endorsed the ECT as the basis for their energy cooperation when the last PCA was being negotiated. Article 65 of that agreement, which applied to energy, made explicit reference to the principles of the Energy Charter at the very outset of the text.

### Facts and fallacies

Despite both the originality of the Energy Charter concept in facilitating East-West cooperation in the energy sector, together with the political support enjoyed by the ECT in the initial phases of its development, Russia has yet to ratify the Treaty. This has created confusion about Russia's role in the Treaty and raised questions as to whether Russia is even a member of the ECT. The situation is compounded by the largely ill-informed assertions that ratification of the ECT will require Russia to provide mandatory third party access to its energy infrastructure and open up its energy reserves to foreign investment. Even more critical voices, including those expressing their views in the spring edition of *Europe's World*, argue that "Russia will not implement (ratify) a treaty that it considers a humiliation because it was written to favour consumers who saw themselves as the winners of the Cold War".

None of this type of speculative, emotionally charged discussion does justice to Russia's realistic relationship with the ECT and the fundamental role that the Treaty can continue playing in the New Agreement between Russia and the EU. Considering a number of key facts in the inter-linkage between the Russia, the EU, the PCA and the ECT may be instructive in this sense. Fact number one.

<sup>1</sup> The Energy Charter Treaty of 1994 is a legally binding extension of the principles contained in the European Energy Charter of 1991, a non-binding political declaration and precursor to the ECT. The ECT came into full legal force in 1998, upon its ratification by the 30th member state.

Although Russia has yet to ratify the Treaty, it applies the Treaty on a provisional basis, which means that it has agreed to apply the Treaty's provisions to the extent that they are consistent with Russia's constitution, laws and regulations. While only a handful of ECT members such as Norway and Australia have yet to ratify or apply the Treaty provisionally, Russia's provisional application represents a considerable degree of commitment to the Treaty's binding provisions.

Fact number two. It is true to say that Russia's formal ratification of the Treaty would further consolidate on the relationship between the EU, Russia and other ECT member states. However, the absence of Russian ratification does not interrupt the technical work of the Treaty, nor the Energy Charter process – in which Russia is one of the most active participants. Formal ratification tomorrow would not lead to a different state of affairs for Russia with respect to its ongoing relationship with the Charter process and its obligations under the Treaty.

Fact number three. We should mention at this point that the EU, Russia and all of the other ECT members would not have signed the Treaty and continued to be active in the Charter process had they not accepted the principles contained in the Energy Charter declaration. I refer to universally applicable concepts such as open and competitive energy markets, non-discrimination, recognition of state sovereignty over resources, creating the conditions to stimulate investment flows, consideration of the environment and efficient use of energy. These principles work to the benefit of all parties which is why the great majority of ECT members have seen fit to ratify the Treaty. This includes the European Communities and all of their member states.

Finally, it should be added that the ECT member states, despite the best efforts of Russia, the EU and others, have yet to complete negotiations on new instruments intended to improve upon the Treaty's provisions on transit. While this gives the impression that the work of the Charter process needs to be expanded, it also reinforces the urgency to resolve certain aspects of cross border energy relations – particularly energy transit – within a multilateral as opposed to a bilateral forum setting. It is hardly surprising, therefore, that negotiations on the Energy Charter draft protocol on transit have recently returned to the multilateral level. The Energy Charter process, as the primary international energy institution where Russia is an active member, remains the most adequate framework for energy producers and consumers to iron out any differences they may have in how energy should be transited across borders.

### A common denominator for shared principles within competing interests

In the field of energy, it is natural for Russia and the EU to be both competitors and partners. Europe remains the largest single customer for Russian energy exports, on which Russia is no less dependent than Europe relies on Russian energy supplies. Although this creates inter-dependence, it should likewise be accepted that the strategic interests of consumers and producers are not always going to be in convergence. Furthermore, diversification of energy supplies and markets has traditionally been a central tenet of sound energy policies. The prospect of competitive interests – be they with

respect to the price of energy or over the direction which export routes should take – is therefore likely.

We should also note that, as was recently underscored by European Energy Commissioner, Andris Piebalgs, the EU and Russia employ two different types of legislations to organize their respective domestic energy markets. This applies particularly to the gas sectors, where the EU internal gas market endorses the fully liberalized model where as the Russian gas sector is largely vertically integrated. This too can create certain strains since the level of compromise that has to be reached extends beyond the supplier-consumer market based relationship, and includes two distinct institutional approaches of managing domestic energy markets.

This backdrop to the Russia-EU bilateral energy relationship creates a rather challenging playing field for negotiators of a future New Agreement. However, the fact that both sides have embraced the principles contained in the Energy Charter – demonstrated by signing the ECT – implies that the common denominator that binds Russia and the EU in the energy sector is stronger than any competing interests which may exist. This common denominator is the Energy Charter, the core principles of which are just as applicable today as they were when the Charter process was emerging during the 1990s. It is the primary functioning instrument of international law which is available to both Russia and the EU through which to institutionalize their energy relations within the framework of a New Partnership Agreement. There are three key aspects to the ECT and the Charter process which both the Russian and EU negotiators should take into account when designing the energy provisions of the New Agreement.

First, the ECT and the principles of the Energy Charter are based on the guiding philosophy of sanctity of domestic energy policies. Effectively this means that members of the ECT are free to determine the structure of their energy markets (be they fully liberalized or vertically integrated), execute domestic energy policies in a sovereign manner, and determine the degree to which they desire to open up their energy sectors to foreign investment. ECT member countries exercise full sovereignty over the development of their national energy resources and are not obliged to provide mandatory third party access to their energy infrastructure. The starting point for any effective cross border energy relationship is offering due respect for alternative models of market organization.

Second, the Energy Charter aims to maintain a balance between the interests of the key stakeholders along the entire energy value chain. This applies particularly to the need for providing an equilibrium between consumers and producers, simultaneously to paying due attention to the interests of transit states. Whilst it has already been mentioned that the interests of energy producers and

consumers are not always going to converge, a balanced framework for their energy trade is essential. Such structures, however, should be based on principles shared by both sides. The 51 member countries of the ECT include a good mix of producers, consumers and transit states and the Charter process remains the key international energy forum in which these stakeholders can reconcile their differences. In this context the Charter's role is unique: no other international energy organisation provides a common platform for the development and implementation of binding disciplines among these diverse groups of stakeholders.

Finally, and perhaps its most notable contribution, the ECT aims to create a level playing field for all of its members, based on a common set of rules and practices acceptable to all. Nowhere is this more important than in the energy sector, where a fine line exists between commercial and political decision making, and where the sheer size of investments together with ecological considerations brings with it exposure to enormous risks. With respect to the Russia-EU energy relationship and a New Partnership Agreement, the fact that intensive interdependence juxtaposes two highly distinct organisational approaches to domestic energy markets, elevates the ECT to the closest instrument we have in forging a 'common energy space' underpinning an effective Russia-EU bilateral energy trade.

The founders of the Energy Charter concept intended for it to work in a neutral manner, based on common principles to create the foundation for effective cross border energy relationships in Euro-Asia. The negotiators of the ECT designed its instruments to reflect this neutrality and placed it within a binding inter-governmental framework of 'soft-law'. The Energy Charter process, which is based on the provisions of the Treaty, incorporates the necessary flexibility to give the relationship truly durable character, reducing risks and promoting trade and investment along the way. Taken together, the instruments and experience of the Energy Charter provide the most practical and the most realistic platform for the ongoing evolution of the Russia-EU energy relationship. The Energy Charter should form the soul of any bilateral energy deal within the framework of a New Partnership Agreement between the EU and Russia, ensuring that the playing field between remains level, rather than challenging.

*André Mernier*

*Secretary General*

*Energy Charter Secretariat*

## Finland is facing major energy decisions

By Timo Rajala

Energy investments are being made in Finland and all over the world at an increasing speed. Many countries find themselves in the same situation as Finland; electricity consumption is increasing, imports are decreasing and existing capacity is becoming obsolete.

Finland wants to continue these investments. The industries are exceptionally unanimous in their wish to change over to emission-free electricity production during the next 20 years. They will volunteer to make the necessary investments, worth billions of euros, largely without government subsidies. The gain would be self-sufficiency in electricity production. Thereafter the use of electricity for heating or even electric cars would be acceptable and would slow down climate change. The new capacity built would also curtail price increases and reduce the costs levied on companies by emission trading.

In this difficult economic situation companies are looking for strong signals to indicate that Finland will provide favourable operating conditions in the future. The secured availability of energy at competitive costs would be an incentive for companies to develop and invest in Finland.

It poses a political problem that nuclear power has a prominent role in future electricity solutions. At least two new nuclear power plant units will be needed by 2025 in addition to the Olkiluoto 3 plant presently under construction. One of these would have to be built already before 2020 to help Finland to fulfil its emission reduction quota.

When we are now thinking of the future energy solutions in Finland, one factor causing confusion is the EU liberalisation package. There is talk in the EU about liberalising the market, but in practice regulation is on the increase. The EU has set exact percentual goals for emission reductions, energy conservation and the share of renewable energy. It restricts the decision-making options of the member states drastically. There has been a tradition in Finland that the industries and politicians seek the best national solutions in close co-operation and then commit themselves to these. The best national solution now is a model emphasising nuclear power, but it doesn't fulfil the EU equation with the three variables.

The grip of the EU on national energy policies has continued to tighten. This is somewhat peculiar, as energy policy does not fall within the authority of the EU but should be decided on by each member state independently. The EU has circumvented the problem by directing energy solutions in the name of environmental policy.

What is guiding the EU decisions and actions? Has it consistently concentrated on averting the climate change? As a consequence of the EU emission trade the carbon dioxide emitted carries a price now, at least in energy production and heavy industry. There is also a political agreement on the setting of emission limits on sectors outside the emission trade, e.g. traffic.

The country-specific obligations for renewable energy are at odds with this goal. Nearly all the member states have such heavy obligations that their execution is both unrealistic and unreasonably expensive. The essential criterion for decision-making in the EU energy policy has been lost, i.e. the cost-effective reduction of emissions. Member states have no alternative but to use enormous

resources for renewable energy. What if the same resources had been applied to other means of reducing emissions?

There is a political wish now to force companies into renewable energy generation through legislation. Manufacturers of equipment and other actors selling services are naturally enthusiastic about this. The situation is a tricky one, though, because in order to get investments countries are likely to start competing in who grants the most generous subsidies and thus triggers rapid investments. Sellers of equipment will take advantage of the heavy demand and the customer's paying capacity. The customer can afford to pay because the subsidising level is high.

The capacity of the EU has weakened. In addition to renewable energy, the EU has also on its plate many other massive and ambitious legislative projects. Their preparation has, however, proceeded slowly. One example is the so-called third liberalisation package, which contains stipulations on the ownership of power transmission grids. After their summit in June 2008, the energy ministers announced publicly that a successful compromise on the issue had been reached. However, the European Parliament did not accept this compromise and the whole package is now threatening to collapse.

There is reason to ask whether the EU should reduce the quantity of legislation and improve its quality. The combat against climate change is a global problem and the EU should concentrate on finding a global solution. The member states should be allowed to decide independently on the most cost-effective ways to avert climate change.

The EU has now begun to stipulate the energy solutions of individual member states and is in actual fact setting limits on the total consumption of energy. This is only a short step away from the stage where the EU sets a production ceiling e.g. for Finland's energy-intensive industry. If, for example, the Finnish steel industry increases its energy consumption by one megawatt-hour, Finland will have to invest further in renewable energy owing to its EU obligation. Implemented with wind power, this would cost 250 million euros. Should the same steel mill invest in Hungary, the obligation to increase the share of renewables would cost only one third of that sum.

Finland has the opportunity to shift to nearly almost completely emission-free electricity production quickly and, from society's point of view, economically. For its part, this would help to secure access to competitive energy to the Finnish industry and economy. The price of energy and the costs of emission trading would be considerably reduced. We in Finland should be allowed to decide on this independently.

*Timo Rajala*

*President, CEO*

*Pohjolan Voima*

*Finland*





## Environmentally friendly for sustainable growth

By Karlis Mikelsons

Latvenergo Group is the leading energy utility in Latvia and is the leader of energy generation from renewable resources in the Baltic countries and the European Union.

Latvenergo Group has started its business activities in 1939 by construction of Ķegums hydropower plant. Currently Latvenergo Group includes five subsidiaries: Augstsprieguma tīkls AS (TSO), Sadales tīkls AS (DSO), Latvenergo Kaubandus OÜ, Latvenergo Prekyba UAB, and Liepājas enerģija SIA.

Latvenergo Group generates its electricity and thermal power in three Daugava hydropower plants and Riga combined heat and power plants, as well as Aiviekste hydropower plant, Ainaži wind power plant, and Liepājas enerģija SIA facilities.

The Daugava hydropower plants is comprised of Ķegums HPP with a total capacity of 264,1 MW, Pļaviņas HPP, capacity 868,5 MW, and Rīga HPP, capacity 402 MW. Approximately 71% of the total electricity produced by Latvenergo is generated at Daugava hydropower plants. Due to significant portion of the overall power supply amount generated by Latvenergo hydropower plants, the total power supply output depends heavily on the water level in the river Daugava; therefore, the annual volume generated by hydropower plants may vary between 1800 GWh and 4500GWh.

Latvenergo AS has two large combined heat and power plants: Rīga TEC-1 (CHPP) and Rīga TEC-2 generating both electricity and thermal energy. Annually, Riga CHPP produces approximately 30% of the total quantity of electricity generated by Latvenergo and 70% of total heating energy supplied to the City of Riga's centralised heating supply system.

In 2005, the 106 million euros\* reconstruction of Rīga TEC-1 was completed. Rīga TEC-1 has two gas turbines, one steam turbine, and two water-heating boilers for centralized heating system. Rīga TEC-1 electric capacity is 144 MWel, and the heating capacity - 377 MWth. Rīga TEC-2 is the largest combined heat and power plant in Latvia, with electric capacity of 330 MWel, and heating capacity of 1148 MWth.

