SME - Pro

SanMed Corridor Extension Project

Discussion Paper

from

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SME – Pro; ScanMed Corridor Extension Project

The ScanMed Corridor, initiated by the EU, has as its idea a high-performance logistical link from Scandinavia into the Mediterranean region. The corridor ends at the northern Norwegian border, and from a northern European perspective it is easy to get the impression that Brussels sees the northern axis as something of a dead end. From a global transport economics perspective, however, this is fundamentally wrong. What is urgently needed is an extension of the transport axis to the open sea, and from here further in the direction of Asia, i.e. a ScanMed corridor extension project, or SME-Pro.

A revolution is a fundamental and permanent structural change in one or more systems, usually occurring abruptly or in a relatively short period of time. If one follows this definition, the opportunities for the future of intercontinental maritime traffic on the Far East-Europe route, including hinterland traffic toward Western and Central Europe, are indeed revolutionary: serving almost the entire European continent via the so called NSR Northern Sea Route (or: Artic Route) offers the chance of sustainable cost savings and faster service in the medium term, while at the same time significantly improving the ecological balance. The idea of an extended ScanMed corridor is not new to the European Commission; however, it requires a new way of thinking in order to keep pace with the opportunities that arise. Likewise, an extension to the north is necessary to ensure connection to the open sea and thus access to Asia.

Changing global trade patterns

There are two major routes in global container trade: the Europe-East Asia route with a trade volume of 23.0 mill TEU in 2020, and the Transpacific route from Asia to North America (west coast mainly) with a trade volume of 25.1 mill TEU in 2020. These two routes dominate the global container trade since years. Beginning of the 2000s Transpacific has been the trade route with highest volume, and between 2008 and 2013 both trade routes have been on nearly similar volume, and since 2014 Transpacific again shows higher volumes. A third important global container trade lane connecting continents is the Transatlantic trade connection between Europe and North America (east coast mainly). In 2020, the volume on this route amounted to 7.5 mill TEU; that is approximately one-third of the volume of the other routes. The table below displays the three intercontinental routes.

Estimated containerized cargo flows on major trade routes 1995 - 2020

year	Transpacific		Europe Asia		Transatlantic	
	Asia - NA	NA - Asia	Asia - Europe	Europe Asia	Europe - NA	NA - Europe
1995	4.0	3.5	2.4	2.0	1.7	1.7
2000	7.3	3.5	4.7	2.5	2.7	1.7
2005	11.9	4.5	9.3	4.4	3.7	2.0
2010	12.3	6.5	13.3	5.7	3.2	2.7
2015	17.4	6.9	15.0	6.4	4.1	2.7
2020	18.1	7.0	16.1	6.9	4.7	2.8

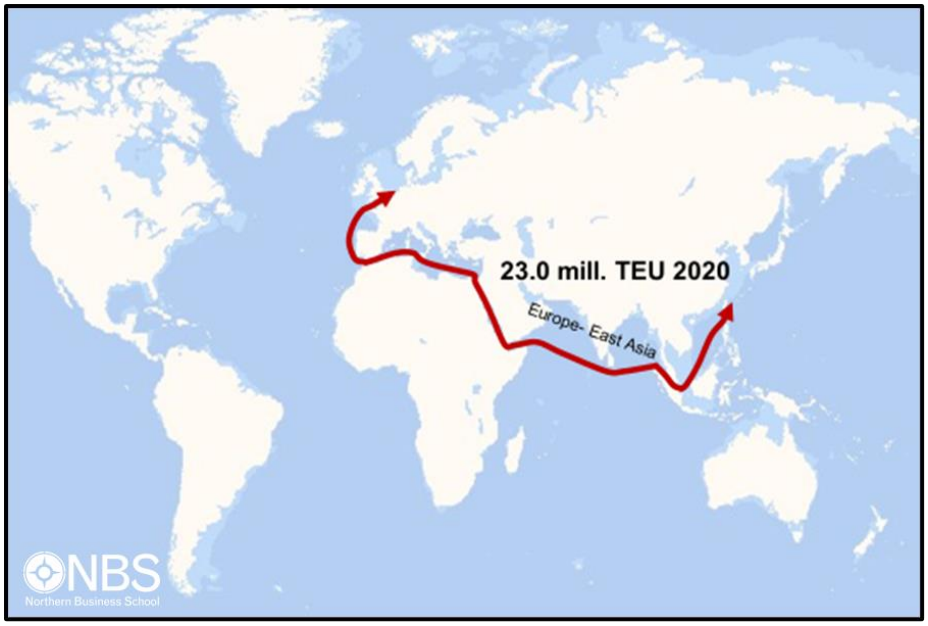
Source: UNCTAD Review of Maritime Transport, multiple years; NA = North America

