Baltic Rim Economies

Bimonthly Review



ISSUE NO. 4, 31 AUGUST 2010

	ARTI	
	Anı	

Vlad Filat: Bringing Moldova closer to the European Union	Page 1
Libor Rouček: Endangered European security?	Page 2
Maud Olofsson: Energy co-operation in the Baltic Sea region	Page 3
Carl Haglund: EU and Russia – why they matter for the Baltic Sea	Page 4
Jenni Kuronen: Fundamental changes are needed in the governance of maritime safety	Page 5
Ramūnas Vilpišauskas: Lithuania and euro – a second opportunity not to be missed	Page 6
Jukka Gustafsson: Current challenges of Finnish and Russian shipbuilding –	
collaboration in R&D and building of ice class special tonnage	Page 7
Bo Österlund: The Arctic region is warming up as a result of climatic change,	
and the repositioning of security policy	Page 8
Marcel de Haas: Russia's future security stance versus friends and foes	Page 12
Seppo Ruohonen: Changing Baltic Sea military threats	Page 13
Nikita Lomagin: Medvedev's fourteen points – any added value for global security?	Page 14
Peter F. Johnston: Arctic energy resources and security	Page 15
Timo Hellenberg: How to secure the Arctic – more joint exercises, less high level declarations	Page 16
Katarzyna Zysk: Russian perspectives on Arctic security	Page 17
Teemu Palosaari: Ice melts, peace prevails. The race for resources in the Arctic?	Page 18
Joan Nymand Larsen: Northern economies in a time of change	Page 19
Timo Koivurova: Who should be governing the Arctic?	Page 20
Tatiana Romanova: Russia in the Arctic area – more issues than it seems?	Page 21
Roderick Kefferpütz: Putting Russia's Arctic policy into perspective	Page 22
Yrjö Myllylä: Russia's geopolitical focus has moved to the North –	
the development of Murmansk region in the light of three scenarios	Page 23
Amelia Hadfield: Arctic adventures – cold shoulder or hot prospects?	Page 24
Anna Sirina: Indigenous peoples of the North in Russian politics today	Page 26
Eini Laaksonen: The uncertain future of the Shtokman gas field project in the Barents Sea	Page 27

EXPERT ARTICLES CONTINUED ON NEXT PAGE

To receive a free copy, print or register at www.tse.fi/pei



Baltic Rim Economies





ISSUE NO. 4, 31 AUGUST 2010

EXPERT ARTICLES CONTINUED:	
Sami Andoura: Towards a European Energy Community an opportunity for the Baltic	Page 28
Dmitry V. Vasilenko: The EU gas market – doomed to Kalakh game	Page 29
Susanne Oxenstierna: The Russian nuclear renaissance	Page 30
Peter Lund: It is time to think more with brain than muscles in the Baltic Sea Region	
energy debate	Page 31
Asta Salmi: Innovations and Finnish–Russian research co-operation	Page 32
Juha Väätänen: How do Russian companies innovate?	Page 33
Kristiina Helenius: It's time to step up FDI efforts	Page 34
Ralph Hirdina and Thomas Jost: German investment in the Baltic States	
Tauno Taajamaa: We should know how to do business with Russia – but do we really?	Page 36
Andrei A. Tatarinov: Olympic winter games in Sochi – costs and expected benefits	
Kimmo Rentola: Post-Cold War politics of history	Page 38

To receive a free copy, print or register at www.tse.fi/pei



Bringing Moldova closer to the European Union

By Vlad Filat

Since September 2009 Moldova has been governed by a four-party Alliance for European Integration, which replaced a Communist government that often failed to implement EU-inspired reforms and uphold many of the democratic standards it claimed to respect. The new government is now working hard to fast-track Moldova's transformation into a state that can credibly aim at becoming an EU candidate.

Moldova has inherited a bad image – that of a corrupt, poor, dysfunctional post-Soviet country riddled with a secessionist conflict. Some of it is true, but some of it are stereotypes. Our aim is to rethink Moldova, by changing the country in order to change the stereotypes, and change its place on the mental maps of most fellow Europeans. I suggest to start with geography: Chisinau, the capital of Moldova is roughly at a similar distance from Venice, as it is from Moscow, and Vienna is considerably closer. Then I suggest to look at the map of economic interdependence: over 50% of Moldovan trade is with the EU, and roughly 17% with Russia. A forthcoming EU-Moldova deep free trade area will only accelerate these trends. Close to 70% of Moldovans also support EU integration.

These factors are not just empty numbers. They provide Moldova with a solid societal, economic and political basis to continue its transformation and European integration. Despite a difficult regional and geopolitical context, Moldova is the only post-Soviet state (the Baltics aside) where every single transition of power came as a result of elections. Moldova also has a free media. This year alone two news channels have been launched providing non-stop scrutiny of the government's actions.

The country also starts to pull itself out from the economic crisis:

in the first six months of 2010 the Moldovan economy grew by 4.7%. And despite significant belt-tightening, the country has managed to avoid the massive social unrest that endangered the stability of many European countries in the last two years. In March, Moldova was also promised €1.9 billion by the European Union, the United States, the IMF, the World Bank, and other donors to support a strategy of mid-term reforms. The country also seeks to improve the business environment and investment climate by cutting red tape and simplifying the administrative burden on foreign investors. The World Bank placed Moldova among the Top 10 reformers in the world when it comes to the costs of doing business, while according to Transparency International Moldova's place in the corruption perception index improved by 20 places in the last year alone.

Relations with the EU have also gained significant momentum. We are working on a new Association Agreement, which would anchor Moldova even deeper in the European space. We will also sign a far-reaching free-trade agreement with the EU. What matters deeply for Moldova's citizens, though, is to move towards a visa-free regime with the EU.

We are already working on implementing all the necessary technical conditions. From January 1, 2011, the

country will be the first Eastern partner of the EU to switch to the exclusive issuance of biometric passports. Moldova's customs officials and border guards have been working actively with an EU mission to modernize our border infrastructure. Moldova will be an increasingly safe neighbour for the EU and a good partner in managing migration flows.

A new international dynamic also augurs well for conflict settlement efforts in Transnistria. For years Moldova's secessionist conflict was dumped into the category of 'frozen conflicts' with few chances of a solution. Obviously the conflict is not 'frozen', but not because it is 'boiling', but because a solution is not unimaginable. The formula of a solution rests on internal and international dynamics.

In domestic politics, the aim is for Moldova for become a state that is more attractive for the residents of the Transnistrian region. From this perspective, every step that brings us closer to the EU, not least the existence of free-trade and the free circulation of citizens, are also steps towards resolving the conflict.

But equally important are international developments. As the US-Russian 'reset diplomacy' takes root, and the EU-Russia 'partnership for modernisation' takes shape, chances are that Moldova can become the one piece of the puzzle around which the some of the new elements of the European security architecture can be built. In June this year the German Chancellor Angela Merkel and Russian President Dmitry Medvedev announced a plan to create an EU-Russia committee at foreign ministerial level aimed at fostering better cooperation in foreign affairs and security. The point of the initiative is not just to create another forum, but to focus on concrete avenues for cooperation, and conflict settlement in Moldova is envisaged as a first priority. Such steps are a good sign that could create international momentum for the resolution of the conflict.

There is no doubt that Moldova still has a lot of challenges to overcome. Progress is significant, but the list of reforms we have yet to undertake is even longer. Our institutions are still weak, political and economic realities will have to improve a lot, the unsolved conflict in Transnistria is a threat to regional stability and in November the country will hold early elections. But what matters is that the dynamic is positive and the road map for reforms clear. Much more work has to be done, and will be done. The government will continue to build a more solid basis for Moldova's democracy, will fight corruption, will modernize the economy and will deepen cooperation with the EU.

Vlad Filat

Prime Minister

The Republic of Moldova

Endangered European security?

By Libor Rouček

When it is talked about the security in the European Union, it is meant internal security as well as international security. Nowadays the security can not be treated separately due to the globalized age and interconnected societies in which we live. Therefore the European Union has been active in both areas of the security, at home and abroad. However, we are living a serious economic crisis which can have a negative impact on the security issues. The aim of this article is to point out to some trends which could bring some sort of danger for our foreign, security and defense policies.

For being a global player in the international security the European Union has defined many instruments how to fulfill this role. I don't want to write about the milestones in the process of creation of the EU Common Foreign, Security and Defense Policy because it is widely known. The reality matters and the fact is that the European Union has been able to contribute to maintaining peace and finding solutions to many international conflicts through its civilian missions and military operations which have been conducted in many parts of the world. Moreover the updated European Security Strategy by the French Presidency of the European Union at the end of 2008 and now the Lisbon Treaty brings new tools, strengthens competences of the European institutions and emphasizes even more the importance of the security and defense issues.

Internally, Member States of the EU are equally aware of the challenges for the internal security – terrorism, organized crime, cyber-crime, drug and arms trafficking, trafficking in human beings, economic crime and corruption as well as natural and man-made disasters. All these challenges require cross-border cooperation, preparedness and response. For accomplishing these goals there have been approved several crucial programs and strategies, I can mention the latest Stockholm Programme (2010-2014) and the Internal Security Strategy for the European Union approved during the Spanish Presidency as a complement to the European Security Strategy.

The European Union has many documents and tools at its disposal. However, if we want to talk about the security and the European Union in a complex way, it is necessary not to forget NATO as another global player. NATO has been a military organization but now it is being defined New Strategic Concept of the Alliance in which the member states should answer crucial questions concerning future role of the organization for the security challenges of the 21st century. In May 2010 the Group of Experts published document NATO 2020: Assured Security, Dynamic Engagement with the recommendations on a New Strategic Concept. I consider one recommendation extremely important from the European point of view: full complementarity between NATO and the European Union. I can fully agree that a truly comprehensive partnership with the EU that is cost-effective, based on principle of reciprocity and that encompasses the entire range of the institutions' mutual activities¹ is absolutely necessary.

The reference to a cost-effective partnership is more than important. The current economic crisis has had many negative effects and it seems it also will have one on the foreign and security issues. The main slogan of nearly all European governments now is austerity and necessity to

save. However, it should be discussed whether these measures could be taken also in foreign, security and defense policy. Let me show how it could endanger our goals and strategies.

The Lisbon Treaty has introduced the European External Action Service as an instrument how to forge a genuine foreign and security policy of the European Union. On 26 of July the General Affairs Council adopted a decision establishing the External Service which means that in coming weeks there will be an interesting diplomatic game how to really build this new European diplomatic service. However, there is a risk that some Member States could fight against this service in order to maintain its own diplomatic influence in the world and also to keep money in the time of austerity for national diplomatic service leaving little for the European diplomacy.

Moreover, the European Union and its Member States are talking about other priorities for the future than the security. The economic problems can cause that future European operations could be postponed or simply not planned. The governments are cutting its security and defense budgets and it will have its repercussions for both internal and international security. The same for NATO that is facing a serious challenge (remarkably not military) – cutting NATO's common budget by the Member States which have temptation to spend less because of the need to save money regardless of the international security problems.

In all cases, it is a wrong calculation. It is understood that austerity measures are necessary in order to stabilize public finances of the Member States but the foreign, security or defense issues should not be victims. New conflicts, terrorist attacks or disasters will continue to happen. To find solutions will be more and more difficult due to a complicated nature of the world around us. Ignoring these facts and looking inwards is risky. The same could be said for the NATO's allies. The common budget of the Alliance and the common funding of the military capabilities combined with civilian assets is the most important link between the various Member States and its partners and it must not be weakened for the future.

Austerity measures should not be excuse for leaving the security behind. The European Union must continue to play a key role taking advantage of all common instruments that has. The Members States of the European Union and NATO should not forget that nobody is able to act alone, and especially in the time of crisis. Burden sharing, cost-effective cooperation between EU and NATO partners, international organizations which are able to deal with the complex international issues, these are priorities for the future. Spending more together should be the step in the right direction and the prevention for not endangering our security.

Libor Rouček

Vice-President, S&D

European Parliament

http://www.nato.int/cps/en/natolive/official_texts_63654.htm

Energy co-operation in the Baltic Sea region

By Maud Olofsson

A general outlook on competitiveness and green economy

The Baltic Sea region is an important region to Sweden. We are not only connected with our neighbouring countries through the sea, but through long standing trade relations between businesses as well as travel of citizens. Therefore we put the competitiveness and future development of the Baltic Sea region high on our agenda. For the future benefit of the region, I am convinced of the need to create policy and market conditions that stimulate investments, innovations and entrepreneurship. If we together can identify the regions' strengths, and use them wisely, companies and citizens will benefit greatly.

The EU strategy for the Baltic Sea region will play a crucial role for the economic development of our countries. Even if this is a strategy of the European Union it is clear that many of the issues can only be addressed in constructive cooperation with our external partners in the region, and in particular Russia. In many cases a good platform for such deliberations can be found within the framework of the Council of the Baltic Sea States. There are many ways in which the EU-strategy for the Baltic Sea region and the work within the framework of the CBSS can complement each other

One main priority of the CBSS should be to work towards a more sustainable economic development in the Baltic Sea region.

A transition towards a more sustainable economic growth - an eco efficient economy - in the Baltic Sea region can pave the way for new enterprises and jobs. We need to develop policy and market conditions that stimulate investments, innovation and entrepreneurship to create an eco efficient economy.

Specifically on energy policy co-operation

Renewable energy and energy efficiency are at the core of such a policy for an eco efficient economy. For example we need to strengthen the grid, invest in wind, solar and other renewable power, create energy out of waste and co-operate on energy market reforms in relevant ways.

Like in the broader Baltic Sea region co-operation, the energy policy field includes a number of tools that – if used wisely – may complement each other in a good way. The Baltic Energy Market Interconnection Plan, BEMIP, has taken a holistic approach that includes both issues relating to investments in infrastructure for energy, energy market reforms, renewable energy sources and energy efficiency. BEMIP is for the European Union, but in the energy field it is quite obvious that there is a need for co-operation including all countries in the region. Therefore I am glad to see that there already is an established platform for that - the Baltic Sea region Energy Co-operation, BASREC.

We should ensure that the work within BEMIP and BASREC is mutually reinforcing rather than just overlapping. I am confident that we will find ways to do this, in fact a flexible exchange of information has already taken place on a number of occasions.

The art of finding the win-win solutions

With two major crises, climate change and the economic down turn, affecting people all over the world, measures to tackle these challenges cannot wait. Action has to be taken simultaneously by governments, individuals, researchers, business and industry. Because by doing so, we will not only fix the climate challenge, but turn the economic down and create new jobs.

As policy-makers, we should help the entrepreneurs to turn the environmental challenges into business opportunities. New forms of climate friendly and energy efficient housing, transport, services and production of energy will be needed in the eco efficient economy.

In this context, the close interrelation between climate change and energy policy is of both importance and interest, given the present share of fossil fuels in the global energy mix and the increased need of security of supply. Sometimes the policy debate

on energy seems to imply that we need to focus on either security of supply or on climate related energy issues. In reality we need to think of both – and fortunately they are interrelated.

This is good news, in the sense that we don't have to make too much of a choice between measures or feel that too much focus is spent on measures that don't help us meeting the one or the other of these objectives.

How so? Well, let's look at what kind of measures we must take in order to decrease emissions – we must both use energy more efficiently and increase the share of renewable energy. By doing so, our societies will become less vulnerable for possible disruptions in our traditional energy supply.

After all, this is quite simple, since energy usage in most countries today also implies a substantial use of fossil fuels. In Sweden this is most clearly the case for energy used within the transport sector. However, less energy use and more alternative supply is relevant for us all and in all sectors.

We must realize that security of supply is not merely a question of transport routes and interconnections, but also a matter of sustainability in a broader sense. What we do to improve security of supply of energy must also take environmental concerns into consideration. Measures to improve energy efficiency and to make better use of renewable energy sources are – and must be seen as – a vital part of the solution.

In this context I am very pleased that the Baltic Energy Market Interconnection plan is based on exactly this kind of broader view. It takes into consideration the needs for improvement in the energy infrastructure in the region as a whole. But that is not all. It also highlights the need for development of the energy markets in the region; and notes the important role for energy efficiency and renewable energy sources. The same line of reasoning can be found in communiqués adopted at meetings within BASREC.

Meeting the challenges is more than formulating communiqués and plans – we need to find possible solutions and promote that they can be realized.

In the Baltic Sea region we have a number of assets that could contribute to realizing the transition to an eco efficient economy. Within our region we have lots of experience in the fields of renewable energy sources and measures to promote energy efficiency. We also have big potentials for cost efficient projects, and not least a large potential for bioenergy. There is scope for a mutually rewarding co-operation that may serve not only our own countries, but also as an example for others.

Specifically on BASREC

There clearly is a role for BASREC in this, and I am glad to note that important steps have been taken recently to develop this cooperation in a good way.

Within BASREC , the Energy ministers last year decided to create a budget framework for concrete projects making the energy co-operation stronger and more concrete.

A number of energy projects are now on the way to be implemented. They include both co-operation on wind power, regional strategies for the Post Kyoto period and much more. I look forward to the continued work and cooperation within the Baltic Sea region for the future benefit of our region, it's environment, businesses and people.

Maud Olofsson

Minister for Enterprise and Energy, Deputy Prime Minister

Sweden

EU and Russia – why they matter for the Baltic Sea

By Carl Haglund

The Baltic Sea is today in a miserable state. Vast areas of the seabed are dead due to lack of oxygen, and enormous amounts of nutrients are stored in the top sediments. Every time these nutrients are brought to the oxygen-rich surface water by sudden influxes of fresh salt water through the Danish straits, there are extraordinary algae blooms all over the Baltic Sea. Fortunately the state of our sea is today a well know fact and the efforts to save the Baltic sea are more ambitious than ever. Despite of these strivings the amount of nutrients that countries around the Baltic Sea let out into the sea is still way too large. This is due to open sewage systems, constant runoff from e.g. agriculture, industry and private households. The results can be seen also during the summer of 2010 when the toxic blue-green algae again made swimming in the sea hazardous. The Baltic Sea is the most polluted sea in the world. From an European union point of view this not very flattering. The Baltic Sea is the only sea the union almost can call its own, when all the countries along its coast are EU member states except from Russia.

In late 2009 EU adopted its first macro-regional cooperation strategy, called the EU Strategy for the Baltic Sea region. The strategy was initiated by the European parliament and the intergroup for the Baltic Sea. The idea behind a macro-regional approach for regional cooperation within the EU is quite simple - not everyone has to be involved in everything. In order to make regional cooperation smoother, the macro-regional approach attempts to give goahead to member states in a particular region with projects that concern only them. The funding for the Baltic Sea Strategy was initially perceived to stem from existing funding sources such as the Regional development fund, and this is where the lion's share of the funding should come from. However, the EU's structural funds are poorly suited to fund activities that involve one or more non-EU countries, and in a Baltic Sea context, this is of course problematic.

The presence of Russia in the Baltic Sea is historically great. The city of St. Petersburg is traditionally Russia's window to the west. The city, founded in 1703 and designed by the elite of European architects, was meant to show the European powers how enlightened the Russian empire was. Current Finnish sea charts are based on the old charts of the Russian navy, and even on the demilitarised Åland islands, the great fortress of Bomarsund still reminds of the Russian presence there throughout the 19th century.

When the Soviet Union collapsed and the Baltic States quickly assumed independence after many decades of occupation, the Russian presence in the Baltic Sea diminished significantly. However, during the last 10 years this has changed. With the opening of significant ports and oil terminals in the Gulf of Finland, Russia's economic interests in the Baltic Sea have regained their historic prominence. Russia exports roughly half of its oil through the Baltic Sea, and with the NordStream gas pipeline project, linking Russia directly with Northern Germany, the strategic importance of the region for Russia is right back where it used to be, if not beyond.

This set the stage for a very interesting political situation, when the EU launched its first macro-regional strategy for a region that is strategically important for Russia. Cooperation

between EU and Russia is challenging; there is still no follow-up on the Partnership and Cooperation Agreement, and the Russian approach to the EU seems to follow the old rule of "divide and conquer". At the same time, the EU is dependent of Russian energy exports while Russia is equally dependent on European money to finance modernising its ancient industrial and infrastructure park, not to mention its social and health care systems.

From an ecological point of view, Russia's role in the Baltic Sea is equally very important, although Russia doesn't like to admit it. A large part of the nutrient input, which causes the serious eutrophication of the Baltic Sea, stems from open sewage systems in St Petersburg and Kaliningrad, as well as from agriculture and farming in the areas along the Russian costs to the Baltic Sea. Meanwhile, enormous collections of toxic waste and other dumps are building up close to the coast in the Kaliningrad and Leningrad oblasts, slowly but surely seeping into the groundwater and finding its way to the sea.

Large EU-projects have funded sewage treatment plants in St Petersburg, but bureaucratic difficulties and unwillingness from the Russian side to cooperate have made progress slow and frustrating. Russia, referring to a perceived junior partner role, refused to sign a Financial Agreement with the European Commission in 2008, leaving it outside the European Neighbourhood Partnership Initiative's cross-border cooperation. This made it virtually impossible for the EU to fund any projects to help Russian authorities deal with critical problems concerning toxic waste or sewage treatment.

Non-governmental organisations like HELCOM and the Baltic Sea Action Group have emphasised these problems for a long time, warning that the damage made to the Baltic Sea may well be irreversible if nothing is done very quickly. Following an initiative by me in the European Parliament, the EU budget 2010 allocated 20 million euro for projects under the Baltic Sea Strategy involving non-EU countries. This will bring a little relief to the situation, but a long-term solution needs to be found in order to quickly address the serious environmental hazards that exist in western Russia.

In effect, the challenges facing the Baltic Sea are as serious and as important as ever. For any lasting solutions to be found, we need to bring Russia properly into the sphere of cooperation and funding. The EU and Russia must be able to agree on common principles of cooperation, and the environmental dimension must be part of a future agreement, placing equal responsibility on all parts. Everything else is an absurdity and will only lead to tension and a further degeneration of the Baltic Sea.

Carl Haglund

Member

European Parliament

Vice Chair of the Parliament Intergroup for the Baltic Sea

Fundamental changes are needed in the governance of maritime safety

By Jenni Kuronen

The risk of a large oil accident in the maritime traffic of the Gulf of Finland and of the Baltic Sea has aroused wide concern in society. Many efforts by several actors have been done to prevent an oil accident or to decrease its harmful consequences. International actors, such as EU or HELCOM, states, NGO's, researchers and the companies in the sector all seem to share the concern.

Several preventive policies have been adopted to control the sea traffic in the Gulf of Finland, for example Mandatory Ship Reporting System (GOFREP) and the deep-water (DW) route on the southern side of Suursaari. New risk control options are also under development, for example Tanker Safety Project initiated by the John Nurminen Foundation, and the development of real-time risk analysis systems (e.g. EfficienSea Project). In addition, several new suggestions have been made on how to improve maritime safety in the GoF, for example extension of the VTS center authority and requirement of a winter navigation certificate.

Although the goals of all these efforts are undoubtedly good and they might be needed in the short-term, over a longer period of time this may result to burdening the shipping industry with excessive rules and additional costs, which reduce the risks of accidents only little. The amount of maritime safety regulation is extensive already now, ranging from safety of humans, ships, cargo and environment to security issues, and from international level (International Maritime Organization IMO) to regional (e.g. European Union) and national level. Still, accidents and incidents happen at sea and it seems that there are some fundamental problems in the maritime safety policy system.

International shipping industry needs international rules. Maritime safety issues are to a great extent handled in the IMO, which is the organization of United Nations. The work of IMO is based on national representation and on the implementation of regulation by flag states. Flag states have very different standards in implementing the regulations. The system allows the existence of flags of conveniences, which in turn enable operation for obscure and uncaring shipping companies. Nation states are many times promoting their national interests in IMO instead of promoting maritime safety interests. As a result, the regulation process in IMO tends to be slow and the result is often a compromise of compromises. Incapability of IMO to provide fast and effective responses has lead to the activity of other actors to regulate maritime safety, for example of the European Union.

Traditionally maritime safety regulation focuses on technical aspects and it tends to be reactive instead of proactive: regulations are revised when a major accident has happened. Often this kind of post-accident policy is not very comprehensive and some particular technical risk gets too much attention. The shipping companies have to make expensive repairs to ships, although some technical feature may not be the risk in itself – more crucial is how that feature is taken into consideration in the operation of a ship.

Actually, it is a commonly repeated statement that over 80 % of sea accidents are caused by human error. Still majority of the maritime safety regulation addresses all the other issues except human factor – probably because

human factor issues are considered difficult. Human factor issues do not only deal with the actions of a single seafarer – it also includes broader issues such as safety culture, organizational culture and safety management. Many times a human based error is only the final link of a long and complex chain of organizational and operational errors both onboard of a ship and onshore in the shipping industry and in the shipping companies. The competition and economic pressures in the shipping sector are fierce. New regulations often add, for example, to the bureaucracy and paperwork in the ships. Workloads of seafarers increase and they suffer from fatigue, which is already a remarkable risk to maritime safety.