Latvenergo Group invests in modernizing its generating facilities and increasing production volume using state-of-the-art, environmentally friendly technologies.

Since 2007 up to spring 2010 Pļaviņas HPP is undergoing the second largest reconstruction, the total investment for the project amounting to 29,6 million lats. The resulting increased capacity and efficiency of three hydroelectric generating units will allow an average annual increase in electricity generation by 30 GWh and will extend units' utilization period by at least 30 years.

Currently, Rīga TEC-2 is under reconstruction. As a result, a new combined cycle power generating unit will enter service in the middle of 2008 which will be capable of operating in both co-generation and condensation mode. In co-generation mode, (gross) fuel utilisation efficiency could reach 88% and 57% in condensation mode (external air temperature 0°C). This fuel efficiency will allow to triple the amount of electricity generated per unit of heat used, and also will minimize the environmental impact of the plant.

After the reconstruction the electricity generated in cogeneration mode will increase, on average, from 820 GWh to 2200 GWh a year, supplying Latvia with additional 1400 GWh annually.

After the completion of Rīga TEC-2 reconstruction it will become the most modern combined heat and power plant in the Baltic region, enhancing the energy supply independence of Latvia and generating electricity in the most efficient and effective way.

Considering the fact that Latvia is the first country in the Baltics where electricity suppliers face the free-market situation, Latvenergo has become a dynamic company and successfully works in competitive environment; our market share is 96% (of the total electricity consumption in Latvia).

The electricity supply market is quite different in the three Baltic States, as in Estonia it is completely closed, and in Lithuania non-functioning. Therefore, Latvian companies do not have an opportunity to work in the neighboring markets which bars steady development of the electricity supply market in the region.

We have started working at the development of interconnection with Scandinavia because Latvia and the Baltics in general need new interconnections with Western Europe. The new network would open electricity supply from Scandinavia, increasing the safety of electricity system in the region and diversifying the supply.

Especially important for the Baltics would be the interconnection with Sweden, both for the development of electricity supply market and for providing the lacking capacities. Even though a 350 MW cable from Estonia to Finland makes it possible to buy electricity at Scandinavian electricity stock exchange *Nordpool Spot*, the capacity of the cable is insufficient for creating real market with Western Europe.

Launched in 2006, the new under-sea electrical cable *Estlink* connected the electrical supply network of the Baltic States with Northern Europe, allowing Latvenergo Group to buy and sell electricity at *Nord Pool* stock exchange. This created a different outlook for the Baltic States that did not have a direct connection with electric power systems of Central Europe before and were relatively isolated from electricity networks in Western Europe and Scandinavia.

Developing interconnections with Scandinavia, opening up the electricity supply markets in Lithuania and Estonia, and creating a common Transmission System Operator (TSO) for the three Baltic States is crucial for the future development of the Baltic region. Common TSO in the region would facilitate better planning of power systems development and attract new investments, as such TSO would operate on a larger scale and solid financial standing.

By taking these steps the Baltic States would solidify their position in general and would more successfully integrate into the Scandinavian electricity supply market, thus creating a unified region around the Baltic Sea.

Karlis Mikelsons

President, CEO

Latvenergo AS

Latvia

\*1 EUR = 0,70 LVL

## Nord Stream – making more European energy solidarity possible

By Reinier Zwitserloot

Wintershall is proud to participate in the Nord Stream project. Nord Stream stands out from many other pipeline projects as an European project by its very structure, being realized in partnership with Gazprom, E.ON Ruhrgas and Gasunie, all of them international energy companies with great technical expertise. With its first pipeline grid scheduled for commissioning in 2011, a transport capacity of about 27.5 billion m<sup>3</sup>/ year of natural gas will be created. With the second phase being completed in 2012, that transport capacity will be doubled. This goes along with investments of 7.4 billion €.

But why does Europe need Nord Stream? Why is there no reasonable alternative guaranteeing European energy security? A focus on the global energy market gives an unequivocal answer.

As the world's second largest consumer of energy and the largest energy importer, the European Union (EU) possesses an important competitive advantage: about 80 % of the world's reserves of natural gas and crude oil are in a radius of about 4500 km of the EU. This is particularly important in view of both the rapidly rising demand for energy globally and the efforts of emerging economies like China and India to make up for their lack of raw materials by securing direct access to oil and gas reserves. One thing is for sure: Europe must be proactive. Energy security is not just going to come knocking on Europe's door.

Another fact has to be accepted: European supply cannot be guaranteed solely on the basis of renewables. According to the latest reference scenario of the International Energy Agency, the proportion of fossil energies in Europe will remain stable at about 80% until 2030. Thus fossil fuels are the backbone of European supply security for this generation and the next. Among fossil fuels, natural gas stands out because of its high energy efficiency and its relatively good environmental properties. The increased substitution of natural gas for other fossil fuels has made the biggest single contribution to reducing CO<sub>2</sub> emissions in Europe since 1990!

However, the contribution of natural gas to climate protection will only be brought to bear if Europe succeeds in meeting its growing need for gas imports. With EU production set to fall by 100 billion m<sup>3</sup> by 2020 and demand forecast to grow by about 100 billion m<sup>3</sup> at the same time, the EU faces the challenge of securing access to new natural gas reserves. An impartial view at the world map clearly indicates where additional gas can come from: Norway will on the whole merely be able to maintain its share of European gas supplies until 2020. Africa will be able to increase gas deliveries in the longer term, but it will by no means be able to fill the looming import gap. LNG will make a note-worthy contribution to the EU's gas supply, but intense competition for LNG is also expected. The Caspian Sea Region including Iran and Iraq does, indeed, have major reserves of gas, but it will not be able to make up for the import deficit. With up to 30 billion m<sup>3</sup>, at the most just 5% of the overall requirements of the EU-27 could be covered via the Nabucco project in 2020.

Hence it is clear that a really substantial increase in gas imports cannot realistically be achieved without Russia: Russia has the world's largest proven natural gas reserves and is also "within pipe-line distance" for Europe. Forecasts

predict that Russia will be able to increase its gas exports to the EU from its current level of 130 billion m<sup>3</sup> to around 190 billion m<sup>3</sup> by 2020, so by 50%. That increase cannot be achieved without a transportation network expansion. The Nord Stream pipeline will contribute to that expansion, creating a diversification of existing import routes from Russia to the European Union. Nord Stream certainly does not see itself as competition to other major pipelines like Nabucco and doesn't make these superfluous either. The realization of all these pipeline projects is essential for securing Europe's supply. Despite its enormous proportions, the Nord Stream pipeline would "only" be able to cover about 8% of the EU-27 gas demand in 2020. Nonetheless, the additional volume liquidity of 55 billion m<sup>3</sup> brought into the European market will have the important effect to help buyers, even if they are not interested to buy Russian gas, to get gas from other sources at reasonable conditions.

Transporting gas over offshore pipelines is an environmentally sound and safe method of transport, as decades of experience with the complex network of underwater pipelines in the North Sea have documented. As an offshore pipeline, Nord Stream will avoid environmentally sensitive areas such as forests as well as populated areas. Compared to an overland alternative, Nord Stream not only represents the "shorter" route with lower operating costs, but also – due to the small number of compressor stations necessary – lower CO<sub>2</sub> emissions during operation.

Because of its overwhelming importance for supplying Europe, the Nord Stream pipeline was included in the Trans-European-Energy Network's (TEN-E) list of "priority projects of European interests" in June 2003 (reconfirmed in September 2006).

One fundamental aspect, often forgotten in the current debate, needs to be highlighted: Nord Stream offers opportunities for solidarity in energy supply throughout Europe. For Poland, e.g., the construction of the Nord Stream pipeline with its onshore links in Germany (OPAL and NEL) will provide several possibilities for connecting the Polish and the German pipeline systems. This would firmly integrate Poland into the European pipeline grid, since the German gas pipeline system today is already linked directly to the major European transit pipelines from the North Sea and is also networked with the European trading points for natural gas in Belgium, the Netherlands and the UK. Only by providing infrastructure, material chances for solidarity in energy supply throughout Europe can become reality!

*Reinier Zwitserloot*

*Chairman of the Board of  
Executive Directors*

*Wintershall Holding AG*

*Germany*



## Current and future activities of Lietuvos Dujos AB

By Viktoras Valentukevicius

### Brief company profile

Lietuvos Dujos AB owns 99% of Lithuania's natural gas transmission and distribution system. The company is in charge of a safe operation and development of the system. The core activities of the company cover natural gas imports and sale to customers, provision of natural gas transmission and distribution services, a well-balanced development of Lithuania's natural gas supply infrastructure. In all, Lietuvos Dujos AB operates 1.8 thousand km of natural gas transmission grid, and 7.5 thousand km of natural gas distribution grid. The company supplies natural gas to companies of Energy Sector, Industrial Sector, Agricultural Sector, Small Commercial Sector and to household customers. The company is also engaged in natural gas transmission on transit to the Kaliningrad Region of the Russian Federation. Lietuvos Dujos AB has more than 540 thousand customers, it employs over 1800 staff members. Lietuvos Dujos AB continues running the natural gas business which in Lithuania dates back to 1961. Following the privatization of the company, which was carried out in two stages, the results of the company started to improve rapidly: the restructuring of the company has taken place, the debts of the company have been settled, the know-how and the company management based on western standards have been adopted. The year 2002 saw the coming of the first strategic investor E.ON Ruhrgas AG, holding a 38.9-percent stock into the company, and the year 2004 saw the coming into Lietuvos Dujos AB of the other partner, the natural gas supplier Gazprom OAO, holding 37.1-percent stock. The privatization gave the company a long-term gas supply agreement, stability, modern-style management, also, the financial situation of the company has been stabilized, bright prospects for development and investments have opened up. It is already four years that AB Lietuvos Dujos has been working under the management of the world famous and highly reputable energy companies. The state of Lithuania holds a 17.7-percent stake of the company, whereas 6.3-percent of the shares of the company are held by small investors.

The priorities of the company include a consistent development of natural gas market, a methodical expansion of the natural gas infrastructure, stable and safe gas supplies to customers, strengthening of the customer and public relations, an efficient management of the company, a rational use of resources, securing that professional standards are met in all activities undertaken by the company and ensuring high quality of works carried out.

### Natural gas business prospects and plans

As the demand for natural gas is on the increase, it is ever more important not just to make adequate forecasts of natural gas demand in the future, but also to give our attention and efforts to maximizing the efficiency with which this green fuel is used. It is especially important when we see the rapidly growing demand for natural gas in Europe and efforts of other countries to secure natural gas supplies based on long-term agreements. The price dynamics we have been seeing for some time past makes us reassess the impacts to natural gas consumption forecasts and to review our investment plans, too. On the

basis of the Customer Demand Analysis it may be presumed that in 2015 gas consumption in Lithuania will come close to 5 million cubic meters.

No less ambitious are the company's development plans: over the past 5 years Lietuvos Dujos AB has invested over LTL 550 million (EUR 160 million), and over the next 5 years our investments into the renovation, development and our system performance security enhancement is projected to approach LTL 1 billion (EUR 290 million). Out of the pending projects we may single out the construction of a new Gas Compressor Station which is needed for the further enhancement the capacities of gas transit to the Kaliningrad Region, which at the same time will upgrade the security of our gas supplies to our customers in Lithuania due to Lithuania's growing demand for natural gas. Also, it is planned that over years to come, each year, several thousand both households and industrial companies will become customers of Lietuvos Dujos AB; it is planned that the existing natural gas systems will be developed and modernized, quite a lot of towns and settlements are still waiting for their turn to get connected to the natural gas grid.

### Business environment is still complicated

The mission assigned to Lietuvos Dujos AB by the National Energy Strategy is loaded with the greatest responsibility of all. The company is expected to secure continuous and reliable natural gas supplies not only in the short-term but also in the long-term. Therefore, the necessary preconditions for a successful performance of the company include not merely huge investments (we talk about millions) and competent staff but also a soundly based and stable legal regulation. The new Law on Natural Gas enacted in the beginning of 2007 distorted the principles of the EU Gas Directive. Instead of the implementation of the ideas of the market liberalization, the common EU internal market conditions and the so-called energy exchange among the member states, total regulation and isolation have been prescribed. An obvious contradiction can be easily seen: the current version of the Law on Natural Gas fails to secure the transparency, safety and reliability upgrading, the significant investments into the creation of alternatives and the benefits to customers that are being declared. On the contrary, the provisions of the Law are in conflict with the international Gas Sector practice, they stall the process of the gas system development of Lithuania and even the gas supplies security enhancement projects provided for by the National Energy Strategy.

*Viktoras Valentukevicius*

*General Manager*

*AB Lietuvos Dujos*

*Lithuania*





## Russian gas can unite Europe – if we allow it

By Seppo Remes

The Russian Federation has the world's largest gas reserves; over 30% of the world's gas. It is also the world's largest gas producer, with roughly 670BCM of annual production. This position is not going to change in the foreseeable future. All decisions concerning these reserves are fully in the hands of the Russian Government.

Russian gas reserves are mainly located in the northern part of Western Siberia (Urengoi, Yamburg and Medvezhie are the biggest fields). Gas has been recovered for decades, mainly in Cenomanian structures, which are "convenient" because they are almost pure methane and easy and cheap to process (basically, just take away the water), because of the small depth of deposits and because of the natural pressure of gas flows. The fields are rather close to each other, which lowers infrastructure costs. There are estimates that fields' overall costs are as low as USD 1/boe (barrel of oil equivalent).

