

Side event in connection to High North Dialogue 2020

<http://www.highnorthdialogue.no/side-events/>

Wednesday March 18th

Significance of Eurasian Arctic Transshipment Hubs for Arctic Shipping: Implications for Regional Planning

Transshipment hubs in the northern latitudes could add a new dimension to global trade and be a catalyst for increased regional and industrial development in the High North. Increased transshipment simplifies the transport network allowing it to deal with increased volume resulting in reduced shipping costs. Such hubs could provide cargo storage facilities and various port and industrial services for shipping in the Eurasian Arctic.

The seminar is organized by the Centre for High North Logistics, Nord University. The seminar will have two parts. During the first part CHNL will present work in progress connected to port infrastructure development in the Arctic. During the second part, the discussion will open out to the audience in order to provide feedback to current research progress.

The research results as well as the audience discussion will focus on the following aspects: What makes a port an important Arctic transshipment hub; and what is the socio-economic significance of Eurasian Arctic transshipment hubs for future development of shipping in the Arctic and in promoting regional and industrial development?

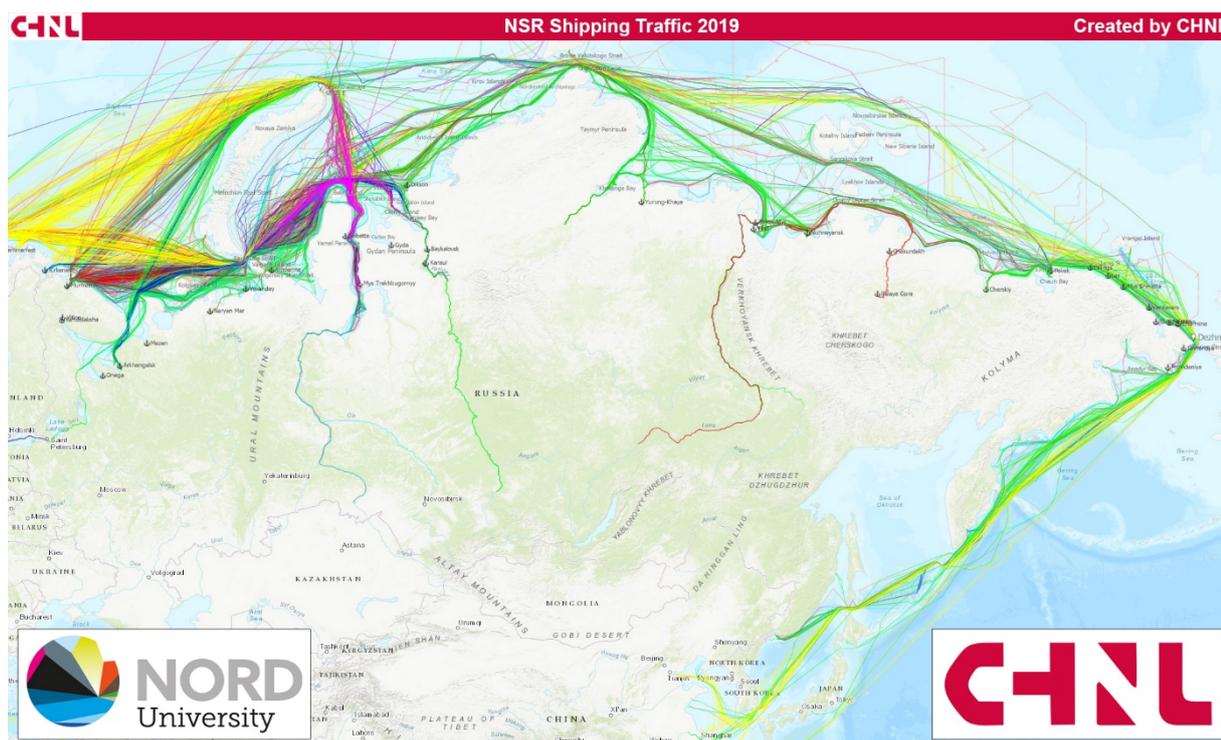
Venue: Scandic Havet, Room "Forelskelse"