In short, maritime safety risks stem largely from the structure, social organization and economic pressures of the shipping industry. Many of the current maritime safety regulations are more like band-aid solutions instead of actually interfering with the causes of safety problems. If maritime safety policy is wanted to be truly effective, fundamental changes in the system are needed. First, international regulation system must be built so that it doesn't allow sub-standard shipping in any part of the world. Second, the regulation processes in IMO must present interests of maritime safety and the shipping industry itself instead of national, protectionist interests. Third, and the most important from the point of view of human factor, are the spontaneous activities of companies in maritime safety issues. Command-and-control policies can improve the situation but not make the needed fundamental changes. If a shipping company acts responsibly, takes care of safety issues properly and has motivated and committed personnel, detailed maritime safety regulations are not needed to ensure maritime safety. Maritime safety is also an interest of seafarers and the shipping companies, but the circumstances have to support the safe working environment in the shipping industry. Thorough reflection is needed on how shipping companies can be encouraged to operate responsibly and how unhealthy competition in the shipping industry can be prevented.

Although for us, who live in the vicinity of the Gulf of Finland and the Baltic Sea, safety at sea is of great importance and a large oil accident would be highly undesired, we have to remember that for seafarers, the Gulf of Finland and the Baltic Sea are only part of their journeys and maritime safety is as important issue elsewhere as it is in the Baltic Sea. The development of maritime safety policy regulation requires a comprehensive point of view.

Jenni Kuronen

Researcher

Centre for Maritime Studies University of Turku



Lithuania and euro – a second opportunity not to be missed

By Ramūnas Vilpišauskas

These days the subject of euro zone enlargement is overshadowed by the issues of the euro zone survival. The financial problems of Greece and most other EU (and euro zone) members have raised doubts among policy makers and analysts regarding the prospects of the euro zone. The excessive deficit procedures have been started against absolute majority of the EU members because of their fiscal indicators (budget deficit and state debt) exceeding the limits set by the Stability and Growth Pact. Although Greece has received most attention of the markets and EU leaders, the deterioration of the state of public finances and persistent lack of structural reforms in most of the EU member states brought to the agenda the issues of economic governance, sanctions and reinforced coordination procedures changing the picture of the EU debates in half a year more than a decade of muddling along with the implementation of Lisbon strategy.

In such a context, some people in non euro zone EU members started raising the question if it is worth to continue pursuing the goal of joining the euro zone "as soon as the criteria are met". It seems, that some Central and Eastern European countries gave up the sense of urgency to meet convergence criteria in the next several years, and seem to be inclined to wait and see what happens with the euro zone. Some in the public even go as far as to blame the single currency for the current problems in Greece and some other euro zone members.

However, it would be a mistake to blame the euro zone (or financial markets, for that matter) for the current problems which many European countries are facing. To a large extent these problems are the outcome of inability to undertake structural reforms to increase competitiveness and the lax fiscal policies, with public spending growing much faster than the growth of the economy. Membership in the euro zone probably reinforced these trends, but did not cause them. On the contrary, the convergence criteria could be seen as guidelines for sound fiscal policy, even though their set and their exact numbers could be debated. The problem was that many countries have chosen to ignore the principles of sound fiscal policy and therefore had very little room for maneuver after the start of economic decline in 2008. Economic decline further exposed the rigidities of the national markets, the lack of flexibility and the mismatch between productivity and souring wages in many of the euro zone members, which was ignored during the times of fast economic growth.

These lessons particularly hold for the Baltic States which have been among the fastest growing economies in the EU since joining it in 2004, maintaining yearly real GDP growth rates of 7-8 percent up till 2008. However, at the same time they with the exception of Estonia failed to run fiscal surpluses and to accumulate reserves which could have been used when budget receipts started to decline with the start of economic decline. Although one could debate how much the expansionary policy contributed to the pick-up inflation in the Baltics which exceeded the Maastricht criteria and prevented Lithuania and Estonia from introducing euro in 2007, it is quite certain it was mostly the political consensus on the need to accumulate a reserve during the times of economic growth which allowed Estonia to maintain relatively healthy fiscal criteria and to qualify for joining the euro zone in 2011.

All three Baltic States, however, undertook significant fiscal adjustments after the start of the economic decline in 2008. Instead of strategy to devalue their national currencies recommended by many external observers as a traditional

policy instrument, they have chosen to maintain the stability of their exchange rate policies by setting the introduction of euro as a corner stone of exit from the crisis, and opted for internal adjustment of wages and prices instead. It was for the size of these adjustments that these countries have been recently called "Europe's unsung heroes" by Steve Forbes during his meeting with Lithuania's Prime Minister A. Kubilius. For example, the overall size of fiscal adjustment, mostly coming from cutting down public expenditures and some tax increases, in Lithuania in 2009-2010 comes close to 12 percent of country's GDP while adjustment of further 5 percent of GDP is planned in order to bring the budget deficit from around 8 percent planned for 2010 to 3 percent in 2012. According to the European Commission, wages have been reduced by around 8,7 percent in Lithuania in 2009.

These measures contributed to the fast recovery of market confidence in the Baltic countries with credit default swaps and credit rating returning to pre crisis levels in March 2010. In July 2010, the IMF forecasted the Lithuanian economy to return to the growth trend by reaching 2 percent of growth in 2010. Although growth will to a large extent depend on the developments in neighboring markets which are also Baltic States' main export markets, most forecasts are positive regarding economic developments in the years to come.

However, it is clear that economic recovery will not be sufficient in itself to allow reducing the budget deficit and stop the growth of state debt which is forecasted to reach around 38 percent of Lithuania's GDP in 2010 (relatively low compared to 80 percent of euro zone's average forecasted by the European Commission for 2010, but accumulated very quickly during the recent couple of years). Thus, additional fiscal adjustment measures, mostly on expenditure side, will be required in Lithuania. Although this is likely to prove increasingly difficult as the Parliamentary elections approach in 2012, the current Government has shown the determination to proceed with the plan to bring the deficit to 3 percent of GDP in 2012 which would allow joining the euro zone in 2014.

At the same time, high education reform has been started in 2009 and major reforms of energy sector to create a Baltic electricity market based on the model of Nordic exchange (Nordpool) have been initiated in 2010. Health care and social security reforms are being debated, measures to improve investment climate are also on the agenda. Although the Government had to face the fact that implementation of reforms is much tougher than initiation, in particular, when you have a fragile coalition government in place, there is a possibility to use this situation as window of opportunity for the long-term reforms and not allow crisis to be wasted.

Ramūnas Vilpišauskas

Director of the Institute of International Relations and Political Science

Vilnius University

Former Chief Economic and Social policy Advisor to the President of Lithuania



Current challenges of Finnish and Russian shipbuilding – collaboration in R&D and building of ice class special tonnage

By Jukka Gustafsson

At the same time when the world's shipbuilding industry is in the deepest recession ever experienced, the President of Russia Dmitry Medvedev "outlines bright future for Russian shipbuilding" in a meeting of the Russian Security Council in June 2010. In spite of the international financing crisis and the current price of oil, which hit also Russian financing possibilities, President Medvedev said that "the fight for Arctic resources, which has been growing stronger lately, is a separate issue, adding that the challenges in the region must be given attention in a shipbuilding development programme". In the referred meeting was present also the President of United Shipbuilding Corporation (Russian abbreviation OSK), Mr. Trotsenko, representing major part of Russian shipbuilding related companies. Russian Government's clear strategy is to create special shipbuilding zones in several parts of Russia with special tax and customs conditions. In December 2008, OSK was added on the list of strategic enterprises entitled to government support including all other major yards and institutes. The Government has also invested in the industry 22 billion RUB (5,5 billion EUR) during the last few years. Russian Government and Navy are in discussions with French Government, STX France and other parties to purchase four Mistral class helicopter carriers. One vessel should be jointly built in France and three vessels in Russia, probably in St. Petersburg, where one French helicopter carrier visited for in November 2009.

Since private Wärtsilä and state company Valmet left shipbuilding in the late 80's, the remaining Finnish yards have been moved to and from Norwegian owners to recent Korean owner STX, which has expanded from Korea and China to several new countries and in a short time.

In Finland it has been no understanding nor actions to maintain even a small participation in the ownership (and decision making) of one of the key industries and R&D of Finland. A comparison can be easily made e.g. to France, which maintained 36% ownership of the important shipyard in St. Nazaire (comparable in size and production with Turku) when Aker sold the majority of shares to STX. The value of Finnish shipbuilding has been and still is in it's ability to develop, design and produce special vessels for demanding customers. The world class passenger vessels, ice breakers, ice-going offshore and arctic vessels, LNG carriers and many other type of special tonnage has been created using not only own 4,000 employees, but also hundreds of companies and several thousands of employees in the Finnish maritime cluster.

The shipyards in Helsinki, Turku and Rauma have designed and built more than 1500 vessels to former Russia and former Soviet Union, but only few vessels to modern Russia. Around 300 vessels have been built to ice class. The daughter company of STX Finland, Aker Arctic Technology (AARC), is a company which continues the extensive R&D work of the former Wärtsilä, at that time Kvaerner Masa-Yards Arctic Technology Center. The new ice model testing facility is located in Helsinki and is ranked as the most modern in the world. AARC has as a co-operation partner in the Krylov Shipbuilding Research Institute (KSRI) in St. Petersburg.

Several special vessels have been jointly developed and even constructed by Finnish and Russian shipyards and institutes. As examples to be mentioned Taimyr-class nuclear ice breakers with Baltic Shipyard, Titan-class 600 tons offshore crane vessels with Caspian yard and the most recent arctic shuttle tankers between AARC and Admiralty shipyard.

According to the Ministry of Economic Development of the Russian Federation "the demand by national ship-owners for large capacity vessels includes and " the demand for civil maritime technology in Russia"; both for the period up to 2020 comprise of close to 1500 vessels. The list of large vessels includes 25 large LNG carriers (150 000-216 000) m3 and 39 large tankers (115 000 - 360 000) dwt. None of those can be built at any of Russian current yards. The list of ice breakers includes 6 nuclear powered and 20 diesel ice breakers. Floating nuclear power plants for north regions are listed as seven units; the first of those is currently under construction in Baltic Shipyard. The number of science research vessels is 27; the first of those is now under construction in Admiralty Shipyard in order to replace "Akademik Feodorov", built in Rauma in the 80's. Small ice class gas carriers are listed as seven. Maritime technique for shelf exploration (oil & gas) consists of 105 - 120 units. Tankers, bulkers, universal and multipurpose vessels, timber carriers are listed up to 230 vessels. Passenger

and freight ferries up to 25-30 vessels. Fishing fleet vessels (large and middle) up to 180. Other vessels for renovation of Russian other fleet up to 750 vessels. The number of requested vessels is incredible with respect to capacity of Russian shippards. Foreign technology and finance participation is a clear target in the modernization and gigantic extension of Russian shipbuilding industry.

The first Russian super yards have recently been decided to be established in the Russian Far East near the city of Vladivostok. Korean Daewoo Shipbuilding and Marine Engineering (DSME) has started with OSK a gigantic shipyard project in Primorsky territory. Another agreement has been signed with a Chinese-Singaporean Yantai Raffles in order to build a gigantic offshore yard in order to build platforms and drilling equipment. There is no doubt that foreign deliveries and joint production will be remarkable for many years due to practical reasons. Next natural step for OSK is the selection of foreign partner for the building of a new super yard in St. Petersburg area.

The main shipyards and institutes of Russia are located from historical and practical reasons in the centre of St. Petersburg. The main products are and will be for Russian Navy and the facilities of all big three: Baltic, Admiralty and Severnaya yards are for the small and mid size vessels only, without proper available area for extension. All yards have during the last few years prepared plans for large vessel construction but the cost of one new green field super shipyard is around 3 billion EUR. In June 2010 the president of OSK, Mr. Trotsenko has confirmed the rumors that "the main areas of Admiralty will be moved onto the island of Kotlin in Kronstadt". However, no decisions have been made and the minimum design and construction time for such a yard is 3 years. According to recent statement of General Director of Severnaya and Baltic shipyards Mr. Andrey Borisovich another gigantic stabipbuilding group "The United industrial Corporation" (Russian abbreviation OPK) has also plans for the reconstruction and upgrading its current facility Severnaya suitable to build large vessels.

A private owned shipyard but well connected to state organizations and companies is Vyborg Shipyard, which also has plans for a super shipyard in Primorsk (Koivisto). However, the Primorsk plan was recently "frozen" due to the delay of Shtokman gas & condensate development project.

STX Finland is keen on any cooperation possibilities including all related technology, design and construction of "lead" vessels.

For any further development of Finnish shipbuilding industry

For any further development of Finnish shipbuilding industry and all related maritime cluster it is of outmost important to participate in the development of Russian north-west shipbuilding industry and shipping, especially arctic.

The key words are in close cooperation between the governments and the strongest companies.

A recent but small step forward was made in May 2010, when a cooperation agreement was signed for the development and building of a new type of oil spill combat icebreaker for Russian leading shipping company Sovcomflot. The formal signing was witnessed by the Russian prime minister Vladimir Putin and Finnish prime minister Matti Vanhanen. The political support and participation on the highest level is certainly a must in any future business. Joint ventures with Russian shipyards should be considered for the joint design and construction of all kind special vessels and new technology items like aluminum LNG tanks and even in the development and construction of new Russian yards. STX Finland and Finnish maritime cluster possesses leading technical knowhow and has good experience of working with Russian organizations.

Jukka Gustafsson

Project Director Sales & Marketing

STX Finland Oy

Turku, Finland



The Arctic region is warming up as a result of climatic change, and the repositioning of security policy

By Bo Österlund

The Arctic region is determined in several varying manners. Geographically, the Arctic region is limited by the Northern Arctic Circle which follows the latitude 66° 33'N but the region may also be determined according to temperature, timber line, permafrost, icecap or various political agreements, the most important of which is the UN Convention on the Law of the Sea passed in the year 1982. In terms of temperature, Arctic regions comprise the regions north of the isotherm + 10°C. As determined by the tree line, the Arctic region begins in the transitionary zone between the timber belt and the northern treeless tundra. Also the border of the everlasting permafrost may be regarded as the boundary of the Arctic region. In the area of permafrost at least 90 per cent of the ground is frozen. This, in comparison with the other determinants, is due to make the Arctic region more extensive, particularly in Russia. In maritime regions the boundary of the Arctic region is determined on the basis of the duration of the wintry ice coat of the sea.

The Arctic region is generally considered to comprise the Arctic Ocean with parts of Canada, Greenland (Denmark), Russia, the United States, and the Nordic countries. Apart from Sweden and Finland all the others are coastal states of the Arctic Ocean which also share territorial demands in regions which are still an issue of negotiations.

The extent of the Arctic Ocean is 50 per cent larger than that of the land area of the United States. The length of the Arctic coastline is approximately 45 000 kilometers. Roughly 40 per cent of the Arctic region (13, 4 million square kilometers) is land and 60 per cent is sea (roughly 20 million square kilometers). In summer, the Arctic Ocean is covered by a coat of ice of roughly 8 million square kilometers, on an average. In winter the ice coating is at its most extensive from March to May, about 15 million square kilometers. At the end of the summer the ice coating is at the minimum; a few years ago its extent was only 5, 3 million kilometers. According to climatic patterns made up by certain experts the icecap of the Arctic region will diminish by about 2, 5 per cent per decade.

Almost all researchers share the opinion that the icecap continues to melt. The most drastic estimates suggest that the icecap should disappear totally in a few decades. In any case it is sure that the reduced icecap will open new opportunities to the sea routes of the whole world and, simultaneously, will provide new accesses to the exploitation of the immense natural resources in this region.

The assessment of the energy resources of the Arctic region involves several factors of suspense. The most precise estimates lack numerical information of positive deposits. The estimates of American, Canadian as well as European assessors are based on a pattern concerning economically profitable deposits while the Russian assessments are based on a pattern describing the technical exploitation possibility of the deposits only.

The United States Geological Survey (USGS) suggests that the Arctic region holds, according to a sophisticated estimate, 25 per cent of the oil and gas deposits of the earth yet to be discovered. The USGS estimates that as much as 110 billion barrels of oil might be found east of Greenland. Considering today's consumption (more than 85 million bbl/d) such a deposit would provide for the global consumption of five years. As far as deposits west of

Greenland are concerned, there are no public estimates yet.

The sea district of Norway still holds verified virgin deposits with 500 million metric tons of oil (equaling to a production of 10 million bbl/d for one year) and 800 billion cubic meters of gas.

The energy strategy of Russia expects the share of "Arctic Oil" to rise up to 20 per cent of the total production of Russia which today is roughly 10 million bbl/d. The Commander of the Russian Northern Fleet, Admiral Vladimir Vysotskij pointed out as early as in June 2007 that even then Russia obtained 90 per cent of its gas, 60 per cent of its oil, more than 90 per cent of its nickel and cobalt, roughly 60 per cent of its copper, and over 95 per cent of its platinum from its Arctic region. The statement may, naturally, carry also deliberate aspects in addition to a scaling error, or the term Arctic region may denote here something entirely different from the European definition of the area.

The gas field of Shtokman 600 kilometers north of the Kola Peninsula is estimated to hold 3,8 trillion cubic meters of gas, and, furthermore, 31 billion metric tons of gas condensate. The total cost of the investments required for the exploitation of the field is estimated to reach 20 billion US dollars. The gas field will be substantially affiliated with the double gas pipeline to be installed on the bottom of the Baltic Sea since the gas is to be conducted from this gas field. The estimated time-table concerning the launch of the economic exploitation of the field will postpone the project for years. Consequently, the gas must be supplied by other gas fields or by bereaving other consumers of their shares. The Russian plan to commence the transportation of gas condensate to the United States will, at all events, be postponed to the 2020s. According to Western estimates concerning energy transportations from the Russian Arctic region, which today equal to 10 million metric tons annually, will rise at least 50 per cent by the year 2020. The British Petroleum suggests that the Arctic region might hold even 25 - 50 per cent of the yet undiscovered oil and gas resources of the world.

The increased opportunities of sea transportation favors Russia, in particular, since its oil and gas deposits in Siberia are, in general, situated in areas with no roads or railways. The transportation possibilities along the waterways endowed by rivers are and will be increasingly significant in the future, at least during the ice-free summer seasons.

The idea of a northern sea route to East India, Japan, and China which would spare the seafarers the hardships of sailing round the Horn, has haunted the European minds ever since the early Middle Ages. Severe climatic conditions, ice blockades, and the inadequate technical level of knowhow have so far constituted obstacles hampering sea traffic.

After the golden period of coal-operated steamers, globalization has integrated the continents into a more and more solid network. Despite the recession, the seas of the world are plied continuously by more than 40 000 seaworthy cargo vessels which transport annually more than 300 million containers. This system of transportation traffic conveys more than 90 per cent of the volume of global trade.

At the moment, experts discuss two main alternatives of routes or fairways through the Arctic region.

The Finnish explorer Adolf Erik Nordenskiöld was the first man in history to circumnavigate Eurasia via the Northeast Passage in 1878. This passage runs from Nordkapp eastwards north of the Kola Peninsula and then follows the northern coast of Russia, and via the Bering Strait to the Pacific Ocean. The passage runs through the exclusive economic zone of Russia, and, in places, also through its internal territorial waters.

The passage has always been of great military importance to Russia. When the Soviet Union established the Pacific Fleet and the Northern Fleet at the beginning of the 1930s the passage provided an opportunity to unite these two power factors when required. In 1942 a Russian man-of-war sailed from the Pacific to the Barents Sea. The route was not opened to international sea traffic until July 1991 in the period of Mikhail Gorbachov, only a few months prior to the disintegration of the Soviet Union.

This passage which is utterly tempting economically would shorten the passage from Hamburg to Osaka, Japan to a third of what it is today; the route is at least 6400 kilometers shorter than any traditional alternative sea route. According to a Swedish source the route will be opened for year-round traffic in 5 - 10 years.

Roald Amundsen navigated the Northwest Passage in 1906; it runs via Greenland and Newfoundland curving round Canadian territorial waters north of Alaska to the Bering Strait and further away to the Pacific Ocean. This route will shorten the passage from the east coast of the United States to the Far East by roughly 7 000 kilometers, i.e. it will save at least two weeks of travelling time. A tanker which is too massive to pass the Panama Canal would save as much as two months of travelling time. Since the climate of the northwestern area is colder than that in the northeast, experts estimate that the opening of this route for year-round commercial sea traffic might become actual in 10 - 20 years. Difficulties in navigating the fairway as well as environmental aspects may also challenge the trafficking. The shipwreck of the tanker "Exxon Valdez" resulted in 40 000 metric tons of oil leaking into the sea in 1989. It is estimated that more than 80 000 liters of crude oil are still today to be obliterated from the wreck. The purification cost is estimated to reach roughly 2 billion Canadian dollars. The memory of this tanker catastrophe appears to pilot even today all initiatives and measures of protection. According to experts it might cost as much as 100 million Canadian dollars to prepare a nautical chart of this route.

In summer 2008, the Northeast Passage as well as the Northwest Passage was both open simultaneously for the first time in recorded history. According to the optimistic or pessimistic (depending on the angle of the assessment) estimates based on real observations of several researchers of the Arctic region, our Arctic Ocean might be ice-free as soon as in the summer months of the year 2015.

An extensive number of researchers are interested in a third future sea route, i.e. the fairway crossing the North Pole. In comparison with the two previous routes, the Northeast Passage and the Northwest passage, the polar route is obviously the shortest but it will not come true until a massive melting process of the ice takes place; according to certain estimates it will not be possible until at least 50 - 60 years from today, not even for a short summer season.

Prior to the Second World War every coastal state had only a narrow territorial waters of some 3 - 4 nautical miles in width; according to the UN Convention on the Law of the Sea it could then be widened to cover 12 nautical miles from the baseline. Finland enlarged its territorial waters to 12 nautical miles by a law passed in March 1995.

As for the rest, the sea districts remained open high seas in which the states of the world were free to exercise any kind of legal activities. Harry S. Truman, President of the United States, began with his declaration of the year 1945 a development which changed the sovereignty of the seas. According to Professor Timo Koivurova, University of Lapland, Truman's declaration, according to which the United States possesses sovereign rights to the natural resources of its continental shelf, launched a chain reaction in which one state after another endorsed similar rights to the natural resources of their continental shelves. This arrangement became established as a part of international common law in which every coastal state is entitled to a seabed area attached to its land territory.

The problems which have emerged after the establishments of continental shelf rights have dealt mainly with the question how far outs to the open high seas the continental shelf of a coastal state can extend. According to the UN Convention on the Law of the Sea 1982 the continental shelf may principally extend out to 200 nautical miles from the baseline of the territorial sea. "The continental shelf of a coastal state covers the seabed and its contents of underwater areas extending outside the territorial waters of a coastal state as a natural prolongation of its land territory out to the continental margin's outer edge, or 200 nautical miles from the baselines from which the width of the territorial sea is measured in case the continental margin does not extend so far ." The definition of the distance of 200 nautical miles (370 kilometers) denotes the "at most"-definition.

The UN Convention on the Law of the Sea is frequently called "the Constitution of the Sea". The Convention regulates almost everything connected with the sea from fishing to oil drilling, from environmental aspects to traffic and the sea boundaries of the states.

According to this Convention the coastal states were to lodge their submissions for claims concerning their continental shelves to the UN Committee dealing with this matter in ten years after becoming a member of the UN Convention on the Law of the Sea. The United States is the only coastal state of the Arctic Region that has not joined the treaty. As far as the other coastal states are concerned, Norway ratified the Convention in 1996, Russia in 1997, Canada in 2003, and Denmark in 2004. The two lastmentioned countries have still time to deliver their claims of continental shelves, Canada until 2013, and Denmark until 2014. Finland ratified the treaty in 1996. Russia was the first state to deliver the claim of its continental shelf to the UN in 2001 even if it had to complete this information subsequently.

The greatest disagreement in determining limits in the Arctic Region concerns the definitions of the 2 000-kilometer-long Lomonosov Ridge bisecting the Arctic Ocean and the Mendeleev Ridge extending out to the North Pole. Are they to be regarded as prolongations of the continental shelf of the coastal state and thus as grounds for an extended continental shelf, or not? Canada, Denmark, and Russia each claim that the territory belongs firmly to their own continental shelves. If these areas are determined to belong to the continental shelf of Russia, it is a matter of an area with an extent of 1, 2 square kilometers. According to the view of the United States these ridges do not belong to any country's continental shelf but are part of the deep-seabed under the regime of the International Seabed Authority, and thus common property to all nations.

We still retain in remembrance the Russian expedition in 2007 when a miniature submarine was steered into the depth of 4 300 metres near the North Pole, leaving the Russian national flag there as a calling card. The commander of the expedition, the then Vice-Chairman of the Russian Duma and explorer Artur Tjilingarov stated after this visit: "The Arctic is ours, and we have to exhibit our presence in the region".