However, things are set to change. Firstly, drilling must gradually go deeper to more difficult Valanginian and Achimov structures, which is roughly 3-4 times more expensive. Secondly, new gigantic fields must be opened to production, which fundamentally increases capital costs in fields and in infrastructure (especially Yamal peninsula, starting with the giant Bovanenkovskoye field). The estimated cost for the Yamal peninsula first and second phase fields is roughly USD 35-40bn between 2009-2020, increasing the production to 300BCM/a (UBS Investment Research estimates). The majority of the cost is the pipeline from Yamal to Vologda. Gazprom can probably finance this fully from its profits. Thirdly, now all these costs must be covered by investors; previously the burden was shared by the Soviet state. Actually, the most difficult problem is how to optimize the opening of the new fields whilst also decreasing volumes from old fields to match the existing trunk pipeline and storage capacity. It is obviously efficient to open new gas storages to pump gas there in low consumption summer time, and thus decrease the need for additional, very expensive trunk pipeline capacity during peak winter consumption. Fears have been expressed within the Russian Government that investments have not been sufficiently large.

Gazprom's perhaps most important asset is its 159,000km trunk pipeline system, with 41,000MW of compressor stations and 65BCM underground storage (almost 15 years' worth of Finland's gas consumption). It has been estimated that the value of these assets alone, calculated as a replacement cost, is around USD 500bn, which is more than twice Gazprom's market cap. (at end of August).

Aside from its pure gas business, Gazprom is a very important financier of the Russian budget; it also makes it possible to keep domestic gas prices at lower levels via profits from gas exports. Gazprom also fulfills some social tasks, such as the like USD 1bn investment program in the gas distribution network to households in smaller towns and villages (domestic prices do not cover the investment costs; sales will be loss-making). The government's control also prevents any price dumping on export markets: all exports are done by Gazprom's daughter company, Gazexport. And one cannot forget the political aspect: it gives the Government the possibility to differentiate prices downwards to customers/countries it considers to be constructive and friendly towards Russia. However, I believe that this "discount policy" to many CIS countries during the last 10-15 years has been a mistake and has

cost Russia so far at least USD 50-100bn. And I at least have not heard one grateful word back from them;— on the contrary, there has been harsh criticism when prices were drawn to market levels. Imagine that during 15 years the Finnish paper and pulp industry had been selling its products, on a government recommendation, with very large discounts to other Finno-Ugrian countries, Estonia and Hungary!

Domestically, the basic dilemma for the gas industry is how to improve its efficiency and keep investments at very high levels. I do not believe that today's situation is optimal. The Gas Reform must introduce real competition to the sector, which first of all means real, fair, non-discriminatory access to trunk pipelines – not only on paper but in real life, with transparent rules adequately monitored. At the same time, tariffs must be at levels enabling Gazprom to maintain the system in good order. The Reform must also guarantee reasonable, profitable price levels on domestic markets. From the viewpoint of financial markets, Gazprom is not ever likely to get properly valued if it continues to be one huge "black box", where the efficiency of different core businesses is impossible to estimate.

Monitoring of fair and non-discriminatory access to pipelines can be arranged in different ways, for example, by setting up a government entity – like the System Operator in the electricity sector. This can also be done via non-governmental organization, where all producers, including Russian oil companies have representation. In both cases, it would be more effective to have a separate business entity, the Gazprom Pipeline Company for example, as a 100% Gazprom subsidiary, but with separate accounts and IFRS books. A more radical option would be to fully spin-off transportation from production and sales. There are clear signs that steps towards opening up Gazprom pipes for other producers are taking place, mainly because of the conflict of interests between Rosneft and Gazprom.

Domestic prices must be gradually drawn up to export net-back price levels (price at border minus transportation cost and export tax). The Russian Government has promised this for 2011. Because of very high international gas and oil prices, it is probable that the implementation of this decision will be delayed and in 2011 the level of domestic prices around Moscow will be only USD 110-120 per 1000m<sup>3</sup> (today's net-back price would be around USD 200). Now prices around Moscow are USD 50-60 per 1000m<sup>3</sup>. Full net-back pricing will take place probably 2013-2014. As a separate note, this is much more than the EU agreed during WTO negotiations with Russia.

Both pipeline access and price increases provide an incentive to other gas producers. It is important to use the gas produced by oil companies more efficiently (typically, most oil fields also have gas and vice versa). And it is important to get new gas companies into business to focus on small and medium sized fields where the gigantic Gazprom is not at its best.

Gazprom is a huge company with a market cap of over USD 200bn (at end of August, and at highest over USD 300bn). It is *the* Russian gas company, but it is also a big oil company, the biggest Russian electricity company and a lot of more (which is not core business and should be gradually divested). It is too big a company to be adequately and transparently valued by the markets. I am convinced that it would be better both for Gazprom and the government, as well as other Gazprom shareholders, to



have a deeper understanding of each of its businesses. In some cases it could mean a quite clear separation of the businesses with IPOs and/or partial sales; and in some cases perhaps the separation of businesses into separate legal entities could be enough (for example Gazprom trunk pipelines). I am convinced that the target of USD 1,000bn market cap for the whole group is only achievable with these actions

Aside from the above discussed domestic gas industry issues, there are extremely important international aspects. Gazprom receives some 70% of its income from exports, where it has monopoly rights. Gas prices on regional European markets are market driven. Gazprom is just a price taker; marginal prices are determined by more expensive Norwegian and North-Sea production. The half-hidden logic behind the Energy Charter is to create competition between different Russian gas producers on EU markets. However useful dreaming might be, we won't see this happen: Russia will in future continue to control, or at a minimum, coordinate its gas exports to prevent any potential dumping and consequently, the massive loss of tax revenues to the government. At the same time, I don't deem it impossible to have a system, where export quotas (physically or financially) are distributed in proportion to each gas producers' share in overall Russian gas production, but at the same time, sales would be channeled via one organization, be it the Gazprom structure or some to-be-created structure.

The basic dilemma between Europe and Russia is the nature of supply contracts: are they long-term contracts or not? This is a question of price, but also, more importantly, the question of security of supply and the question of the financial cost of enabling new pipeline investments. In all these aspects I have never understood the EU "hostility" to long-term contracts. Let me explain: Firstly, spot prices can only be an efficient price setter in the short term. Secondly, they are quite easy to manipulate (this is a very oligopolistic business). Thirdly, and most importantly, Europe will inevitably run into a gas deficit because it is either impossible or too expensive to finance tens of billions of new pipeline investments without any long-term take-or-pay supply contracts. In fact, Gazprom (and other producers) could just sit and wait until prices are extremely high because of the worsening deficits, and earn wind-fall profits when prices inevitably sky-rocket. And to dictate whatever price for any new additional gas supply. Fourthly, in this case we would be in a deficit situation for years, because investments take a minimum of 4-5 years to take effect.

Surely the best model would be the combination of long-term and spot markets, where the latter plays a role of keeping swing producers in business and cutting unnecessary over-investments, thus keeping also gas prices at lower levels. This needs effective regulation and

regulators (public and self-regulative structures), large enough storage capacities inside the EU (for all producers, including Gazprom) to react effectively into demand changes and also certain political guarantees that long-term contract terms are also valid after 20-30 years. Increased storage capacity for Russian gas would also greatly improve the supply certainty and would thus be one of the policy focuses.

Another issue often discussed is the security of supply for Russian gas deliveries. Technically, economically and politically, the more different pipeline routes, independent from each other, from Russia to EU there are, the better the security. Clearly, both North Stream and South Stream will improve the supply security; any risk management professional can confirm this. I also don't know any laws of chemistry or physics – or politics – that require that every pipeline in Europe should go via one certain country. Surely, at the same time, environmental procedures and requirements must be followed –not because of political populism, but for the environment.

The more we have pipelines going from Russia to EU, and the more we have Russian gas storage in the EU, the better. It is also good if Russian Gazprom is involved in the distribution businesses in Europe: this just makes the integration more valuable for the company. Also, politically the effect is the same. Both markets should be open for foreign investments: inside Russia for EU companies, especially in gas production, but also in gas processing, trading and distribution; inside Europe for Russian companies in production, trading and especially in storage and distribution. If parties want to put upper limits or restrictions on foreign ownership, it would be a reasonable compromise. Foreign ownership of trunk pipelines and certain strategic gas fields is a very sensitive issue for Russians. At the same time, Russian ownership of certain trunk pipelines in Europe is at least as sensitive issue for Europeans. Gradually, the trust and good track records would push away negative presumptions and full liberalization of ownership could be put on the table. Russian gas can become one of the most important single elements of unifying Europe, and of integrating Russia and the rest of the Europe. But this is only possible if we put aside biased presumption of Russia as "the bad guy", being guilty before she has even done anything.

*Seppo Remes*

*Member of Board,  
the Federal Grid Company, Russia*

*Member of Board,  
RusHydro, Russia*

## PGNiG – trying to be one step further

By Aleksandra Mierzyńska and Krzysztof Parkoła

Polish Oil and Gas Company (Polskie Górnictwo Naftowe i Gazownictwo - PGNiG) is the leader of the Polish natural gas market, as well as the only vertically integrated gas company in Poland. Formation of the PGNiG Group has enabled coordination of the upstream and downstream operations – from exploration and production to storage, trade and distribution of gaseous fuels.

PGNiG as a state-owned company was established in 1982 and then in 1996 transformed into a State Treasury stock company. Its Capital Group includes 57 specialized companies dealing with specific activities, such as gas distribution and sale, crude oil and natural gas exploration, geophysical and geological research, drilling services, etc. PGNiG business focuses on exploration and production of natural gas and crude oil, followed by gas sales to both industrial customers and around 6.5 million individual customers. The company produces oil and gas from domestic sources, but it also imports gas from Russia, Ukraine, Germany and from countries of Central Asia. Moreover, gas storage is an important part of PGNiG activities. The company owns six underground gas storage facilities of a working capacity at the level of 1.66 bcm, which represents 13.5% of the annual gas consumption by PGNiG customers.

The company owes its competitive edge on the gas market (which is now in the process of deregulation), chiefly to the natural gas and crude oil production. The core business of the PGNiG Group includes trade and distribution of natural gas. Following the separation of its gas trading business from the operation of the gas distribution network – completed in 2007 – the entire trading business has been taken over by PGNiG, while distribution is now handled by six Regional Gas Companies belonging to the PGNiG Group.

Given its revenue and profit streams, the company ranks among the largest and most profitable enterprises in Poland. In 2007, it posted PLN 16.7 billion in revenue and PLN 916 million in net profit. With the headcount of approximately 30 thousand, PGNiG is also counted among Poland's largest employers.

Sustainable value growth and minimization of the operating risk are a key strategic objective for PGNiG. It requires from the company continuous business development on the Polish and international markets as well as securing energy environment for Poland. Therefore, strategic priorities of PGNiG include:

- Extending the value chain, to include all activities from exploration and production to sales to customer service;
- Securing uninterrupted supplies of natural gas to our customers;
- Creation of diversified and stable portfolio of natural gas sources;
- Development of trading activity;
- Development of R&D activity.

The PGNiG Group launched projects designed to diversify supply sources in order to become independent from natural gas supplies originating from a particular direction or a particular supplier. Our strategy is focused primarily on

balancing natural gas supplies from the eastern direction with an increased volume of natural gas imports from the north and a concurrent increase in domestic gas production. As to achieve this goal, in 2007 PGNiG acquired a 12% interest in the license covering the Skarv, Snadd and Idun fields on the Norwegian Continental Shelf. The company's aim due to the annual production from the NCS fields is 0.5 bcm of natural gas and 0.4 million tones of crude oil. PGNiG also made another important step on the way to secure natural gas supply from Scandinavia to Poland by acquiring 15% in Skanled Consortium, which is developing the Skanled gas pipeline from Karsto in Norway to Sweden and Denmark.

In terms of domestic production, PGNiG plans to increase natural gas production from current 4.2 bcm annually to 4.6 bcm in 2009. Crude oil production will almost double in 2013 and reach 900 thousand tones (in 2007 it was 528 thousand tones). The key project for the crude oil production increase is development of LMG (Lubiatow-Miedzychod-Grotow) field in Poland. Resources of the this field are estimated at 7.25 million tones (53 mboe) of crude oil and 5.5 bcm (35 mboe) of natural gas.

PGNiG owns all domestic storage facilities connected to the gas distribution system. However, the current storage capacities allow the Group to store only natural gas reserves that can be used in case of short disruptions of supplies or to balance seasonal demand peaks. In order to fully meet the demand during abnormal peaks the company plans to expand working capacity of underground gas storage facilities to 2.8 bcm by 2012. Three from existing six underground gas storage facilities will be extended and also three new ones will be build in central and northern Poland.

The Group conducts exploration and prospecting work both in Poland and abroad in countries such as Pakistan, Libya, Egypt or Denmark. PGNiG work in that area involves mainly exploration of geological structures for natural gas and crude oil deposits. The exploration and prospecting for deposits comprise a study of historical data, geological analyses, as well as geophysical and drilling research. The work is conducted by PGNiG and its exploration, geophysical and geological service subsidiaries.

In its future actions, the PGNiG Group would like to concentrate even more on exploration activities – the Company considers to buy gas deposits in Pakistan, Libya or Norway. However domestic market will remain a priority for PGNiG.

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## Profiling as a key success factor in modern university strategies

By Tapio Reponen

Universities are facing several challenges at the moment. Globalization, freer markets for research and education, shifting demographics meaning fewer young people in industrialized countries, diminishing public financing and students' loss of interest in studying for several years are all changing the environment radically. At the same time the quality of research is improving in many developing countries and younger people there are increasingly interested in studying in respected western universities. Consequently there are global structural changes in University markets.

Markets will become more and more fragmented in a way such that there will be global players offering their services worldwide, both through distance learning using a variety of e-learning technologies and through personal customized lecturing. There will also be smaller specialized universities to meet the demands of focused customer groups. These smaller units need cooperation, networking, joint efforts and even some ownership arrangements.

In this new environment the role and importance of strategic thinking are strengthening, as universities have to position themselves in more competitive markets. Universities need a strategy generation process of an expert organization, where a shared view of the strategic objectives and their implementation could be achieved. The viewpoint of an academic leader is the following: How should we bring about the changes that are required?

The first stage of the strategy process is to define the business we are in. Based on this definition the goals of the strategy should be specified, operationalized and made explicit to the personnel. The difficulty lies in balancing the multiple goals of the modern university environment. Meeting the strategic objectives often requires the focusing and concentration of resources and efforts. The problem is how to motivate different groups of personnel to implement actively a focused strategy of conflicting desires.

