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TransBaltic

Robustness of the transport system in the BSR

Thoughts on TransBaltic's Macroregional Transport Action Plan

Baltic fitness

By **Przemysław Myszka**

According to TransBaltic, infrastructural components and specific geographical areas in the BSR transport system are forecasted to face serious capacity pressures due to increasing traffic volumes by 2030. The project's "Macroregional Transport Action Plan" touches upon the issue of how to make the transport system in the BSR robust enough, and points out areas such as the inland waterway transport or TEN-T policy which are in a need of action.

Inland waterway transport (IWT) has the potential to meet the EU transport policy challenges such as the internalisation of external road transport costs, reduction of emissions in transport, shift of long-haul cargo from road to other modes, traffic congestion, higher demand for transportation of large quantities of cargo at one time, etc. Carrying goods via the inland waterways is economical and competitive in comparison to land transport; it might actually become the dominant form of transporting mass goods. Additionally, in the opinion of TransBaltic, IWT is attractive enough to play a complementary role in maritime transport (e.g. a low environmental nuisance and low energy consumption, no road fees or lower risk of damage and collisions) and is a viable alternative for carrying non-time sensitive commodities between seaports and hinterlands, offering a low price with a longer period of delivery.

Also, TransBaltic votes in favour of reinforcing the role of seaports as multimodal gateways in the EU's TEN-T strategy to reflect their role in the BSR transport system. In the TEN-T policy, seaports serve as strategic access points for multimodal networks, benefitting the development of intermodal transport and increasing the efficiency of the whole European transport system. Nonetheless, TEN-T's core network is not well configured for the BSR as some core ports (e.g. Trelleborg, Riga, Klaipėda and the Szczecin-Świnoujście port complex) are not a part of any core network corridor while criteria for a corridor designation are unclear. There is no core corridor extension to Russia either, despite the role of this country's seaports in the BSR trade exchange.

The "Macroregional Transport Action Plan" also underlines that the integration of the Motorways of the Sea (MoS) in the TEN-T concept is doubtful. MoS should be seen not only as port-to-port connections but primarily as services connecting hinterlands. For this reason they need to connect ports identified as the main nodes of the network and constitute a maritime extension of the landside TEN-T network corridors.

Last but not least, about 66% of all Baltic seaports are small ports which handle less than 2 mln tn of cargo per year. Their progress is strictly linked to the evolution of their port city and region. However, small Baltic ports operate in a very fragmented market – handling chiefly dry bulk, specialising in some types of cargo (e.g. timber, offshore wind farm equipment) and sustaining local tourism and fishery. Therefore, they are often neglected by decision makers. Financing small ports is also a burning question as very often they are not able to secure the development funding on their own. As TransBaltic sees it, Baltic Sea countries should develop a small seaport's agenda in transport policymaking at the EU level.

All in all, the BSR has the potential to deal with capacity pressures. The Baltic is like a sportsman who aims at a new goal – now it must be fit enough to lift whatever the future brings. ●

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How to make the transport system within the BSR robust enough?

Dr. Capt. Jan Pyś
Director of the Inland Navigation Office in Wrocław


Photo: Göta kanal

> “Carrying goods via the inland waterways is not an alternative to road or rail – it’s a necessity.

Carrying goods via the inland waterways is not an alternative to road or rail – it’s a necessity. First of all, it is cheap and environmentally-friendly. For instance, let’s look at the expenses of setting up new infrastructure. The cost of constructing a single dam (consisting of a weir, hydro-electric power plant, a flood-gate and a safe passage for fishes) equals 10 km of motorways and 20 km of high speed railway line. But that’s not all – dams add value. They serve as barriers in the case of floods, enable to accumulate water (which in today’s world is becoming more and more valuable), produce electric energy, help to run fish farms as well as to extract aggregates from rivers, contribute to water tourism, not to mention their positive impact on the environment and its flora and fauna. Secondly, inland waterways transportation is designed to easily handle cargo such as bulk, dangerous goods, large commodities, household waste and boxes. One of the main factors streamlining the development of water transport (both sea and inland) is setting aside obstacles for the free market and making competition more even. Today we still face many forms of subsidies in the EU states (rail is a good example of this). One idea on how to solve this is to establish a stock exchange of transport services within the BSR where water transport would have a significant role to play and would attract shippers. Naturally, carrying cargo is not only about road and rail, therefore decision makers should also pay more attention to the development of the infrastructure serving the combined sea-inland waterways transportation.