The Svalbard is another disputed question where Russia, in accordance with the agreement acknowledges the Norwegian supremacy in the islands but considers that the status of demilitarization of the region has not been observed. Russia also holds the view that the international economic status of the islands is valid also in the Economic Zone of the islands.

At the end of April Russia and Norway reached, after negotiations of 40 years, an agreement concerning the defining of the sea border and the common sovereignty of the oil and gas deposits transgressing the state limits in the sea area between the Svalbard and the Novaya Zemlya. The agreement applies to an area of slightly more than 175 000 square kilometers which is now to be distributed between the two states. This agreement is not, however, a legally valid pact between Russia and Norway. It is, in fact, an endeavor officially presented, solemnized by the highest leaders of the countries, and undersigned by the Foreign Ministers to achieve such an agreement. Although it is an extremely significant intermediary etape, the agreement is not yet completed. A lot of technical polishing and refining, and, in particular, the enforcement of a conclusive agreement, will still be necessary. The final "de jure" situation which can be accepted to serve as a basis for the agreement remains still to be settled.

Russia also has expressed its disagreement concerning its sea border with the United States which has not yet been ratified.

According to Swedish sources it is apparent that the Russian policy concerning the Arctic region aims at a balance between military and economic interests. This is manifested in the interaction of the Russian Northern Fleet and the Russian oil industry. The free access of the Russian naval forces out to the Atlantic from the naval bases in the Kola Peninsula, as well as the decisive role of the Northern Fleet, are emphasized in the Russian sea strategy until the year 2020 which also accentuates the significance and accessibility of the Northeastern Passage.

The United States appears to observe the issue of the Arctic region from a distance. The primary focus of its domestic interests seems to be Alaska, while Canada is the main party in bilateral questions. Strictly speaking, the United States seems to have been left aside in the discussions of the Arctic region since it has not yet joined the Convention on the Law of the Sea.

The hands of the American clock of security policy seem to have stopped, at least for the moment, at a position where the permanent presence of the US Air Force in Iceland has ceased, the storage of combat weapon material in Norway is being reduced, and the presence of naval forces has been increased in the Indian Ocean and the Pacific Ocean. The researcher Fredrik Lindvall of FOI (Försvarets Forskningsinstitut) has assessed that this change will decrease the presence of the US armed forces supporting its European allies.

The significance of the air space of the Arctic region has remained a field of operations for the remote actions of the air forces, for intercontinental missiles, and consequently also for missile defence. Doctor of Political Science Markku Salomaa assesses, in his article "US cruise missiles to be used as a NATO shield in the Baltic area" published in the magazine "Rannikon Puolustaja" ("The Coast Defender") 1/2010, that protective missiles of the AEGIS system of the

Navy will be stationed also in the Norwegian Sea as soon as from the year 2011. The surveillance of Russian missile submarines in the Arctic Ocean is likely to be continued in the same way as it was exercised during the Cold War. Mobile, rapidly conveyable components of armed forces, naval and air forces seem to maintain, if not to increase their significance in the world seas and in the air space above them

Canada's demand to restrict the free traffic of foreign naval forces in the Canadian territorial waters of the Northwestern Passage is under consideration. Canada wants to incorporate that part of the route in its internal territorial waters. Thoroughfare traffic (including war vessels) presupposes the coastal state's permission of transit traffic, and also submarines are to cruise surfaced. Canada also has a territorial controversy with Denmark concerning the regime of the uninhabited island of "Hans Island". The Canadian Prime Minister flew to the island in 2005, and hoisted there the Canadian flag as a sign of the regime. With the progress of the process concerning the continental shelf it became evident that, on the basis of remapping, the island unambiguously belonged to Denmark.

For a long time Canada has shown its presence in the sparsely populated or actually uninhabited north. It has watched its territories primarily with marine guard planes (with Aurora guard planes flown from the south only a few times in a month), with a domestic radar net and in the last few years also with two frigates which, however, are not reinforced for trafficking in ice, and with submarines stationed in the north. One of those is purely operative, and is not operated under the icecap.

According to the American jurist Eric Posner the rule over the sea depends on presence, capacity, and power. As far as the Arctic Ocean is concerned, this should be augmented by the will to operate on the surface, below the surface, and in the air space above the sea. In the Arctic region Russia possesses both of these qualities, Canada possesses the capacity of presence in open waters but no power, the United States possesses power but no capacity of presence. It is worth mentioning that the US Coast Guard has only three icebreakers capable of sailing in arctic waters, and even they are under the administration of the Pacific naval board. Russia has as many as 18 icebreakers capable of trafficking in arctic circumstances, and seven of these are nuclear-powered.

Iceland has displayed great interest in the increased possibilities of sea transportation in the Arctic Ocean. Due to its site this island state might have the opportunity of providing harbour, supportive, and terminal facilities as well as transit loading possibilities to the sea traffic via the Arctic Ocean. As to the increased sea transportation in consequence of the exploitation of the natural resources of the Arctic region, Iceland appears to cherish expectations of obtaining certain contingents to be used for its own economy.

The relationships between Iceland and Norway are affected by the disagreement of drawing the borderlines of the two countries concerning the course of the continental shelf around the island of Jan Mayen, and the exploitation of the natural resources of the Svalbard. The security policy of Iceland undergoes a noticeable process of change. One of the conducting factors is the above-mentioned withdrawal of the US Air Force from the island and the air base of Keflavik in 2006. Despite the withdrawal, the defence treaty between the United States and Iceland is still in effect. It is, however, true that the treaty covers only exceptional circumstances. NATO has in consequence of this development become the cornerstone of the security policy of Iceland which as a

result of the withdrawal of the US forces commenced to organize its own domestic defence. In 2008 defence was, for the first time in history, entered into the state budget of a separate caption. This resulted in the Iceland as establishment of Iceland Defence Agency (IDA) on June 1, 2008; it controls the four radar stations of the island and the air-traffic control of Keflavik. The surveillance of the air space was arranged in co-operation with NATO. Furthermore, "the Thorwald Stoltenberg" report requested by the Foreign Ministers of the Nordic countries suggested, as is well known, that also the Swedish and the Finnish Air Forces should participate in Air Policing. This suggestion may well be considered rather controversial in a situation where NATO is unambiguously responsible for the surveillance.

The issue of domestic military defence to be arranged along with and in addition to the Coast Guard is apparently a consequential result of the development of security policy in the first decade of the 21st century. The participation of the Icelandic coast guard personnel in the crisis management in Afghanistan and the opportunity given to Icelandic youths to do their voluntary military service in the Norwegian army appear to be the first steps towards the island's own domestic armed forces proportionate to the size, the population, and the economic capacity of the country.

The expected warming up of the climate and the melting of the Arctic Ocean will affect and actualize several territorial and border questions in Danish Arctic policy. The increasing traffic of vessels in the neighborhood of Greenland is seen also as a catalyst in security policy. The developmental span of the self-government of Greenland is assessed by many experts of politics to result in political autonomy as soon as in roughly 20 years. The enlarged self-government (in June 2009), and the voted detachment from the EU (in 1985) are additional spices in the development. Economic lingering independence is sure to follow after a certain interval of delay, and will certainly be influenced by the growth of the opportunities of exploiting the natural resources and energy sources discovered, as well as the encouraged sea traffic. Their exploitation will take Greenland towards economic independence from its former, or, for the time being, present mother country.

According to the magazine "Defense News" published in early March this year Norway has plans to reinforce its Arctic region with one or two air bases, and possibly with one submarine base. According to the Norwegian Minister of Defence Grete Faremo these bases could be established in Evenees, Bodö, and Orland.

The assessments of the improved accessibility of the Northwestern and the Northeastern Passages in summertime and the warming climate have roused also the Chinese as well as the Bahamian and the Liberian research resources and exploration vessels instigated by the TV documentary of the issue, shown on the Canadian TV on March 18, 2010. The interest seems to be focused on China, Japan, and both the Koreas which all sit so to speak "in the same boat", and which would be well served by shorter sea routes from the Far East to the European markets. It is also worth mentioning that almost 50 per cent of the Chinese gross national income is cashed in with the help of shipping and the exports over the seas. Besides, there are no pirates

who elsewhere will collect sky-high "insurance expenses". Northern alternative sea routes will endow the northern Chinese ports with opportunities to develop into new centers of logistics. The changing trends in global shipping seem to serve well particularly the Far East, and also the much-consuming western world due to the lower transport costs. At the moment the cargo cost for one container from the Far East to Europe is roughly 3 500 € per voyage while the cargo back costs only about 500 €

The interest of Bahamas (consumption roughly 22 000 bbl/d) which is one of the greatest states in shipping business, and that of the oil state Liberia is likely to be focused, in addition to the shipping routes, also on the opportunities of exploitation of the natural resources in the area, and thus also to the geographic division of the area.

Since 1994 China has made explorations in the Arctic Ocean with the biggest non-nuclear icebreaker "Xuelong" (displacement 21 000 metric tons) which was originally bought from the Ukraine. To ensure arctic capability of operation the acquisition of a new Chinese research vessel (displacement roughly 8 000 metric tons) is being under consideration, and it is estimated to be in operative use by the year 2013. The finishing date seems to occur with the dead-lines of the lodgings of submission for the determination of the limits of the continental shelf of Denmark and Canada. In the research "China prepares for an ice-free Arctic" published by SIPRI in early March this year also the importance of military factors in addition to scientific and commercial aspects is discussed in the Arctic region."Kina inser sakta men säkert de kommersiella och strategiska möjligheter som ett isfritt Arktis skulle innebära".

(" China apprehends, slowly but surely, the commercial and strategic opportunities offered by an ice-free Arctic zone").

Senior Colonel in the Chinese People's Army Han Xudong warns in the report of SIPRI: "The possibility of use of force cannot be ruled out in the Arctic due to complex sovereignty disputes".

The critical path in the Arctic region opened by the warming up of the climate passes through the international relationships of the coastal states, international justice, energy policy, fishing policy, and exploitation of other natural resources to the developmental alternatives in the security policy of the region.

Physical presence, will, and capability of year-round operation as well as adequate power and available resources will decide who is going to rule the sea. As far as the Arctic Ocean is concerned, capacity of operation on the surface, below the surface, and in the air space above the sea can be added to the above list.

At the moment, however, it seems evident that there is no need to resort to swords as long as the limits of the continental shelf are drawn by science.

Bo Österlund

Navy Commodore (ret)



Russia's future security stance versus friends and foes

By Marcel de Haas

Under Vladimir Putin and Dmitry Medvedev, Russia has developed from a neglected regional power into a self-declared resurgent superpower. What is the most likely scenario for Moscow's security stance versus its Western and Eastern neighbours in the decades ahead?

An assertive Russia?

One of the likely scenarios is that of continuation of a forceful foreign security policy. In the international political field Russia seeks at least to consolidate its leading position within the CIS Collective Security Treaty Organisation (CSTO) and - together with China - also in the Shanghai Cooperation Organisation (SCO). With NATO an ambivalent relationship will be continued, varying from cooperation to confrontation, according to actions of both parties. The strong trade links with the EU will further be raised, based upon reciprocal interests. But in the security area cooperation with the EU will remain restricted to practical cooperation in areas which are of interest to Russia, such as counterterrorism, non-proliferation of mass destruction weapons and civil defence/disaster relief. In the military area emphasis will be laid in the execution of the in 2008 announced military reforms, aiming to accomplish armed forces that can be used fast and, if so desired, also abroad.

Or a failing Russia?

Another probable scenario is that the Russian Federation turns into a failing state. The domestic sphere in this setting shows a Russia which will be characterised by social disorder, by a faulty economy, and by political turmoil in the North Caucasus. The economy shows hardly any increase or even shrinks. That is the consequence of a continued one-sided economy solely depending on energy resources and with connected reducing revenues. Such a weakened socio-economic situation has also consequences for Russia's position in the dimension of international security. Owing to a lack of Russian leadership the military alliance CSTO weakens or even disintegrates. Considering these circumstances and supported by its reinforced position in the SCO, China is able to strengthen its influence in Central-Asia at the expense of Russia. If China's leverage becomes so strong that it can stretch its power into Russia's Far East, Moscow might feel obliged to align itself with the West in the field of security cooperation, in order to keep its territorial integrity in tact. In the military field, due to obstacles such as uncooperativeness of political leaders and generals, corruption, a lack of (defence and security) budget to fulfil the plans, a deficient number of volunteers, as well as shortages in military-industrial capacity to produce the requested number of modern arms, only a part of the envisaged military reforms plans will be reached.

Expect a failing and assertive Russia

A combined scenario of a failing and assertive Russia seems to be the most likely for the next decades. As to a failing Russia, this will be the result of deepening of the main existing domestic threats, of a demographic and socio-economic nature, as well as of territorial integrity. The global financial crisis of 2008 and beyond has proven how vulnerable Russia's one-sided economic dependence is on energy resources. The deteriorated economy has already caused social unrest. As to territorial integrity, Moscow seems to be loosing its grip on the North Caucasus,

resulting form crime, corruption, anarchy and Islamic terrorism. Russia's Far East is also breaking-up from Moscow, by focusing on China and other Eastern countries, possibly actively encouraged by actions from Beijing. Because of contradicting national priorities and opposing views neither CSTO nor SCO are likely to obtain an integrated political-military structure, to become an intervention tool of Moscow, nor to form 'blocs' threatening the West. Moreover, if their economic strength is further enhanced, China and India will act more independently from Moscow and will undermine its international stature. With regard to an assertive Russia, such perilous circumstances of loosing power at home and abroad might induce the Kremlin to use military action, in which, by a fast victory abroad, domestic support can be gained. Thus, the West could be confronted with a resurgent Russia with limited capabilities of power projection, in which 'Georgia 2008' type of Russian military action can be expected, most likely only in the CIS area.

Western policy options in response

How might the West respond to a failing and assertive Russia with a limited capability of power projection? A dual Western policy towards Russia could be the right approach, of the traditional type of 'carrot and stick'. On the one hand the stick, a policy of a tough stance. By pointing out to Russia what is acceptable, and by taking the initiative in stead of reacting to Moscow's endeavours. On the other hand the carrot, a policy of encouraging cooperation with Russia. Moscow and the West should focus on mutual beneficial and practical projects. The recent US-Russian strategic nuclear arms agreement is a good example of this, from which talks on other arms control issues may follow. Another option is joint Western-Russian political action in international security, for instance towards (the nuclear ambitions of) Iran and North Korea. Moreover, the good experiences of joint military operations could be reinforced. In addition to cooperating in or on Afghanistan, other foreseeable options in joint operations could be regarding the piracy near Somalia, and Russian contingents in EU operations, such as recently in Chad, which explicitly are of mutual interest. Differences between Russia and the West are likely to stay. Hence, workable conditions have to be established, since both parties will remain important players in the international arena in general and in Europe in particular.

Lieutenant Colonel Dr. M. de Haas

Senior Research Fellow

The Netherlands Institute of International Relations Clingendael

The Netherlands

This article is partly derived from his book 'Russia's Foreign Security Policy in the 21st Century: Putin, Medvedev and Beyond', which was published by Routledge in March 2010. (See:

http://www.routledge.com/books/details/9780415477307)

Changing Baltic Sea military threats

By Seppo Ruohonen

Cold war era in the Baltic Sea was militarily quite predictable and considerably calm under the global reassurance-deterrence balance and military equilibrium of military forces. Occasionally global crises on each decennium between two big powers Nato and Warsaw Pact reflected tension to the Baltic Sea. Both allies were actively surveying and spying the territorial waters of Finland and Sweden sometimes up to the Gulf of Bothnia

Unallied and wartime neutral Sweden had a strong naval defence with few hundreds warplanes and submarines surveying and reconnoitring territorial and international waters. Uniquely neutral Finland had a strategic coastal defence supported by a strong mining capacity and a quite comprehensive underwater surveillance system and a reasonable air interception capacity. Finland operated in the frame of the treaty on cooperation and friendship and mutual assistance with Soviet Union and managed to avoid political crises reaching military dimensions.

The military political centre of gravity in the Baltic Sea was in the Danish straits and the Sea constituted being a flank for the massive central European forces. Nato surveillance penetrated deeply to the Baltic Sea and Soviet navy was on call in the Danish straits. Usually during the crises the Soviet fleet was out on the high seas and regularly expansive navy exercises occupied the horizon keeping sea surveillance systems alerted. Danish Nato sea mining facilities were standing by constantly. The Baltic Sea was nearly Soviet inland sea. Despite the permanent confrontation the economical maritime traffic was very seldom disturbed.

After the Soviet Union collapsed Russian intensity decreased dramatically and fewer submarines, warships and warplanes were observed in the Baltic Sea. Nato and its Nordic allies were confused but still alerted. Nato lost her basic muse; eastern threat did not exist any longer. The organisation had to find a new concept and mission in order to convince her legitimate existence. Sweden ended to the conclusion that there will not be any military threat at least within a decade. Nordic political decision makers and leaders set a pressure to streamline armed forces. Finland followed the process a few steps behind.

While former Soviet armed forces were decaying and the navy intensity declined globally the Nordic countries commenced to streamlining their forces. Newly independent Baltic countries strived to build capabilities to control their territory. Finland, Sweden and Nato supported the Baltic countries' efforts. Sweden felt relaxed and was at the head in cutting territorial forces. Swedish coastal defence was nearly disarmed, submarine programs cooled down and army and air force suffered heavy cuttings.

In the early 90'ies new crises like in Iraq-Kuwait, Somalia and Balkans kept politicians, researchers and think tanks busy in order to find an appropriate strategic concept. UN was toothless in Bosnia and Kosovo. Late 90'ies 1998 EU Summit in St. Malo adopted a new proposal of European crises management, which was further developed in EU Summits in Berlin and Helsinki. Later on United States bought the concept. On 2001 the 911 tragedies strengthened the new crises management concept and created the war on terrorism. Nordic Natomembers and Sweden accelerated to build crises management capabilities participating thus in global responsibilities and serving their foreign policy. Crises management was found as armed forces' mission number one. Finnish defence forces' first priorities was yet and stills a national territorial defence. Traditional UN-missions and developing PfPcooperation within Nato were in agenda as well. In the larger European picture the Baltic Sea was not militarily very challenging. Danish straits cold war function was gone. The Baltic Sea military potential decreased permanently to the lower level, as it was believed.

In the beginning of the new millennium oil price was approximate 20 USD barrel starting to increase sharply being later 2008 150 USD barrel. In the course of increasing oil price Russia intensified oil export via the Baltic Sea. The waterway gained gradually more importance for Russian economy and consequently increased the need of navy presence. The Baltic Sea region's maritime security officials were alerted and environmental authority and circles awaked to emphasise oil accident risks. The military monitored altering situation.

The Baltic Sea strategic assessments gained new dimension after Germany and Russia made 2007 an agreement on gas delivery through

the pipelines on the seabed. Baltic countries and Poland reacted immediately. They stressed the environment risks but actually were more concerned of their transit trade and security. Sweden announced the project being a security political question too. Finland considered the project mainly being an environmental issue.

The Baltic Sea countries and EU realised that the sea itself and maritime sea traffic is vital for them all. The Baltic Sea strategy proposals popped up in EU parliament. The waterway has been most important for Finland and Russian economy but along with the pipeline project it is crucial for the German and EU energy policy and economy. Nato interest comes from the Baltic members' and Poland's demands and United States general interests to the Russian activities. For the Finnish economy it has mainly an environmental meaning but undoubtedly it is a burden that the pipeline puts on the use of economical maritime zone as well.

The pipeline construction works and security measures are obviously working well between the pipeline company, respective countries' officials and various international subcontractors. All the coastal countries have their own measures to control the construction works on the respective territorial waters and economical zones. It needs to forward the surveillance activities to the international waters as well. National perspective usually goes before the common interest.

Along with the high oil prices Russia made a decision to modernize 45 percent of the defense forces weaponry by the 2015 although the process has slowed down with lower oil prices and economic downswing. The pipeline project has generated a new security discussion and security thinking in the Baltic Sea Region. Russia is heralding their main effort being the pipeline protection. Early this year media reported Russia bought a new landing operation support vessel from France and Sweden is searching partners for their new submarine project. Process has increased all parties' presence in the Baltic Sea. Vladimir Putins 2007 speech in Munich, Georgian war 080808, Russian energy transit trade problems with Byelorussia, Baltic countries and Poland have all retarded confidence building process with Russia in the Baltic Sea. Latest German talks with France and Poland about a joint proposal for Russian-European "cooperation on security" have raised EU and transatlantic dialogue. United States calls for the Nato being an essential part of the process. Certainly this will have reflects on the pipeline discussions and the Baltic Sea military situation.

Global security challenges and asymmetric threats have resulted a common information collecting and operational networking in the Baltic Sea. Unfortunately most European governments cut their defense budgets last year, which substantiated fears that the goals of the European Security and Defense policy (ESDP) will seriously weakened. This together with the inefficiencies in Afghanistan and Kosovo created by the impasse in relations between EU and Nato has raised demands of closer defense cooperation between EU and Nato.

Already for some time this initiative has been constituted in the Baltic Sea where Finland, Sweden and Nato and some international partners have had a good cooperation in exercises developing functional maritime situational awareness and surveillance systems. Closest cooperation is Finland and Sweden's deepening sea-surveillance cooperation (SUCFIS) having the objective of exchange even classified data. The Baltic sea-surveillance cooperation (SUCBAS) offered to all Baltic Sea countries and Norway is aiming to exchange maritime information. It is meant to be a node for the European Defense Agency's maritime surveillance system (MARSUR) that will enable the dialogue between 15 EU members and EU and Nato maritime actors. Evidently these strengthen situational awareness and security in the Baltic Sea but need Russia more closely to come along.

Seppo Ruohonen

Lieutenant Colonel GS (ret)



Medvedev's fourteen points - any added value for global security?

By Nikita Lomagin

There are few things in Russia's foreign policy today that occupy as much attention worldwide as Medvedev's call for a new European security architecture and his further 'fourteen points' proposal for a European Security treaty. Medvedev's program, at least in a number of its points, resembles the program by Woodrow Wilson who had enunciated peace aims in his famous "Fourteen Points". There are at least two things in the above-mentioned programs in common in terms of tone and content. First, both documents advocate multilateralism in the security area and adherence to law. Second, they are quite idealistic and maybe even naïve in terms of the tools needed for their implementation. But, if Wilson from the very beginning put international public opinion above all else as a key instrument to influence decision-makers around the world, Medvedev will have yet to explore such an option in the future.

Throughout 2009 and first half of 2010 a large number of government officials and politicians, analysts and experts from Russia, Europe, the US and other countries played an active part in the numerous discussions held on the Russian initiative in numerous intergovernmental and non-governmental forums. Contrary to a widely shared view in the West that 'those who speak for Russia have made plain what they oppose but not what they propose instead', (Legvold, 2009) Medvedev's proposal seems to have both real substance and all the symbolic features of the major foreign policy initiative of his presidency so far.

Nevertheless, Michael Emerson in his "Russia in Europe and the West" (2010) has suggested that President Medvedev's draft European Security Treaty is not going to fly fot it may be subject to endless talks in the OSCE's Corfu process, but the bottom line is that this is neither technically nor politically a plausible proposition. Alternatevely, Volker Ruehe (former German defence minister) and General Klaus Naumann (former chief of staff of the German armed forces) published an article in Der Spiegel on 8 March, recommending that the question of NATO membership for Russia be put back on the agenda. The idea is not for a regular membership action plan, but rather that politically the perspective of future membership would be adopted as the frame through which to radically change the sense of thinking and debate about Russia's strategic security relationship with NATO and Europe. In fact, this idea is not fresh. As Jeffrey Mankoff observed, 'In the early 1990s, the hope was that Russia itself would eventually make its way into NATO. In the early twenty-first century, that prospect looks exceedingly remote: Russia's authoritarian political system disqualifies it, and few Europeans or Americans would seriously contemplate extending NATO's Article 5 collective security guarantee all the way to the Russo-Chinese frontier ... For a time, Moscow hoped to use the OSCE as an alternative, only to sour on the idea when the OSCE began openly criticizing the conduct of Russian elections'. (Mankoff, 2009)

The underlying idea of President Medvedev's proposal was to formalize in international law the principle of indivisible security as a legal obligation pursuant to which no nation or international organization operating in the Euro-Atlantic region is entitled to strengthen its own security at the expense of the security of other nations or organizations. The initiative had a unifying character and was designed to harness the potential of states and international organizations to create a truly indivisible space of equal security for all the states of the Euro-Atlantic region within a framework of common 'rules of the game' and mechanisms for their application.