The theoretical background should be in interactive strategy generation and knowledge creation. Knowledge generation is considered a process that leads to action being taken on the part of individuals involved. Strategy planning should be an interactive learning process to create a shared vision of linking operational objectives and available resources. To illustrate this development in the following there are some thoughts on the strategy of Turku School of Economics and Baltic Sea region as one of its focus areas.

Shaping the future, Turku School of Economics (TSE) is a university of economic science specialized in the

development of business knowledge and advancement of entrepreneurial activities:

- TSE's internationally recognized research activities target business development and the knowledge that drives it.
- The university offers broad-based training in Turku and Pori. Studies include a comprehensive choice of economic sciences, other business and finance-related subjects and foreign languages.
- The broad-based activities include also continuing and adult education services, executive education, research and development services, recruiting services among others.

Turku School of Economics has three focus areas, of which one is business knowledge in global environments. Through an interactive strategy process we have concluded that Baltic Sea area is one of our key areas. We put much effort on that research and we are convinced that this definition of policy is successful. Our way of thinking got confirmation on October 1st, when we signed a three year contract to coordinate Council of the Baltic Sea States' (CBSS) EuroFaculty project.

In this framework our Pan-European Institute (PEI) is a leading unit in Finland in the study of Baltic Sea Economic Region, especially Russia. All Europeans are important collaboration partners in its operations, but PEI has an active role in promoting a wider Europe and supporting its success.

In the present economic development a natural cooperation between Baltic countries and with Russia has a lot of potential. Finland has some strength like early adoption and even pioneering use of technological innovations. We are known for our strong mobile communications industry. In a business school it is possible to combine business knowledge and technological innovations. Our role is to help in implementing new innovative operating models.

*Tapio Reponen*

*Rector*

*Turku School of Economics*

*Finland*



## Germany and the Baltic Sea Region – challenges and opportunities for cooperation on energy security

By Markus Ederer

Regional cooperation in the Baltic Sea area is a success story. Following the fall of the Iron Curtain, the links that had historically been so strong around the Baltic Sea were imbued with new life. This was very much thanks to the Council of the Baltic Sea States. Germany has thus from the outset been a firm supporter of the reform and further development of this organization, a reform adopted by the CBSS this June at its Riga Summit. We want to strengthen the Council of the Baltic Sea States as a model of regional cooperation. It is a motor of our cooperation in the Baltic Sea Region – fuelled by an unparalleled wealth of contacts in the political, business, social and cultural fields. The Baltic Sea Region is a leader as regards competitiveness and innovation; our volume of trade is constantly growing. Another factor that will in future contribute to this success story is the initiative launched by European Parliament members from the Baltic Sea States and Sweden to enhance northern Europe's integration with the rest of the EU by means of cross-sectoral cooperation. Germany is thus very pleased that Sweden intends to make the EU Strategy for the Baltic Sea Region one of the priorities of its EU Presidency in the second half of 2009. We should not however forget to involve Russia as an important Baltic Sea State and CBSS member as well as Norway and Iceland as important regional stakeholders.

Our cooperation in the Baltic Sea Region has engendered considerable trust between us, it has brought us, the partner states, closer to each other. In our daily work together, many regional interests and projects crop up that we as Baltic Sea States share and could promote together. These include the development of trade and the maritime economy, infrastructure and transport, ecological sustainability and the improved use of the region's potential in the fields of education, research and technology, as well as the promotion of exchange between civil societies.

We need to significantly step up cooperation on energy policy. Energy security for the Baltic Sea Region is inseparably linked to European energy security. Even today, the EU is the largest internal market in the world with almost 500 million consumers. Even today the EU is the largest and most attractive gas market in the world. And it is widely expected to remain so until far into the future, since our demand for energy continues to rise. A study conducted by the German Institute of Energy Economics (EWI) and Prognos estimates that the EU will need an additional 150-200 billion m<sup>3</sup> of gas in the period to 2020. We should therefore work together to guarantee energy security for the Baltic Sea Region and the European Union for many years to come. We thus need to jointly exploit new sources, fund new pipelines and infrastructure projects, further increase the energy efficiency of our economies and practise a level of energy solidarity with each other that is worthy of the name.

A sustainable architecture for pan-European energy security should be based on the following pillars:

Firstly, energy security is only possible if we work with one another and not against one another. For this reason we must forge a cooperative framework that balances the interests of consumers, transit states, producer countries and business. This must involve the European Union, but should also include our neighbours, whom we should bind more closely to us by extending the Energy Community and further strengthening the principles of the Energy Charter Treaty.

Secondly, Russia will remain Europe's main energy supplier for the foreseeable future. But it is not correct to say that the dependence between the EU and Russia is unidirectional. Some 80% of Russian energy exports go to

Europe. And energy exports account for approximately 60% of the Russian budget. Russia thus needs us as long-term, steady consumers, just as we need Russia as our supplier. In addition, the Russian economy is in urgent need of modernization, and it cannot make lasting progress on this front without European technology, without European know-how. It would thus be more accurate to talk of a bidirectional dependency. We should shape this mutual bond to ensure that it is to our mutual benefit.

Thirdly, diversification of supply routes and energy sources remains one of the main priorities. The Extraordinary European Council of 1 September 2008 invited the Council and Commission to examine initiatives to be taken to this end. The Nabucco pipeline remains a key project, participated in by RWE, one of Germany's largest energy companies. Therefore the European Union, the Member States and the Commission should underscore their interest in the realization of the Nabucco project even more clearly than they have done to date.

Fourthly, energy solidarity in Europe is the current watchword. We understand the Baltic States' desire to address their unidirectional dependence on Russia as their oil and gas supplier and to tackle their energy-policy isolation on the north-eastern fringes of the EU. We therefore welcome and support the proposed plan for a Baltic energy network and the greater integration of the region's countries into the EU grid. The question of gas storage is also moving up the agenda, especially in the context of the EU Commission's second strategic energy review, which is due to be presented in November. For 2009 we support the initiative of pooling EU funds for energy projects in the Baltic Sea Region in a new regional development fund for energy in the Baltic.

Fifthly, de facto solidarity on energy supply issues is not a one-way street. Energy solidarity should always operate in both directions. We therefore hope that German and European energy-policy interests will be given fair consideration by our neighbours. In this context, we must be able to rely on projects that were agreed in the framework of the Trans-European Networks as a contribution to EU-wide security of supply really being implemented.

These include, in Germany's view, the Baltic pipeline, which has drawn much criticism, above all from the countries of the Baltic Sea Region. It is important for us to repeat that the Baltic pipeline is, firstly, not a purely German project, and secondly, that it is not a "political" project, but rather is being implemented as a European energy economy project. The Baltic pipeline is part of the Trans-European Networks. It will increase European energy security, since it will cover part of the rising demand for gas in the EU. Natural gas from the Baltic pipeline will be delivered to Germany, but also to France, Great Britain and the Netherlands. At the same time, Germany has always made it clear that it takes seriously the concerns of all Baltic Sea states, be they political or ecological.

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# Russia's ability to use its energy might

By Jyrki Terva

In the end of 2005, Russian president Vladimir Putin introduced the concept of Russia as an energy superpower to the public. In January 2006, the gas crisis happened in Ukraine. The decision made by Gazprom to close the gas valve resulted in a drastic weakening of Russia's image in Europe and elsewhere in the world as a reliable energy producer. Also recently during the war in Georgia in August 2008, there were renewed fears that Russia might cut its energy exports to the West.

What would be the possible effects of this kind of energy embargo on Russia itself? At the moment over 50% of Russian government tax revenue is generated by energy exports. Russian markets and the stock exchange are built on the foundation of wealth generated by the oil and gas industry. Thereby it is clear that in the event of disturbances to energy exports, negative impacts would be felt in the very foundation of the Russian economy. The stock market would collapse and the effects of capital flight would be felt in the real economy as well.

It is safe to state, that disturbing energy exports is not in Russia's interests. Instead, the ability of Russia to use its energy might revolves around three basic factors: the ability to control energy transit routes and distribution channels, the ability to make deals on energy supplies and the ability to control and finance energy production.

## New transit routes to bypass old ones

Control of the energy transit routes would guarantee Russia the independence required by its proposed energy superpower status. In the current situation this is not the case. Russian energy exports are currently dependent on Soviet era oil and gas pipeline infrastructure that resides in Ukraine, Belarus and Central-Asia.

To change the situation Russia has started to build new transit routes. The new routes bypass the old routes through the sea areas in the North and in the South of Europe. The routes in the North are the Nord Stream gas pipeline crossing the Baltic Sea and the new oil terminals in Primorsk and Ust-Luga in the Gulf of Finland. In the South the routes are the Blue Stream and South Stream gas pipelines crossing the Black Sea, and the Novorossiysk oil terminal on the Black Sea coast.

Russia has also repeatedly announced that it will not ratify the European Energy Charter Treaty. The treaty would require Russia to open up its pipelines to non-native companies. In contradiction to the treaty, Russia wants to retain its monopoly of the Central-Asian energy transit routes. All current pipelines from Central Asia, especially from gas rich Turkmenistan, go through Russian territory.

## The goal to control the value chain in European energy markets

Out of the Russia's energy companies, Gazprom and Lukoil have stated that they aim at controlling the whole value chain of their energy products starting from energy production in the fields to delivery to the end consumer. Russian companies often accuse the European Union for protectionism in its energy markets. A special target for criticism has been the energy market reform of the EU, which aims at separating production, transport and retail to be owned by different companies. The reform effectively prevents the control of the value chain.

Contracts on energy deliveries are a central instrument for Russia to influence relations with certain importing countries. Oil is sold through traders with short term contracts whereas gas is sold with long term contracts of 25-30 years. Russian oil is mainly being traded in the London raw materials exchange. Russia's own oil exchange was established on Putin's initiative in Saint Petersburg, but so far the traded volumes have not reach considerable levels.

Gazprom is the market leader of gas trade in Europe. The most important long term contracts were renewed with the main European customers in 2006. Gazprom has been very successful in making deals in recent years. Export revenue of the company has seen steady growth.

## Old technology prevents adjustments in energy production

As with the transport infrastructure, the production infrastructure in Russia is also inherited from the Soviet era. Technology has been upgraded to make production in the old oil fields more efficient, but the fundamental technological solutions are still out of date. Therefore, the ability of Russian energy companies to adjust their production is weak, in comparison to Saudi Arabia's ability to adjust its production according to the market situation.

The bulk of Russia's oil production originates from the fields of West-Siberia. Production from the old fields is static at its current levels. New investments are starting to be realised in East-Siberia, but the long term results of the new investments are highly dependent on oil price developments. The primary market of East-Siberian oil is in China.

Current gas production as well as new investments are located in Yamal Peninsula in the West-Siberia. The Schtokman field is also prepared for production, but Yamal is the first priority of Gazprom for the simple reason that the current transport infrastructure is starting from Yamal. Investment decisions concerning Schtokman are supposed to be made in September 2009.

The lack of available gas storages is affecting the ability of Russia to adjust its gas production. Therefore the gas reserves that are used during the winter heating season are being spent often too quickly. Similarly during the summer, gas production can often not be kept on-stream due to this lack of storage. Gazprom is addressing the issue by building new storages for the gas in Austria and in Saint Petersburg.

## Risks to the Russian energy might

Choices made by Russia which have been reflected in its energy policy in recent years appear contradictory. Russian energy companies have successfully increased their income generation and renewed contracts with their main European partners. At the same time Gazprom's efforts to control its distribution channels in Europe have been mostly unsuccessful.

Russia has also not succeeded in its goal to increase independence from the traditional transit countries for its energy transportation. New transport projects, including Nord Stream still entail many factors of uncertainty. At the same time relations to the old transit states of Ukraine and Belarus have been strained.

In gas production the most challenging years for Gazprom will be 2010-2015, when it is likely that domestic production will start to decrease at the same time when domestic consumption will continue to grow.

In the current situation, Russia's ability to use its energy might depends heavily on the continuation of high energy prices. The new projects which are planned demand huge investments, which are possible only if energy prices stay at their current high levels.

Lower energy prices due, for example, to the global economic slowdown could drive Russia's current energy policy into a dead end. However, if energy prices will continue at their present high levels, the situation might change to be more favourable for Russia in 5-10 years. This will require that the new proposed investment projects for energy production and for transit routes start to bring results.

Jyrki Terva

Consul for Trade, Economy and  
Cooperation with  
Neighbouring Regions

Consulate General of Finland  
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## Activities of the Polish Energy Group

By Tomasz Zadroga

### Who we are

**The Polish Energy Group (PGE Polska Grupa Energetyczna)** is the largest energy group in Poland involved in the generation, distribution and sale of electricity. The PGE Group is comprised of more than 100 subsidiary companies. The holding company is PGE Polska Grupa Energetyczna S.A., which is a 100% state-owned company.

The PGE Group has its origin in the establishment of Polskie Sieci Elektroenergetyczne S.A. ("**PSE S.A.**") in 1990 as a result of the major restructuring of the Polish energy sector. PSE S.A. was a major energy company, active mainly in electricity transmission and wholesale trade. In 2004 the activities of the Transmission System Operator were legally unbundled from PSE S.A. with creation of a subsidiary company. Since 2007 the Polish TSO (with its transmission assets) has been a separate company fully-owned by the Polish State.

In May 2007 the majority of the shares in two groups of power generation and distribution companies were transferred to PSE S.A. by the State. PSE S.A. changed its name to PGE Polska Grupa Energetyczna S.A. Moreover, pursuant to the requirements of EU law, the activities of the Distribution System Operators were legally unbundled from other activities through the creation of separate companies. Simultaneously, the integration of similar activities being conducted by different companies in the PGE Group started. This integration process is a major part of the current development of the PGE Group.

