

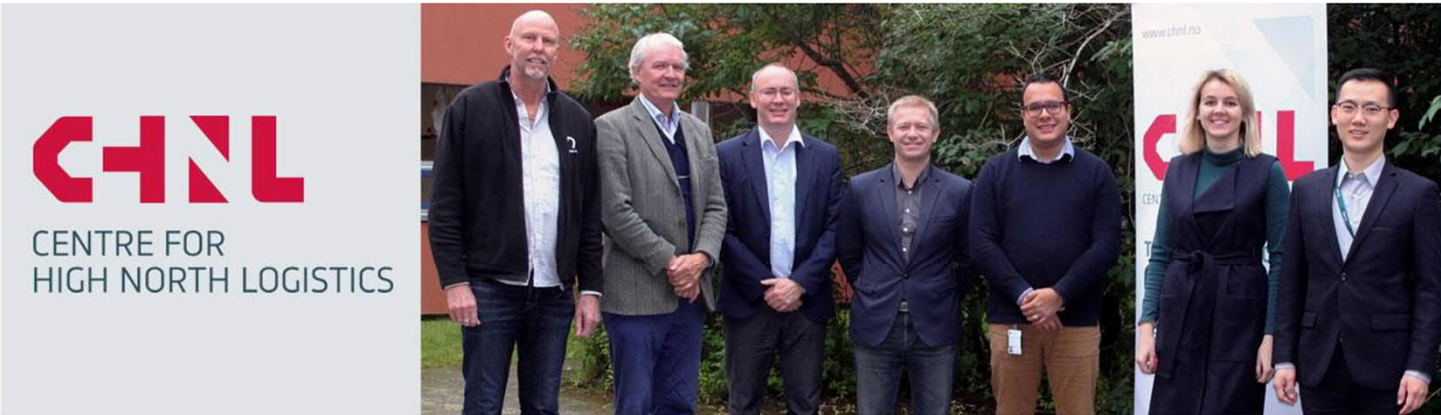
Thematic Network – Arctic transportation and logistics(ATL)

TN leader: Kjell Stokvik

Organization : Centre for High North
Logistics (CHNL), Business School ,
Nord University



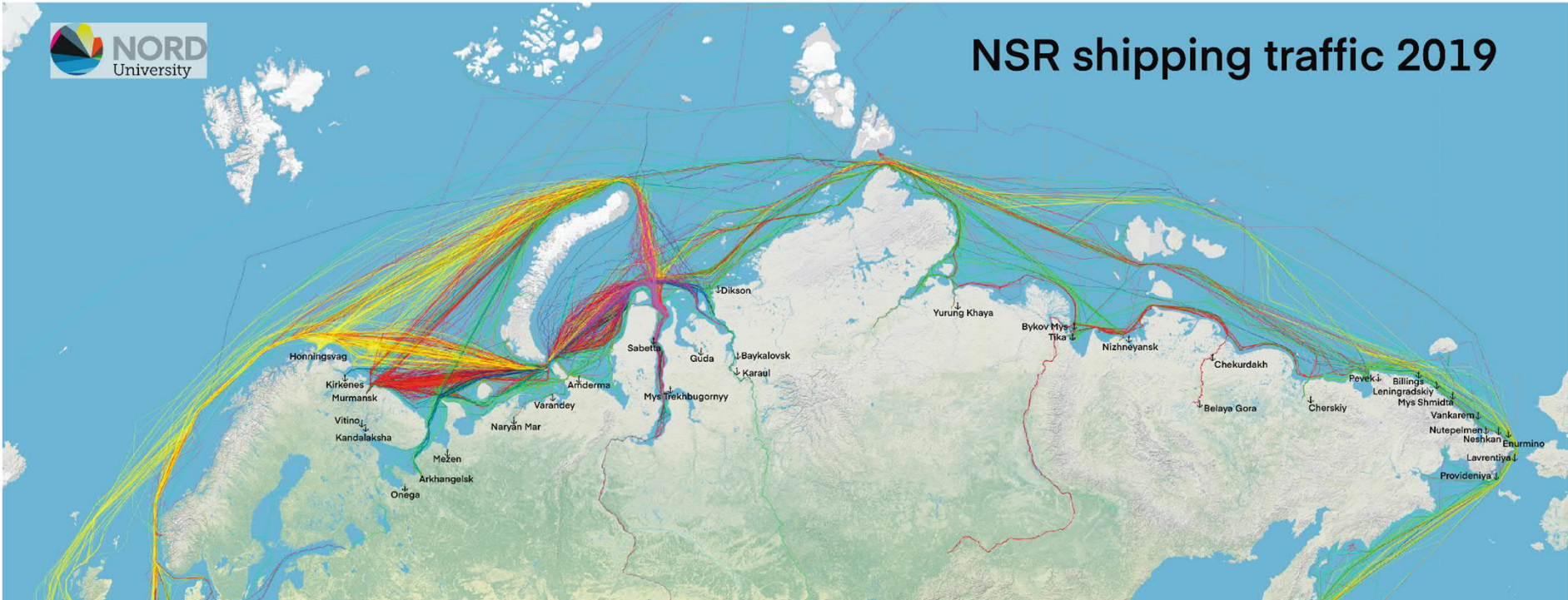
Centre for High North Logistics (CHNL)