Medvedev's plan contained several basic principles for building such a Pan-European Security architecture. First, every Euro-Atlantic state should have a voice; second, all relevant international organisations – the European Union, NATO, the OSCE, CSTO, CIS – should be included; third, the treaty should be based on new rules binding on all; and, fourth, it deals with a wide range of trans-regional security threats in the wider Eurasian space. Medvedev proposed a new kind of cooperation in the field of hard security, to upgrade the current system of Euro-Atlantic security to become a long-lasting one based on legally binding reciprocal and common commitments.

Medvedev called for a future treaty of European security as a kind of 'Helsinki Plus' treaty, that is as a confirmation, continuation and effective implementation of the principles and instruments born out of the Helsinki process, but adapted to the end of ideological confrontation and the emergence of new subjects of international law in the twenty-first century. The proposals were based on the view that, although the world has changed, European security is still far from perfect. Inviting China to the table seems quite rational – Russia avoids choosing between its

mighty neighbors and makes its best to bind Beijing in yet another political-military institution.

The entire Medvedev program might be summed up as very idealistic: one state's aspiration for greater security must stop at exactly the point where the next state might feel insecure. The Russians have invoked one of the basic Christian principles: do unto others as you would have others do unto you.

The moment of suggesting a new initiative by the Kremlin was quite appropriate, given the relative decline of hard and soft power of Western states as a result of the war in Iraq and the global economic meltdown. Moreover, it seems that the prime concerns of governments in the NATO states in these post-crisis years will be with domestic economic instability and (in the case of the United States) with meeting challenges in the Middle East -- Iran, Afghanistan, and Iraq-- where resources of other powers (first of all, China and Russia) and regional organizations (SCO and Collective Security Treaty Organization) will be in demand. On the one hand, relative revival of Russia provides chance that Russia and Russian-led regional institutions to be heard. Indeed, certain developments in post-Soviet space, such as the strengthening of Collective Security Treaty Organization and its recognition by the UN General Assembly, emergence of a customs union among Russia, Belarus and Kazakhstan, and general growth of Russia's soft power in the region embodied inter alia in an influx to Russia's main cities of dozens of thousands of migrants from Central Asia - all this symbolized a revival of Russia as the core within the CIS.

Also, the willingness of Russia's president to advocate a legally binding treaty stems not only from the bitter experience of his predecessors, but also from his background as a lawyer who prefers formal agreements to mere verbal agreements. According to Russia's Minister of Foreign Affairs Sergei Lavrov, 'Dmitry Medvedev's proposal for a new security pact sets a litmus test for the honesty of the West versus Moscow... The treaty was necessary to implement declarations made in the 1990s that "we are all friends, security is indivisible and nobody's security can be enhanced at the cost of others.' (Lavrov, 2010)

Finally, a survey of world opinion on general principles of world order conducted by the Council on Foreign Relation in November 2009 revealed some signs of potential support for Medvedev's Security program. (World Opinion on General Principles', 2009) In particular, international polling indicates a strong consensus that world order should be based on a multilateral system led by the United Nations or a group of regional powers, rather than a system based on hegemony or bipolarity.

It appears that the key issue is not about keeping the status quo in terms of the security architecture in Eurasia, but rather on what a new security mechanism should look like — should it be a NATO-centric structure which means turning the North Atlantic Treaty Organization into a forum for consultation on worldwide security issues, including all rising powers such as China, India and Pakistan, or should it be a new institutional framework based upon a legally binding treaty guaranteeing equality and indivisibility of security of all states.

Medvedev's "Fourteen Point" program certainly represents continuity of Russia's security policy advanced about fifteen years ago. It represents one of the first 'positive' Russian foreign policy initiatives after the collapse of the USSR. The initiative has both real substance and all the symbolic features to be expected of the major foreign policy imitative of Medvdev's presidency so far. The program's main added value is twofold: it aims at the construction of a new security regime in Europe on new principles of the indivisibility of international security and the inclusiveness of all interested actors; one of the main objectives of Medvedev's security plan is not only to upgrade the already existing (and ineffective) system but also to expand it into the Asia-Pacific region, in order to have a common security space from Vancouver to Vladivostok.

Nikita Lomagin

Professor

World Economy Department, St. Petersburg State University

Russia



Arctic energy resources and security

By Peter F. Johnston

Arctic energy resources have gathered growing attention in recent years due primarily to two developments. The first is the growing global consumption of oil and gas supplies that has fuelled concerns about the sustainability of the resource. The second is the belief that climate change might melt the Arctic ice cover to the extent necessary to make mass development of Arctic oil and gas deposits financially lucrative.

Reduced ice cover and fears of dwindling fossil fuels alone are not enough to spur on Arctic exploration operations; there must also be a reasonable certainty that resources are present in amounts to make development lucrative. It is clear that there are some profitable operations already underway. Additionally, a 2008 United States Geological Survey report, Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle, suggested that there are indeed quantities in amounts that warrant exploration. The median estimate of the report suggests that roughly 90 billion barrels or 13% of the estimated global amount of undiscovered oil might exist in the Arctic. The median estimate for gas suggests that 1,669 trillion cubic feet, or 30% of the world's undiscovered gas is present in the region. The study also indicated that approximately 84% of these reserves lie offshore on the Arctic countries' continental shelves. Interestingly, the study did not include gas hydrates which are likely more abundant in the Arctic. This could become an important energy resource in the future when technology facilitates its development.

Nationalized Oil Companies now control over 85% of global oil reserves. Similarly, Russia, Iran, and Qatar, all nationalized producer states, control just over 50% of global proved gas reserves. This has limited opportunities for International Oil Companies to expand operations. Parts of the Arctic offer these companies an opportunity to increase their reserve ownership.

Another factor that portends Arctic development is the potential shift in emphasis of global energy markets towards increased gas consumption and a slow transition away from oil. Some of the major oil companies have begun to refocus their business model from oil to gas. Exxon Mobil and BP are two of the bigger names to have done so and Shell has also made recent shale gas investments that suggest it might also be following this path. Given the preponderance of gas in the Arctic, it is possible that this transition will result in increased developments.

Arctic gas might also assist Russia to maintain its long-term contracts. Traditionally, Russia has relied heavily on gas purchased in Central Asia and resold to Europe. Turkmenistan has been one of the sources of supply however in December 2009 it opened a major gas pipeline to China signifying a dramatic shift away from Russian trade. While the infrastructure and capacity for Turkmenistan to export to Russia still exists, it is possible that the flow to China may one day increase such that Turkmen exports elsewhere will not be possible. Given this, Russia may increase its Arctic operations to offset the potential loss of Turkmen gas.

Similarly, if other Central Asian countries follow Turkmenistan's lead and shift their trade east, the proposed Nabucco pipeline project could find itself without adequate supply. This might also entice Europe to look north for its supply.

However, the technical challenges posed by operations in the Arctic environment can be prohibitive. Even with some melting ice coverage in recent years, there is still a lot of ice and a harsh climate to contend with. These characteristics shorten the drilling season, place surface and sub-surface facilities at risk, and endanger workers. The special equipment, construction, and procedures required to protect infrastructure and personnel against environmental hazards such as icebergs, ice gouging, and exceedingly cold temperatures are extremely expensive.

The vast distance to market will necessitate the construction of extensive pipeline or rail networks to move the product or require a significant increase in tanker traffic. These tankers would also have to contend with the harsh environment and might experience periods where they can not transit the region.

A final environmental consideration is the fragile nature of the eco-system itself. Spill management in the region would potentially face the added burden of ice-flows. The Deepwater Horizon crisis in the Gulf of Mexico highlights the risks and might result in an increasingly stringent legislative and regulatory framework for operations. The increased protective measures and procedures add a premium to operations in the region.

While there have been suggestions that conflicts might erupt over resources located in areas where maritime boundaries are disputed, this seems extremely unlikely. The USGS study suggests that most of the undiscovered Arctic reserves lie within uncontested continental shelf areas. Approximately 31% of the undiscovered oil is estimated to lie offshore of Alaska in US territorial waters while roughly 39% of the undiscovered gas is believed to lie in Russia's Kara Sea region. Moreover, the Arctic states are already engaged in resolving boundary disputes through the United Nations Charter on the Law of the Sea. In addition to this UN approach, there is also the ongoing dialogue that takes place amongst Arctic states and other interested countries through the Arctic Council.

Indeed, there have already been many examples of cooperative development in the Arctic offshore region that portend for similar cooperation in the future. Russia and Norway signed a Memorandum of Understanding in June 2009 to explore ways to jointly develop a contested portion of the Barent's Sea. Norway and Iceland have also made an arrangement to jointly manage the Dreki offshore area that straddles their ocean boundaries in the Norwegian Sea. Canada and Greenland have consulted about planned drilling in Greenland's waters as well.

While there are likely abundant amounts of hydro-carbons in the Arctic, it seems that the prospect for large-scale, short-term development is not high. Contemporary low oil and gas prices coupled with the challenges of Arctic operations will likely encourage some companies to seek opportunities elsewhere and might impose delays on already planned projects – the Shtokman field being a case in point. Other options for gas include shale gas while for oil there are alternatives such as offshore Brazil or oil sands in Canada.

Finally, prospects for conflict over Arctic resources and territory seem remote indeed. The anticipated reserves lie primarily in uncontested areas and, given the existence of regimes and venues to resolve contested boundary claims, it seems very unlikely, in the current context that conflicts will occur in the Arctic region.

Peter F. Johnston

Strategic Analyst

Defence Research and Development Canada – Centre for Operational Research and Analysis

Canada



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.

How to secure the Arctic – more joint exercises, less high level declarations

By Timo Hellenberg

The Emergency Ministry Emercom of the Russian Federation hosted the annual meeting of the Emergency Prevention, Preparedness and Response (EPPR) Working Group of the Arctic Council in Vorkuta, Russia, which took place in June 2010. According to the EPPR Chair, Ms Ann Heinrich (USA), "the meeting was a success and it was very well organized by the Russian hosts". Furthermore, the Finnish Foreign Minister Alexander Stubb has recently proposed that the intergovernmental Arctic cooperation would need its special own high level meeting. The overall challenge of security and safety cooperation in the Arctic region is not a need for new declarations or ministerial level "get togethers" as proposed above, but to enhance interoperability and joint capacities at the field level.

Some of the countries sharing interest in the Arctic have been connected with extensive network of bilateral and multilateral agreements in the field of civil protection since 1960s. For instance, Finland, Sweden and Norway have detailed network of multilateral agreements on cross border cooperation in various emergencies and border crossing accidents, including forest fires, nuclear accidents and chemical explosions. Countries such as Russia have a long tradition of bilateral cooperation when it comes to intergovernmental interaction. For a country such as Russia with a tradition of preserving sovereignty at the cost of intergovernmental cooperation it is hard to request assistance from the outside. A case in point is the ongoing wave of forest fires in Russia (by 1.8.2010 770 counted), which is regarded by President Dmitry Medvedev as a major socio-economic disaster of the half the century. I haven't seen any Nordic or neighborhood initiative to provide emergency assistance, nor any signals of external aid requested.

So, how to promote the new era within the Arctic safety and security cooperation? Could EU play a more essential role? As most of the countries within the Arctic region are either members or partners of the European Union. Then could the resources and mechanisms be better used?

In the field of civil protection and emergency management, EU has several layers, both at strategicpolitical and tactical-operational instruments which could be used more efficiently within the Arctic cooperation. The EU Internal Security Strategy (since 2010)¹ lays out the basis for a European security model, which integrates actions on enforcement and judicial cooperation, border management and civil protection. Furthermore, in July 2006 the JHA Council approved interim Crisis Coordination Arrangements (CCA).² The decision also included the organization of regular exercises in order to test the efficiency and adequacy of the CCA internal procedures. The arrangements are cross-pillar and applicable to crises within or/and outside the EU, but not for the crisis affecting individual member states. The backbone for the crisis coordination arrangements is the principle of subsidiarity. Member states carry the primary responsibility for managing emergencies in their territory and the national competences will be respected. No new permanent structures should be established but use already existing structures. The arrangements aim at enabling to develop a coherent, optimal and pragmatic response to cross-border emergencies by meeting the needs of fast-developing crisis. An other example is *The EU Joint Situation Centre (SitCen)* which could be fully beneficial in the Arctic cooperation. The Community Mechanism for civil protection which was established by the European Commission in 2001 could also be activated in the event of major natural or man made emergencies in the Arctic region. When the scale of the disaster overwhelms national response capacities, the affected country can benefit from civil protection means or teams available in other EU member states.

Besides these extensive EU capacities available, countries of the Arctic region are still counting on the bilateral and multilateral agreements instead of EU-level action. A good example is the upcoming Barents Rescue 2011 exercise in Sweden, where the backbone of the intergovernmental cooperation is still on bilateral and multilateral agreements instead of EU level action. Almost all of these instruments, legislative or operational, demonstrate and reflect the level of cooperation, integration and confidence that exists between member states. However, in order to know about the actual effectiveness, adequacy and possible gaps of these instruments something must happen. One only gets the answer post-factum of a crisis i.e. after something has happened. This of course is not sought-after. Instead the aim is to get the answers before something happens. The bodies, mechanisms and instruments should be tested. Exercises should not be done only to get successful results but to challenge the already created and approved models and processes, and to learn by doing, sometimes even from mistakes.

Timo Hellenberg

Dr., Executive Director

Hellenberg International



¹ http://register.consilium.europa.eu/pdf/en/10/st05/st05842-re02 en10 pdf

² Consequently the Council's Secretariat has written internal standard operating procedures (SOPs) for the arrangements. A second revised version is dated on 23 October 2006. None of the documents are public due to the sensitivity of the information contained.

Russian perspectives on Arctic security

By Katarzyna Zysk

Uncertainties about future developments in the Arctic notwithstanding, the regional transformations deriving from climatic changes have the potential to influence world affairs in a spectrum of areas. Security implications of the expected expanding commercial activities are among spheres closely observed by many interested state and non-state actors.

For several reasons, Russia as one of the most determined key regional players will have a preponderant impact on political developments in the Arctic. With the shoreline covering nearly half of the latitudinal circle and control over the Northern Sea Route, Russia will influence many future Arctic activities. Moreover, the Russian northern regions, rich in petroleum and other natural resources, play a central role in the country's economic development plans. And finally, the Arctic continues to be a critical component of Russia's strategic thinking. Despite the persistent weaknesses and problems the Russian armed forces continue to struggle with, the country has the strongest military presence in the region of all the Arctic littoral states. Understanding Russia's approaches to security is thus clearly important to other Arctic stakeholders.

Traditional "hard" security continues to play a crucial role in Russia's thinking about the Arctic. However, transformations in the region's environment have led the Russian leadership to put a stronger emphasis on "soft" and asymmetrical security challenges in recent years.

As the main basing and operational area for the sea-based nuclear forces deployed mostly with the Northern Fleet, the region is central to Russia's nuclear deterrence. The northern seas and land territories also provide a test bed for new weapons and host a range of important military installations and defence industries. In addition, the warming of the Arctic opens up Russian sea and land territories for an increased human activity. These developments generate new mission requirements for various security structures, in particular the Navy, the Federal Security Service (FSB), and its branch the Border Guard (FPS).

The Arctic dynamics may also have an impact on the perception of symmetrical security threats. During the Cold War, the Arctic Ocean was primarily an operational front for the launch and overflight of nuclear missiles. Surface vessel deployment was difficult because of ice-cover and thus limited. However, the opening of the polar sea channels may increase flexibility of naval deployments, making military operations easier and more versatile.

The need to provide security to operations related to diverse future economic activities in the harsh Arctic environment may give incentives for deployment of naval forces, together with coast and border guards, and similar agencies. Likewise, it cannot be excluded that economic interests of the various actors may be followed in the future by political aspirations and ambitions for a stronger military presence in the region.

In line with the military doctrine, Russia regards potential expansion of foreign military forces in proximity of the national territory, both on land and at sea, as a security concern. The likelihood of an armed confrontation in the Arctic has been assessed by Russia as low. However, neither Russia nor other Arctic actors can fully discard future, limited Arctic tensions from their defence planning as long as uncertainty about future regional developments is part of the decision-making process and security equation. Maintaining a reliable military force in the region is thus one of Russia's fundamental policy goals.

In Russia, the perceived vulnerability of the country's northern regions, comprising 11,000 km of land and almost 20,000 km of sea borders, has increased in the last few years. The need to strengthen surveillance and defence capabilities seemed not a pressing issue in 2006, when a Vorkuta-based Independent Arctic Border Detachment of the KGB, formed in 1994, was closed down. The responsibility for border security was subsequently shared between military districts and relied on existing automatic surveillance systems.

However, the Arctic transformations generate a variety of security challenges in Russia's vast northern territories, otherwise distant, often uninhabited and mostly unsurveyed. In the view of the

Head of the FPS, General Vladimir Pronichev, the Arctic has become a crossroad of interests for many states. Despite the ongoing international cooperation and dialogue, Russia is concerned about what is perceived as a sharp rise in the number of individuals and organisations wishing to develop business activities in the region. Key documents adopted in recent years point at such potential threats as terrorism at sea, smuggling of narcotics and other illegal materials, as well as massive poaching and illegal export of biological resources. The FSB has reported cases of illegal migration of citizens of the Commonwealth of Independent States in the Arctic regions reportedly each month; in 2009 over 600 persons were arrested for border violations.

Consequently, as announced in the 2008 Arctic policy document, Russia has taken steps to strengthen border security. In 2009, Arctic units were re-established within the Arkhangelsk and Murmansk FPS. Russia aims at creating a comprehensive coastal defence infrastructure by 2017. The plans include development of a network of forward-based airfields and modern military towns along the Arctic coast, similar to the "Nagurskaya" compound on the Franz Josef Land archipelago opened in 2008. While Russia does not plan a radical increase in number of personnel, the priority has been given to investments in automatic systems for constant surveillance of the furthermost Arctic reaches, including stationary and mobile electro-optical and infrared systems, as well as meteorological, communication and radar satellites within the space system "Arktika". The FSB also relies on unmanned aircrafts, of which seven have been purchased from national manufacturers. Projects for a new ice-class boat for prolonged Arctic patrols and other ships for the coast guard are under development.

Russia's expressed intention to play a leading role in Arctic search and rescue, crisis management and humanitarian assistance has also been corroborated in practice. In May 2010 the FSB and the Ministry of Emergency Situations conducted their first joint exercises under severe Arctic conditions, rehearsing among others deployment of an airborne hospital.

Russia as a decisive regional player has an impact on policies of other Arctic stakeholders. The country's approaches to security are therefore important to follow and understand. The recent Russian policies have focused on improving surveillance capabilities of the FSB rather than enhancing offensive military capabilities for the Arctic. While one may expect some strengthening of the Northern Fleet in result of ongoing naval modernization programmes, a large-scale military build-up is not a plausible scenario in the near future due to a number of reasons, including financial and structural constraints, as well as a lack of existential security threats. This notwithstanding, as a vital element in the country's broader economic and military strategies, the Arctic is likely to remain of strong significance to Russia and an arena of an increased activity of the Navy and other Russian security

Katarzyna Zysk

Dr., Senior Fellow

Norwegian Institute for Defence Studies

Norway

Visiting Research Scholar

The U.S. Naval War College, Center for Naval Warfare Studies

USA



Ice melts, peace prevails. The race for resources in the Arctic?

By Teemu Palosaari

Thanks to the ongoing melting of the Arctic Ocean sea ice the Arctic natural resources have become an increasingly topical issue in international politics. Traditionally the Arctic political puzzle has contained a variety of political actors: in addition to the Arctic states there are a number of active intergovernmental, regional, indigenous, environmental, scientific and non-governmental organizations. Many "non-Arctic" actors, such as China and Japan, have also shown increasing interest in Arctic activities lately.

The media often describes the situation as a "Cold Rush" or "Arctic Race" in which the coastal states US, Russia, Canada, Denmark and Norway are competing for the ownership of and control over the new oil and gas resources and the transport routes. Consequently, the conflict potential in the Arctic has been repeatedly in the headlines. The climate change is presented as a factor that results in growing political and military tensions between the Arctic states. The view has, however, usually been based on single events, such as military exercises or flag planting underneath and above the Arctic Ocean's surface.

In the academic debate there appears to be two major, and somewhat competing, interpretations as regards the near future Arctic international politics. The first of them underlines the role of states and sovereignty, whereas the second highlights international governance and cooperation. What seems to connect the views is that, in contrast to the mainstream media picture, both contain a number of issues that point to the continuity of *peaceful* development of the Arctic

National interest and national security in the Arctic

Geopolitical transformation in the Arctic is a key point of departure in the state-centred view that focuses on national interest and national security. The map of the Arctic is redrawn as the ice melts. New transport routes are opening and new energy and mineral resources become exploitable. From the viewpoint of national sovereignty these changes inevitably impact on the way the Arctic states view their national defence, territorial integrity, and control over internal waters. Furthermore, the access to and ownership of new energy resources is typically regarded a national security issue. Yet, from the state-centred perspective, a conclusion can be drawn that the development in the Arctic is likely to remain peaceful. In a historical perspective it is clear that the previous era of antagonism between states in the Arctic has been replaced by more cooperative relations. During the Cold War the Arctic became a central stage of the arms race between the superpowers, but after that states have managed to create stability in the region, and it is in their interests to keep it that way. For instance, when it comes to territorial claims in the Arctic, the rules of international law as well as the procedures of the UN Conclusion of the Law of the Sea have been followed by all. As political instability and conflicts continue in many of the traditional oil production areas around the globe, the Arctic is seen as a welcome exception in this respect. Additionally, the challenging environmental conditions in the Arctic mean that international cooperation is often needed in making possible the exploitation of the undersea natural resources.

Arctic governance and cooperation

Since the 1990s various international and regional organizations have emerged in the Arctic region. Environmental regimes, wide security agenda, and crossborder cooperation have gained a recognized role in the Arctic politics. Thus the mechanisms of Arctic governance are already in place. From the viewpoint of international governance, polar ice melt and other environmental impacts of the climate change can be perceived as a common, global threat which calls for cooperation between all Arctic actors. Thus, rather than causing tensions between the states, climate change can give a boost to international cooperation and further strengthen the institutions of multilevel Arctic governance. This also challenges the narrow views on national sovereignty, interest and presents a broader view on security. The global attention on the melting of the North Pole and Greenland's glaciers will also bring the Arctic issues into the international agenda defined as environmental and human security issues, rather than as traditional national security issues.

Summing up, it can be stated that although often reported otherwise, the scramble for the Arctic's minerals is unlikely to lead to conflicts that would threaten the peaceful development in the region.

Teemu Palosaari

Research Fellow

Tampere Peace Research Institute University of Tampere

Northern economies in a time of change

By Joan Nymand Larsen

Economies in the Arctic region are feeling the pressures of Rapid change - both physical and social global change. challenges Arctic communities. Arctic societies are facing an unprecedented combination of rapid and stressful changes involving environmental processes, economic changes, and industrial developments with the growing role of multinational corporations engaged in the extraction of natural resources. While climate change is perhaps the most obvious and widely acknowledged influence on the future of northern societies, other factors may play a more immediate role in the lives of large segments of the Arctic population. Because of the unique character of the Arctic region the consequences of change in terms of its impact on culture, society and economy are relatively more pronounced. Much of the major threats to the ecology of the Arctic are the result of social conditions arising from human activity and interactions with the environment in local, regional and global contexts.

The economies of the high North have a number of common characteristics that set them apart from economies outside the region. While the formal economy of the North is characterised by resource extraction, the local economy can be described as a mixed economy where market and non-market activities all play an important role in supporting community livelihoods. employment, traditional pursuits, and transfer income from government all provide important sources of income, with the relative size and importance of the market, non-market, and transfer sector varying throughout the North. The formal and market-based economy is characterised by the role and presence of the largescale capital and skill-intensive nature of industrial resource production, whereas the informal, subsistence based - non-market economy is characterised by traditional pursuits of hunting, trapping, gathering, but increasingly with connections to the local market economy. Economies within the North also vary significantly; by type, quality, and quantity of industrial resources produced; by the importance of the indigenous population and the local economy; and by the different national economic and political systems. Viability of modern communities increasingly requires maintenance of economic relations with the outside. strength of these economic relations and the linkages between different sectors differ significantly due to broad variations in natural, financial and human resources. commonalities as well as sharp contrasts observed in the North makes the need of tracking and measuring change a daunting task. Significant data challenges however have complicated the task of devising indicators and measuring change in quality of life, including Arctic specific measures of economic wellbeing.

Local and regional economies are increasingly experiencing the effects of global change processes and the changes occurring in global markets in far distant places. The Arctic region faces several distinct challenges related to economic development and the, primarily, large-scale resource extraction activities upon which it is based. Among these challenges are permafrost and sea ice, remoteness and lack of accessibility, the high cost of production in the North, the availability of human resources for large-scale industrial projects, a fragile eco-system, environmental impacts, and the negative spill-over effects of industrial activity for local and indigenous communities. At the same time, many of the region's resources are of critical geopolitical importance both nationally and globally. With rising global demand, and a growing desire for stable and secure resource supplies in world markets, industrial resource extraction activities in the Arctic will likely continue to expand despite any observed and expected physical, environmental and human costs.