### What we do

The PGE Group was established as one of four energy groups in Poland, within the Governmental Programme for the Power Sector Restructuring, as a result of the consolidation process in the Polish power sector. The current activity of the PGE Group covers five business lines: mining (lignite) and electricity generation (lignite-based and coal-based, including power and heat cogeneration); wholesale trading of electricity; retail trade (electricity and heat); distribution of electricity; and generation of electricity from renewable energy services.

Generating more than 54 TWh annually (approximately 40% of the total electricity generated in Poland) utilising its 12.3 GW power generation capacity (more than 35% of the total installed capacities in Poland), the PGE Group trades in electricity on the wholesale market and provides **a safe and stable supply of electricity** to its approximately five million customers in Poland. The PGE Group's share of the retail electricity market is approximately 26%.

The PGE Group consists of two large lignite mines, more than 40 power plants and combined heat and power plants (CHP) (including renewable, hydro and wind power plants), eight Distribution System Operator Companies, eight electricity Retail Sales Companies, an electricity wholesale company and enterprises operating in other industries (including the telecommunications industry). Hard coal and lignite are the basic fuels used in the power plants of the PGE Group.

PGE's mission is **to build the Group's value by meeting the energy needs of customers**. In order to meet competition requirements and secure a high level of customer service, PGE's priority is to be customer-oriented and provide customer satisfaction.

### Potential of the PGE Group

The financial potential of the PGE Group allows it to undertake necessary investment projects which are of a critical significance to Poland's **energy security**, and hence Poland's economic stability and sovereignty. The market potential of the PGE Group makes it possible for the Group to successfully compete in the CEE region, while providing a guarantee of a competitive structure of the market in Poland, which translates into the competitiveness of the entire economy.

The Polish power sector today is facing major challenges. It must ensure Poland's energy security and meet the challenges of the country's growing economy, while meeting increasingly strict environmental standards.

In response to the new challenges and requirements, the PGE Group is embarking on activities in the field of new power technologies. These activities include participation in the Clean Coal Platform, as well as preparation of the Nuclear Energy Development Programme in Poland.

The good financial performance (2007 EBITDA of PLN 4.7 billion) reported by the companies of the PGE Group in recent years has been made possible by our business being focused on building value. In the power market not only price but also the quality of customer service are the key competition factors. Therefore, the PGE Group is implementing a programme aimed at standardisation and continuous improvement of the quality of the services provided.

### Development of the PGE Group

One of PGE's key strategic goals is to create value for the shareholders through **continuous development of the Group**. The largest investment project currently under construction is the new 858 MW power block at Belchatow power plant. PGE intends to dedicate significant resources for the modernization and construction of the electricity network and generation infrastructure, which will allow it to take advantage of the emerging integrated market in Europe.

*Tomasz Zadroga*

*President and CEO*

*PGE  
Polska Grupa Energetyczna S.A.*

*Poland*



## D-6 development – dialogue with the local communities and the government

By Yury S. Kadzhoyan

LUKOIL places a strategic emphasis on its operations in the Baltic Sea region.

It is a key export corridor used to export Russian oil and petroleum products to Europe. This fact contributes to integration of production, transportation, refining and distribution facilities into a single production chain.

Based on the vertical integration principle, LUKOIL has been making investments into development of transshipment and distribution facilities in Northwestern Russia. The Company owns two transshipment terminals on the Baltic coast: one in Izhevskoye settlement, Kaliningrad Oblast, and the other in Vysotsk port, Leningrad Oblast.

Moreover, LUKOIL operates an extensive distribution network in Northwestern Russia, Finland, Lithuania, Latvia, Estonia and Poland. To ensure supplies of petroleum products to this network, the Company has been considering an option of purchasing refining facilities in the Baltic Sea region.

Continental shelf development is yet another most important area of LUKOIL's operations in the Baltic Sea region. In 2004 LUKOIL-Kaliningradmorneft, one of LUKOIL's subsidiaries, started production at D-6 field located 22.5 km off the shore of Kaliningrad Oblast.

It was for the first time that LUKOIL had been engaged in a complex construction of field facilities. A modern steelworks factory with the state-of-the-art equipment was built to construct the offshore ice-resistant fixed platform.

We are currently using the engineering solutions that were first implemented in the Baltic Sea for development of the Caspian fields. The steelworks factory was used as the groundwork for construction of the offshore ice-resistant fixed platform (LSP 2) which is to be installed at Korchagin field in the Russian sector of the Caspian Sea.

The European community was concerned about the D-6 project from stage one. Few believed that offshore drilling would have no adverse environmental impact. At that time we were facing two challenges: one was to come up with the engineering solutions which could minimize the hazard of environmental accidents and the other one was to convince all concerned parties that the project posed no threat to the unique Baltic environment.

It is still difficult to say which of the tasks was more complicated. Nevertheless, both of them were successfully accomplished.

From the technical point of view, the project is secured against any environmental safety related problems due to its closed oil gathering, transportation and treatment system. Produced oil is treated to comply with the stock-tank oil parameters at onshore facilities, as opposed to being treated on the platform itself, which happens in other parts of the Baltic Sea. Oil is fed to the shore via a subsea pipeline which considerably reduces the risk of oil spill accidents.

The "zero discharge" production drilling technology is also completely safe. It involves transportation of all household and production waste onshore for further processing and disposal.

To control the environmental state at D-6, LUKOIL-Kaliningradmorneft is performing 24-hour satellite monitoring of the Baltic Sea. More than three million tons of

oil has been produced here over four years of the field's operation. And still there has not been a single case of environmental pollution.

In 2006 LUKOIL-Kaliningradmorneft completed certification of crude produced at D-6. Now, if there is a need to identify the source of oil pollution in the Baltic Sea, it suffices to compare the samples of oil slicks with the data contained in the respective certificates to exclude D-6 platform from the list of suspected pollution sources.

Today neither the European governments, nor the environmental organizations are concerned about LUKOIL's operations in the Baltic Sea. Moreover, our company's experience in terms of safe operation of offshore fields has been highly rated by HELCOM, the Helsinki Commission. The "zero discharge" requirements became part of the new "HELCOM Baltic Sea Strategy" signed by the ministers of the member states in Poland in November, 2007.

This story of success was made possible due to close cooperation with the local communities and the government, discussions on the company's stance and project details, and constant progress reports.

We managed to effectively communicate with representatives of the European Parliament, Euroregion Baltic, the already mentioned Baltic Marine Environment Commission also known as the Helsinki Commission, Ministry of Environment of Lithuania, the press and electronic mass media of Germany, Spain, France, Poland, Estonia, Latvia and Lithuania.

Such communication was largely possible due to visits paid by European representatives to the production facilities of LUKOIL-Kaliningradmorneft i.e. D-6 offshore ice-resistant fixed platform, Romanovo oil gathering unit and integrated oil terminal in Izhevskoye settlement.

In October 2004, soon after the field was put into operation, Kaliningrad Oblast hosted official delegations of HELCOM, the Latvian Ministry of Environment and representatives of the European mass media.

As part of such visits, they had an opportunity to find out for themselves how concerned LUKOIL was about its industrial and environmental safety, and have their questions answered first-hand, i.e. by experts immediately responsible for operation of production facilities. The result was that the Baltic Sea shelf development dialogue became more professional and relevant.

The most valuable lesson we learned in the course of D-6 development is that only those projects which meet the interests of all parties concerned, whether those of the investor, the local communities or the government, can become a success.

*Yury S. Kadzhoyan*

*Director General*

*OOO LUKOIL-  
Kaliningradmorneft*

*Russia*



## Estonian oil shale sector undergoing changes

By Janek Parkman

Oil shale, just like coal, is also a sedimentary rock the resources of which in the world are very vast. Still, compared to coal, the energetic value of oil shale is several times lower. Oil shale, just like coal, was used quite extensively in many countries of the world until the middle of last century. When oil and natural gas were widely taken into use the importance of coal in world energy decreased and the importance of oil shale disappeared almost completely. Today, the almost centennial use of oil shale has remained only in two countries of the world. These countries are China and Estonia.

In Estonia where there are no resources of oil, natural gas or coal either, the use of oil shale in the beginning of last century was the only possibility to cover domestic energy needs. During the time when Estonia while being one of the Soviet republics could freely use a part of the oil and natural gas of the whole Soviet Union, the importance of oil shale use decreased. As an independent state Estonia has to pay market price for import fuel and therefore domestic energy resources are increasingly more important. Today, oil shale is the most important energy source of Estonia and its importance increases in line with the worldwide price increase of fuels. In 2007, 19 million tons of oil shale was mined. Oil shale electricity covered more than 95% of Estonia's electric energy. Shale oil received from oil shale treatment covers 100% of Estonian boiler plant needs that operate on liquid fuel. Oil shale is also used as raw material for cement and chemical industries. All these products are also exported to other Baltic Sea countries.

Concern about greenhouse gases is diminishing the solid fossil fuels based energy production. The use of Estonian oil shale for power generation is diminishing for the same reason and by 2015 the production output of oil shale electricity will probably diminish twice. However, as the demand for liquid fuels is constantly high, Estonian manufacturers of shale oil are increasing their production outputs. If, 400 000 tons (2,5 mln bbl) of liquid fuel were manufactured from Estonian oil shale in 2007, then according to certain forecasts this output may reach up to 1,7 million tons (10,5 mln bbl) by 2015. This output would cover the whole Estonian need for liquid fuel, including the need for motor fuel.

The development strategy of oil shale up to year 2015 is currently in the legislative proceeding of the Estonian Parliament. This document contains political agreement on the estimated mining volumes of oil shale and trends of oil shale use. This will first of all set guidelines for the whole Estonian oil shale sector how the Estonian state and industry should reduce in cooperation the environmental effects of oil shale sector and effect on human

environment. Further appraisal of oil shale products is also a priority specified in the development plan that would still provide a bigger surplus value with a smaller volume of resource use. Technological innovations are considered that are necessary to be introduced both in oil shale mining and manufacture of oil shale products. Estonia is probably the only country in the world where the Parliament is devoting such great attention to oil shale as mineral resources and its use. However, this is understandable because oil shale has a unique role in Estonian economy.

Estonian oil shale manufacturers are also active in other countries besides Estonia where there is a wish to develop oil shale industry. Government owned power Company Eesti Energia AS is currently developing an oil shale mine in Jordan. Privately owned Viru Keemia Grupp AS is present in the Ukraine in the Boltysk oil shale deposit. Besides Estonia there are big oil shale resources along the Baltic Sea in Russia in the Leningrad oblast where shale oil production capacities existed up to 2004. Russia plans to revive the oil shale treatment in the Leningrad oblast and Viru Keemia Grupp AS hopes to contribute to it with its skills. In addition to the above mentioned, oil shale resources are being introduced in several countries around the globe, including USA, Australia, Canada and Brazil.

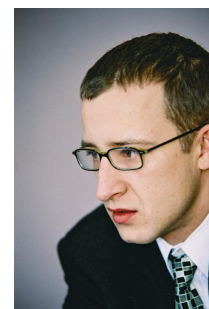
Maintaining the know-how of oil shale production and the existence of corresponding scientists and engineers creates an excellent possibility for Estonia to witness the rebirth of one industrial sector. At the same time the establishment of one heavy industry sector demands considerably more than the scientists and engineers of just one country could offer. With great probability the cooperation that is already taking place between the engineers and scientists of Estonia and other Baltic Sea countries will still reach to a completely new level. Leading mining engineers, chemists and power engineers of the whole world can exchange knowledge and experience so that everyone would benefit from it. At the same time the countries that develop the oil shale industry will ensure their energy security and attract huge investments in their economies.

*Janek Parkman*

*Chairman of the Board*

*Viru Keemia Grupp AS*

*Estonia*





## Energizing opportunities

By Christian Lund

StatoilHydro was the first oil company to offer coffee and hotdogs when it entered the Baltic market in 1992. Today the Norwegian company operates around 400 service stations in the Baltic region and Poland.

-Our expectations have been exceeded, and we are very excited to see that StatoilHydro's growth in the Baltic countries and Poland continues, says Vice-President for Retail Jørn Madsen.

As the first foreign oil company, StatoilHydro opened a service station in Tallinn in 1992. Today StatoilHydro operates 190 Statoil stations in the Baltic countries, with a market share of 20 to 30 percent. In Poland StatoilHydro has 260 outlets.

-Early experiences from the Baltic region proved that our concept was very successful with local customers, so expanding in this market has been a natural growth strategy for StatoilHydro, says Madsen. He is now planning for expansion in the Russian market.

-We have already established a presence in Murmansk, with eight service stations, and working towards opening our first station in St. Petersburg by late 2009, says Madsen.

### Food to go

-We regard the Baltic countries and Poland as very interesting markets, characterized by strong economic growth, increased purchasing power among consumers and geographical proximity to our home market in Scandinavia.

StatoilHydro has invested a lot in its station network, and has focused on building an organisation with a consistent profile. The stations are primarily company owned, and are mostly full service stations.

-When the company started its Baltic operations in the early 1990s, Statoil was the first chain to introduce hotdogs and coffee, and has been a leading player in convenience ever since, says Madsen.

-The Polish market is even bigger than Scandinavia and the Baltics combined, and we are working to expand our presence. There have been significant developments in these markets since we opened our first stations. The Polish market is very competitive, with many local and international companies. The past few years we have seen a shift in demand from grocery to convenience goods, and we have developed our offer accordingly, says Madsen.

### Serving the business market

In addition to servicing retail customers at the pump, StatoilHydro has a considerable energy business in the region, marketing commodities such as fuel oil, aviation fuel, and lubricants for industrial machines.

- In Poland we are the largest foreign supplier of lubricants, with a market share of seven percent, says vice president for Energy, Hans-Olav Høidahl.

While StatoilHydro's home market in Scandinavia is relatively mature, the Baltic region, Poland and Russia are all markets with strong growth. In 2009 StatoilHydro will double the number of employees in the Russian lubricant business.

-We are experiencing increased economic activity, and many of our Scandinavian customers are now moving into new markets in the Baltic region and Russia. They are investing in new capacity, and want the highest quality lubricants for their processes.