Time: 10:00-12:45

Type of Event: Registration required

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Program

10:00-10:10	Welcome: Introduction to the Centre for High North Logistics (CHNL) Kjell Stokvik, Managing Director, CHNL/Nord University, Norway
10:10- 10:25	Ten Years of International Transit Shipping on the Northern Sea Route Dr. Björn Gunnarsson, Associate professor, CHNL/Nord University, Norway International transit shipping via the NSR (shipping between two Non-Russian ports) has been progressing very slowly during the last ten years. A large majority of the ship traffic has been cabotage (shipping between two Russian ports) and destination shipping (shipping between a Russian port and a Non-Russian port). All international transit voyages via the NSR can be said to be exploratory in nature, but an effective way to evaluate future commercial possibilities of NSR. This study (research in cooperation with Dr. Arild Moe, FNI in Oslo) will evaluate and analyze what has been learned over the last ten years in regards to international transit shipping via the NSR and what are likely prerequisites or pre-conditions for future use of the route as an important trade corridor between NE European and NE Asian markets.
10:25-10:35	Q&A
10:35-10:50	Review of Environmental Risks and Impact Analyses of NSR Shipping Dr. Ning Lin, Senior Researcher, CHNL/Nord University, Norway Global warming and continued reduction in sea ice cover will result in longer open water duration in the Arctic. In the regions north of the Bering Strait (north of 70 degrees N), future open-water duration may shift from a current 3-4 months to a projected near 5 months by 2040, which is important for the shipping industry and may lead to an increasing number of vessels navigating through the Arctic shipping routes. The purpose of this paper (research in cooperation with Dr. Roberto R. Hermann, CHNL) is to review the literature on the environmental impacts and risks of shipping activities in the Northern sea route. A systematic literature review approach is used in this article in order to identify the environmental impacts and risks caused by shipping activities. The environmental impacts caused by various ships, including cruises, cargo ships and military ships, are identified in this article, along with the corresponding estimation methodologies and data sources. The increased risks to ocean animals and seabirds because of ship traffic, and zooplankton because of the transport of nonindigenous species in ballast water are also illustrated. Besides, the solutions to mitigate environmental impacts and risks are also discussed in this article.
10:50-11:00	Q&A
11:00-11:15	Logistics of the Russian Fossil Materials in the Arctic and Future Possible Development Dr. Olivier Faury, Assistant Professor, EM Normandie Business School, France

	<p>Maintaining the level of fossil materials production and exportation is highly strategic for the Russian federation. Among the most strategic production area, we can quote the Western Russian Arctic seabed (oil and gas) and the Kuzbass (coal). Most of fossils materials are send to Europe, making Russia dependent on Ukraine and Byelorussia for transit. To avoid such issue, the only way is to use maritime transportation though the north. To reduce the impact of transportation cost, over the last years investments have been done and secondary hub implemented to the transship raw materials.</p> <p>This article analyses the way fossils materials are managed between the first loading and the final destination. To do so, we use the Automatic Identification System (AIS) to visualize the different typology of vessels in 2018 for dry, liquid bulk and gas. Results stress the importance of the area of Murmansk as a second-tier hub connecting both Arctic ports and the rest of the world.</p>
11:15-11:25	Q&A
11:25 - 11:40	Coffee break
11:40 - 11:55	<p>The Significance of Deep-Water Transshipment Hubs for Future Development of the Northern Sea Route</p> <p>Dr. Roberto R. Hermann, Associate Professor, CHNL/Nord University, Norway</p> <p>As Arctic shipping employs very expensive purpose built vessels (high ice-class and winterized) the use of transshipment hubs on the Atlantic and Pacific side of the NSR is necessary in order to secure their efficient utilization. The hubs' main function would be to offer transshipment of cargo (loading and unloading), storage and ship support services. The transshipment hub in the western entry to the NSR in the Barents Sea could be in the Kirkenes/Murmansk area and the one in the eastern part in the Bering Sea could be located in Dutch Harbor or Adak in the Aleutian Islands. Between the two hubs high ice-class Arctic shuttles would transport cargo on a year-round basis following a predictable shipping schedule. Despite this potential there is a gap in the literature about the planning issues related to these transshipment hubs. To better address this gap, the Centre for High North Logistics is currently developing the project "Significance of Eurasian Arctic Transshipment Hubs for Arctic Shipping". The project's main research question is "What makes a port an important Arctic transshipment hub; and what is the socio-economic significance of Eurasian Arctic transshipment hubs for future development of shipping in the Arctic and in promoting regional and industrial development?" The research (in cooperation with Dr. Björn Gunnarsson, CHNL) will analyze which market conditions and infrastructure and logistics system is required to develop efficient transshipment hubs in the Arctic. We present the preliminary results of a literature review of previous studies dealing with port development in the Arctic, and studies discussing the importance of large ports for regional socio-economic development. In addition providing a research plan to address the additional issues as "What makes a port an important transshipment hub?" In future contributions we will empirically tackle through a case study approach various elements of transshipment hubs.</p>

11:55-12:05	Q&A
12:05 - 12:20	<p data-bbox="391 271 1353 338">Future Cargo Base for Transport between NW Europe and NE Asia via the Northern Sea Route</p> <p data-bbox="391 353 1422 427">Alina Kovalenko, Ph.D. candidate, Centre for High North Logistics (CHNL), Nord University Business School, Bodø, Norway</p> <p data-bbox="391 443 1422 1093">Regular year-round transit shipping via the Northern Sea Route (NSR) between NW Europe and NE Asia requires different physical infrastructure and support services than the current seasonal operations. In case of wrong decisions in planning new Arctic transportation infrastructure (e.g., fleet of high ice-class vessels, transshipment hubs and other port infrastructure, railways, roadways, inland river transport, etc.) the large financial losses are possible. To avoid such consequences, an assessment of a possible future sustainable cargo base for transport via the NSR is necessary. Despite several publications dealing with the economic viability on NSR transit shipping, detailed assessment on the cargo potential is still lacking. To fill this knowledge gap, in this study we evaluate trade indicators (import and export) for 2009-2018 and compare the cargo flows of various modes between NW Europe and NE Asia, using comparative technique. The statistical analysis of Europe-Asia trade characteristics determines the types and volumes of commodities that could be transported on a sustainable basis via the NSR between the markets. The result of the study is the input data for the further study of the required transport and logistics infrastructure of the NSR.</p>
12:20 - 12:30	Q&A
11:30 - 12:45	Final Discussion led by Kjell Stokvik