The vast majority of Arctic natural resources are destined for world markets, and this places the circumpolar north firmly in the world system. The economic future of the Arctic depends on global and economic processes, making the Arctic regions vulnerable to the volatility of world markets and decisions made in far distant places.

Future challenges related to climate change and globalisation can be expected to play a growing role in decisions regarding resource allocation, resource use, ownership and control, with important consequences for Arctic economies and their economic sustainability.

Life in the Arctic is increasingly shaped or influenced by events, decisions and activities happening elsewhere. Strategies for sustainable development and Arctic environmental protection need to take into consideration the economic, social and environmental linkages between the Arctic and other regions of the globe, and processes of globalization. The future of the Arctic will be linked or influenced by other, non-Arctic regional, social, political and economic interests, and analysis of the future of the Arctic economy must include the growing multinational connections and their interlinkages, and move beyond the traditional theoretical frameworks of core-periphery relations.

Rapid change in Arctic has increased the emphasis placed on devising indicators for monitoring and measuring change in human development and quality of life. Indicators of living conditions are useful in monitoring social change, and some indicators are common for worldwide comparisons. Standard and globally accepted measures such as educational attainment and gross domestic product are important in evaluating human capacities. Knowledge about indicators such as these is important in understanding the character, direction and prospects of changes taking place in the North. In addition to this, however, differences between the Arctic and the surrounding world is reflected in a set of unique attributes of human development which have not been captured adequately by universal standard indicators. The Arctic Social Indicators (ASI) project is a circumpolar project that is working on constructing indicators that reflect these unique aspects what residents of the north view as prominent features of human development - to help facilitate the long term monitoring of human development in the Arctic. Arctic residents have indicated that the viability of their communities relies on having control over their own fate, sustaining contact with nature, and retaining their cultural identity. The construction of Arctic social indicators is based on these three domain areas articulated by residents of the north as being particularly prominent features of human development. In addition, indicators are also constructed for the more standard domains of demography, material wellbeing and education.

The challenge of devising such indicators has demonstrated for example in the work on material wellbeing indicators. Arctic specific measures of the Arctic economy - viewed in terms of material wellbeing - is considered by ASI in terms of the contributions made by all three major parts of the Arctic economy; market, non-market, and the transfer sector. In devising an indicator of economic or material wellbeing, the application of the standard measure of GDP has proven to be inadequate for the Arctic because of a number of serious weaknesses including the noninclusion of the traditional, subsistence economy, and the flow of resource rents. The inability to fully capture all major contributions to Arctic material wellbeing in a single indicator presents us with an indicator of minimum material wellbeing. Such a "minimum" indicator is represented e.g. by per capita household income. Devising and measuring more complete indicators will be both costly and challenging, and until more data become available, including new approaches to primary data collection, the task of measuring and tracking material wellbeing in the Arctic most be viewed as incomplete. Still, the urgency to track and monitor change is growing, which places pressure on Arctic nations to find solutions to identified data challenges including issues of data availability, access to data, and questions of data management.

Joan Nymand Larsen

Senior Scientist

Stefansson Arctic Institute

Iceland



Who should be governing the Arctic?

By Timo Koivurova

One thing we know from international politics is that when the actors start to use legal arguments to defend their positions, we are likely witnessing a regime change. Regime change means a transformation from one system of governance to another. This may be what is currently taking place in the Arctic.

For a long time, the Arctic as a region did not attract much attention from the policy perspective. The soft Arctic Council cooperation in the fields of environmental protection and sustainable development between the eight Arctic States (the five Nordic States, The United States, Canada and the Russian Federation) has been fairly low-key. This has been reflected in that the Council cannot make legally binding decisions, that there is no stable funding mechanism for the Council activities, etc. Unique has been the role the Arctic Council has accorded to the regions indigenous peoples. Their international organisations are permanent participants, which the member States have to consult before any decision-making. Their status in the Council is even better than the observer status given to some of the major nation-States (e.g. Germany, the UK, etc.).

Yet, this image of the region has changed fairly dramatically, in particular with the process of making the Arctic Council sponsored Arctic Climate Impact Assessment (ACIA), the results which were released in 2004. It was this assessment that established the region as an early warning region of climate change, the consequences which have been, are and will be twice the intense as those of the rest of the world. It also changed the political image of the region from a frozen desert to one of dynamically changing region, the change driven by climate change and economic globalisation.

The "legalisation" of the Arctic debate has come mainly from the realisation that the melting seas of the Arctic can be made use of economically, whether this means saving expenses by using short-cut routes for transportation of goods, increasing the amount of tourist visits to the region or making use of the plentiful natural resources of the Arctic (various species of fish and offshore oil and gas). Much of the hype around these issues has involved misconceptions. The idea that the Arctic states are scrambling over the offshore oil and gas resources by staking out continental shelf claims has been misunderstood as a power game when it has, in effect, been an orderly process, with the littoral states acting in line with the law of the sea. Yet, in international politics and law, it is also important how things are perceived to be, not only how they really unfold.

This was well illustrated when the five coastal states of the region (the United States, the Russian Federation, Canada, Denmark-Greenland and Norway) organised a meeting in Ilulissat Greenland in May 2008 to tell to the rest of the world that there is no scramble for resources in the Arctic. But since they also told that they possess maritime sovereignty in the Arctic, and that they will start co-operating with each other in other areas of policy, this had the effect of "legalising" the discussion, various actors at least making sure that if Arctic governance is to change, they will have a place in it. Here are two examples:

- 1. The Inuit Circumpolar Council ICC (representing Inuit in Denmark-Greenland, Canada, USA and Russia and is one of the permanent participants in the Arctic Council) adopted its own Circumpolar Inuit Declaration on Arctic Sovereignty. In the declaration, the ICC declared that it needs to be involved in Arctic governance, given that the Inuit have self-determination as guaranteed in international law.
- 2. The European Parliament asserted the EU agency in Arctic affairs and proposed that international treaty negotiations should be commenced on the basis of the model provided by the Madrid Protocol of the Antarctic Treaty.

Since Finland, Sweden and Iceland – together with the indigenous peoples' organisations - were left out of this May 2008 Greenland meeting by the coastal states, this caused concern as to whether the coastal states were envisaging a type of "inner core" co-operation. This interpretation was given further impetus by the second meeting between the coastal states in Canada that took place on 29 March 2010 – a meeting, which most experts thought would never happen.

It is difficult to say where Arctic governance is moving since so much is taking place at an ever-increasing speed. It does seem likely that with the melting sea ice, the coastal state cooperation will gradually become the arena where more ambitious Arctic governance issues are discussed and perhaps even resolved. This will involve high-profile issues such as delineating the outer limits of their continental shelves and, in case of overlapping entitlements, commencing negotiations for settling the location of the borders as well as controlling the gradually increasing risks from navigation in general and ship-based pollution in particular.

Yet, it is difficult for the five coastal States in the long run to govern the emerging Arctic Ocean. It is clear that region's indigenous peoples need to be involved in any future governance arrangement, as region's original occupants. But outside actors should also be involved. The reason for this is straightforward. All States of the world and their commercial fleets have legally guaranteed access to most waters of the Arctic when these become ice-free, including fisheries access to the vast high seas portion of the Arctic Ocean. This scenario should inform the coastal state meetings as soon as possible. If they do want safe navigation in their "backyard" and sustainable high seas fishing, they should act now and try to involve larger group of countries in governing the Arctic. It is much more difficult to involve other States later, when the Arctic Ocean is seasonally ice-free, given that law of the sea guarantees them all the navigational rights. Now, when the ice is still there and blocking the use of the Arctic Ocean, there are possibilities to come up with innovative international governance mechanisms.

The author has conducted, together with professor Erik Molenaar from the Netherlands Institute for the Law of the Sea. a three-part analysis for WWF Arctic International. The first report studies the legal and governance gaps, the second the options for addressing identified gaps and the third proposes one possible international governance mechanism for the downloaded region. The reports can be http://arcticgovernance.custompublish.com/international- governance-and-regulation-of-the-marine-arctic-overview-andgap-analysis.4640536-142902.html> and the last report was published on 26 April 2010 in a press conference in Copenhagen.

Timo Koivurova, LL.D.

Research professor, director

Northern Institute for Environmental and Minority Law Arctic Centre

University of Lapland



Russia in the Arctic area - more issues than it seems?

By Tatiana Romanova

Two images spring in mind at any talk about Russia in the Arctic area: one is planting a flag 4 km under the North Pole in August 2007; another one is oil and natural gas bonanza. While both things are true, other issues should not be overlooked.

Separating Real Barrels from Paper Ones

Speculations about oil and gas reserves in the Arctic are numerous. Russian figures vary from 13 to 95 bln tones for oil and from 20 to 320 tln. bcm for natural gas. US researchers have assessed Arctic resources as 90 bln. barrels of oil and 47 tln. bcm of gas, with oil mostly located in the "US zone" and natural gas concentrated in the "Russian part". However, no figure has been supported by sufficient exploratory drilling and tests.

Secondly, the deposits of both oil and gas are located deeply under water and ice. Therefore, technically, most of the resources can either not be extracted at the moment or do not make much commercial sense¹. On top of that they are located in severe weather conditions, away from existing infrastructure.

Thirdly, Russian companies, which are in charge of shelf exploration (Gazprom and Rosneft), do not possess necessary technologies. They are also short of money (some estimations show that it will cost some 2.5 tln. USD between now and 2050). Therefore, Russia has to strike a balance between preserving majority shares in Arctic projects and attracting foreign investors, who can bring much needed expertise and financial resources.

Lastly, there are growing environmental concerns about shelf oil and gas exploration, especially following the catastrophe in the Gulf of Mexico. According to ecologists, the consequences of a similar leak in the Arctic would be much more severe because of the permafrost.

Therefore, at best, Arctic shelf carbohydrates can be brought into commercial use in the long-run. They can alleviate the problem of depleted Russian oil and gas resources, provided world energy prices increase. They will still require cooperation with foreign companies and technological developments, which would make Arctic exploration sounder, both commercially and environmentally.

More Tangible Economic Prospects

The Arctic area is also rich in many other resources, like nonferrous and rare metals, diamonds. Some of them are already explored; others are still to be brought into production. The Arctic also contains substantial fish stocks and other marine resources, which are used in food and pharmaceutical production. These industries are less "sexy" than oil and gas; yet, they currently constitute the majority of the Russia's Arctic economy and will remain so in the foreseeable future.

Furthermore, the Arctic is home to another ambitious mid-term project, the North Transportation route. It will provide a shorter (hence, cheaper) link between Europe and Asia via the Northern seas. Its commercial use will relieve the congestion of the Suez and Panama straits and will contribute to the reduction of the CO2 emissions. On top of that, it is free of piracy plague, which contaminates all routes in the vicinity of Africa.

The project is not new; it was discussed already during the Second World War but at the time it was judged too expensive. Today's global warming and ice-melting, however, change the whole story.

It is frequently argued that Russia will gain little from this route because it will be open for navigation to all countries. However, Russian main gain from this route will be not from transportation but from providing port facilities, navigation, insurance, rescue operations, and other services. Furthermore, new environmentally friendly technologies for the fragile Arctic ecosystems will have to be developed.

All these activities will contribute to shifting Russian economy from being natural resources oriented to the one, based on

contemporary services and innovation growth. They are also much more real and short-term compared to the hydrocarbon exploration.

The route is not unproblematic, however. It is conditioned on Russian ability to provide for necessary safety and security, and to ensure that it is not used for illegal activities like smuggling, drug transit, or people trafficking.

Overlooked Political Issues

Finally, there are significant political issues, linked to the Arctic area. One is that of identity. Russia is used to positioning itself as a northern country, located in harsh climate conditions, and yet mastering them. For this very reason, development of Arctic territories is an issue of self-confidence. This aspect, in fact, permeates Russia's 2008 Arctic Strategy. It was also a rationale behind planting a flag under the North Pole.

Furthermore, the issue of governance is of paramount importance. It is currently based on two pillars: the Arctic Council and the 1982 UN Sea Convention. The first one is a loose international organization comprising eight permanent members, of which five border the Arctic area (Russia, US, Canada, Greenland / Denmark, and Norway) and three are in the immediate vicinity (Finland, Sweden, Iceland). The Council provides a framework for a very soft non-binding cooperation.

UN Sea Convention spells out guidelines for setting the borders in the region. Article 76 states that no state can control the Arctic but neigbouring countries can establish their exclusive economic zone (200 nautical miles, extendable by another 150 miles, if proved that the shelf in question is the continuation of their continental territory).

Russia ratified the convention in 1997 and presented its first Arctic claim in 2001. However, the evidence, which accompanied Moscow claims, was deemed insufficient. Currently Russia collects additional proves with the aim to have the claim recognized by 2012-2013.

Russia's participation in both the Arctic Council and in the UN Sea convention demonstrates its determination to be a good student of international law, to apply the legitimate legal framework (despite its not being perfect). This is in stark contrast to Canada, fixing in its internal legislation sector division of the Arctic area, and the US, which to date have not ratified the Sea convention.

Finally, there is a growing understanding in Russia that its Arctic policy will have an impact on the dialogue with major players, like the EU, China, or the NATO. Russia pursues the strategy of transparent Arctic governance with decision-making being confined to the littoral states and relevant international bodies.

However, there is a good understanding in Moscow that other players will strive to improve their positions in the region. The EU will use environmental rhetoric; therefore, Russia works on the development of this part of its image. The NATO will play a security card; thus, Moscow will attempt to demonstrate that it can guarantee safety and the rule of law in the region, and at the same maintain its tangible military presence. Finally, the Chinese position mainly draws on commercial motivation; in the long run it will require a more balanced public-private partnership in Russia.

Tatiana Romanova

Dr, Associate Professor

School of International Relations St. Petersburg State University

School of International Politics and International Economics

Higher School of Economics Russia

¹ Some Russian calculations show that a ton of oil in Western Siberia costs about USD 30, in Eastern Siberia – USD80 while that in the Arctic amounts to USD 700.

Putting Russia's Arctic policy into perspective

By Roderick Kefferpütz

The Arctic is in flux as climatic change is unlocking the hitherto mythical region. Vast new opportunities and challenges, ranging from new oil and gas deposits, fishing stocks as well as shorter sea routes are opening up. In this context, the High North has been getting a lot busier. All riparian states (Russia, Canada, United States, Norway and Denmark/Greenland) are keen to advance their sovereignty over Arctic waters by extending their Exclusive Economic Zones and push for their claims and interests in the region. Disagreements are therefore not uncommon with a range of sovereignty disputes existing between most of these circumpolar states. New actors and organisations, such as the European Union, China and the North Atlantic Treaty Organisation (NATO), are also quickly emerging in this arena, forming a new constellation of players.

The panoply of major actors, interests, and emotions mixed with a patchy legal and institutional framework for the region often leads to a geopolitical vision of a future scramble for the High North.

The Russian Federation, home to the longest Arctic border, in particular is commonly singled out by commentators as the sole culprit responsible for creating such a rush for the Arctic, which is endangering the region's peace and stability. Russia's actions in the High North have frequently been decried as jingoistic, if not outright belligerent, by experts, foreign governments and the media.

The primary milestone often mentioned is the Arktika 2007 expedition which entailed two mini-submarines (Mir-1 and Mir-2) descending over 4.2 km and planting a titanium Russian flag on the ocean floor at the North Pole. In the context of Putin's Munich speech in February 2007 and the already strained relations between the West and Russia at that point, the event was seen by many as a landmark signalling Russian belligerence in the region. It was particularly decried by Canada, with the former Canadian Foreign Minister Peter MacKay criticising the event by stating that 'this isn't the 15th century. You can't go around the world and just plant flags and say "we are claiming this territory"

Some pundits are also pointing to Russia's increasing military presence in the region as a sign of a growing Russian threat in the High North. In March 2009, for example, the Security Council called for the establishment of a military unit, in line with Russia's Arctic strategy, that will safeguard the security of Russia's territory in the Arctic Ocean. Simultaneously, the head of Russia's military combat training directorate, Lt.-Gen. Vladimir Shamanov, also announced plans to bolster the operational radius of Russia's northern submarine fleet and reinforce combat readiness in the region. Military exercises are also being increasingly organised in the region.

One of the other more worrisome developments identified alongside the flag-planting exercise was the resumption of longrange bomber flights over the Arctic. These long-range strategic bomber patrols have been deemed particularly controversial by Western experts as these flights have supposedly included a mock bombing run against Norway's northern command centre at Bodo.2

Focusing on these aspects of Russian policy in the Arctic region alone naturally paints a negative picture. However, it is a one-sided picture that tends to not only turn a blind eye to Moscow's more co-operative measures in the Arctic but it also fails to judge Russian policy in comparison with that of the other riparian states. As a matter of fact, almost all circumpolar states are increasing their military capacities in the Arctic; it is not only a Russian phenomenon. Denmark's 2010-2014 defence plan

also includes the establishment of an Arctic military command structure and task force ready for operation in the Arctic, Canada plans the construction of new armed icebreakers and a deepwater port for civilian and military use at Iqualuit, Norway is increasing its capabilities, NATO is searching for a military role in the region and has conducted several military manoeuvres in the High North, while the United States - a sleeping giant in terms of its Arctic policy - is starting to increase its presence in the region having put forth a Presidential Directive in 2009 that noted the potential vulnerability of the country to terrorist and criminal acts in the Arctic, inherently proposing an increased US Arctic capacity.

Furthermore, Russia is not the only country to have planted a flag in this area. While Russia's flag-planting caused a furore, Canada's flag-planting (albeit slightly different as it was limited to a barren inhabitable knoll called Hans Island, whose sovereignty is disputed between Canada and Denmark, rather than the Arctic seabed) gained little attention. Russian military manoeuvres should therefore not be solely treated as something extraordinary as other countries have undertaken similar manoeuvres. Norway itself has stated that Russia's activities rather reflect a 'return to a more normal level of activity for a major power with legitimate interests in the region'.

Finally, Russia's Arctic strategy is a multi-vector strategy that goes beyond mere military and security policy. Moscow, for example, has been exploring the possibility of a joint sovereignty claim with Canada, is actively participating in Arctic governance, and co-operates with the European Union in the region through the Northern Dimension (ND) Programme. Most importantly, Russia has also recently struck an agreement with Norway on maritime borders in the Arctic ending a 40-year border dispute. This rapprochement in relations between the two also follows joint naval exercises testing inter-operability in various scenarios, such as search and rescue and armed attacks on installations, as well as Norwegian press reports that Norwegian F-16 fighter jets have had to scramble fewer times in 2010 to meet Russian military aircrafts than in the past.

In conclusion, it is unfortunately a common mistake to simply brand the Russian Federation an aggressor in the High North. Not only is Russia's policy far more nuanced than often depicted in Western discourse, but it is also not that very different from the other riparian states' policies.

Roderick Kefferpütz

Associate Research Fellow

Centre for European Policy Studies (CEPS)

Belgium

This article is based on an earlier CEPS Policy Brief entitled 'On Thin Ice? (Mis)interpreting Russian Policy in the High North.

¹ "Russia plants flag under North Pole", BBC News, 2 August 2007 (http://news.bbc.co.uk/2/hi/europe/6927395.stm).

[&]quot;The Arctic contest heats up", The Economist, 09 October 2008.

³ Statement at NATO Seminar by Norwegian Minister of Foreign Affairs, Jonas Gahr Støre, "Current Strategic

High the 29 January 2009 Challenges in North", (http://www.regjeringen.no/en/dep/ud/about.mfa/minister-offoreignaffairs-jonas-gahr-s/Speeches).

Russia's geopolitical focus has moved to the North – the development of Murmansk region in the light of three scenarios

By Yrjö Myllylä

The starting point of the article is the idea that the dissolution of the Soviet Union resulted in a shift of the geopolitical and geoeconomic focus in Russia to the north. As the main oil-producing regions of the Soviet Union, such as Kazakhstan and Turkmenistan, became independent, the relative importance of north-western Russia and Siberia increased in Russia's oil and gas production. The high prices of crude oil and natural gas products in the global market have led to the emergence of wealthy, rapidly developing pockets in remote regional economies. Oil and natural gas are Russia's main exports, brought to Europe primarily by oil and gas pipelines, an infrastructure built several decades ago. Now, however, the situation is changing.

Economic interest in northern regions has increased as the growing world economy demands more energy and the resources in existing oil and gas fields are being depleted. The Arctic region is rich in oil and natural gas. The rising prices of raw materials are making the exploitation of Arctic natural resources more profitable than before. These regions are located northeast of Finland. What role will Murmansk's northern location have in the new, rapidly developing transport system? What impact will the fact that the Murmansk Region is located relatively close to key market areas – the European Union and the increasingly important eastern coast of the United States – have on the development options for the region? How will other geographical factors, such as an ocean port that is ice-free the year round, affect the development options available to the Murmansk Region? What effect will the change have on the development of industry and logistics in the Murmansk Region and how will it affect social trends there?

The business structure of the Murmansk Region consists not only of activities related to national defence but economic activities typical to high-resource regions in general: extraction and pre-processing of natural resources, particularly mining and the related ore processing, apatite mining and the fishing industry. The mining and metal-processing industry, which is very important to the region, has found its way to a new global market, but tough competition is forcing production plants to reduce their workforces as well as modernize their technologies. The rationalization of industry has resulted in outmigration, particularly from communities relying on a single industrial

The major projects in energy production, for example, and their time schedules will impact on the development of the Murmansk Region. For example, the schedule for the opening of the Shtokman gas field and the Murmansk or Indiga oil pipeline project can be linked to the driving forces. The author has examined the development of the Murmansk region in the light of three scenarios until 2025. The scenarios are based on the Delphi method and the three Delphi panels which were Murmansk Panel, Moscow Panel and the International Panel. Scenarios 1 and 2 represent the extremes in or the limits of the most probable scenario for the development of the Murmansk Region not leading to an actual economic disaster. Shtokman gas field is in operation in Scenario 1. Scenario 3 represents an unlikely but still possible deep regression in the world economy and a slump in the oil price.

Scenario 1 – 'Market forces and democracy are strengthening and values developing'

Scenario 1 is summed up in the comment of one of the international participants in the panel, which presents the following main vision and key actions: The Barents region will be as active as the Persian Gulf, exporting oil and gas. The region will become a base for offshore operations, with global importance over the next 200 years. There will be a large amount of spin-off activity. All this, however, will require changes in Russian legislation. Exclusion of foreign actors from investments, which is currently the greatest obstacle, must be eliminated to allow free movement of capital.

Scenario 2 – 'Authoritarianism is increasing and a regulated economy prevails' $\,$

Here, the development will be slower than in the previous scenario. Taking advantage of favourable trends in the world economy, Russia will attempt to launch the Shtokman operations and other large energy

projects on its own. The projects will start slowly and have less impact on the development of the region than in Scenario 1.

Scenario 3 - 'Problems are accumulating and the oil price is sinking'

In this scenario, all or some of the wild card events considered possible but unlikely by the participants in the panel will occur. The scenario is largely built on the assumption that the price of oil will fall; this will be preceded by an increasingly authoritarian trend in society. The price of oil may plummet because of a slump in the world economy, a crisis of sudden peace in the Middle East or a pandemic disease. Other wild cards may also emerge, such as an environmental disaster or youth riots, but these will be limited and can even provide an exit from a crisis.

In the vision for the most likely future operations the Shtokman field would be started up in 2020-2025 provided that international capital and technology from international enterprises, for example, would be available for the region. It is very likely that the population will be smaller than today. Materialization of investments in Shtokman will change the course of the population trend, at least locally. In a probable scenario, communities relying on large-scale mining or metal-processing industries alone will not be able to maintain their population bases at the current level, even if the volume and value of their production is higher than today.

Findings and recommended political actions - A need for innovative activities: Profitable exploitation of the natural resources in and around the Murmansk Region will require development of infrastructure and the systems for producing the resources. This highlights a need for a consensus and partnership between local and federal actors governing the infrastructure with regard to sharing the benefit from investments in the region. Finding economically lucrative solutions plays a key role in investments that will bring cost savings in transport technology, for example. Finding new, lucrative transport and production solutions for the high-cost Arctic region stresses the importance of innovation activities, particularly the creation of a network of research institutes and enterprises in the fields of transport and logistics, energy production and the mining and metal-processing clusters. Thus far, local enterprises have sought innovative solutions for transport technology and logistics in a centralized manner from abroad, e.g. from Finland.

Murmansk will form an important logistic gateway from northwestern Russia to the world, enabling transport of natural resources and processed goods to the world market. The development of the logistic gateway will mostly depend on trends in the world economy as well as the prices of raw materials, such as oil and minerals.