### New plant in Poland

In Poland, StatoilHydro is serving several large industrial customers, through a program called "Total Fluid Management".

-This is a concept where we enter into partnerships with our customers, to serve all of their fluid management needs. We dedicate several full time employees to a factory, ensuring that the customer is always getting the right product and service quality. This has proven to be a very successful concept, says Høidahl.

### StatoilHydro is also building capacity in Poland.

-We recently opened a new lube plant in Ostrowiec, with a production capacity of 15 000 cubic meters extension possibility up to 30 000 cubic meters. This plant is an important part of our strategy, and will also be able to export to the Russian market, where we expect the strongest growth in the years ahead.

### Fuelling Riga Airport

StatoilHydro is currently supplying aviation fuel to Riga International Airport and will enter in to the finish market from year end.

-The Polish market for aviation fuel is monopolized, but liberalisation and increased competition are priorities of the European Commission, so we pay close attention to the developments in this market, says Mr. Høidahl.

StatoilHydro has been in the Baltic region and Poland for more than ten years.

-The EU enlargement has been positive for our business. Last year we had six percent growth in our lubricant business, and we aim to keep this rate in the years ahead, says Høidahl.

-It's always a challenge to enter new markets as a foreign player. But we have succeeded in building a good sales organization. I would say that our success is a result of working closely with our customers, and supplying high quality products.

*Christian Lund*

*Public Affairs Manager,  
Energy & Retail Europe*

*StatoilHydro ASA*

*Norway*



### Facts about StatoilHydro's operations:

Poland 261 gas stations. 1 lubes plant (Ostrowiec).  
4 300 employees.

Estonia  
52 gas stations. 700 employees.

Latvia  
68 gas stations. Aviation fuel. 850 employees.

Lithuania  
71 gas stations. 750 employees.

Russia  
8 gas stations. 130 employees.

## The Russian Arctic is turning into an important energy supply route to Europe alongside the Baltic Sea

By Erkki Kotiranta

The current situation in the Caucasus has increased the importance of the Baltic Sea as Russia's import and export route. It is clear that ensuring trouble-free and on-time oil transportation is crucial to the Russian economy.

Oil industry accounts for about 30 percent of Russia's GDP, more than 75 percent of export earnings and about 60 percent of the national budget. These figures indicate the importance of oil for the economy and prosperity of Russia.

Regardless of whether we talk about natural gas, oil, coal, or electricity Europe is the most important market for Russia both at present and in the future. But the Baltic ports will not be able to handle the future flood of Russian oil to Europe. At the moment 60 percent of Russian oil shipments are loaded at ports in the north-east region of the country. The port of Primorsk alone accounts for more than 70 percent of Russian crude oil exports.

### The Importance of the Arctic is rising

According to Russian authorities the development of Russian economy depends on further increasing the production of oil and natural gas. They estimate that the production of natural gas is growing at an annual rate of 1 percent. The natural gas pipeline to Europe which is currently on the drawing board supports this view.

Now that the price level of crude oil has stabilized at above USD 140 per barrel, investments in the Arctic area have become profitable. On the other hand, if the current price level remains unchanged, growth prospects are going to diminish which will have inevitable consequences for the Russian economy.

Lukoil's Varanday terminal will be opened by the end of 2008. Shipments will be carried by Sovcomflot with an estimated annual capacity of 3 million tonnes but there are plans to increase throughput up to 12 million tonnes annually.

87 percent of Russian natural gas and oil reserves are located in the Arctic area, compared to only 1 percent located in Southern Russia. The appeal of the Arctic is reflected, for instance, in ship orders. Five arctic tankers with a capacity of over 75,000 dwt have been built recently.

Moreover, Sovcomflot has ordered two vessels of over 114,000 dwt with an option for four additional ships. Gasprom is planning to order dozens of new drilling rigs for the Arctic region by the year 2030. There are also plans for large natural gas carriers.

It is obvious that the increasing demand for oil carriers requires new ice-breaking capacity to ensure the safety of shipments. Russians are planning to order four nuclear-powered icebreakers by the year 2018.

### Political aspects

Russia has shown active interest in expanding its Arctic territory. One indication of this effort is the planting of the Russian flag at the North Pole. The expedition was successful, but the media turned the mission against Russia. In 2001 Russia tried to persuade the legal committee of IMO to annex certain Arctic territories to Russia, but IMO did not approve. The proposal will probably come up again in 2012.

We are going to see further activity all over the Arctic in Russian, American, and Canadian territories. Expeditions and seminars will be organised to study the North-East passage, North-West passage and other regions of the Arctic.

The Murmansk region will see significant growth and in the future it will become the main route of energy shipments to Europe and an important supply route to the United States, as well. This means new challenges to shipbuilders and to operations in this area where the nature is extremely sensitive.

*Erkki Kotiranta*

*Neste Shipping Oy*

*Vice President*

*Finland*

# Safe and reliable global maritime transport of dangerous chemical cargo via the Baltic Sea

By Jyrki Vähätalo

We are dependent on maritime transport. Currently around 90% of all world trade is carried by sea. Sea transport includes chemicals that are frequently – but not always – classified as dangerous. Today, the transport via Finnish ports of classified dangerous chemical cargo, i.e. noxious liquid substances and gases carried in bulk, solid materials possessing chemical hazard and solid bulk materials hazardous only in bulk, harmful substances and dangerous goods in packaged form, amounted to about 20 million tonnes.

The regulations, rules and recommendations concerning global shipping of dangerous cargo are based on the work of the International Maritime Organization (IMO). The legal instruments are codes and conventions. An active specialized agency of the United Nations, the IMO today has 168 Members after the Cook Islands became a member state on 18 July 2008. IMO plays a key role in ensuring safety of life at sea and in protecting the marine environment from ship source pollution - as summed up in IMO's mission statement: "Safe, Secure and Efficient Shipping on Clean Oceans."

Numerous vessels carrying also dangerous chemical cargo sail through the Baltic Sea, a unique, brackish inland sea with a sensitive ecosystem. The Baltic Sea can be considered an inland lake for the countries in the Baltic Sea region. In fact, it was only about 8,500 years ago that the Ancylus Lake was connected with the Atlantic through the Danish Straits and later formed what is now our Baltic Sea. Today, the Baltic Sea has the official status of a Particularly Sensitive Sea Area (PSSA) with the exception of the waters under sovereignty of the Russian Federation. A PSSA is an area which needs special protection through action by the IMO because of its significance for recognized ecological, socio-economic or scientific reasons and which may be vulnerable to damage by international maritime activities. When a PSSA has been approved, specific measures can be used to control the maritime activities in that area, such as equipment requirements for ships and installation of vessel traffic services (VTS). In the Baltic Sea safety measures involving shipping routes have been intensified including VTS systems, such as the Automatic Identification System (AIS) and the compulsory Gulf of Finland Reporting System (GOFREP) applied by Finland, Estonia and Russia.

The International Convention for the Safety of Life at Sea (SOLAS) covers various aspects of maritime safety including dangerous chemical cargo: the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) provides an international standard for the safe seaborne carriage of noxious liquid chemicals in bulk. The corresponding codes for gases carried in bulk are the IGC Code and the BC Code for solids. To minimize the risks to ships, their crews and the environment, the IMO's Codes prescribe the design and construction standards of ships and the equipment they should carry, with due regard to the nature of the products involved.

In 1992, the United Nations Conference on Environment and Development, familiarly known as the Rio Summit, established the Globally Harmonised System of Classification and Labelling of Chemicals (GHS). The GHS provides a basis for harmonization of regulations on chemicals at national, regional and worldwide level, also an important factor for trade facilitation. GHS coincided with the review of Annex II of the International Convention for the Prevention of Pollution from Ships (MARPOL). The revised MARPOL Annex II Regulations for the control of pollution by noxious liquid substances in bulk entered into force on 1 January 2007. It includes a novel four-category classification system for noxious liquid substances designed to be in harmony with the GHS. Improvements in ship technology, such as efficient stripping techniques, have

made possible significantly lower permitted discharge levels of noxious liquid substances. Noxious liquid substances from tankers may accidentally enter the marine environment through operational discharge, spillage, or loss overboard. Nevertheless, accidents of noxious liquid substances are rare due to the high-level safety standards; for instance, most tankers are of double hulled construction to prevent outflow of cargo even in the event of a collision or grounding.

Cargo transport units (CTUs) have revolutionised the worldwide transport including dangerous chemical cargo. The ancient Egyptians used amphorae to ship liquid cargo and only recently, in the 1930's, American entrepreneur Malcolm McLean (1913-2001), conceived of the container. Containers, commonly referred to as CTUs, replaced the traditional bulk method of handling goods. In sea transport the CTU is typically a freight container or a trailer. Notably, the volume of shipping of dangerous goods packaged into CTUs continues to grow significantly both worldwide and through the Baltic Sea.

The international rules for the carriage of packaged harmful substances and dangerous goods in packaged form are set in the International Maritime Dangerous Goods (IMDG) Code. The IMDG Code has been harmonised with the United Nations Recommendations on the Transport of Dangerous Goods and with other modal regulations (air, road and rail). In accordance with the principles set out in the UN Recommendations, the IMDG Code divides dangerous goods into 9 classes. The new GHS criteria for harmful substances, i.e. substances which are identified as marine pollutants only, will take effect from 2010.

The IMDG Code does not distinguish between ocean crossing and transport in smooth sea areas, also described as the concept of low wave heights. In the Baltic Sea today, most of the transport of packaged dangerous goods is carried out by trailers in ro-ro ships on relatively short voyages and within low wave areas. By derogation from the provisions of the IMDG Code, the Memorandum of Understanding on the Transport of Dangerous Goods in ro-ro Ships in the Baltic may be applied on all ro-ro ships operating in the Baltic Sea. The Memorandum is a multimodal agreement on the transport of packaged dangerous goods between Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Sweden and Poland. The Memorandum has existed for more than 25 years with the purpose of facilitating multimodal transports of dangerous goods from land mode to sea mode and *vice versa*. The Memorandum is allowed under the existing provisions of the IMDG Code. We are proud of the fact that the safety records are excellent.

Today, we live in a society which is supported by a global economy. Maritime transport of dangerous chemical cargo via oceans and smaller seas such as our fragile Baltic Sea is an integral part of global economy. Fortunately the countries in the Baltic Sea region, including Finland which became a member of the IMO in 1959, actively struggle for safe, secure, environmentally friendly and efficient shipping of dangerous chemical cargo to the world via the Baltic Sea.

Jyrki Vähätalo

Senior Maritime Inspector

Finnish Maritime Administration

Finland



# Al Qaeda's threat to oil and gas assets in the Baltic Region<sup>1</sup>

By Peter F. Johnston

Contemporary energy security is threatened by terrorist attack, particularly since al Qaeda has encouraged strikes on oil and gas infrastructure. The Baltic Sea region is not immune to this threat and could find itself the target of an al Qaeda assault at any time. The impact of such an event would be extreme in terms of the ecological damage, clean-up and also the affect on global oil prices.

## The Global Threat

The leadership of al Qaeda intends to overthrow what it considers to be corrupt regimes in Muslim countries and replace them with a single Islamic Caliphate. Osama bin Laden's 1996 fatwa entitled, "Declaration of War against Americans Occupying the Land of the Two Holy Places," identified the expulsion of US and Western countries deemed to be supporting these regimes as a first step. In this fatwa bin Laden railed against what he argued to be artificially low oil prices controlled by the US. He insisted that the governments ruling the oil producing Muslim countries were robbing, in conjunction with the US, their own people. He also indicated that killing foreigners and causing economic hardship for the US through economic boycotts would convince them to leave. However, he argued against targeting oil and gas infrastructure in the Middle East in order to avoid hurting local economies.

In a 1998 fatwa, bin Laden reiterated the need to attack Americans, their economic interests, and the Muslim regimes supported by the US. He also widened the list of appropriate targets and locations to include US allies, declaring that it was the duty of all Muslims to attack these targets in any country possible.

In 2004, bin Laden advocated attacks aimed at oil and gas infrastructure in the Middle East used to supply the West. A January 2007 internet publication released by al Qaeda, *Sawt al-Jihad*, extended the threat to oil and gas infrastructure that provided resources to the US and its allies throughout the world and noted that oil is the lifeblood of the G-8 and the industrialized world.

Al Qaeda and other militant Islamist groups have responded by attacking energy infrastructure in the Middle East. Noteworthy incidents include the bombing of the French oil tanker, *MV Limburg* on October 6, 2002 off of the coast of Yemen; attacks on pipelines in Yemen in 2006 and 2007; and 2 separate attacks on foreign oil industry executives in Saudi Arabia in May 2004, killing 22. The oil and gas industry has also been targeted in Iraq. According to the Institute for the Analysis of Global Security Iraq Pipeline Watch, there were 469 attacks on pipelines, refineries, energy workers, and storage facilities in Iraq from June 12, 2003, to March 27, 2008.

More alarming was al Qaeda's thwarted February 24, 2006 attack on Saudi Arabia's Abqaiq refinery. In April 2007 an al Qaeda cell was arrested allegedly preparing to strike Abqaiq again. This hub processes roughly two-thirds of Saudi oil thus is key to the Saudi Arabian and global petroleum industry. These attempts indicate al Qaeda's intention to inflict significant global economic damage.

## The Baltic Threat

Oil and gas infrastructure in the Baltic region has not been specifically mentioned in al Qaeda fatwas or documents advocating attacks. However, this should not lead one to conclude that attacks will not occur. This is because, with the exception of Russia, the Baltic states are all members of the West and thus are all targets of al Qaeda. More specifically, all of these states, again except Russia, contribute troops to the International Security Assistance Force in Afghanistan (ISAF) while Denmark, Estonia, Finland, Latvia, Lithuania, and Poland have, or had, forces deployed with the Multi-National Force in Iraq (MNF-I), making them targets of al Qaeda and sympathetic militant Islamist groups. Russia is likely a target since it exports approximately 400,000 barrels per day (b/d) of crude oil and refined products to the US. Moreover, its military actions against Islamists in Chechnya are still fresh in the minds of many extremists.