- **How can inland waterway transport successfully play a complementary role in maritime transport?**

Inland waterways are a natural extension of sea routes. Having a common vision of developing these combined seaways is of upmost importance since the so-called motorways of the sea and inland waterways can, and should, complement each other. In light of this, both of them ought to be included in the TEN-T as mutual projects. The European Community intends to invest a large amount of money into the development of the transport network and efficient seaways are a perfect flywheel for boosting economies across the Baltic Sea region. What’s worth noting is that the BSR and its rivers are ideal for implementing the concept of combined sea-inland transportation without the necessity of transhipping goods in ports at the mouth of the water-course. The Baltic is not a big sea and is nicely suited for small vessels which – after proper modernization works of the inland waterways – could sail further into the hinterland. Sea-river barges with a load capacity of up to 3,000 tn and a draught of 2.5-3 m going to Gliwice (south of Poland) or to Berlin aren’t an unthinkable idea. Additionally, sea-inland waterways transport should not only have a joint strategy or policy of development but also have common scientific institutes, education paths, offices and investment plans.

- **Will inland waterway transport be a viable alternative to road/rail for carrying commodities between seaports and their hinterlands in the BSR countries?**

- **How feasible would it be to use a combination of inland and sea shipping to transport containers from Berlin via Szczecin to Scandinavia?**

As it isn’t possible to use the inland waterways without transhipment in ports located at the river’s estuaries, the best solution would be to utilize the sea-inland combined transport concept. In practice it means that we will be able to tranship cargo (also containers) from sea vessels onto barges in a fast, simple and efficient manner. Of course, there’s no reason why containers should not be carried to and from Scandinavia via Szczecin to Berlin. But that’s not the only way they could go. Boxes could also be floated to and from Scandinavia through the Oder river from Frankfurt/Oder, Brzeg Dolny (south-west of Poland) and Gliwice – PCC Intermodal has terminals in all of these cities. Along the Oder we also have ports in Kostrzyn, Wrocław, Opole and Kędzierzyn-Koźle, which could be used as well.

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Peter Zoné

Operations Manager at Port of Hargshamn

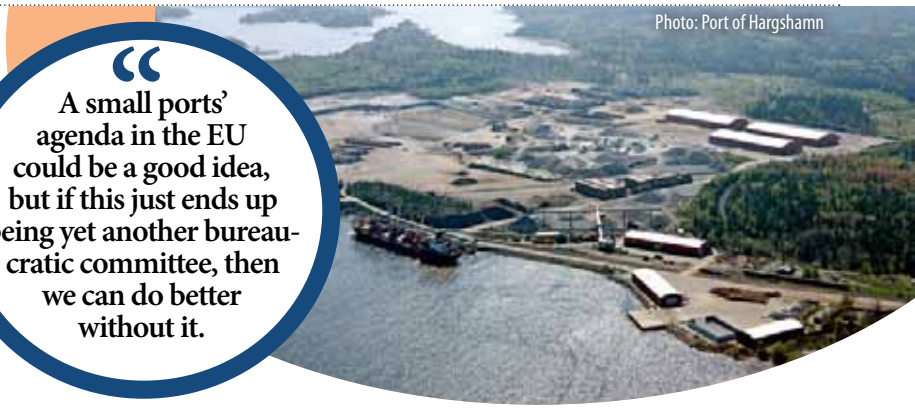

Photo: Port of Hargshamn

> "A small ports' agenda in the EU could be a good idea, but if this just ends up being yet another bureaucratic committee, then we can do better without it.

- **How to make the transport system within the BSR robust enough?**

All parts within a successful transport chain must have equal or at least comparative capacities and standards, i.e., if you want to increase the usage of rail transport between Sweden and Germany, this wouldn't be possible if the rail system through Denmark is sub-standard (not saying that it is so!). Simply, a fragmented corridor is not a corridor at all.

- **How to make inland waterway transport in the BSR more attractive for shippers?**

For inland waterway transports to be attractive for shippers, the seaports must be backed by good road and/or rail infrastructure to and from the port, or at least have access to a high level of services to existing road and/or rail connections. A very small quantity of all goods handled by seaports has its starting point or final place of rest in a seaport. Most of the cargo is handled multiple times, often by different modes of transport, from the very start to the end. This point of view is regretfully neglected by decision makers and infrastructure planners. I think this is one of the reasons why some high profile transport projects fail.