The structure of business life in the Murmansk Region in the future can be markedly different from the present situation, even if the current structures of industries, particularly the metal-processing and mining industries, retain their central role in the region's economy. Future business will require a workforce and an infrastructure adapted to Arctic conditions and communities.

Yrjö Myllylä

Managing Director, Doctor of Social Sciences

RD Aluekehitys Oy



Arctic adventures - cold shoulder or hot prospects?

By Amelia Hadfield

The Arctic used to be the domain of the unreachable. The impossible. The avoidable. No longer. The Arctic is fast becoming a new foreign policy battle ground, in which a series of new challenges vie over the most popular geopolitical issue of the new century: energy security.

Melting ice will prompt the rise of regional sea levels, increasing the likelihood of flooding, and other natural instabilities. But the breakup of icebergs, glaciers and plateaus may also kick-start new transportation routes in the High North, assisting the infrastructure needed to launch a serious exploitation of hydrocarbons. Optimistic estimates posit Arctic reserves to be a quarter of the world's remaining hydrocarbons, so there is much at stake.

In whose backyard is this new bonanza? The EU and Russia are the most vocal so far, though Canada, the US and the Scandinavian countries have clear stakes as well. Each of the key states assert their various claims, based on a variety of legal concepts (including historical claims of exploitation (Norway), the sector principle based on the convergence of lines of longitude (Canada, FSU), and national sovereignty based on 'relatively immovable ice formations' (Russia), but all of these are countered by the principle that the region may be regarded as the High Seas (Shaw, 2003: 456).

Russia's 2007 statement was the most potent of recent times, simply placing a Russian flag on the seabed, 4,200 metres below the North Pole, to solidify its claim to the Arctic (BBC, 2007). This immediately launched a debate over territorial claims of the Arctic as a region, and sovereign rights over natural resources (like subterranean hydrocarbons). In 2008, the EU then argued that it would protect and preserve the Arctic in unison with its population, promote sustainable use of its resources, and contribute to enhanced multilateral governance regarding use of the Arctic (EU Commission, 2008).

EU Legitimacy

This report - which tacitly laid claim to the Arctic - came as a surprise to some, including Russia. With three EU Member States (Sweden, Finland, and Denmark), and two EEA members (Norway and Iceland) contained within the Arctic Circle, and with interests in alleviating its own energy dependence, the EU is a "natural and legitimate player" in the Arctic, as János Herman of DG Relex. This is debateable. The EU has no legal authority over the Arctic, and in this sense is not a natural player. But it does have a degree of 'associated legitimacy'. First, by virtue of geopolitics. The Arctic may generate an additional source of hydrocarbons (oil, natural and unconventional gas) that may permit a lessening of EU energy dependence upon current Russian imports. Second, keeping its green credentials bright, the EU views the Arctic as its New Northern Neighbourhood, the neglected counterpart to its eastern and southern flank, inhabited by citizens, in need of sustainable policies regarding economic activities and environmental protection. The 1995 'Northern Dimension' is the only EU policy with a clear Arctic component. The EU may soon need to construct 'High North' annexes for a variety of extant policy areas like agriculture, research and fisheries, which transfer resources and foster cooperation outside EU borders. More particularly, the Integrated Maritime Policy which covers maritime transport, fisheries, environmental protection, energy, sea and deep sea international legislation is potentially highly relevant for the Arctic region.

The geopolitics of energy security will have to wait for entrepreneurial investors with enough backing to tackle the risks of a 'post-BP' world of deep sea energy exploration. But sustainable development cannot wait. Seen in the context of climate change, warming effects in the Arctic are faster, more dramatic and more difficult to manage than in other regions. Dealing with area must be done carefully and sensitively. Taken together, the EU feels itself justified as a 'legitimate' Arctic actor and well-placed to construct an EU Arctic policy.

A few things are missing however. First, authority. The EU currently has no capacity to make or enforce territorial claims regarding natural resources in the Arctic, on behalf of itself or its Member States. However imperative its energy security needs, EU Arctic policy may bring a degree of horizontal coherence to a variety of policy areas, but it lacks the competence to go further. Second, congruence between EU (Commission) ambition and the national interests of EU Arctic Member States in which energy security, shipping, fisheries, etc are driving forces. Not all MS have interests specifically related to the Arctic (energy dependence itself is variable, both materially and psychologically). Third, internal coherence. There is no 'Arctic unit' in the Commission, Council Secretariat or emerging EEAS, nor a well-defined constituency in the European Parliament (EP), the member states, the industry, or civil society to defend and support the real interests of the Arctic region and its inhabitants. Fourth, the absence of a genuine political 'Arctic constituency'. As pointed out by member of the Permanent Representation of Greenland, the EU needs to "qualify" as an Arctic actor by garnering the active support of Arctic inhabitants; "at present, it is unlikely to get this as the Arctic population resents EU objections to whale- and seal-hunting and its attacks on their traditional way of life".

Russian Ambitions

Whilst the EU displays only a loose interest regarding the Arctic, the region has been a priority for Russian foreign policy since the early 2000s, centrally because of Russia's rise as a self-designated energy superpower. As is well known, more than 65% of Russian energy exports goes to the European market. This trend can only increase, at least in the short-term; estimates for 2020 predict EU gas consumption to rise by 50% with Russia providing 70%+ of these same imports. There is undoubted pressure on Russia from the EU (and domestic needs) and the search is on to meet this demand via new sources.

How easy will this be? Interest in the Arctic increased after various reports suggested first that climate change would open a variety of new, less ice-bound routes into new areas, and second that the area itself may contain a high concentration of untapped hydrocarbons. Current forecasts suggest that geological prospecting and commercial development in some parts of the High North could begin by 2020. Moscow has given credence to this schedule – and geopolitical importance of an "Arctic boom" – in three ways.

First, in September 2008, President Medvedev instructed the Russian Security Council to envisage the Arctic as a Russian resource base. To do so, it would need to ascertain the borders of its continental shelf as soon as possible. To that end, Russia secondly announced its plans to resubmit a claim to expand its continental shelf with the UN Commission on the Limits of the Continental Shelf in 2010. Russia is looking to expand its continental shelf to include 1.2 million square kilometres of Arctic territory, by arguing that the Lomonosov and Mendeleev ridges are extensions of the Siberian Shelf. If these ridges are designated as Russian, this allows it to extend its territorial reach in the form of a Murmansk-Chukotka-North Pole triangle, a spot which is alleged to contain concentrated oil and gas reserves. Third, Russia's latest national security strategy, which underwrites the first two developments. While the strategy suggest that Russia will adopt "a pragmatic foreign policy, [and] without engaging in expensive confrontation, including a new arms race", it does not exclude the use of force in claiming (and possibly defending) sovereign rights over natural resources. This could be taken further, with recently published Russian plans to ultimately be "capable of guaranteeing military security under various military and political situations" and the main purposes for the military development are to "combat terrorism at sea, combat smuggling and illegal migration, and protecting aquatic biological resources".

Geopolitical spats easily arise over geographic quibbles. In 2008 the Green Party in the EP argued that the international community should construct a convention to "protect the region from the extraction of fossil fuels and minerals and other industrial activities for at least 100 years". The Russian presidential envoy suggested the following year by asking observers to "Look at the map. Who is nearby? All our northern regions are in or come out into the Arctic. All that is in our northern, Arctic regions. It is our Russia". Indeed, the region is home to a 40-year old unresolved border dispute between Russia and Norway regarding areas of the Barents.

More important will be the details of delimitation. Russia ratified the 1982 UN Convention on the Law of the Sea (UNCLOS) in 1997 and, along with Norway, regards it as a

comprehensive multilateral regime for the Arctic Ocean. The EU has questioned whether UNCLOS provides an adequate governance framework and subsequently suggested a new Charter of Arctic Governance. The key question therefore is the emergence of new Arctic policy, by or between the key Arctic actors, and its justification on grounds of national interest, which increasingly includes energy security. To be sure, the Arctic is a multi-state neighbourhood for both Russia and the EU. The EU needs to look more proactively at its value-added assets, bringing its economic and ecological research to bear on discussions. "The will for a comprehensive understanding of the environmental challenges and good environmental practices are poorer unless the EU is informed and involved". What has gone wrong in the EU-Russia Energy Dialogue may hopefully be connected by a mature diplomatic approach to the Arctic Dimension, in which a cocktail of bilateral and multilateral fora (e.g. the Barents-Euro Arctic Council or EU-Russia Roundtable of Industrialists) can begin coordinating on a sustainable Arctic policy.

Amelia Hadfield

Professor of European Affairs

Vrije Universiteit Brussels

Senior Research Fellow

Institute for European Studies

Belgium

Indigenous peoples of the North in Russian politics today

By Anna Sirina

Russia regards the Russian part of the Arctic as a geopolitical region, amongst other things with regards to the shelf's hydrocarbon resources and new possibilities of a Northern sea route as a result of global warming. Minority indigenous peoples of the North, Siberia and the Russian Far East (hereafter – peoples of the North or Northern peoples) are a small, but very sensitive part of Russian Arctic politics as their problems are closely linked with the state of the environment in the region and also with observance of minority rights.

In Russia, the 40 officially recognised northern peoples make up a population of 244 thousand, living in 28 administrative districts of the Russian Federation. They are marked out by the extreme nature of the lands they inhabit; small numbers, i.e. vulnerability; and special links with the land and way of life. These circumstances unite them in an interethnic community in Russia from its western to its eastern borders. At the same time they are part of the peoples of circumpolar culture and also of the world community of indigenous peoples as a whole.

Article 69 of the Constitution of the Russian Federation guarantees the rights of these peoples in accordance with universally recognised principles and rules of international law and international agreements. At the end of the 20th and beginning of the 21st century a group of laws were passed establishing the legal status of Russia's northern peoples. Providing them with special rights, the democratic, law-governed state that Russia strives to be, gives support to these peoples in order that they conserve and develop their identity and competitive strength.

However, the situation regarding observance of the rights of the Northern peoples has not improved in recent years. Amongst them there is a high death rate and unemployment exceeds the official figures for the country as a whole 1.5 – 2 times. Federal financing of targeted programs for the socioeconomic development of these peoples is insufficient. Alienation of the foundations of their existence: hunting and fishing grounds, by various industrial projects, continues. The law on territories of traditional land use has given rise to harsh criticism of the Federal centre both by the Northern peoples and their representative organs, and by mining companies, because it does not work. This provokes conflicts. Areas inhabited by peoples of the North are undergoing environmental impact. All this generates criticism on the part of the Northern peoples' representatives.

For these reasons, the problems of the Northern peoples have been noted at the highest level. In September 2008, at a meeting of the Security Council of the Russian Federation in Anadyr, President Medvedev declared that the government should pay greater attention to the development of the peoples of the North. The government was instructed to speed up the working out and passing of a Concept for the sustainable development of the Northern peoples and on February 4th 2009, a federal government order (№132-p) approved the Concept for the Sustainable Development of the Peoples North, Siberia and the Far East. This developed on regulations that are included in the document: Fundamentals of State Policy in the Arctic for the period up to 2020, approved by the Russian President, 18th September 2008.

The Concept is an attempt to synthesize existing approaches concerning the Northern peoples, establish clear principles of state policy in this area and formulate priorities.

The document formulates two aims that are hard to reconcile: 1) shaping the sustainable development of minority indigenous peoples of the North on the basis of strengthening their socio-economic potential and 2) preservation of their ancestral lands, traditional way of life and cultural values.

The Concept sets ambitious tasks to improve the demographic situation and improve the quality of life, modernization of traditional economic activities, simplification of access to education and medical services, and preservation of their cultural heritage. It is impossible to address any one of these questions without a state role in all spheres of life of the Northern peoples. State support for the economic and social development of minority peoples of the North will be given in the form of subsidies from the federal and regional budgets. Other non-budget sources of funding will be involved.

The Concept should be implemented over 2009-2025 in three stages. During the first stage (till 2011) it is planned to improve the regulatory framework concerning protection of the rights of the Northern peoples. Within the framework of the Concept, changes must be made to the law "On territories of traditional land use" (2001) and the laws "On hunting" and "On fishing" with the aim of reestablishing the legal balance and provide these peoples with priority access to land and biological resources. This work is already under way in the corridors of power.

A new version of the law "On territories of traditional land use" has already been written and the draft is awaiting discussion in the State Duma. The main, fundamental, changes mean that territories of traditional land use will not have specially protected status. This would allow for the development of economic activities, other than traditional, within them. The right to use, without payment and indefinitely, lands where they traditionally live and conduct their husbandry is not confirmed in the new version of the law. In this way a considerable step has been taken away from the "protected" status of these lands towards a "market" status. This, in conditions when there is no other source of income, will push the Northern peoples towards making compromises with mining companies.

Adoption of the Concept shows that the problems of the peoples of the North are officially recognised as a priority area of action for Russian administrative authorities. This confirms Russia's geopolitical interests in the North. It is important for the authorities to be able to build a dialogue with civil society on complex, basic issues such as, for example, the project to construct the Evenkijskii hydro-electric power station that the majority of people in Evenkiya are against.

Anna Sirina

Senior Researcher

Department for Siberian and Northern Studies Institute of Ethnology and Anthropology Russian Academy of Sciences

Russia

The uncertain future of the Shtokman gas field project in the Barents Sea

By Eini Laaksonen

The Russian Gazprom is developing the vast Shtokman gas field in the Barents Sea together with the French Total and the Norwegian Statoil. However, due to the uncertainties related to the future of the global gas business, the project's implementation has been delayed. Moreover, before making the final investment decision, it is reasonable for Total and Statoil to consider also the political risks that they might face in the Shtokman project.

The Shtokman gas field project

The Shtokman field's reserves, according to Russian measurements, account for 3.8 trillion cubic meters of gas and about 37 million tons of gas condensate. The annual production of the project is envisioned to reach 70 billion cubic meters of natural gas and 0.6 million metric tons of gas condensate, which is comparable to Norway's entire gas output. The license to explore and produce gas and gas condensate in the Shtokman field is owned by Gazprom neft shelf, which is a wholly owned subsidiary of Gazprom. Shtokman Development AG is the company established to develop the Shtokman field and to be the owner of the field's first phase infrastructure for 25 years since its commissioning. Gazprom owns 51 percent, Total 25 percent, and Statoil 24 percent of the company's shares.

The total costs of the project are expected to reach USD 30 billion, USD 15 billion being required already in the first phase. The full development of Shtokman is envisioned in three stages at four-year intervals, the first phase producing up to 24 billion cubic meters of natural gas per year. The peak production of 71 billion cubic meters per year is expected to be reached after 25 years.

Due to the uncertainties in the gas business, the Shtokman Development consortium has postponed the implementation of the project. According to the current schedule, the final investment decision is to be made before March 2011, and regarding LNG, it will be made before the end of 2011. The gas production in the field is planned to start in 2016.

Uncertainties hindering the field's implementation

At the moment, there is considerable uncertainty regarding the future development of gas prices, even though most analysts believe that the prices of oil and gas will increase over the coming years. The surge in the North American shale gas output as well as the fall in the European demand have dampened the project's export prospects.

After the recent gas crises, the EU countries are now working intensely to reduce their dependence on Russian gas, and the unconventional gas resources are now under exploration also in Europe. If the unconventional gas reserves will be found to be profitable there as well, it might, in the long-run, have serious effects on the demand and prices of the Russian gas.

Moreover, instead of Shtokman, the priority for Russian gas production is now the Yamal Peninsula due to its larger size and easier accessibility. If the implementation of Yamal fields will proceed as planned, the importance of the Shtokman field will further decrease and its implementation may not be reasonable in the pear future.

Nevertheless, in April 2010, during his visit to Murmansk, Prime Minister Vladimir Putin expressed confidence that the development of the Shtokman field will begin in a year's time as scheduled. The project is important particularly for the Murmansk region's economy.

Risks of foreign investment in the Shtokman field

In addition to the economic questions, the investors have to keep in mind the problems that foreign investors such as Shell, BP and Exxon Mobil have recently faced with the Russian government, authorities and Gazprom in the Russian gas industry. Even though the political situation currently looks rather stable for the Shtokman project, many factors can change before the field will be in production, even if it proceeded in schedule. For example, the Russian state leadership may and will change at some point in the future, and this may have a significant impact on the state's FDI policy, control over the economy, and international relations.

Nevertheless, there are three reasons for which the foreign investors should not be highly concerned about political risks in the case of Shtokman. Firstly, Gazprom will not be able to implement the project without the help of foreign partners. Secondly, all the involved countries, Russia, Norway and France, are presumably willing to maintain good mutual relations, which encourages peaceful solutions in problem situations. Thirdly, and perhaps most importantly, the ownership arrangements in the Shtokman Development are seen to be favourable for Russia to start with.

Namely, Total and Statoil have not been awarded an ownership of the reserves, but of parts of the company which will develop the field. Shtokman Development AG will develop and operate about one third of the field, and the company will own the infrastructure only during the first phase, meaning for 25 years after the production has started. After these years, everything will be handed over to Gazprom. In addition, Shtokman Development is not to own the license or sell the gas – it is owned by a subsidiary of Gazprom. The legal solution for the inclusion of foreign companies in the project is rather favourable for Russia, and consequently there does not seem to be any reason for Russia to later make unilateral rearrangements in the project.

Foreign partners to develop the field for Gazprom?

Even though the project setup presumably decreases ownershiprelated political risk, it does not seem very favourable for the foreign investors. According to the reported plans, half of the project's costs are to be paid during the first phase, but the field's peak production is to be achieved only at some point after the first 25 years. The foreign partners are involved in the project only during the first phase. How are Total and Statoil going to be compensated for their investment?

Obviously these details remain unclear to the public, and it is possible that they are still under discussion and have to be negotiated before the implementation decision can be made. All the parties in the project are aware of the contractual relationship, and it is a matter of negotiations whether the compensation will be given in the form of dividends, shares of the gas sales, or something else. As the foreign investors do not own the gas in any phase of the project, the risk of losing the field's ownership is not a risk in this case, but instead the risk is to invest enormous sums of money into developing the field and then end up not being compensated as was expected.

Conclusion

Careful consideration is needed in this decision-making. Due to the uncertainties in the global gas markets, it is extremely difficult to predict the future development of gas prices. Moreover, the bargaining power of Total and Statoil is in test when it comes to the contractual relationship in the project. The key question at the moment is the foreign companies' compensation for developing the Shtokman field.

We shall learn more about the future of the Shtokman field project in the beginning of spring 2011, when Gazprom, Total and Statoil are to make their investment decision.

Eini Laaksonen

Research Associate

Pan-European Institute
Turku School of Economics



Towards a European Energy Community - an opportunity for the Baltic

By Sami Andoura

The European Union and its 27 member states together face several major crises: an energy crisis, with human activity consuming more resources than nature can provide; an environmental crisis, with climate change calling for a radical shift in the way we produce and consume energy; and an economic and financial crisis that limits our ability to find solutions quickly. However, these crises also offer opportunities. The development of alternative, sustainable, energy sources and green technologies is the key to a new industrial revolution based on sustainable development and new technologies that will help emerge from the economic crisis and create the jobs of tomorrow.

Europe needs a common energy policy in order to guarantee access for its citizens to energy at reasonable and stable prices, to maintain its industrial competitiveness, to promote sustainable development and the transition to a low-carbon society, and to ensure security of energy supply for all Europeans.

Despite a dramatic increase in regulatory activity designed to establish a broad European energy market and fight climate change, the European Union has struggled to develop a common energy policy. Moreover, the national solutions adopted by member states large and small have proven inadequate to the task and have increased the risk of diverging and even conflicting responses to common challenges.

To overcome the many stumbling blocks and doubts about the current ability of the European Union and its member states to face these challenges together, a new approach aiming at deeper integration and solidarity is required. Because energy issues involve more than just the environment and market liberalisation, specific rules and an overarching economic, political and strategic approach are required.

The creation of a coherent and integrated single regulatory space for energy in Europe calls for a number of measures. The market liberalisation process must be accompanied by an upgrade of Europe-wide energy networks. The diversification of Europe's energy mix must be encouraged through greater support for research and development in new green technologies and by greater reliance on renewable energies. These technologies require major investments in both production and transport. This in turn means that the EU must have independent and autonomous financial resources, including the power to levy taxes on certain goods and types of production in order to finance projects of common interest.

To ensure that no third country can engage in targeted reductions of energy supplies, the European Union must present a single interface in its relations with its external partners, both producers and transit countries. This must include the ability to pool supply capacities should the need arise. In a major energy crisis, common strategic reserves must be available and distributed throughout Europe in a spirit of solidarity.

Europe has several options when it comes to meeting these crucial requirements. The most radical, but also the most promising, would be to create a European Energy Community with its own rules and methods specific to the energy field.

However, not all EU states may be ready to embark upon this route just yet. If this proves to be the case, those states wishing to move forward without delay must be able to do so. A differentiated approach of this kind is not without precedent. It has been used, in the past, to make major strides in the European project, including the Schengen area and the single currency.

In the case of the Baltic states, a European Energy Community has the potential to address major issues they face such as their isolation from the European energy markets, their huge dependence on a single supplier for imports of both oil and natural gas, their vast, under-developed potential for much needed renewable energy, their inability to properly fund R&D projects for the required alternative energy sources and last but not least, a certain lack of a common vision on energy issues, which negatively impacts the region as a whole. This sometimes leads to contradictory solutions to common challenges, as illustrated by the multiplicity of projected nuclear power plant projects, or as concerns the anachronistic national schemes for investments in offshore wind projects, not economically viable at national scale. A European Energy Community offers the possibility to turn these apparent constraints into opportunities, particularly the huge potential of the Baltic States to take advantage of renewable energy sources, especially offshore wind. What must be highlighted, however, is that the clean energy potential of the Baltic can be exploited for maximum effect only if it is done so logically and collectively.

A common energy policy will clearly not be brought about overnight, and it will take time to carry out the full debate that is needed. But Europe cannot afford to wait indefinitely. Efforts to build a coherent and effective common policy must get under way now. This can be done by developing some elements of the policy without delay.

Some of the priority actions would be, for those states wishing to go forward: developing ambitious economic instruments to finance common research and development projects on alternative energies, deepening and structuring cooperation in Europe-wide energy networks, and setting up oil and gas purchasing groups to facilitate procurement from foreign suppliers, thereby strengthening and focusing the EU's foreign policy in this field. Although these steps may appear technical and limited in scope, they will lead to decisive changes, paving the way to greater cooperation and solidarity in the energy field.

Through concrete projects, the shift towards a more collective, and by extension, European framework for energy questions will facilitate solving these and other such tangible issues for the Baltic countries. In this way, problems of isolation may be met by deeper interconnection and integration into the greater European energy market. Issues of energy dependence can be addressed in pooling risks and strengths in their relations with external supplier(s). Additionally, the huge potential for exploiting offshore wind in the Baltic which is hampered by an inability to fund these projects at a national level could instead be addressed through a common approach.

Ultimately, the specific problems of the Baltic States correspond in many ways to those that Europe faces as a whole. In this sense, the Baltic region represents a potential laboratory for the entire EU which could directly illustrate the benefits of coherent, collaborative action in energy policy. Thus, by addressing these types of concrete issues with collective solutions that advance both regional as well as European interests, the Baltic States could take on a welcome pioneering role in the larger European energy context.

Sami Andoura

Research Fellow

Notre Europe

France

The EU gas market - doomed to Kalakh game

By Dmitry V. Vasilenko

The complicated political processes between two countries or organizations are often associated with the chess game. Such projection is sometimes correct while modern political traditions root in Byzantine Empire's court intrigues. Even being highly politicized global economic processes do not exactly fit military logic of chess. The weakness of such analogy is even more evident at the natural gas market. The global gas market is actually a fiction - eventually there is a set of highly isolated regional markets that apart from two interacting parties include groups of mediators (i.e. transit states). We can stress out that political constraints disguise economic nature of gas market relations as well as chess game disguises the most ancient economic game - Kalakh. Kalakh or the seed game reflects the essence of trade as money and goods are at the board simultaneously. Historically Kalakh was the first resource game and therefore is applicable for the gas market logic as strategy description tool.

Since 70-ies and until 2008 European gas market has been growing intensively due to low environmental characteristics of coal and potential danger of nuclear energy. The scarcity of its own gas leads the EU to the dependence on the imported fuel. Taking into account prospective Northern sea reserves depletion, Algeria and Russia (as two largest suppliers) can easily cover the deficit. At the same time political constraints of energy security shifts cooperation vector of the EU energy policy to the Central Asian, Northern African and the Gulf countries.

The gas politics can be modeled as one-board Kalakh game between producer and consumer. In this case wells are full of both USD and cubic meters. As Kalakh is a win-win game both players can get their benefits if they use wise strategy. If we need to include a transit country we add one more board. In the optimal model we will have a set of games "producer – transit state" and "producer – consumer" which means that transit country is buying gas and taking fees directly from producer. In the worst but realistic case transit state breaks the game into two parties "producer – transit state" and "transit state – consumer" which means that such mediator gets benefits from both main sides

Two major processes that dramatically change modern relatively stable order are the liberalization of the EU gas market and the integration of gas producers into gas cartel.