Denmark has also gained al Qaeda's attention due to the publication, in a Danish paper, of cartoons depicting the prophet

Muhammed that offended some Muslims. The Danish embassy in Pakistan was attacked in June, 2008, and an al Qaeda spokesman released a statement in September promising that Denmark would endure more attacks in order to "...wipe you [all non-Muslim Danes] from the face of the earth."

The oil and gas infrastructure of the Baltic region offers many targets for terrorists. Russia exports much of its tanker-borne crude through the Baltic Sea via the port of Primorsk. Throughput in 2007 was roughly 1.5 million b/d and construction of the Baltic Pipeline II will increase this amount. Smaller volumes of Russian oil are shipped from Baltic ports located in Estonia, Kaliningrad, Latvia, Lithuania, and Poland. These facilities, along with the Mazeikiiai refinery in Lithuania, receive their oil either by pipeline or train from Russia. Russian gas also transits to other European markets via the network of pipelines in the Baltic region. As well, refineries in other Baltic states including Denmark, Finland, Germany, Poland, Sweden, and Russia are potential targets. Also, Russian oil major Lukoil's Kravtsovskoye offshore oil platforms are located in the Baltic Sea. Finally, the Nord Stream Pipeline, once built, could be vulnerable to attack.

The *MV Limburg* attack demonstrated that al Qaeda has the ability and intent to strike oil tankers. Tankers in the Baltic Sea are constrained by extremely busy and narrow shipping lanes. They can exit the Sea via the 3 Danish straits, which narrow to 4 km between Sweden and Denmark. They may also use the Kiel Canal to transit to the North Sea, although few tankers are small enough to do so. Regardless of their routes, oil tankers using the Baltic Sea are vulnerable to attack — more so at these choke-points.

A successful attack on a tanker in the Baltic Sea would have tremendous regional and international repercussion. Regionally, given the 30 year period required for a complete water exchange in the Baltic Sea, the ecological impact and the clean-up costs would be immense. Globally, it could cause economic problems by driving up the cost of oil.

## Conclusion

The threat of an attack on oil or gas infrastructure in the Baltic region is real. Al Qaeda has specifically identified Denmark as a target and all other states in the region are implicitly targeted due to their association with the West and also, except for Russia, because of their participation in the MNF-I or ISAF. Russia's oil exports to the US make it an al Qaeda target. There are numerous vulnerabilities in the region, with oil tankers perhaps being the most lucrative. Granted, it is easier for al Qaeda and like-minded militant Islamist groups to strike targets in the Middle East. However, these terrorist organizations have demonstrated a desire and capacity to operate further afield suggesting that a major attack in the Baltic Sea region is possible.

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<sup>1</sup>This paper, its interpretation, and any opinions expressed herein, remain those of the author and do not necessarily represent, or otherwise reflect, any official opinion or position of DND or the Government of Canada.



## Russian shipbuilding – is a rapid turnaround possible?

By Arild Moe and Lars Rowe

According to Russian authorities, the country's shipbuilding industry is in a deep crisis: Labour intensity at Russian yards is 3 to 5 times higher than in other countries, and Russian yards take from 2 to 2.5 times longer to build similar ships. In 2007 the Russian Ministry for Industry and Energy (Minpromenergo) launched a strategy for the further development of the shipbuilding industry. In the strategy document two areas stand out: Russia's military capabilities, and the development of petroleum resources on the Arctic continental shelf.

The strategy has two main elements: development of a state investment programme for civilian shipbuilding and reorganization of the industry. All in all, the programme represents a very ambitious policy of modernizing Russia's shipbuilding industry. The goal is that the industry by 2016 is to be competitive and able to cover much of Russia's shipbuilding needs, and even conquer a 'significant share' of the world market.

The total cost of the federal target programme 'Development of civilian marine engineering for the period 2009–2016' is estimated to be 136.4 bill roubles (approx USD 5.5 bill.). Even if the sums are big, when spread out over the years and between the various sub-programmes, their contribution will not necessarily be strongly felt. But the main concern is with the approach. It is an attempt to force through modernization and innovation by decree, which is reminiscent of the centrally planned economy. It is a top-down approach, where little is said about incentives for innovation from below. In defence of the programme, one can argue that, given the problem description in official documents, the situation in the sector is so serious that only a concentrated infusion of capital and concrete tasks from above can bring it back on its feet. But if this is true, the goals sound overly ambitious.

The other main element of the shipbuilding strategy is a comprehensive reform of state management of the naval industry. This reform entails establishing a state holding company, the Unified Shipbuilding Corporation (*Obedinennaya sudostroitel'naya korporatsiya* – OSK). This will be the umbrella organization over three regional state-owned holding companies and one non-regional one, with special areas of competence within naval production. The aim of the reform is to establish an integrated structure that gives the state full control over key decisions, but it is also clear that an important goal is to secure cooperation between yards.

It is still too early to tell exactly how the reorganization will be carried out. But the reform is very much in line with the strong centralization trend seen in Russia in recent years and a belief that central administrative agencies will be the most likely providers of a new and efficient structure in the shipbuilding complex through active intervention. Moreover, the shipbuilding industry in Russia is clearly regarded as a sector of national significance, both militarily and within the civilian sector, justifying strong state involvement. This point is further augmented by the large military presence in Russian shipbuilding: military orders currently make up 77 per cent of the order books at Russian yards. Very few yards have an exclusively civilian profile.

It must be noted though, that not all Russian yards are integrated in OSK. Three of the most important yards – Vyborg, Severnaya verf and Baltiyskij zavod in St. Petersburg – are still privately held. It is speculated whether the owners of these enterprises will be asked to sell their assets wholly or partly to the state. The apparently most successful yards are in private hands and the government may want to include them in the state corporation to help develop the whole sector.

The Ministry's strategy makes little reference to the need for international collaborative programmes, which could allow for Russian insight into the technological capacities of other countries. The role of foreign companies in the development of Russian offshore industry is mentioned only once in the strategy, and then without much specification. The strategy as a whole is strongly geared towards promoting a Russian naval industry able to meet

the demands of national customers, and to a certain degree be able to compete effectively on the world market, on its own. In light of the backwardness of Russian naval industry today, this palpable lack of reference to international collaboration needed for future development points up what one may term a strong rhetorical discourse of national self-preservation in Russia today. Foreign (Western) interests are perceived mainly as ideological and economic competition – not as potential partners. But even if the potential and role of foreign interests is not highlighted in policy documents, and even if the use of Russian yards remains a strong overall concern, there is still considerable scope for foreign involvement in various ways, as experience has shown. Of the offshore platform under construction for Gazprom at Vyborg, only the hull is built in Russia. Everything above deck comes from various foreign suppliers. The same is the case with the ill-fated production platform for the Prirazlomnoye field under construction in Severodvinsk.

The mammoth industrial complex of the Russian naval industry is not easily turned around, and will still be held back by systemic problems in the foreseeable future. This is a reality that has been acknowledged at the central level in Russia. In May 2008, Prime Minister Vladimir Putin was clear in his statement during a visit to the Admiraltyeskie yard in St. Petersburg: "...foreign ships are built faster, are of a higher quality, and importantly – are still cheaper."

In policy statements coming from the new Russian president Dmitry Medvedev it is possible to discern a critique of the strong tendency of central control and transfer of industrial assets to state companies, so dominant in Putin's second term. '... any additional strengthening of the role of the state, increasing its presence in the economy is not foreseen. On the contrary, we will take action to reduce the presence of the state in the economy.' It is uncertain, though, if a real policy change is underway. And even if that should be the case, it will probably first affect or rather prevent new centralization and state take-over initiatives. Rolling back or radically changing the recently approved strategy for the shipbuilding industry would be far more complicated. That is unlikely to come about until weaknesses in the strategy are commonly recognized, and several years may be needed to come to this point.

The goal of rapid development of the Arctic continental shelf relying primarily on the domestic shipbuilding industry does not look attainable. Russia will either have to accept more foreign involvement, or scale down its offshore ambitions. We believe a combination of the two alternatives is likely.



Arild Moe and  
Lars Rowe

Fridtjof Nansen Institute

Norway



## Institute's turning points and highlights

By Urpo Kivikari

In a divided Europe, Finland was the giant of East-West trade. Only at the end of the 1960s did the Federal Republic of Germany usurp Finland as the Soviet Union's most important western trade partner. Until the break-up of the Soviet Union, Finland occupied a significant position in the foreign trade of its eastern neighbour. Business with the Soviet Union for Finland was, naturally, even more important. In addition to the great value and significance of this trade itself, what was special about Finland's commerce with the Soviet Union was its maintenance as bilateral trade to the very end.

In Finland's export to the Soviet Union, Turku was the most significant locality, due to the shipyards and industry situated within the city. Indeed, it was natural that during the midpoint of the 1980s, a project was launched in Turku to establish a university-level unit concentrated on research and education in the Soviet Union's economy and foreign trade. With the financial support of the City of Turku and several business enterprises, the Institute for East-West Trade was established in 1987 at Turku School of Economics. Faithful to its founders, the Institute – on the foundation of its scientific mandate as well as alongside it – selected, as its goal, to also be of use in resolving practical problems both in Finland and in international forums.

The target area in research and education comprised, first and foremost, the socialist nations of Europe and their external economic relations and, subsequently, the economic conditions and integration of those countries that had transformed into market economies. The development of the Baltic Sea area into a European meso-region which has reflected, in a versatile manner, the development that has occurred in Europe as a whole has also been a central theme from the very beginning, and this still continues.

During the entire time, the most pivotal target for research has been the Soviet Union/Russia. As examples of this activity, I would like to mention a theme that I regard as particularly close to me personally from each of the three decades.

At the end of the 1980s, I was a member of academician Shatalin's international group, whose headquarters were at IIASA in Laxenburg, Austria. Working with top Russian and Western specialists provided a unique possibility to gain familiarity with the requirements and conditions on the basis of which the Soviet Union proceeded to establish a market economy. The international group did not even discuss the time required by a transition into the market economy. This period was subsequently brought to the fore in academician Shatalin's reform programme, published in the Soviet Union.

In the 1990s, long-standing projects funded by the Academy of Finland and the European Union, in which Russia's development possibilities for external economic relationships were analysed, were implemented at the Institute. Via many publications and conferences, the results spread to the scientific community and were also put into use by the Russian government. During the first years of the new millennium, I acted as a Senior Expert for the EU in a project in Moscow that examined Russia's path to World Trade Organization membership in addition to the development of the partnership between Russia and the EU. Now, five years later, those expectations on the accomplishment of those aims have appeared to be overly optimistic.

Ever since the beginning, Estonia has been a central target of the Institute's research and education as well as

its partner. The political tension between Russia and Estonia, from the perspective of the Institute, has not made them exclusive alternatives to each other even if the poor relations between these neighbours have sometimes overshadowed our projects. The cool relationship between Russia and Estonia has, however, prevented the realization of the "Gulf of Finland Growth Triangle" project, an undertaking that has received wide international recognition.

If, of the various countries that have been targets for the Institute, one is still given special mention, that would be Hungary. Luckily, I already familiarized myself with the Hungarian economy at the outset of the 1970s. This was fortunate for the reason that Hungary was a pioneer with respect to both the market economy and economics in Eastern and Central Europe during the last decades of the 1900s. Due to the firm contacts with Hungary, I was privileged to be involved with the "Hid" (Bridge) and "Blue Ribbon" programmes implemented during the transitional phase of system change.

The arrival of Estonia and Hungary as members of the EU in 2004 meant that the three Fenno-Ugric language group states of Europe came into closer mutual contact than ever before in their history, which is a remarkable result of European integration from the viewpoint of the Institute as well.

The staff and students of the Institute have actively participated as writers and visiting participants in the operations of the international scientific community. However, the image of a scientific unit also includes the arrangement of both large and small scientific events. The first large event organized by the Institute for East-West Trade was in 1993 in Turku, when the Institute hosted the Second World Business Congress of the International Management Development Association (IMDA).

Aside from research, university education has been a pivotal activity for the Institute from the very start. Our students, who have graduated as masters and doctors in great numbers, have taken on responsible positions in Finland and abroad. The current director of the Institute, Professor Kari Liuhto, is also part of this group.

In two decades, Europe has experienced epoch-making transitions which have not only renewed the task performed at the Institute but its structure as well. During the 1990s, substantial changes occurred in the mutual integration between the states of Western Europe, which also impacted Finland. For the purpose of investigating these matters, the Institute for European Studies was founded at Turku School of Economics. After the line of division between Europe's East and West had disappeared and pan-European integration was launched, it was illogical to maintain a split between two institutes within the university. With the arrival of the new millennium, the two units were welded into one under the name *the Pan-European Institute*.

*Urpo Kivikari*

*Former Director and Professor Emeritus*

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# The global financial turbulence and Russia

By Simon-Erik Ollus

Russia is not an isolated country. The global financial turbulence has proved this fact in the recent months. When the American financial crisis started in summer 2007, Russia still appeared as a quite safe investment country with a high rate of return and a low risk. Russian firms did in 2008 still IPOs for a record of 18 billion dollars, and the cash flow to the country in dollars continued to grow, as the oil price climbed. The economy boomed and the market value of Russian firms grew rapidly in recent years. In the spring 2008, there were 13 Russian firms among the world 500 largest firms by market value, while still a year earlier there were only eight. Russian business seemed to enjoy a period of renaissance and rapid growth

In early 2008 we started to see some changes, and some Russian firms started to cancel their planned IPOs as the international demand fell. In 2008 Russian firms have done so far IPOs for only 1 billion dollars, all during the spring. Some Russian corporations complained already in spring that international interest rates started to climb and lending was harder, but any financial crisis in Russia was still far from expected. In May 2008, we started to see the first real signs of some disturbance. International oil prices started to decline and the problems with Fannie Mae and Freddie Mac showed us that the American crisis is worse than we first expected. American institutional investors started to withdraw capital from abroad and Russia, which was seen in modest decline of the two main Russia stock indexes: RTS and MICEX.