CHNL promotes economically and environmentally sustainable, reliable and innovative transport and logistics solutions in the High North. This we do through contributions to research and development (R&D), educational programs and dissemination of research results, advisory activity and information sharing for and together with businesses, public authorities, NGOs and other stakeholders.



- 13 000 students
- 1200 staff - 600 in Bodø
- 5 Faculties
- 180 study programmes
- 4 PhD programmes
- Annual turnover: Over 1.4 billion kroner



	Cargo	flag RF	Foreign Flag
NSR all cargos	31 531,30	11 322,90	20 208,40
Transit cargo	697,30	44,10	653,20
Cargoes to NSR	2 435,50	2 418,40	7,10
Cargoes from NSR	28 408,50	8 860,40	19 548,10

Type	Cargo th nt	Flag RF	Foreign Flag
Transit cargo	697,30	44,10	653,20
Crude oil	7 563,40	7 563,40	0,00
Oil products	599,50	586,10	13,40
Gas condensate	1 274,80	88,70	1 186,10
LNG	18 339,90	0,00	18 339,90
Coal and coke	234,00	234,00	0,00
Ore concentrate	54,00	54,00	0,00
Other cargos	2 768,40	2 761,30	7,10
Total	31 531,30	11 331,60	20 199,70

Transit	voyages	cargo tn
In ballast	11	0
Liquied	5	333 499
Bulk	3	175 121
General	13	169 067
Containers	1	6 742
Fish	4	12 848
Total	37	697 277