The EU market reforms should lead to a model when producers will be eager to fight for the right to play with one "European player" who will represent all consumers. The main liberalization goals are development of competition, security of supply and environment protection. These goals involve a number of conditions that have to be accomplished and the most important are: to create open market with high competition, to give an opportunity to gas suppliers to use gas infrastructure of the third side, to decrease contract terms. As far as major gas reserves are amassed in non-EU countries it is not clear what will force such countries to bring their gas surpluses to the market to decrease the price. It is more likely that being created deregulated the EU gas market will be immediately conquered by non-EU producers. Both long-term contracts and privacy of infrastructure are the key security factors for gas producers as far they guarantee investments stability. Realization of two latest conditions will lead to the lack of producers' investment motivation, infrastructure deterioration, production decline and thus to the cost increase. Even if practically it is impossible to liberalize the EU market completely tough speculations lead to producers integration talks. It can be much poorer situation for consumers if they will find out that they have to play with one huge producing player - a cartel. While prices were high (until 2009) cartel idea was in opposition to the economic theory because such institutions

established when prices and demand are low. Gas prices decrease gives cartel a chance.

The main gas producers' organization - Gas exporting countries forum (GECF) controls 70% of all natural gas reserves and nearly all the EU imported gas flow incl. 90% of all LNG supplies which means that GECF has good opportunities to become a world gas cartel. There are a lot of market reasons why cartel will be totally ineffective structure. But two key problems came from the inside of the GECF.

The first step towards effective cartel is control over completion of the gas fields. In this case cartel builds a line of countries and completion of the fields is done country by country in exact order and the king-of-the-hill is paying others some compensation. There are too many members in the GECF and such system creates problems both for wealthy and poor states. Countries that need new fields (Russia, Iran and Saudi Arabia) and have appropriate investment funds can face development barriers. Countries with low investment opportunities will have to skip their turn that can lead to 15-20 years of stagnation or to get into debts that will not be an easy deal as creditors will unlikely be cartel members.

The second key condition of the effective cartel creation is the swing producer's role. For years the OPEC used Saudi Arabia as swing producer: surplus oil productions allowed the Kingdom to vary prices; to punish cartel members that exceed production quotes; to block the newcomers entering the market. As far as gas projects are much more expensive than oil ones, the GECF swing producer (SP) will need not only surplus production but large empty LNG fleet, network of pipelines and huge storages. Only Qatar meets all the conditions (huge reserves, LNG fleet, access to European, Asian and American markets), though its market share will not exceed 4% until 2030 and consequently the country has no real market power. Russia and Nigeria cannot be SPs as far as gas export revenues are extremely important for the countries' social-economic development. As far as Saudi Arabia, Iran and Iraq will not enter the market until 2030 it seems that the SP role will stay vacant. The only way to create SP is to form a group of countries. It will weaken a cartel power, but in case there is no SP a cartel will not work at all.

The analysis of both liberalization and integration processes shows mid-term structure of the EU gas market: increase of gas import – 70% by long-term contracts, 30% - spot market and long-term structure – 50% by long-term contracts, 50% by spot market. The mutual dependence of the producers and consumers will be even stronger. The solution lies in the Kalakh logic - less infrastructure links and more mediators parties have, more games with less wells the parties have to play, and more money and gas both sides will loose. The sustainability and fair price can be guaranteed by the large number of joint multinational infrastructure projects.

Dmitry V. Vasilenko

Dr., Vice-Rector on International Relations

St. Petersburg State University of Economics and Finance

Head of Organizing committee of the International scientific conference "Energetika XXI: economy, policy, ecology"

Russia

The Russian nuclear renaissance

By Susanne Oxenstierna

Russia has launched an ambitious nuclear energy programme with the aim of building 24 new nuclear power reactors during the coming 10 years. By 2020, 23 per cent of domestic electricity should be generated by nuclear power stations, according to the state corporation Rosatom which manages all Russian nuclear technology development, both military and civil. According to the tentative plans up to 2025, Rosatom should be running over 50 reactors by then, compared to the total of 32 in operation in 2010. In addition to this domestic expansion, Rosatom intends to build at least 10 reactors abroad.

Many questions arise around the Russian nuclear renaissance. Does Russia really need so many reactors, and can it build them in such a short time span, after a pause of over two decades in the development of the nuclear industry? Is it possible for the country to deliver about three or four reactors per year, when at the height of nuclear power development in the Soviet Union the industry only produced on average two per year? Is there capacity in the nuclear engineering industry to deliver the necessary machinery? Are there enough specialists in the pipeline to build and run the new capacities? And will Russian nuclear power be safe?

The boost currently being given to nuclear power in Russia, and elsewhere in the world, is explained by the concern to secure a sufficient energy supply for the future and to protect the environment at the same time. Hydrocarbons pollute the environment and will become scarcer and harder to extract during the coming decades. Currently, the only alternative source of energy that can replace oil and gas in sufficient volumes and produce satisfactory amounts of electricity is nuclear power. Unlike traditional fuels, nuclear power produces almost no carbon dioxide emissions.

Additionally, in Russia, there are strong economic reasons to substitute nuclear power for some oil and gas. The incomes from oil and gas exports are crucial to the Russian economy and as much as possible of these commodities should go to export. The deposits of oil and gas are situated further and further from the existing infrastructure and extraction is becoming increasingly expensive. It is clear that the Russian leaders want to satisfy the profitable foreign demand in the future without jeopardizing domestic needs. Nuclear power is an important part of the solution to this equation.

Demand for energy depends to a great extent on the growth of the economy. Scenarios before the economic crisis of 2008–2009 assumed continued high growth and continued increases in energy and electricity consumption. In 2007, RAO EES, the now dissolved Russian electricity state corporation, launched a plan for total Russian electricity generation, called GOLERO-2, which assumed a doubling of electricity consumption between 2005 and 2020. This plan was adopted by the Russian government in February 2008, but it soon became apparent that it was unrealistic. According to some critiques, the assumptions behind GOLERO-2 inflated the increase in demand for electricity by two or three times. Since the estimated rise in electricity demand determines the investment in the sector – how many nuclear power reactors need to be installed, how many hydropower stations need to be built and so on – an overstatement of investment needs becomes unnecessarily costly for the economy.

In November 2009, the Russian government adopted the *Energy Strategy of Russia up to 2030*, which states that the economy will need less electricity and only half of the increase of nuclear capacity foreseen in GOLERO-2. This means that new capacity of 14–18 million kilowatts instead of 32 million kilowatts would be needed, which makes a huge difference. The "overnight cost" (calculated as if construction were completed overnight, so that no interest is paid) of building a Russian nuclear reactor generating around 1 million kilowatts of electricity is estimated at

around 2,500 US dollars per kilowatt, which is comparable to the cost of a comparable gas power plant. However, due to the long construction lead times and high risks of delay (as has happened for example at the Russian project in Kudankulam in India), the real cost of new nuclear plants is much higher – in some cases over two times the overnight cost – and at such a level nuclear power is hardly competitive with gas-generated power.

Thus, even the realism of the more moderate forecast in the Energy Strategy may be questioned. And, quite apart from the cost aspects, the Russian machine-building industry today does not have the capacity to build so many reactors in such a short time. There are serious bottlenecks, not least because Russia has not built any new nuclear power plants since the break-up of the USSR. Certain elements, such as turbines, are particularly difficult to build because they were largely built in Ukraine in Soviet times. On top of this, the ambitious nuclear programme has several reactor types in line. Eleven RBMK or "Chernobyl-type" reactors will be in use at least up to 2030. The main type of reactor, the Russian pressurized-water reactor VVER, exists in several models and Russia is also using fast breeder reactors. Furthermore, Russia has a fleet of nuclear ice-breakers, and has begun developing small floating nuclear heat and power plants (FPUs). The world's first FPU, the Akademik Lomonosov, was launched in St. Petersburg at the end of June

Despite the complex nuclear energy agenda, Russia opts for a self-sustained technology in the nuclear engineering industry. It is hard to see how the ambitious plans could be carried through on time even if Russia accepted some foreign cooperation.

Nowhere in the materials on the Russian nuclear renaissance are there any references to how the Russians are reviving education and training for the people who are going to construct these nuclear power plants and run them. Russia has a high reputation in science and engineering education, but to support the expansion described here a whole new generation of nuclear engineers will need to be attracted to the sector, and the industry will have to compete for the best manpower with other domestic and foreign employers. This was not an issue in the USSR.

Nor was the Soviet safety culture satisfactory, either in the nuclear field or in other parts of society, and the question is whether this has changed. According to an IAEA document monitoring Russia's fulfilment of the Convention on Nuclear Safety, in 2007 there were around 40,000 employees at Russian nuclear plants. What kind of safety training do they have? The major accident at the Sayano-Shushenskaya hydroelectric power station in 2009 showed that, as in the case of the Chernobyl accident, vital safety rules were broken by the highly-trained personnel in charge.

The nuclear energy expansion will hardly be as impressive as Rosatom or GOLERO-2 imagines, but it is clear that Russia will expand its nuclear power capacities substantially to meet its future electricity demand. Let us hope that the new generation of Russian nuclear engineers will put safety first.

Susanne Oxenstierna

Doctor of Economics Senior Researcher

Swedish Defence Research Agency

Stockholm



It is time to think more with brain than muscles in the Baltic Sea Region energy debate

By Peter Lund

Energy is the traditional fuel for political rhetoric in the Baltic Sea Region. The source for that has been for many years the Russian energy which intertwines economically not only our region but most of the Europe and the Russian Federation together. For Russia, Europe represents over half of its oil and close to three quarters of its overall gas exports, and in the European energy balance, this comes close to a quarter of all European Union's oil imports and more than 40% of the imported gas. This interdependency is expected to grow in the coming years in particular for natural gas.

In the light of these numbers energy can be easily misused in the political discussions and to polarize – phraseology such as "humiliation, power of oil, security, state muscle, etc." are common in this context and are by no means evoking confidence around the Baltic Sea. Even the recent Finnish decision to build two new nuclear reactors was strongly argued by the Government for reducing the reliance on electricity imports from Russia, which in economic terms would be less motivated than politically as Russian electricity is much cheaper than the electricity from the new reactors and has been a reliable supply source for several decades.

The level of the present political debate around Russian energy has lead to unfortunate fragmentation of interests in the Baltic Sea Region and the region's weight in outlining future energy directions in Europe is much less than it should be. Considering the North Stream gas pipeline from Russia to Germany, the new oil terminals in the Gulf of Finland, recent shale gas findings in Poland and the country's large coal deposits, Barents Sea energy reserves not to mention the huge renewable energy reserves, nuclear construction and higher than average energy use in the north along with the depletion of North Sea oil fields in the coming decade means that the Baltic Sea Region will be beyond dispute the most important piece in the European energy and climate puzzle.

Furthermore, if short-term interests dominate the thinking as it tend to do now, long-term visions which are important in the energy and climate context may become blunt. A stronger cohesive input from the Baltic Sea Region to the EU2020 strategy under preparation would be a welcomed start to reverse the prevailing situation. This new strategy relies heavily on green growth as the future direction of Europe. It combines energy, climate and competitiveness and strives to create millions of new jobs from clean and green technology. Knowledge creation and innovations will play here a key role. Speaking more generally about the long-term climate targets, around 80 percent of the present carbon emissions in industrialized countries need to be eliminated by year 2050. This would require a global energy revolution which in turn is not possible without more efficient and cleaner energy technologies and innovations.

From a Baltic Sea perspective, giving more space to smart energy thinking instead of traditional energy trade and investments with all the political mess involved and focusing more on innovations and new scientific and technological breakthroughs would well be justified in the light of the huge needs and opportunities ahead. Clearly, collaboration on new and clean energy would deserve a much higher priority on the political agenda. There is also a case here for all to win through the stronger cooperative arrangements because a single country alone is not able to provide neither the solutions needed nor the financial means. Local business would be a large winner if politicians gave more support to joint efforts and opening markets instead of isolated nationalistic thinking.

Actually, the motivation for more intensive collaboration should be derived from the tremendous business opportunities that clean and smart energy represent. Now, new renewables such as wind and solar energy represent together a \$100 billion a year market growing in two-digit numbers. Green energy will be even more important as a business than the information technology— the

investments needed to fulfill the carbon reduction targets in energy in the coming forty years are around \$50,000 billion. So, it is quite correct to claim that those countries possessing and selling the clean technology may be the true winners, not those just producing energy commodities. For comparison, the value of all Russian energy reserves (the country holds world's largest natural gas reserves, the second largest coal reserves, and the eighth largest oil reserves) correspond to around \$5,000 billion, but full harnessing of these would necessitate huge investments as well, e.g. near-term needs for energy infrastructures alone may come up to around \$100 billion.

The European Union has an ambitious plan to improve its competitiveness in energy technology. The so-called Strategic Energy Technology Plan or SET-Plan intends to pull together €50 billion over 10 years in clean energy R&D from different sources including national programmes. The SET-Plan including the several energy technology platforms and joint initiatives would be a natural forum for intensified Baltic Sea collaboration. In the present situation, each country or regional organization seems to have its own agenda for the SET-Plan which leads to weak positioning in the overall strategy and subcritical resources for success.

Baltic Sea countries demonstrate high scientific capacity, political good-will for research and appreciation for innovation. But in clean energy technology only a few global success stories are found, notably the Danish wind case. It seems that the national efforts are too much based on providing local technology for local markets instead of having a global market perspective. This may be interpreted as a failure of commercializing new innovations leading to ineffective resource use. What may be required is an integrated view on technology, markets and financing simultaneously. Baltic Sea Region could provide suitable test ground networking for such efforts where all three elements are included with input from different parts of the region.

For example, eco-cities or suburbs in the region that demonstrate both high energy efficiency and local renewable energy utilization would be in this direction (e.g. Gotland). Innovation universities such as the new Aalto University in Helsinki or the Skolkovo innovation city in Moscow are examples of knowledge hubs with strong private-public partnership that could provide market close energy innovations. Energy efficiency could be a special field of common interest as there is a huge potential for energy efficiency in the region. For example in Russia alone, 40-45% of energy could be saved with simple and cost-effective measures. The built environment alone represents close to half of all energy and emissions and would deserve special attention as there are major refurbishment needs.

In the Baltic Sea Region context energy has traditionally been viewed as a tradable commodity. In the view of global development, clean and efficient energy technologies are the key to global energy and climate issues opening up huge new business opportunities. For our region, intensified collaboration in these fields with a focus of managing the whole innovation chain from knowledge to markets would be a well justified effort.

Peter Lund

Professor

Aalto University School of Science and Technology

Innovations and Finnish-Russian research co-operation

By Asta Salmi

There is a strong political will in Russia to boost innovations as reflected, for instance, in Russia's long-term policy programme (*the 2020 concept*). The programme is based on three scenarios, one of which is to turn Russia into an innovation-based society by 2020. This path is seen to be the one that can lead Russia away from its current economic problems. Innovations are thus the focus in today's Russia.

Innovations in the Russian context have also been the object of several research projects. The Academy of Finland has recently funded three academic projects in this area: International Dimension of Innovation System in Russia (led by Professor Kari Liuhto at Turku School of Economics), Innovative Integration Strategies of Finnish and Russian Companies (led by Professor Riitta Kosonen, Aalto University School of Economics) and Innovativeness in Russian High-tech industries (led by Professor Markku Tuominen, Lappeenranta University of Technology). These projects were co-funded with the Russian Foundation for the Humanities, and they were part of the Research Programme on Business Know-how (2006–2009) of the Academy of Finland.

Looking at the innovative environment in Russia and how local and foreign companies may operate in this environment, the research projects also investigate the role of international networking. The results show that great differences in innovative capabilities across different parts of Russia still prevail. There is a need to further develop an open innovation environment and, in particular, to support cross-border idea exchange and networking. Furthermore, companies need innovative ways to become integrated into the local context. Social innovations in business know-how enable them to adapt to the Russian society. These innovations are needed due to the strong political (e.g. law enforcement and corruption), economic (the grey economy and personalised business networks) and social links (availability and skills of labour and paternalism) of business. The integration practices seem to be peculiar to the Russian business context and differ from those adopted elsewhere, which poses challenges to the foreign companies. All of the studies stress the importance of international networking and linkage building within the innovation system.

Russian official plans to boost innovations have been criticised for their emphasis on top-down policies. The results of the aforementioned studies would confirm the often expressed need to enhance bottom-up networking to support the strong administrative pressure. Indeed, interactive relationships as well as diverse international cooperation are the essential characteristics of any national innovation system. The research co-operation within the Programme on Business Know-How illustrates two important areas of networking within the innovation system: international co-operation, firstly, between the funding agencies and, secondly, between the researchers.

Finland and Russia share a long tradition of scientific cooperation, of which funding research on business know-how is only one example. The Academy's international strategy identifies Russia as one of its main areas of collaboration. Research funding co-operation already exists in many fields and further co-operation is being planned. The Academy of Finland engages in close co-operation with three Russian science and research funding organisations: the Russian Academy of Sciences, the Russian Foundation for Basic Research and the Russian Foundation for the Humanities. The aim of joint research funding is to fund top-class Finnish–Russian projects that generate added value in research that focuses on the environment, well-being, society and technology.

Another important area of networking is cross-border cooperation between researchers. The three aforementioned cases are prime examples of this: close and active cooperative links between individual Finnish and Russian researchers were built and future research co-operation is being planned. The co-operation has, furthermore, been extended to involve researchers from other countries; to give just one example, a seminar on Russian innovations organised around these projects in spring 2010 attracted participants not only from Finland and Russia, but also from the United Kingdom, New Zealand and Mongolia. Thus the results of these projects pave the way for even more extensive international research.

Intensive and long-term research collaboration between individual researchers is essential in the area of innovation studies. It helps create a deep understanding of the innovation systems and practices of the respective countries and gives a basis for comparative studies. Moreover, local contacts are often the only option to gain access to the companies and other research sites to do research. The cooperation with companies is particularly important in innovation research, since companies, as both producers and users of new knowledge, are a central element in the innovation system. Given that innovation is about developing and inventing new technologies, services, business models and operational methods, it is clear that both companies and researchers benefit from close cooperation.

It seems that the ambitious plan of building a Russian innovation society can only be accomplished, if also networking and relationship building take place at various levels and between different types of actors. Joint research projects are one fruitful way to build the basis for future innovations

Asta Salmi

Professor of International Business, Aalto University School of Economics

Programme Manager for the Research Programme on Business Know-how, Academy of Finland

How do Russian companies innovate?

By Juha Väätänen

Russian innovation paradox

Russia has set a goal to modernise industries and to transform into knowledge based economy. After the collapse of the Soviet Union Russia has suffered from the paradox when relatively high R&D spending produces very weak results for the economy. Russia's innovation performance has been disappointing, despite the available stock of human capital and overall investment in R&D. Russia spent around 23 billion USD on R&D (public & private spending) equalling to 1.1% of GDP in 2007. Russia's R&D spending is high both absolutely and relatively in the reference group of Central and Eastern European transitional economies. For another comparison, European Union's export powerhouse Germany spent 71 billion USD for R&D in 2007.

Russia's weak innovation performance is emphasised by the World Bank data, which shows that German manufacturing worker creates ten times more value added in dollar terms than his Russian counterpart. This means that Russian R&D has either very low productivity or that there are very weak linkages between R&D and the business. A well known fact is that weak innovation performance has roots in the centrally planned economy background. The Soviet Union legacy still influences the main actors of the innovation system. The federal state is still the most important funding source of R&D. Universities are outsiders in the innovation system, only a few universities carry out research activities. Thus, overhaul of innovation system is needed and enterprise sector has a significant role in this process. Let's have a closer look at how Russian companies innovate.

Surveying Russian companies

At Lappeenranta University of Technology (LUT) we have researched the innovation capabilities of Russian companies for many years. We have conducted numerous surveys on innovation activities of Russian companies. Surveys have intended to find out which strategies Russian companies use in their R&D and innovations? How much is spent for R&D? How innovation activities are organised? What are the innovation performance measures and innovation results? How organisational capabilities such as skill levels and openness matter? What is the role of incentives and pressures in innovation process development? Over the years more than 600 enterprises have been surveyed to find answers to the above mentioned questions.

Enterprise surveys are a convenient way to access first hand information from the executives and decision makers in the companies. Traditionally the main stream of Russian innovation research is focused on the policy level and the national and regional innovation systems. However, it is extremely important to know trends in the private sector as well. The productivity gains at the company level are essential for the whole economy development. Experience from the other transitional economies has shown that especially competitive pressures force companies to develop their competences. Typically competitive pressures come from imports, foreign direct investments and domestic competitors. Finally it depends on companies' capabilities whether they are able to respond to increased competition.

Encouraging innovation performance trends

Our study results show very encouraging innovation performance trends. Russian companies spend relatively

large share of their revenues for R&D even in the international comparison. More interestingly, study results show that the best performing companies have distinct characteristics. They have own R&D capabilities and they are actively looking for external knowledge. Definite success factor is the company's ability to develop high level R&D capabilities, which allow acquiring external knowledge. The external knowledge is either acquired from linkages in supply chain or from various stakeholders (customers, suppliers, shareholders, competitors, partners intermediaries). Innovation capabilities are developed best through the international linkages. Study results show that international competitive pressures effectively increase innovation performance of a company.

It seems that Russian companies prefer domestic cooperation partners even if this co-operation produces more modest innovation results than international co-operation. This indicates that organisational capabilities and skills are to be developed further. On the other hand, companies which have good experiences of international knowledge acquisition aim to deepen their relationships with the key partners. This international co-operation often leads to better innovation performance — higher profitability, better new product development, more product and process innovations and higher number of patents. Furthermore, internationally oriented companies manage to develop their competitive advantages to a new level, which often involves radical changes in their business models, such as increased openness, value creation and value capture.

How does future look like?

Results clearly indicate that Russian companies are increasingly more and more tapping into the world technology pool and are able to absorb this knowledge. This leads to a significant innovation performance increase and indicates that Russian companies are becoming globally more competitive. International competitiveness will eventually lead to diversification of exports and economy in general. However, to facilitate this development further, government should focus on improving investment climate, transparency and openness in the economy. Traditional, centralised and tightly closed approach to innovation and R&D processes do not fit in fast changing global business environment anymore.

Juha Väätänen

Professor, International business & transitional economies

Academic Director, Global Management of Innovation and Technology - Master's Degree Programme



Faculty of Technology Management Lappeenranta University of Technology (LUT)

It's time to step up FDI efforts

By Kristiina Helenius

As the global economy emerges from the downturn, international companies are keeping a close eye on new business opportunities in the Baltic Rim region. But they are not seeing many of them yet.

Finland boasts some 460 affiliates of American parentage. They provide an interesting bellwether for how international companies view the Baltic Rim economies as an investment destination. Traditionally, many global companies group Finland and the Baltics as one division within their organizations.

We can discern some recent trends. First, the global economic downturn of 2008 – 09 pushed many global companies into an accelerated reorganizing mode. Second, American companies, in search of efficiencies, have increasingly concentrated their Nordic presence in Stockholm and Copenhagen, cutting operations elsewhere. But clear new trends have not emerged yet. Many companies are in a holding pattern waiting for stronger signs of economic growth from their markets.

This is a rare window of opportunity to reach out to the international companies that are currently contemplating where to invest next. We at AmCham Finland, sincerely hope the Baltic rim economies share this view and offer strong investment proposals. How these nations succeed in wooing international companies with a credible message and solid business environment is crucial. It will, to a large extent, determine how connected we as a region will stay to the global economy.

Pitching the Baltic Rim as one economic region is key to attracting global companies' attention. Any one national market is simply too insignificant for them to invest in a large scale in when we are up against the exploding Asian markets, Eastern European countries, and fast growing economies like Turkey. Finland, for example, is located at the center of a market of some fifty million consumers. It belongs to the stable Finno-Scandinavian societies with a strong democratic tradition, is in the Euro zone, and shares a border and longstanding ties with the emerging Russian market and the Baltic countries.

There are some developments we watch particularly closely. One of them is Russia's new-found emphasis on attracting foreign direct investment and creating its version of Silicon Valley. President Dmitri Medvedev spoke of his vision at the St. Petersburg International Economic Forum in June and again during his visit to the United States. This theme of "modernization" appears to enjoy wide support and enthusiasm in Russia.

Companies covering the Baltic countries and Western Russia from Finland will soon be able to start the day with a business breakfast in Helsinki and have a negotiation over lunch in St. Petersburg, while reaping the benefits of a high-efficiency cargo center in the Kotka-Hamina hub.

This will be a reality in December 2010 when Helsinki, Tallinn, and St. Petersburg become linked by the new high-speed train between Helsinki and St. Petersburg, cutting the commute to a mere three hours. The annual passenger traffic between the cities is expected to rise from 400,000 to 1,2 million.