Until today, the countries of Scandinavia are only marginally integrated into these main global traffic arteries. The fact is, however, that significant shifts in global trade are on the horizon in the not-too-distant future. In particular, the mega-projects initiated by China and Russia, the **BRI Belt and Road Initiative** and **Arctic Shipping**, will have a lasting impact on the global flow of goods and containers.

With the Belt and Road Initiative, China wants to develop rail traffic between Western China and Europe on several axes. This initiative has already been in development for several years, and more and more trains are running as far as Central and Northern Europe. With the Artic Shipping project, Russia wants to take advantage of the fact that the ice at the North Pole is melting, thus enabling significantly shorter sea routes from Asia via the polar region to Europe. For the very high-volume Far East-Europe transport axis, this will open up very interesting options in the medium term, which will be outlined below.

Far East-Europe Container Trade

For economic and ecological reasons, trade between Europe and Asia is currently carried out largely by ship. The trade itself, due to traffic geography, is routed from Asia past Singapore along the Strait of Malacca, further south past India into the Red Sea, then into the Suez Canal and finally through the Mediterranean and Gibraltar to the major ports on the European Atlantic coast (see graphic below).



The world's largest container ships operate on this route, many of which can already carry more than 20,000 TEU containers. However, it is a long and dangerous route on which pirate attacks occur again and again, for example north of Somalia when entering the Red Sea, or increasingly also in the Strait of Malacca.

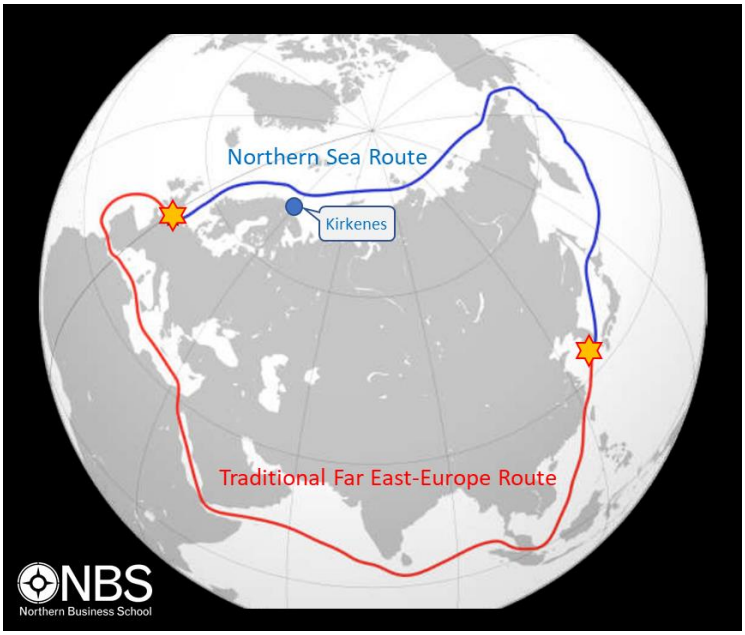
Imports for the whole of Europe and exports to Asia are handled by just a few ports. These are the three most important ports of the so-called Hamburg-Antwerp Range: Rotterdam, Antwerp and Hamburg. Exports from Finland and Norway as well as imports for Denmark and Sweden are routed through these ports. Feeder services connect the three main ports with conveniently located ports in

Scandinavia. However, these traffic patterns, which have been in place for many years, are coming under severe pressure from the BRI and Arctic Shipping initiatives and will have to compete in the future. This is precisely what gives rise to very interesting logistics options for Scandinavia.

Options for Scandinavia

The Chinese **BRI Belt and Road Initiative**, also known under the older names OBOR - One Belt, One Road, or New Silk Road, presented in 2013, aims to reach European markets via land and sea transport routes. In addition to time savings, cost savings compared to traditional maritime transport are also cited as the most important arguments. The focus is clearly on developing rail links through Central Asia (mainly Kazakhstan) and Russia towards Central and Northern Europe. Already today, several thousand freight trains per year run this route, and important Western European partners, such as the Port of Duisburg, in some cases handled more than 50 trains from China per week in 2020[1]. From a Scandinavian point of view, the BRI is an optimal connection, for example, from southern Finland or via the Baltic Sea and the Baltic States in the direction of Central and Eastern Europe, thus extending the transport routes into these countries.