LNG carriers

Icebreakers

general cargo

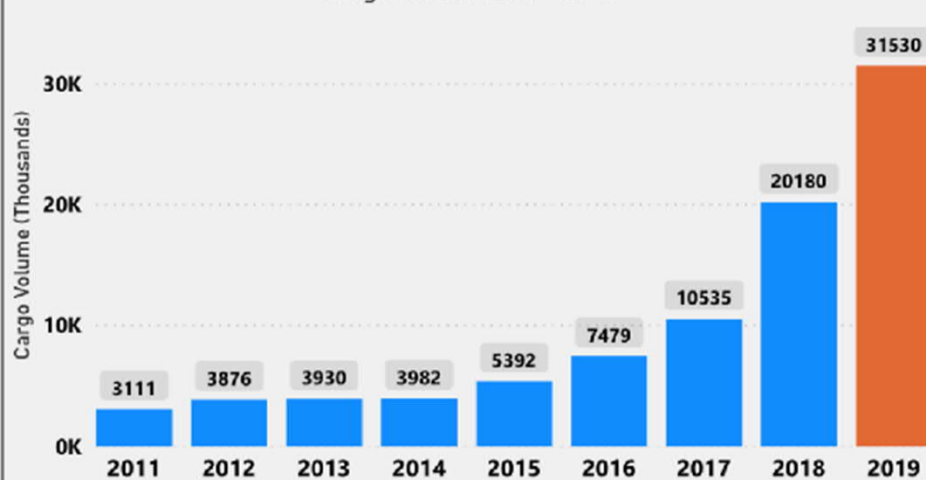
Containers

research

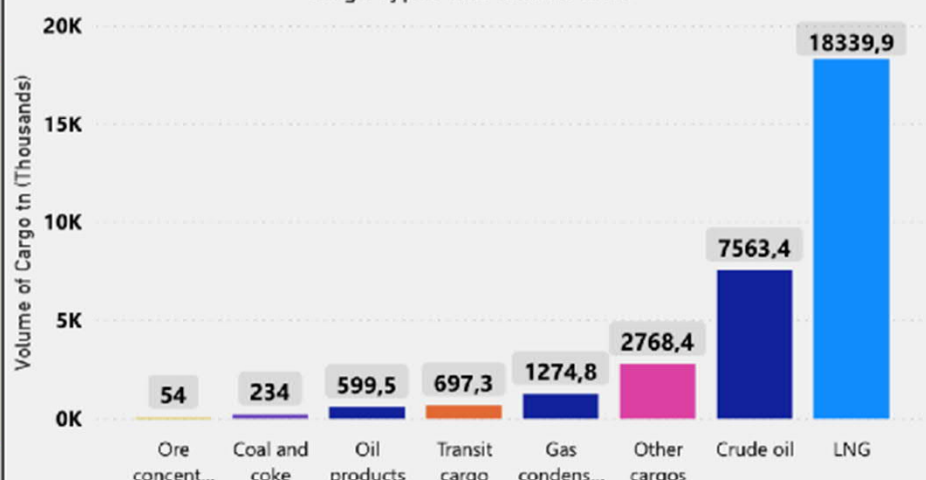
Tankers

Total and transit cargo 2019

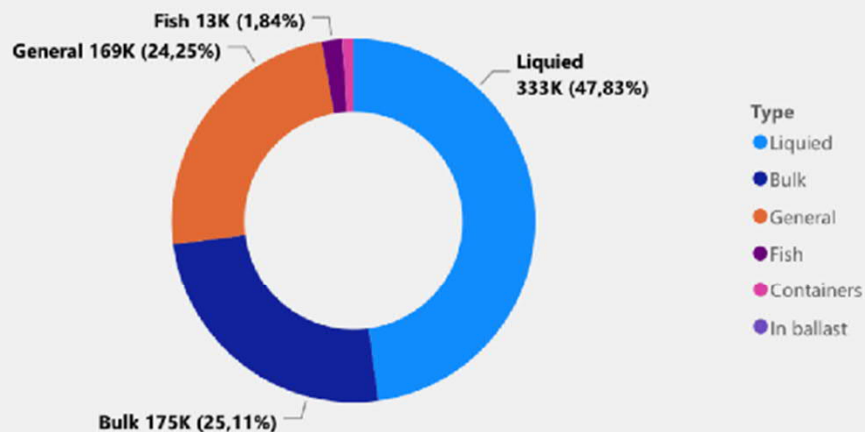
Cargo Volume 2011 - 2019



Cargo Types and Volume 2019



Transit Cargo Types and Volume 2019



97M
Total GRT 2019

2694
No Voyages 2019

37
No of Transit Voyages

277
No Vessels 2019

Focus :

Logistics and transportation in the Arctic:

Though the main focus will be on Arctic maritime transport and logistics operations, port and maritime infrastructure development and Arctic shipping routes, intermodal connections with other modes of transport will also be highlighted and analyzed. This includes maritime connections to river transport, railways, roadways, pipeline infrastructure and to aviation facilities within the Arctic

Region: Circumpolar

Aims and objectives

The Thematic Network on Arctic Transport & Logistics (ATL) is set to develop new knowledge and critical information on Arctic transport and logistics by analyzing current and future operational and logistical challenges, and by promoting new innovative and green transport and logistics solutions

This knowledge will be integrated into new educational programs and communicated to Arctic businesses, government authorities and other Arctic stakeholders through various networking opportunities. This allows ATL to promote more environmentally-friendly and sustainable logistics operations and industrial activities in the circumpolar Arctic.