The opening of the arctic region marks another paradigm shift for the Baltic Rim economies. National carrier Finnair's strategy positions Finland as the ideal transit hub between the Americas, Europe, and Asia, offering the shortest and fastest routes between the continents. With the melting of the Arctic Ice Cap, the same logic is starting to apply to sea routes as well.

Most counties in the Northern hemisphere have ambitious arctic strategies. Finland too, outlined its own in June.

Finland's role as the gateway to Russia will be further enhanced with the Nord Stream pipeline which is considered a major milestone in EU-Russian relations. Nord Stream will transport up to 55 billion cubic meters of gas per year, which supplies more than 26 million European households. Construction of the new gas link from St. Petersburg to Germany is underway.

However, there are developments that are not helpful in making the case for a lucrative Baltic Rim economy. Russia's announcement that it plans to restrict imports on selected meat and dairy products from Finland came as an unpleasant surprise. Russian authorities informed the Finnish Food Safety Authority that the operations of several Finnish food producers fall short of Russian legal requirements.

Another unfortunate dispute straining trade relations between Finland and Russia is the custom duties on raw timber. Russia's membership in the World Trade Organization would be a major and much-needed step forward as it would provide common norms and a base for more transparent trade relations.

We, as a chamber, have a voice on both sides of the border. In fact, there are AmChams in every Baltic Rim country! Two years ago, AmCham Finland, with our 220 member companies, launched a strategic partnership with AmCham Russia which has some 850 corporate members. The power of the network to deliver business benefits is remarkable. It can be instrumental in delivering messages on behalf of the business community. So far, the partnership has not been activated for advocacy. It should.

If the Baltic Rim economies are serious about engaging these companies, as they should, AmCham Finland stands ready to act upon its role as a bridge builder between the public and private sectors. We continue our active dialogue with members to understand their needs and growth objectives so that they can fully commit to serving our markets. We are eager to identify growth potential amidst the structural change that is happening in Finland as well as the Baltic Rim region at large and support our members as they translate it into new business opportunities.

When the Baltic Rim economies prove to have viable and innovative business development ideas, AmCham Finland can assure that the message reaches the global headquarters of our member companies.

Kristiina Helenius

Managing Director

AmCham Finland



As the voice for the international business community in Finland, AmCham is central in assisting companies to launch into the global economy and in helping investments successfully enter the region. We stand at Finland's open door, ready to welcome those who share the goal of adding value through interaction and mutual support

German investment in the Baltic States

By Ralph Hirdina and Thomas Jost

Soon after the Baltic States regained independence in August 1991 the German Government started to rebuild its international relations with Estonia, Latvia and Lithuania. In subsequent years political, economic and cultural ties of the Baltic States with Germany and the other European Union (EU) countries developed fast. Already in May 2004 the Baltic States joined the EU supported among others by the German Government.

Economic integration of the Baltic States into the EU is reflected in the strong growth of trade and capital flows. Germany is one of the main trading partners of the Baltic States. The value of trade in goods between Germany and the Baltic States amounted to €5.3 billion in 2009. Trade and business relations between Germany and Estonia date back 700 years to the Hanseatic League. After Finland, Sweden, Latvia and Russia, Germany was the fifth largest Estonian trade partner with a bilateral trade value of €1.4 billion in 2009. For Latvia, Germany was the fourth largest and for Lithuania the second-largest trade partner.

Strong political relations, EU membership and growing trade ties were the basis for increasing investments of German companies in the Baltic States. The Baltic States ambitiously implemented the legal framework of the EU and therefore gained confidence for foreign direct investments (FDI). Furthermore, the Baltic States presented themselves as modern states. For example Estonia's innovative projects "e-government", "e-learning" and "e-voting" are groundbreaking. Finally, close cultural and social relations between the Baltic States and Germany, documented by many bilateral cultural and social projects, indirectly pushed German investments.

Germany, the fourth largest outward investor worldwide, measured by the value of its outward FDI stock, strongly increased its investments in the Baltic States in the past two decades. German FDI in the Baltic States was also driven by geographic proximity and a widespread use of the German language in the Baltic States as well as by the rapid economic growth and political stability of the Baltic States in the past decade. Growing German FDI in the Baltic States was safeguarded by Bilateral Investment Treaties (BITs) that went into force with Estonia in 1993, with Latvia in 1996 and with Lithuania in 1997. Double Taxation Treaties (DTTs) were concluded with Estonia (1996), Latvia (1997) and Lithuania (1997). The German-Baltic Chamber of Commerce, located in Riga, acted as a platform for the exchange of ideas and information and promoted business contacts between German and Baltic companies.

German FDI in the Baltic States amounted to €1933 million at the end of 2008, according to the FDI stock statistics of Deutsche Bundesbank. German FDI therefore tripled within less than five years after EU accession of the Baltic States in May 2004. Lithuania received more than half (€1028 million) of German FDI in the Baltic States followed by Latvia (€461 million) and Estonia (€444 million). Total German corporate investments are higher than these figures as the FDI stock statistics of Deutsche Bundesbank cover only foreign affiliates with a balance sheet total of more than €3 million. Besides bigger German multinational enterprises (MNEs) a large number of small German firms operate in the Baltic States. The total number of firms with a German stake in the Baltic States is estimated to be around 2.000. In all three countries Germany is one of the main foreign investors (ranking on the 4th place in Lithuania, 6th in Estonia and 3rd in Latvia).

German production and service facilities have become an integral part of the economies of the Baltic States and contribute to economic growth and employment. According to the data of Deutsche Bundesbank foreign affiliates of German companies produced a value added of €2.1 billion and employed 20,000 employees in the Baltic States in 2008. German companies also contributed to capital inflows that the Baltic States needed to capital inflows that the boom years after EU accession. The activities of German companies as world leaders in many high-tech products led to positive technological spill-over effects for the Baltic States.

The German economy also profits from the grown economic ties. The Baltic States offer interesting markets with a population of

nearly 7 million and they belong to the Baltic Sea Region, one of the most dynamic economic regions of the world. In addition, the Baltic States are a gate to Russia. Germany's Chancellor Merkel and Russia's President Medwedew recently emphasized to strengthen economic relations between Russia and Germany. The Baltic States could benefit from intensified economic relations between Russia and Germany due to their geographical proximity to Russia and their transit function. But, investments in the transport sector in the Baltic States compete against those in Russia. In recent years, Russia built up strongly its logistic infrastructure in order to compete with the Baltic States. The building of the gas pipeline from Russia to Germany through the Baltic Sea without involvement of the Baltic States showed that the Baltic States cannot take it for granted to profit from an intensified economic relationship between Russia and Germany.

The investments of German firms in the Baltic States were mainly driven by longer-term strategic considerations and less by short-term wage and cost considerations. Despite the sharp recession of the Baltic States in 2009, which suffered from a 15% decline of their real GDP, the hardest fall in the EU, German companies did not disinvest. A recent survey of the German-Baltic Chamber of Commerce found out that 90% of the German companies would repeat their investments in the Baltic States. In spring 2010, the business situation is still problematic despite signs of a recovery. But, German firms consider their situation better than the overall situation and expect to increase their investments in the medium-term in the Baltic States.

Despite the strong importance of German companies in the Baltic States there is still potential for a growing role in the future. Investments in the future will crucially depend on how the Baltic States can cope with the economic crisis. Macroeconomic stabilization and a return to solid economic growth will attract growing German FDI. The European Commission has forecasted that the Baltic States will return to positive economic growth rates in 2010/2011. The introduction of the Euro should further stimulate FDI as it could end speculation of a depreciation of the currencies of the Baltic States. Estonia will enter the European Monetary Union (EMU) and introduce the Euro on January 1, 2011. Latvia and Lithuania are expected to join EMU in 2014. Both countries therefore have to reduce their budget deficits to fulfil the Maastricht criteria for the introduction of the Euro. In addition, both countries could improve their anti-corruption policy; currently they only rank on the 52nd (Lithuania) and 56th place (Latvia) of the ranking of Transparency International. On the other hand, all three Baltic countries improved their business conditions considerably which is reflected in their ranking among the top 30 countries of World Bank's "ease of doing business" list.

Thomas Jost

Professor of Economics

Ralph Hirdina

Professor of Law

University of Applied Sciences Aschaffenburg

Germany

We should know how to do business with Russia - but do we really?

By Tauno Taajamaa

Last year was horrendous for Finnish companies operating in Russia. The total value of Finnish exports to Russia decreased 47% from 2008. Finnish investments in Russia were 400 million euros negative, i.e. Finnish companies did not invest in but divested from Russia. The problems with punitive taxes for importing forest products and other regulatory challenges imposed by the Russian government (like the recent restrictions on the import of some meat and dairy products) have created a major dent in the image of Russia-related business. The market is seen to have both economic and political risks as far as long-term business opportunities are concerned. Therefore many companies are justly thinking: "Is doing business with Russia really worth it?"

Still, we all know that Russia is a land of endless opportunities. The grim export statistics from 2009 were largely due to global macroeconomics, and all of Finland's key export markets suffered. In 2010, the Russian economy is expected to grow by 4-6% (Ministry of Foreign Affairs). And even though Russia's economy is still very heavily affected by the ups and downs of oil price, its growth is much faster than the growth in e.g. the EU area. Consumer optimism and consumer purchasing power are also growing this year according to research. Due to the positive economic and legislative development of the past decade Russia continues to be a very prospective market for Finnish companies. The evolving market is still hungry for innovations and benchmarks in technology, service and business models. There are several fields of business which are growing and which do not carry a big political risk, e.g. ICT and business services. These fields offer Finnish companies significant opportunities. And the companies that are willing to invest now, at the beginning of the new growth period, will benefit the most.

However, for an individual company, business in Russia is not about macroeconomics, it's simply about answering two plain questions:

- Can I create or identify a need for my products and services in Russia?
 - Can I sell and deliver my products and services in Russia?

Fintra (The Finnish Institute for International Trade) works a lot with individual companies. Unfortunately we often see that small and medium-sized Finnish companies (and, surprisingly, bigger ones too):

- a) do not analyze these two key questions critically enough
- b) do not identify the competences they need to build and transform in order to be successful in Russia

We see many companies who have learned the hard way the realities of doing business in Russia and have paid dearly for the mistakes leading to this learning.

We also see that the key problem for companies is that they realize but do not internalize the fact that Russia is a truly different business environment.

Companies do prepare and plan well for market entry or investing in Russia. The key challenge is that they do not internalize that it is different. They still go and try to sell and operate the way they operate in Finland or many other industrialized countries. Here, in our opinion, lies one of the key differences between successful and not so successful companies in Russian markets.

Fintra helps yearly hundreds of Finnish and Russian professionals develop the skills they need to be successful in business. These individual competencies translate directly to company-level competencies. In Russia the old cliché of a company's success depending on the skills and competence level of your employees is still very much a fact. A company can have perfect processes and six sigma systems which work beautifully in Finland but fail in Russia. The culture, general mindset and how business is done is based very much on personal interaction, quick decision-making and creativity in solving different, sometimes very strange, problems. There is very little customer understanding on

processes, protocols and predictability. All this plays up the importance of the individual skills and competencies of the people selling and delivering products and services in Russia.

Fintra has done some research on the competence level of Finnish companies in Russia in regard to their ability to work with Russian clients and employees and what has made some companies successful and others less successful. Some of the key findings are:

-Be willing to invest in relationship building and relationship management.

This means investing time, money and the right (Russian-speaking) people to find the right decision makers in potential client companies and establish a personal relationship with them. The ability to manage this relationship once established is also essential. This means that your sales force should not be only experts of your products but extremely good at impressing clients and communicating in the Russian cultural context.

-Make sure you are able to retain local talent

The reasons for commitment of the best local talent are not necessarily similar to what you are used to. Since the best talent are aware of their importance to the company, they expect and demand much both in terms of monetary compensation and growth opportunities. Patience, humbleness and integrity are not big virtues in Russian business. To retain the talent, be willing to pay more and invest in training more than you would like. This has to be done because they are the key to your sales success - not your products or services. And they are very quick to move on to your competitors. They are also more committed to people than to the company. As a manager you have to form a relationship with your top talent. And it must be done face-to-face. Management by email is just not an option in Russia.

-Be very sensitive to customer segments

Due to historical reasons the Russian business environment contains different operators which may be competing in the same business segment but, as organizations, are totally different from each other. In our research we have identified several different organization types from classic Soviet-fashion state enterprises to ultra-modern global shark organizations. The game of selling to them is totally different depending on the organization. There are a lot of unwritten rules you need to know and pitfalls you need to be aware of when dealing with each customer segment, i.e. you need to have several different sales approach strategies when selling in Russia

We are slowly waking up to the post-depression business landscape here in Finland. Many companies are realizing that the business lost during the economic downturn is lost for good. For companies looking for new business Russia currently presents a golden growth opportunity. However, being successful there demands a very different set of skills. Our hope in Fintra is that companies willing to invest in growing business in Russia are also willing to invest in learning how to do it instead of paying dearly for learning the hard way.

Tauno Taajamaa

Managing Director

FINTRA



Olympic winter games in Sochi – costs and expected benefits

By Andrei A. Tatarinov

The XXII Olympic and Paralympic Winter Games in Sochi is becoming the most significant national project in the history of modern Russia. Not long ago the very idea of hosting Winter Olympics in the country's single subtropical holiday resort seemed at least queer to the major part of the Russia's population. Now it doesn't. Nevertheless disputes on expediency and validity of such a substantial inputs of resources in a single, though global-wide, sporting event still continue to rage.

Winter Olympics: Growing Scale

In recent decades the scale of Olympic and Paralympic Winter Games (OPWG) has increased greatly. If in the French Albertville in 1992 the XVI OPWG attended nearly 1 800 athletes, while their number in Vancouver in 2010 exceeded 2 600. During that Games Vancouver hosted 6 500 members of national Olympic teams and 10 800 media representatives. An increase in number of overnight visitors to Vancouver (according to the excellent Canadian tourism statistics) at the period of OPWG in February and March 2010 was 123 thousand people, or 12% in comparison with the same period of 2009. In February- the peak period of the event - it reached 22%. Due to the expert's ("Tourism Vancouver") estimates the 2010 Olympics will generate an additional tourism inflow to Vancouver of 8% (nearly 650 thousand visitors).

All these figures look quite impressive.

Canada hosted OPWG twice. In 1988 they cost to Calgary US \$525. Total cost of the Vancouver Winter Olympics is preliminarily evaluated US \$5,75 billion, or 11 times higher nominally and 6,4 times in real terms.

How much will it cost in Sochi?

All the Winter Olympics, except for Sarajevo (1984), were hosted by a narrow group of advanced western nations with highly developed sporting, transport and ecological infrastructure for that time. Certainly it can be explained for many reasons, but the fact that in lower developed countries necessary amount of infrastructure investments rises greatly is quite important. This is relevant for all the Olympics. For example, the operating costs of the 2008 Olympic Games (OG) in Beijing, as well as the costs of construction and reconstruction of sports facilities, amounted to US \$3,9 billion, while investments in infrastructure - US \$40,9 billion. In spite of the Beijing Government statements that these infrastructure investments were made independently of the Olympic Games, only few who doubt that 2008 OG could not be so successful in the lack of them.

Sochi Olympic construction plan is quite impressive. The total number of units to be constructed before 2014 is 242, with 72 are being constructed at the moment. The biggest investments are directed to infrastructure development.

Estimated value of the most expensive piece of infrastructure -combined (rail and motor) road from Adler to the mountain resort Krasnaya Polyana 48 kilometres length amounts to US \$7,45 billion. The next expensive one is a new internal motorway doubling the main street of Sochi - Kurortny Avenue is also being constructed now. A very complicated structure with the length of 16 kilometres and cost of nearly US \$3,3 billion may beat all records of value - more than US \$200 thousands per 1 metre.

It is also planned to increase electricity generating capacity nearly 10 times to the existing level, what will reduce (or even, eliminate) the city's dependence on power transfer from the other side of the Caucasian mountains. This will cost another US \$1,6 billion. 177 kilometres of a new natural gas pipeline is being constructed now to supply these power plants; its cost is US \$820 million.

First, in 2007 the total value of the Olympic and mountain resort investment programme amounted that time to approximately US \$12 billion, with US \$6 billion of Federal budget funding. The latest estimate announced on June, 4, 2010 by the Ministry of Regional Development amounts to US \$31,2 billion. Due to earlier estimates the share of the Federal budget may amount to 2/3 or US \$21 billion. However, many experts believe the sum may finally exceed US \$40 billion, and reach the level of the Beijing Olympic expenditures.

Even if as a result costs won't overstep the targeted level the planned sum is still enormous. It more than five times exceeds the 2010 Vancouver OPWG costs and more than two times scheduled 2014 OG in London expenditures which in July 2010 were estimated at the level of US \$14,2 billion.

Expected benefits

It is easy to find out that to reach commercial payback of this amount of expenditures for Sochi OPWG during, say, 20 years, taking an alternative cost of capital equal to the Bank of Russia current refinance rate (7,75%) Russian economy should produce additional profits (generated by these investments) at an amount of US \$3,3 billion annually.

Certainly evaluation of this kind of investment programme can not be reduced to a simple payback calculation. Besides the financial efficiency a range of short time and long time consequences should be taken into consideration. Among them it is necessary to name a strong international effect produced by the Olympics, advancement the country's international image that besides the rest is important for the attraction of FDI to Russia.

Another important heritage is a creation of the first in Russia mountain ski resort equipped and managed at the level of modern international requirements, and modernisation of the existing tourist centre in Sochi. Though it is quite doubtful that in the future of 15-20 years Krasnaya Polyana will be able to compete with the major European mountain ski resorts in prices, length of the ski season, quantity and length of ski routes, it obviously will attract tourists due to its Olympic image. It can also become a place of training for Russian and foreign sportsmen, host national and international competitions.

At the Soviet period of time since the end of 1920s Sochi as an "allunion health resort" was developed mostly on the basis of targeted investments funded by the union budget. However at that time choice of a place for summer sea-side recreation was quite limited for the soviet citizens (another option was Crimea), so there was no need for Sochi to compete with numerous holiday resorts abroad. Today it is a hard problem for Sochi. Introduction of up-to-date technologies to the domestic hospitality industry is another expected benefit of Olympics related investments.

Russian authorities emphatically highlight innovative contents of the future OPWG in Sochi, their input to the development of the international Olympic movement: this is in particular expressed in founding the International Olympic University in Sochi, as a centre of training specialists and scientific research in the sphere of Olympic theory and practice. At the same time it should be noted that success in tourism innovation cluster formation requires first of all drastic change in business environment, and investment climate in particular, and this problem can't be resolved within this regional programme.

Nearly 400 thousands people inhabit Sochi currently, what is approximately equal to the number of population of such a significant regional centre as Nice in France. Rapid and substantial growth of infrastructure in Sochi will create prerequisites for diversification of the city's economic profile (along with tourism - transport, trade, finance, R&D, etc.), its transformation into an up-to-date economic centre which will significantly enhance Russia's geopolitical position in the Caucasian region.

Thus, the value of investments, their structure and sources of funding allows to assume that this development programme may lead to much wider consequences than only carrying out a set of Olympic events in 2014. Implementation of this programme in conditions of transformation of institutional environment and human capital development may become a strong factor of economic growth and innovation. This is the way justify huge inputs.

Andrei A. Tatarinov

Dr. Economics, Professor

Department of Finance and Credit Sochi State University for Tourism and Recreation

Head of Laboratory of Regional Economics Sochi Research Centre Russian Academy of Sciences

Russian Federation



Post-Cold War politics of history

By Kimmo Rentola

'Politics of history' has been a hot – or should I say cool – term in recent historical research. Tired of the eternal 'how it actually was', historians have instead turned to 'how it is presented and why', that is, to uses (and abuses) of history. This fad has spread even outside professionals; former Prime Minister of Finland, Paavo Lipponen, declared his memoirs to be "unashamed control of history".

From this perspective, it is interesting to compare the politics of history around the Baltic Sea after the Cold War. The end of an era creates a peeping hole, through which the past is looked at and interpreted, and each present will need and create its own past. Around *Ostseeraum*, there has been two very different ways of peeping through the hole: the Scandinavian way, and the Baltic way. Finland has differed from both

In three Scandinavian kingdoms, the focus has been on the Cold War sins committed by their own governments. Several state committees have investigated secret military dealings with the western powers and the activities of security police, which practiced close cooperation with western services and kept close surveillance of own citizens because of their political views only, without suspicion of any crime. Recently, after ten years of hard work, the committee investigating the Danish security police PET delivered its report in 16 thick volumes.

Extensive investigations have confirmed that security cooperation with the West was far closer than told to the parliaments at the time, or even to all government members, and that own citizens were submitted to surveillance without proper law basis. Findings of the committees have gathered considerable attention and been subject to heated debates. Some have seen violations of democracy and human rights.

In Finland, no truth commissions were set up. Instead, research permissions were granted to individual scholars. Nobody complained when scholars found out that hundreds of thousands of citizens had been registered by the security police, most as supporters of the communist party or visitors to the Soviet Union.

When a history of the security police was published in 2009, it transpired that the Finnish security police was in fact in close cooperation with American and British services. Nobody complained that this had been done without parliamentary or even government authorization; on the contrary, these facts were mainly welcome and applauded.

Its seems that their past has made the Finns thicker-skinned than the Scandinavians. A perceptive Swedish observer described 20th century Finland as "the land of unfulfilled catastrophes", and this was no exaggeration: the fierce Civil War, narrow escape from right wing dictatorship (1930) and from communist takeover (1948), the Winter War, then the new war, and four serious postwar crises with the Soviets.

Living through almost-catastrophes, the Finns learned that questionable deeds may be committed in defence of the independence. Although Lutherans do not have rosaries, the Finns would certainly recognize the Florentine saying, quoted by Machiavelli, according to which you can't hold a state with a rosary in your hands. Hearing of a cynical act or wrongdoing by the state in security policy, the Finns have been far less inclined to moral indignation than the Scandinavians.

In Finland, the only sensitive Cold War issue is the relationship to the Soviet Union. Was the nation on its knees? Some faults have indeed been admitted – self-censorship, treatment of Soviet refugees, eager relations with KGB political officers – but even here, many people think that objectionable deeds were mostly necessary to defend the state. When a Russian radio editor asked Mauno Koivisto, what was the idea

of Finland, the President had his answer ready: "Vyzhit", to survive.

In the three Baltic republics, the politics of history has been dominated by the Soviet oppression and occupation, and by the golden age of independence in the 1920s and the 1930s. National values have been revived, flags, anthems and currencies taken out of the freezer, where they remained for half a century. Some historians' attempts to put actions of prewar statesmen in a critical light have been seen as nearly sacrilegious.

There has been elements of this atmosphere even in Finnish discussion. However, for instance the full revival of prewar ideas has its limits, because in Finland they were not preserved in a freezer. In prolonged historical discussions since the late 1950s, fundamental prewar myths were first criticized and finally destroyed by academic historians. This was possible, because Finland was not under total Soviet control nor a Bloc member; the Finns managed to fight their own corner by a combination of resistance and collaboration. Comparing their historical fate with that of Estonians, they feel relief and at the same time a shame of survivors.

The attitudes towards Russians differfrom the Baltic ones, as demonstrated during the Bronze soldier crisis in 2007, and by the 2009 bicentennial celebration of Finland's own government. The Russians are far from the most favoured nation in Finland, either, but attitudes lack the bitterness discernible in the Baltics or in Poland. The Finnish attitude reminds that of the Germans: the fatal importance of Russia is fully recognized, but it is viewed in a more relaxed way. Estonians often consider this attitude as naïve, deriving from the northern neighbour's unfamiliarity with the deepest nature of the Russians.

Some naivety there may be, but the deepest root might be the war experience: Finnish attitudes to Russians include a sharp dose of self-confidency based on the proven ability to fight. A very old man, Molotov considered it prudent that the Soviets abandoned the idea of compelling the Finns by force: that stubborn people would then have inflicted a festering wound in the Soviet body.

No wonder Finland has been a special case in post-Cold War politics of history, since it was *sui generis* in the Cold War itself. Now, however, when most of the special position is vanished, also the politics of history seems to be 'normalizing', towards the Scandinavian model. The range and constancy of this remain to be seen. We will see, if this mood will prevail, or whether the thick-skinned tradition of the priority of national interest will again rise its head.

Kimmo Rentola

Professor of Contemporary History

University of Turku

To receive a free copy, print or register at www.tse.fi/pei

ISSN 1459-9759 Editors-in-chief Stefan Ehrstedt and Kari Liuhto

University of Turku Turku School of Economics, Pan-European Institute Rehtorinpellonkatu 3, FI-20500 Turku, Finland Tel. +358 2 4814 522, fax +358 2 4814 268 www.tse.fi/pei