The **Russian** initiative to promote **shipping via the Northern Sea or Arctic route** north past Russia to, for example, the Norwegian port of Kirkenes, or further along the Norwegian coast down to Denmark or northern Germany, allows savings of up to 40% in the distance traveled compared to the traditional Far East-Europe route along the Strait of Malacca, the Red Sea and the Mediterranean.



In the summer months, there are already significant increases in traffic numbers here[2], and the fact that the polar ice continues to melt will increase the possibilities even further. For Scandinavia, this

[1] Source: Logistik heute: Neue Seidenstraße - Duisport zählt 50 Züge pro Woche, 6.5.2020; www.logistik-heute.de/news.

[2] In 2020, a total of 1,012 ships transited the Northern Passage, including 157 ships with non-Russian flags. The total volume transported was 31.5 million tons. Source: Overfulfilling the Arctic plan, https://thebarentsobserver.com, Kirkenes, Norway, Jan. 12, 2021.

means that there will be more and more traffic on the north coast in the future. This creates opportunities that are already available in combination with the existing attractive hinterland connections from, for example, southern Sweden and southern Norway to western and central Europe, or that will be created by means of the BRI from, for example, southern Finland.

Taken together, the two global initiatives therefore create a picture of significantly improved transport links to Scandinavia from the north and from the south. What is missing is the inner-Scandinavian connection; this is where the idea of SME-Pro comes in.

Creating the missing link – building the chain

In a world without intercontinental connections, if a transportation planner were tasked with designing an efficient yet cost-effective link between Europe and Asia, the very long sea route of today's Far East-Europe route would certainly not be the highest priority. It is very long, and thus time-consuming and costly. Nevertheless, this traditional Far East-Europe connection through the Mediterranean via the ports of the Antwerp-Hamburg range to, for example, Germany, Austria and Switzerland in Central Europe, and to e.g. Denmark, Sweden and Finland in Northern Europe has become established.

To overcome the disadvantages of the current Far East-Europe route, a development in southern Europe has been observed for several years. Ports such as Koper in Slovenia or Trieste in Italy are strongly promoting the connection from the Suez Canal and the Adriatic Sea directly to Southern and Central Europe. The Chinese involvement in the port of Athens as well as the interest in the port of Venice are further evidence of the increasing attractiveness of the southern connection.

What is missing is an overriding interest in an even more attractive northern connection because it is less time-consuming and less expensive. This is where the SME-Pro initiative comes into play: the realization of an idea for strengthening the intermodal Europe-Asia connection, which is almost revolutionary in terms of opportunities.

The idea of the northern connection is not new, and many necessary building blocks for the realization of the transport axis are also already in place. Many individual projects of the EU ScanMedCorridor can certainly be mentioned here, but a consistent use of the axis has not been realized to date. What is missing, however, for presumably obvious political reasons, is the extension of the corridor towards the north. The last few kilometers to the Barents Sea run through the non-EU country Norway. Clear economic and transport policy considerations should be free of these political boundaries. Initiatives by Finland, such as the Arctic Rail project, point in the right direction.

The North Link itself and so the SME-Pro idea consists of the following components:

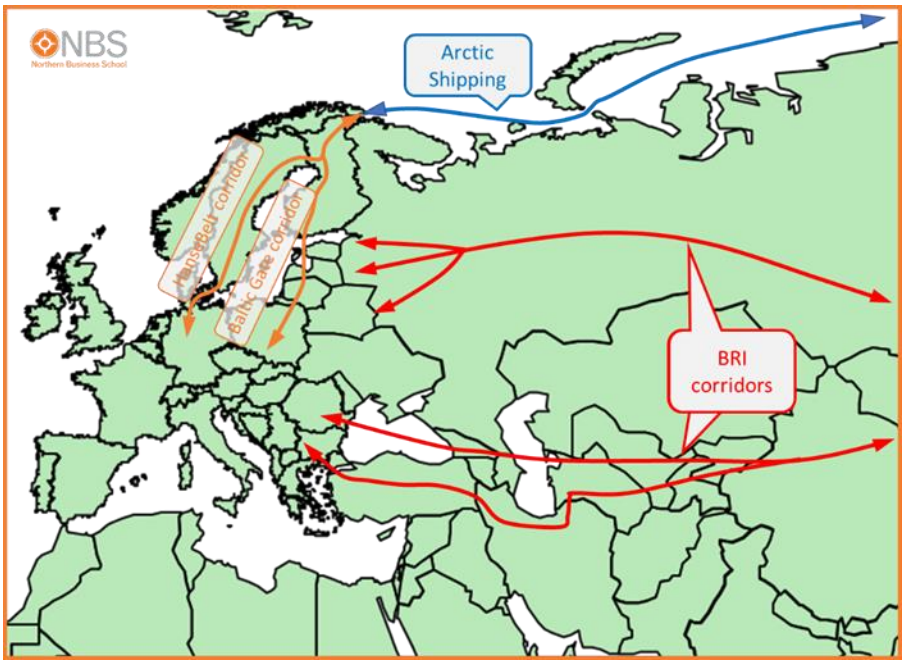
1. the increased use of the Northern or Arctic Sea Route (Arctic Shipping)
2. the establishment of a hub port in northern Norway
3. the development of two rail axes to the south (HanseBelt & Baltic Gate corridors)
4. the connection to the European railroad network

Task 1 is already being implemented by innovative shipping companies and has the potential to grow; the market will provide appropriate competition, so there is no acute need for action here.

The development of an efficient port as task 2 is an imperative necessity to be realized. The port of Kirkenes, for example, which is already preparing for this function, could be considered here.

Task 3 is the missing link: an efficient cargo rail connection from e.g. Kirkenes in the direction of southern Finland (Baltic Gate Corridor) and – in near future – via the Rail Baltica tunnel to Estonia, or via the Baltic Sea to e.g. ports of the Baltic States. The second missing link is a cargo rail access in the direction of southern Sweden (Hanse Belt Corridor). From Sweden, there would then be a direct rail link from Kirkenes to Hamburg via Denmark and the new Fehmarn Belt Tunnel. From here, goods could be distributed further (Task 4).

Visionary speaking, these corridors open up direct rail connections from Kirkenes to Munich or Paris via the HanseBelt Corridor, or via the BalticGate Corridor from Kirkenes to Warsaw and Vienna.



The rail infrastructure in Sweden, for example southbound from Lulea, is already similarly well developed to that in central and southern Finland, e.g. the connection from Rovaniemi to Turku or Helsinki. There is a need for investment and action in the efficient hinterland connection of the port of Kirkenes. The fact that this involves three countries that must jointly implement this infrastructure should not be an obstacle. Projects to realize this missing link have been underway for years, but have not yet been crowned with success.

Projects to realize this missing link have been underway for years, but have not yet been crowned with success. In 2018, the Finnish and Norwegian Ministries of Transport jointly determined that the Arctic Railway Route from Rovaniemi to Kirkenes is the most suitable route for a rail link from Europe to the Arctic Ocean. The proposed link would cost around €2.9 billion, according to a study on the so-called "Arctic Railway" project[3]. It would be the first rail link from a European Union member state to a port in the Arctic Ocean. The Finnish Ministry of Transport aims to have the railroad built by 2030.

The Arctic Railway, the Fehmarnbelt Tunnel and eventually also the Rail Baltica Tunnel “Tallinn – Helsinki” projects have a good chance of being realized by the end of this decade. The port of Kirkenes is also capable of handling larger cargo volumes in the future. The situation is similar with the Arctic Shipping projects; here, too, improved navigational conditions will be in place by the end of the

[3] Source: Arctic Railway Rovaniemi-Kirkenes, Arctic Corridor, 2018, www.arcticcorridor.fi.

decade, so that further increases in traffic can be expected. What is still missing is the logistician who puts together a functioning transport chain from the individual parts. This is where the SME-Pro project idea comes in: preparing the transport axes at an early stage while accompanying the infrastructure projects.

The northern link has the great opportunity to realize the advantages of a connection between Asia and Europe that is up to three weeks faster compared with the existing Far East-Europe link. What is missing is the project-accompanying transport management. It would be desirable if strong partners would establish this network. This paper is intended to promote further discussion on the Northern Axis and to realize it in a timely manner.

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