ACCESS
Arctic Climate Change
Economy and Society

Project no. 265863

ACCESS

Arctic Climate Change, Economy and Society

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D2.71 – Evaluation of ACCESS Arctic shipping research in view of a shipping company

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PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

ACCESS Project
ACCESS WP2 Tasks 2.7 & 2.7.1 by Nordic Bulk Carriers A/S
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General Comments

As earlier mentioned, all commercial transits performed in the Northern Sea Route have been assisted by Russian Icebreakers. This is a compulsory regulation. There is in this case therefore no measureable benefit in using any Ice Route Optimization System (IRO).

The same goes for ice forecasting systems, and other similar systems created to improve arctic operations.
Today, when our vessels do not sail behind an icebreaker in the arctic, NBC use weather routing companies as daily guidance on the most optimal route, taking wind and other weather factors into consideration.

These systems could also work in NSR when/if the icebreaker service is no longer in force, or similar customitted for the Arctic.
NSR only accounts for a part of the Arctic, we will in the near future see more traffic in other areas, such as Greenland and Canadian Baffinland – in these areas, icebreakers are not compulsory and not available – then the systems will have more relevance.

Comments to report 2.16 – Report presenting results of ICEROUTE calculation of travelling time for different scenarios and routes on NSR and NWP in the past, present and future.

NBC is a Ship owner and is coming from a world based on practical use and results based on facts. Shipping is a very volatile business as we have described earlier, but the actual results are backed on pure facts, that are influenced on several parameters which we cannot affect, like wind and weather in general and in NSR the availability of icebreakers, their performance in the ice and which route they use.
This is a part of our business, known factors, but always with different impact – shipping companies live with this uncertainty in their budgets, and for each voyage these factors and predictions are estimated based on experience. An example is that we add 10% to the total days/time at sea for uncertainty for bad weather. In Arctic/NSR we use 20%.... But we only know the actual factors when the voyage in completed.

For this reason, shipping people are often very sceptical towards scenarios and simulations – we live in a world of facts.
HSVA very accurate report uses different routes and also speed calculations to compare. I

am sure, that they are all accurate and also based on historical data. These data will be more important if we had an option to sail on our own, or if they were shared with Atomflot.

Atomflot has also collected data during their more than 50 years in the NSR. We are not sure on their scientific level – and system to share and compare data could be very interesting in the future.

2.42 Calculation of fuel consumption per mile for various ship types and ice conditions in the past, present and in the future.

The issue here is the same, we follow icebreakers and don't force ice. However having said that, we use companies like HSVA and their test results when we build vessels, and their studies thereby affect our business indirectly.

Conclusion

The reports we have seen do not take macro-economy into consideration, trading patterns and , oil prices etc, and this has a big impact on the chosen speed of each vessel.

HSVA's reports could be very beneficial for nautical design of ice classed vessels, engine power, ice impact on hull etc. NBC did actual test their design at HSVA before ordering their series of newbuildings.
This reports could also be used to set the guidelines for minimum specifications, type of ice class needed for a certain time of year, but the Polar Code should set the standards, when it goes into force - the question is only, is it strict enough?
One of the reports also state there is a clear trend of decreased travelling time in the NSR, but this is based on a climate model, and fact is that we in 2013 saw a very tough winter in the Arctic and the decrease is not a linear development.
From a ship owner's point of view, the reports are interesting to read, especially the historically perspectives, but they are far too detailed for a company focused on real operation and result, simulations and models are just too far from our way of doing business.
This may all change when the trading pattern in the Arctic changes, as mentioned earlier, we don't believe that arctic shipping will be driven by NSR traffic, but more destination-based traffic, i.e. loading and discharging cargoes in the Arctic. In the dry bulk sector, there are huge projects under development in Greenland, in Baffinland and in Canada. These places will be regulated under the Polar Code, but icebreaker service will not be compulsory and IRO systems and reports like we have seen from HSVA become much more relevant. There will be shipped out big volumes from Baffinland already this summer, iceberg monitor systems, special radars and most important, well educated crew will be very important to project the environment, but also to project our business, one mistake in arctic can close the area from a whole industry.

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