The ATL members will work on modelling such an innovative, green, optimized and interconnected transport and logistics system for the Arctic.

Planned activities (Main activities)

- Facilitate collaborative research between ATL members on transport and logistics in the circumpolar Arctic.
- Establish research teams on specific topics related to Arctic transport and logistics and jointly apply for national and international research funding; assess all potential sources of funding for joint research.
- Promote green logistics solutions as a way to minimize the environmental impacts of shipping and other Arctic commercial operations.
- Facilitate the use of best available knowledge and up-to-date research results in the implementation of future Arctic projects.
- Built-up close cooperation on Arctic logistics with business partners, public authorities, indigenous representatives and other key Arctic stakeholders.
- Engage with international forums such as the Arctic Council's Protection of the Arctic Marine Environment (PAME) and Arctic Economic Council's Working Group on Maritime Transportation.
- Facilitate the use of case studies and scenario analysis to highlight logistical challenges in different part of the Arctic and possible logistical solutions.
- Determine the demand for new educational programs with focus on Arctic logistics and transport infrastructure development. Promote the development of a joint master's degree program on Arctic transport and logistics with ATL members, as well as professional short courses for practitioners.
- Provide opportunities for student exchange, practitioner mobility as well as faculty mobility among the ATL members, in order to strengthen knowledge exchange and research collaboration in the field of Arctic transport and logistics.
- Dissemination of information through conferences and workshops, publications of research results in academic and trade journals, and on the ATL's website presenting on-going and planned activities by members.
- Close cooperation with other Thematic networks

Planned activities :

- 4. CURRENT AND PLANNED ACTIVITIES

- **Annual workshop for ATL members as well as several PhD students from members' organizations (back-to-back to workshop in St. Petersburg in June 2020).**
- **Mapping of ATL members' capabilities and research priorities. Establishment of research teams to address suggested research topics; implementation plan and timeframes. Establishment the ATL's steering committee.**
- **CHNL at Nord University organizes annually a workshop on Arctic logistics. The workshop is attended by several businesses and governmental authorities. Next workshop will be in St. Petersburg, Russia in June 2020.**
- Participation at the annual Arctic Shipping Forum in Helsinki, Finland in April (approx. 200 attendees), and Arctic Shipping Forum North America in Montreal, Canada in October (approx. 150 attendees). Both conferences are attended by Arctic shipping companies, ship technology companies, logistics operators, classification societies, and governmental authorities from the Arctic states.
- **CHNL at Nord University is a project coordinator for a joint project on Eurasian Transportation and Logistics with project partners coming from South Korea, Japan and South Korea.**
- Participation at the International Arctic Shipping Seminar in Busan, South Korea, held every year in December (approx. 200 attendees). This seminar is attended by shipping companies, cargo owners and logistics operators from South-Korea.
- Nord University is member of the China-Nordic Arctic Research Center (CNARC) which arranges conferences each year, alternating between China and one of the Nordic countries. The next conferences is in 2020 in Umeå, Sweden. These conferences are attended by both academic institutions and commercial shipping companies

List of partners:

- Centre for High North Logistics (CHNL) of Nord University, Norway (lead)
- Murmansk State Technical University (MSTU), Russia,
- Molde University College , Norway
- Finnish Metrological Institute ,Sodankyle Satelite Data Center , Finland

Interested partners:

- Northern (Arctic) Federal University (NArFU), Russia
- Luleå University of Technology, Sweden
- Laval University, Canada, Department of Geography, Environment & Geomatics, University of Ottawa, Canada, Research Centre on Enterprise Networks, Logistics & Transportation, University of Montreal, Canaada, Memorial University of Newfoundland, Canada
- University of Alaska at Fairbanks, USA, Dartmouth College, USA
- International centre for reindeer husbandry/Uarctic Ealàt institute, Norway
- Harbin Engineering University, China,Polar Instituite of China (PRIC), China
- Hokkaido University, Japan



Thank you