- **Is there a need to reinforce the role of seaports as multimodal gateways in the EU TEN-T policy to reflect their role in the BSR transport network? Why is there no corridor extension to Russia despite the significance of the country's seaports in the BSR trade pattern?**

Well, it all depends on political and commercial decisions and reasons. If the volumes of commodities will be on the rise in the long-run, then the need for an extension will be satisfied.

- **Should the BSR countries develop a small seaport agenda in transport policymaking at the EU level?**

Around the Baltic Sea you can find a real throng of ports – 66% of them are small ports which handle less than 2 mln tn annually. Port of Hargshamn, situated between Stockholm and Gävle, is one of them. Our port is of regional importance, mostly providing local companies with raw materials or fuel. And, naturally, there is always a historical reason why the seaports are located where they are. Many small ports have been set up to serve a particular purpose or local commercial demands. In many cases a port's location is fixed and obviously it cannot be moved to a new or better location to adjust its services according to new requirements or shippers' demands. Transport flows arise from political decisions and commercial demands. It could be a good idea to get the small ports' situation "on the table", but if this just ends up being yet another bureaucratic committee in the EU buildings, then I think we can do better without it.

Stig Hjerppe

TransBaltic WP 3 Manager from the Region Västerbotten

Photo: Deutsche Bahn

> "If the northeast passage is navigable almost year-round it could be likely that the ports of Murmansk and Archangelsk will handle a greater part of bulk cargo and the cluster of ports in the Gulf of Bothnia will specialize in boxes.

- **Will the predicted high traffic between Norway-Sweden-Finland and the main economic centres of Europe seriously challenge the existing and planned road and rail infrastructure across the Danish Straits?**

Provided that the Fehmarn Belt connection and the HH connection are built, I do not anticipate any capacity problems with road and rail connections. The volumes of freight in the BSR are predicted to rise, but the IMO regulations may cause some Baltic road/rail ferry links to become unfeasible.

- **What axis of the Baltic ferry business will prevail the most: east-west or south-north?**

If I had a time horizon until 2030 and the development in the field of new engines and fuels succeed, I think that the east-west axis will survive. Of course, there is the risk that the IMO regulation will lead to rerouting of freight onto roads and rail with no ferry links at all and with more emissions of GHG.

- **How far will the cluster of Russian ports in the Gulf of Finland shift their operational focus from bulk to containerized cargo?**

From my point of view, I believe it is most likely for the cluster of Russian ports to shift their operational focus to more containerized cargo. If the northeast passage is navigable almost year-round it could be likely that the ports of Murmansk and Archangelsk will handle a greater part of bulk cargo and the cluster of ports in the Gulf of Bothnia will specialize in boxes.

Ingo Kuhlbrodt
TransBaltic Task Consultant "4.2. Human capacity building in transport operations"
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Photo: Deutsche Bahn

- **How to make the transport system within the BSR robust enough?**

Apart from infrastructure developments, securing cargo flows, maintaining a good financial state of the companies, competing ports and logistical sites, etc., we must bear in mind that in the future the whole transport sector – be it rail, road, sea and inland shipping, ports, logistics, aviation – will need more and more highly skilled staff. Business as usual in human resources management is no longer an option here; rather a more holistic approach is required, namely training youth from the very beginning in order to have specialists with both the proper know-how and practice. A special topic is how to mobilize and integrate more women into technical and/or organisational transport work places. The human factor also means better working conditions, especially for the lower and middle qualified workers (e.g. wages, vocational education training, work-life-balance due to being far from the company and home, etc). In my opinion, these issues should play a more important role when discussing the case of green transport and green jobs. A serious social dialogue on a company and/or local level (e.g. port cluster) could give them an additional positive impulse.

> **"Business as usual in human resources management is no longer an option – we need to train youth from the very beginning in order to have specialists with both the proper know-how and practice.**

Dr. Capt. Andrzej Królikowski
Director of the Maritime Office in Gdynia


Göta kanal, photo: Mikael Svensson

> **"There's no need for Poland to focus strictly on the Baltic. A "Polish" port on the Adriatic Sea (or in the Mediterranean in general) may be the answer to secure the country's future success.**

- **How to deal with capacity pressures which will potentially occur in the BSR by 2030? How far will the cluster of Russian ports in the Gulf of Finland shift their operational focus from bulk to containerized cargo?**

