

UiT The Arctic University of Norway

Effects by increased availability on Ofotbanen/Malmbanan

Project seminar 3 Railroad Infrastructure development in the Barents region

Northern Axis – Barents Link project (NABL)

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- Overall project objectives;
- Increased mobility
- Shorter transport and travel time
- Increased profitability
- Increased transport capacity
- Increased road and rail accessibility
- Improved market access
- Increased sustainability / reduced footprint
- Increased safety / reduced accidents



Foto: House of Lapland

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New railroad from Svappavaara Rails with normal gauge extended into rich mining areas in Finland for heavy haul transport to ice free port in Narvik





Narvik multimodal terminal

- Ice free year around
- Depth; «no limit»
- Main activity today, handling of a.o.
 - 22 mt iron ore and additives for iron ore production
 - 200.000 tons of fresh salmon to Eurpean markeds
 - 90% of all foods, cars and general goods to northern Norway by train to Narvik via Sweden







New areas in Narvik for terminal development



- Production of salmon in northern part of Norway
 - In 2021: 660.000 tons
 - Prognosis for 2030: 884.000 tons (approx. + 3% per year)
- Approximately 2/3 of this, chose border crossing rail and roads from the Narvik region and further north, as their first option.
 - In 2021: 440.000 tons, 200.000 tons on rail from Narvik
 - In 2030: 590.000 tons, 450.000 tons on rail from Narvik (75% on rail, based on todays potentials which is 325.000 tons)





Potential per year if sufficient rail capacity for transport of seafood alone:

- 37 mill euro in reduced transport cost
- 19 mill euro in reduced Co2 taxes
- 95.000 tons reduction in Co2 emission







Locations for production (slaughterhouses)





Seafood transport from northern part of Norway 2021



Concentrated around evening periods





Seafood transport from northern part of Norway, forecast 2030



Concentrated around evening periods



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The fish farmers prefer fossil-free transport by rail from Narvik if the risk of delays is acceptable

If not, shortest road distance on road is chosen if the mountain passes are not closed

- Increased capacity and availability on Ofotbanen/Malmbanan, moves goods from road to rail!
- Potentials for extra seafood on rail today is 125.000 tons, if risk for delays have been acceptable (balance in transport both ways are available)
- Potentials for additional 125.000 tons of seafood in 2030, preferably on rail



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Transport status and forecast for rail transport on both Ofotbanen and Malmbanan 1/2

Updated figures from BEATA-webinar April 2021;

- Transport of iron Ore, Luleå– Narvik:
 - LKAB
 - Year: 2021: 21 mill tons: 11-12 slots per day. 10-11 train per day
 - Indicates no changes in rail capacity for the coming years (in discussions with LKAB)
 - Kaunis Iron
 - Year 2021: 2 mill tons: 3 slots per day. Average 2 trains per day
 - Indicated increase to approx. 4 mt. Requires 5-6 slots per day
- Transport of groceries, cars and other gods from Oslo to Narvik via Sweden
 - Arctic Rail Express (ARE, CargoNet) 2-3 slots per day. 11 trains per week (weekdays)
 - North Rail Express (NRE, DB Schenker) 1-2 slots per day. 6 trains per week (weekdays)



Transport status and forecast for rail transport on both Ofotbanen and Malmbanan (2/2)

Updated figures from BEATA-webinar April 2021;

Transport of seafood from Narvik to European marked

- ARE and NRE trains; 3-5 slots per day. 17 trains per week (weekdays), >200.000 tons (mixed cargo)
- Potentials today for increased transport of fresh products if increased capacity and acceptable risk: 6 trains per week
 - For seafood from Narvik: 125.000 tons
- In 2030 potential seafood transported on rail from Narvik via Sweden could increase to 6 trains in addition per week
 - Meaning a total of 450.000 tons seafood from Narvik threw Sweden via train + 140.000 tons via road from northern part of North Norway in 2030
 - Requires increased rail capacity and transport balance both ways

• Passenger transport:

- Vy; today 3-4 slots per day. 3 trains per day
- Arctic Train; 2 trains per day. Extra trains to be filled in (so far only on Norwegian side)
- Route for transport of goods are planned between Narvik and asian regions via Haparanda. First 2 test trains per month.
- Future tourist transport are expected to double

Investments of approx. 30 mill Eur in increased terminal capacity in Narvik has started



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Railway capacity today:

- 26 slots available
- 26 slots held;
 - iron ore transport: 15 slots
 - cargo transport: 5 slots
 - passenger transport: 6 slots

No rail capacity left for time-critical goods!

Disturbances require

additional rail slots for

more efficient operation



Action to be taken:

Establishment of a Corporate Network for reliable, predictable and sustainable transport of time-critical goods by road, rail and in the air, which ensures capacity and competitiveness for business actors in the north

More actions to come...









Potential network partners to be invited, e.g.;

Commercial actors:



Responsible for infrastructure availability:













Network Objectives;

- Increased sustainability on the road and track
- Shorter time to the market for time-critical goods
- Double track for increased capacity and predictability on the track
- Accessible and predictable mountain passes
- Increased competitiveness for the seafood industry in the north
- Sustainable transport solutions on the road
- Increased air transport of seafood from airports in the north
- Essure directional balance with trains through Sweden for increased capacity

Potentials for reducing CO2 emissions of 140,000 tones in 2030 by moving goods from road to rail between Narvik and the Continent

The use of hydrogen for the distribution of goods by car from and to the railway terminal in Narvik could in 2030 amount to more than 20,000 tones in reduced CO2 emissions.