In the summer 2008, the Mechel and TNK-BP cases occurred, where the Russian *administrative resource* was used brutally against healthy businesses and which reminded us of the *political risk* related to the Russian market. The political risk was refreshed, when the conflict in the Caucasus started in early August, but still we did not see any panic on the financial market in Russia. The Russian political leadership also seemed to be sure that the domestically driven economy was not disturbed by the war. However, the shock for the economy came when the American crisis revealed much worse than expected in late August, when the problems around Lehman Brothers and AIG came up. The stock exchanges around the world plummeted, also the Russian exchanges. The Russian stock exchanges have fallen with nearly 60 % from May to early October, whipping 700 billion dollars out of the country.

## Russian indebted firms and banks are in trouble

Russia has so far enjoyed strong capital inflows in recent years, as oil prices have climbed and investors have increased their investments to the country. However, in August we for the first time saw capital flight from the country. According to the central bank, 21 billion flew out from Russia in August and the central bank had to intervene using its currency reserve to keep the value of the ruble in the currency board. In September, some capital flight was also observed. But exact figures are still hard to get, as the central bank will first to publish the balance of payments figures of the third quarter in mid October.

The market turbulence has severely hit those Russian corporations and banks, which have expanded by foreign borrowed capital. The Russian large firms have borrowed liquidity abroad, using their owed shares as collateral for the loans. Now, as share prices have plummeted, the values of the collaterals have declined and many foreign banks now demand better collaterals or even call their loans back. Some Russian firms have managed to renegotiate their loans with higher interest rates. Other Russian corporations turn towards the Russian banks and try to transfer their obligations there. And for some firms the doors for borrowing are closed and market rumors spread in Russia about troubled firms.

Consequently, the period of cheap liquidity for Russian firms are definitely over.

The financial turbulence also strongly hit the Russian banking sector, whose growth is mainly driven by relending short maturity foreign borrowed liquidity. The domestic financial markets are still small and deposit funded borrowing is rear. The banking sector is quite static. Although, there are nearly 1 200 banks, only the 28 largest ones have access to central bank lending. Since August, the central bank and the ministry of finance have several times injected excess liquidity to the largest banks, but smaller banks still face serious problems, as the interbank market functions poorly and foreign borrowing is getting more expensive. In September, two mid-size banks were bought by larger banks and further similar actions are probably expected. Consolidation is good, but the bad part of the story, is that the sector is dominated by state controlled banks and consolidation means an increase of their market share.

## Bad for the real economy, but still far from worse

The good news is that the effects so far are limited in the real economy. The Russian economy is largely concentrated on natural resource production and the financial sector is relatively small. In early July 2008, Russian firms and banks had external debts for 493 billion dollars, of which a fifth was short term. This corresponds only to about a third of the GDP, which in international comparison is very low. However, the private foreign borrowing has grown rapidly in recent years, by about 40% y-o-y, and some of the large players are heavily indebted.

The main driver of the Russian economy is the natural resource sectors and the economic growth is driven by increasing raw material prices. On an annual term, the oil price is still on a record level and GDP growth was 8 % y-o-y in January-July. Central forecasters expect the GDP growth to decline by a few percentage points until the end of the year, but we still talk about a relatively rapid growth.

The bad news is that the financial crisis will probably affect those sectors, which drive the modernization of the Russian economy; manufacturing, retail sale and construction. We have already seen a decline in construction growth during summer, especially housing construction. Also retail sale has been partly debt driven, and increased cost of borrowing will affect consumption, although August statistics still show a record level of sale. The August figure can be partly explained by the record high inflation that encourages consumption. Value added manufacturing will also suffer, if the cost of capital increases and the demand decreases.

How bad the situation will become depends much on the outcome of the American financial crisis. If the American crisis gets worse, the cost of international capital will increase and oil price continue to decline. This would also hit the Russian economy much more severely than what we have seen so far. But if the American crisis is nearly over, the effects on the Russian economy will be limited. Then, the crisis would function mainly as a welcomed reminder for Russian political leaders and businessmen that Russia is a part of the global economy.

Simon-Erik Ollus

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## From Russia, with gas

By Rainer Nõlvak

Brussels is mouthing about joint energy policy for Europe: together we stand better against risks in energy supply. Who's to decide what is in the best interest of Europe? Oddly enough, with its ages-old divide-and-conquer tactics, Russia's Gazprom seems to be the force in charge of Europe's energy future.

Imminent Russian-German gas pipe, Nord Stream, is necessity for both parties. Designed to meet about a quarter of gas needs of Europe it also fills Russia's state budget with much needed euros. "North European Pipeline", as the project is called in Brussels, is one with "utmost importance" to EU, according to recent memo.

Wealthy Europeans helping Russians to rebuild their economy, while we euries are cleaning up our energy act by switching from dirty coal to much cleaner gas. Can't get any better - or can it?

Nord Stream has been planned grande, in good old Russian style. Current plans call for no less than world's longest underwater pipeline, double stringed. With total length of 1200km, nonstop from Russia to Germany, the cost of offshore pipeline grew from initial 4.7bn euros to more than 6bn during first year's paperwork. The Russian-controlled company has seen cost estimate for pipeline ballooning with disheartening pace since then. Sources close to Gazprom already talk about cost of 9bn while recent Estonian "no" would allegedly add another billion plus to the extraorbitant pricetag. Mind you, entering Estonian waters would have been departure from initial plans to start with.

However, for mere mortals, there are alternatives for gas transport from Siberia to Europe.

First, there's an existing pipeline already. Rolling through countryside of Ukraine and Belarus, it has suffered from excessive political valve-shuffling and is therefore deemed unreliable for Europeans to depend upon exclusively. Whether underwater gas pipe with pricetag of 14bn euros would be reasonable expense or could deliveries be assured via political means has not been brought up for a serious discussion yet. Physically, the existing pipe has plenty of capacity to cater European needs.

Provided that the alternative gas route to Europe is necessary brings us to the question of its location. Is the current underwater pipeline the safest and possibly the least expensive choice? It is known that underwater pipeline is two to six times more expensive to build than pipeline on dry land. Allegedly lesser maintenance requirement underwater is not nearly enough to cover that difference, not speaking of hidden "cost" of increased military presence which Russia is gladly offering for patrolling the entire route. Albeit second to energy security in prevailing view, impact on the fragile Baltic Sea ecology will be huge. Gazprom's current plans call for essentially bulldozing all the uneven areas and thoroughly rework the rest of 1200km stripe of sea bottom, while blasting rocks where needed. One needs to recall that the whole Baltic Sea is essentially a military dumpster since World War II: the underwater gas pipe will have to cross no less than eight large minefields between Estonia and Finland alone, not speaking of dodging chemical weapon's dumpsites which no one dares to touch. Recently, while extending deepwater harbour in Muuga, Estonia, the digging into sea bottom brought up at least one mine daily from already cleaned area. Granted, Nord Stream plans to clean 2km wide corridor through minefields, creating incredible mess on the sea bottom. However, who's to guarantee that all the bombs will be caught? Cost of fishing

out all the deep-settled metal debris is unthinkable. How will aging explosives behave in the vicinity of the gas pipe remains to be seen. In regard of the above, land is much safer place to put pipes on than the bottom of the Baltic Sea.

It turns out there's another route worth considering: Latvia. The Baltic country boasts huge aquifers where gas can be stored in mind-blowing quantities. One of the smallest aquifers in Latvia, with capacity of 2bn cubic meters, is already being used as gas storage in Inčukalns. Gas is being pumped to Inčukalns from Russia in summer, while supplying all Baltic States and feeding back to St. Petersburg in winter. Potential storage capacity in just one of the available sites, Dobeles, would be ten times larger, surpassing many times the largest gas storage in Europe and being able to store quarter of Germany's yearly gas requirement.

It gets better than that. The pipe network to Dobeles and further to coast already exists; all it takes is to widen it. Routing Nord Stream through Latvia would shorten underwater leg of the project more than twice, saving billions while providing extra security via added storage en route.

Why isn't Latvian-German pipeline being built already? Gazprom does not want it.

Lower cost for pipeline with huge storage bonus might be good for European consumers, but not necessarily for Russian leaders. It gives Russia much more control to put separate pipes to Turkey, Germany and soon to Italy rather than dealing with Europe jointly. Just the same, extra gas storage capacity might give Europe extra security, which might not be in the interest of Gazprom.

Whether enough gas will be available for Europeans is another issue. It's known that Gazprom struggles to keep up with future demand. What if the pipe runs empty in bitter cold of the winter? Even more realistic threat, whether any Russian gas will be available for Europe when pipeline to China will start pumping 40bn m3 of gas yearly to opposite direction, remains to be seen.

There's also a delicate question of private interests. Anyone who has done business in Russia knows the "creativity" of clerks, or apparatchiks as they're called in Moscow. Builder's ballooned bids are frequently kick-backed to apparatchiks, so bigger deal means essentially bigger "bonuses". Whether all the billions will be spent purposefully while digging up most of the Baltic Sea remains to be seen. Think Iraq and Halliburton, if you will. On top of that Nord Stream, being Swiss company, is outside European jurisdiction so there's not much we can do about it anyway. Except paying the gas bills, of course.

Don't get me wrong; I'm not blaming Russians. To collarise Europe would serve greatly to Russia's newly found global aspirations and it is smart thing for Putin to do. Question remains, whether it's of mutual benefit. Perhaps it's time for Brussels to act.

*Rainer Nõlvak*

*Chairman of the Board*

*Estonian Nature Fund*

*Estonia*





## EU's growing energy import dependency a major risk

By Kari Liuhto

Russia plays a strategic role in the EU's energy supply. Russia accounts for 24% of the Union's gas consumption and 29% of its oil consumption. At the moment, the EU's own gas production covers 43% of our gas consumption and 14% of our oil consumption. The energy self-sufficiency of the EU decreases dramatically in the coming decades.

In 2030, the Union will only be able to cover 16% of its gas needs and 5% of its oil supply. Obviously, Russia's role as the Union's oil supplier does not increase as much as the share of Russian gas in the EU's gas consumption. When predicting future developments, we should keep in mind that Russia's oil reserves are not as significant – some 6-9% of the globe's oil – as their natural gas reserves, which represent 25-30% of the world total.

Russia is the world's second largest producer of oil after Saudi-Arabia, and already some 70% of Russian oil is exported – to a large extent to the European Union. Russian oil production has not increased in past few years. One reason for stagnation is the increasing role of the state in the oil business. Some five years ago, the state covered only 20% of oil production, whereas today it is already nearly 50%.

Russia is the largest gas producer in the world. The state-controlled Gazprom is a dominant actor, representing some 85% of the country's natural gas production. An important factor related to gas production is the fact that Gazprom's major gas fields are depleting, and it is anything but certain, whether enough new major fields can be opened during the next 10-15 years to replace the depleting ones. Secondly, even if private natural gas producers are rapidly increasing their production, they are not necessarily able to fill the gap caused by Gazprom's declining production.

When one analyses the capability of Russia to export more natural gas, one should remember that Russia's growing economy requires more energy. It has been estimated that Russia's own gas consumption increases by around 2% annually. Another factor to remember is that more than half of Russia's primary energy production is covered by natural gas.

Therefore, Russia should build new sources of energy, such as nuclear energy, in order to be able to export significantly more natural gas. Russia's plan to erect 26 new nuclear units by 2020 is not realistic, as it would require the building of two new nuclear power stations per year for the next 12 years. All in all, Russia should invest some \$ 1000 billion in energy production and infrastructure, to be able to meet the future needs of the country's energy appetite.

A much more realistic option than building new energy capacity is investing in energy saving. The World Bank estimates in its fresh report that by investing \$ 320 billion in energy saving, Russia would be able to reduce its primary energy consumption by 45%. The payback time of these energy savings investments is just 2-4 years.

If Russia is able to produce enough gas to meet the growing needs of the EU, then one should find the optimal way to distribute the gas from remote locations to

consumers. As no major break-through in Russia's LNG production is likely and Russia's gas tanker fleet is insufficient to ship the gas, it seems that pipelines will remain the main channel for gas transportation. In order to increase the flow of natural gas to the EU, old pipelines should be repaired and new pipes should be constructed.

When the final decisions are taken concerning the routing of new pipelines, one should first prioritise the routes which are the most environment-friendly. Secondly, one should prioritise those routes which truly integrate Russia, the EU member states, and the countries-in-between. The Nord Stream and the South Stream have received a lot of criticism since they neglect the interests of many countries, such as Ukraine and Poland. The gas supply can truly integrate Europe, only if gas transit forces countries to talk with each other. Otherwise, gas becomes a major disintegrating force within the EU and Europe as a whole.

It is evident that Russia is a strategic partner for the EU, but is the interdependency between the EU and Russia sustainable. Those who believe in the sustainability of the interdependency seem to neglect the fact that Russia does not aim to stay a natural resource base for the EU, but that Russia wants to develop its own industry and army, and become a super power once again. In this context, one wonders if the super power with a guided democracy would become a competitor rather than remaining a credible partner for the EU in the long-term.

The interdependency between the EU and Russia is not developing favourably from the European point of view, since we are becoming more dependent on Russian energy, whereas Russia may become less dependent on European machines and cars. Moreover, in a crisis situation, Russia could move on without European machines and cars, but the EU would have considerable difficulties in replacing Russian energy in case of non-delivery. I dare to argue so, even if it is a well known fact that oil and gas account for half of Russia's budget income, and the EU is the largest external buyer of Russia's energy.

In addition, one should not forget that the EU's attempts to diversify its energy sources can be even less successful than Russia's attempts to diversify its energy exports. Therefore, the EU should seriously consider how to increase its own energy self-sufficiency instead of increasing its energy import dependency on Russia.

Should the EU be unable to design a common energy policy for itself, the Kremlin will create energy policy for Europe.

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