First of all, we should take notice that road and rail transportation are sometimes ineffective, and for this reason seaborne traffic will be on the rise within the BSR, at least on the north-south axis. Secondly, we should pay more attention to Russian ports in the Baltic. Not taking into consideration Primorsk, which is the largest port in the BSR in terms of annual capacity, as it solely handles liquid fuels; we have Kaliningrad, St. Petersburg (currently the biggest universal port within the Baltic) and Ust-Luga, of which the last one intends to become the largest and most modern port in the whole region (in 2015 the finishing touches are scheduled to be completed). Ust-Luga is the end point of Baltic Pipeline System-2, which will be a major contributor to the export of Russia's gas to the EU. As of now the port has seven terminals for various purposes – a sulphur terminal, a universal cargo terminal, a coal terminal, Multipurpose Terminal Yug-2, an auto railway ferry complex, a factor forestry terminal and the newest one – Ust-Luga Container Terminal. The port aims to reach a capacity of 180 mln tn in 2020. The port is situated on the EU-Russia border (36 km from Finland, 147 km from St. Petersburg) and is connected to northern Europe. In contrast to other Baltic Russian ports, the port has a short ice season – it is operational year-round with a short period (40 days) of ice-channelling. During the first half of 2012 the port handled 18.86 mln tn (2.2 times more than in the corresponding period of 2011). Therefore, it is predicted that Ust-Luga will attract cargo from other ports in the Baltic (also from the neighbouring

Swedish Maritime Administration, photo: Mats Hörström

port in St. Petersburg). But let's not forget about Russia's enclave between Poland and Lithuania. In 2011 the Kaliningrad Sea Commercial Port marked the biggest increase in container handlings in the BSR (+152% year-on-year). This year the port increased its boxes traffic by 20.4% yoy from January to April. This year (over the past 6 months) the volume of cargo transhipment has grown by 21.6%. Based on such data, it's relevant to say that Russian ports in the BSR will not only handle bulk cargo, but surely will focus more and more on containerized goods. Moreover, considering capacity pressures in Poland, we have container terminals increasing both their capacities and throughputs. But there's no need for Poland to focus strictly on the Baltic. A "Polish" port on the Adriatic Sea (or in the Mediterranean in general) may be the answer to secure the country's future success.

- **How to make inland waterway transport in the BSR more attractive for shippers?**

Inland waterways are in need of upgrading their navigability – above all they must be deepened. Furthermore, the inland infrastructure requires investments – both in fleet and in small ports. There is also a necessity to combine sea and inland shipping in a multimodal network contributing to a better efficiency of cargo handlings. These are the first steps which will later enable looking forward to other positive aspects of inland waterways transport such as lower operating costs, smaller amounts of money needed to handle goods and the environmentally-friendly character of it. In this regard Poland has potential for development – the Vistula Lagoon is a natural candidate for inland waterway transport. There's also the E-70 International Waterway, going all the way from Antwerp via Berlin, Poland to Klaipėda, as well as the E-40 which could connect the Baltic and Black Seas. These two waterways could become fully navigable someday. We can look, too, at the liquefied natural gas terminal being constructed in Świnoujście. The LNG could be transported on feeders (cabotage) to the hinterland (to small inland ports) and then further on to the mainland.

- **Is there a need to reinforce the role of seaports as multimodal gateways in the EU TEN-T policy to reflect their role in the BSR transport network?**

In my opinion the TEN-T network has been configured correctly, but there is a need for stricter cooperation, e.g. between major Polish ports. Also, the government should support the ports more. The BSR transport network also faces another challenge: would it become embroiled in fierce competition or will it tighten its relations for the sake of the whole region? For instance we could have a Baltic cluster, where all parties would be well informed and will go hand-in-hand – I think this is the way to put the macroregional integrated transport system concept into practice. Or, we could be facing strong competition all the way along the Polish coast, Kaliningrad Oblast, Baltic states and Russia.

- **Should the BSR countries develop a small seaport's agenda in transport policy-making at the EU level?**

The interests of small ports should be taken into consideration within the EU transport agenda, as in many situations the development of small ports is a chance for local tourism and industries to evolve. Investments could certainly speed things up.

- **Is the integration of Motorways of the Sea in the TEN-T concept doubtful?**

Quite the contrary. The Motorways of the Sea concept has been designed to help achieve a clean, safe and efficient transport system by the means of transforming sea shipping into a viable alternative for road transport as well as establishing multimodal corridors to which even small ports can contribute.

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