

Feasibility of Container Shipping through the Arctic

Author: Kirsi Tikka, Vice President Global Technology and Business Development, ABS

Receding ice cover in the Arctic has raised questions about the feasibility of using shorter Arctic routes for regular commercial transshipping. The ice cover reached its minimum recorded in September 2007 and the coverage in September 2008 was only slightly more extensive. The media reports on the "ice free" Arctic gave the impression to the public that shipping through the Arctic was likely to become routine in the near future. The reality however is that the ice conditions in the Arctic vary seasonally and annually and regular shipping through the Arctic routes is not likely in the near future. However it is of interest to investigate what conditions would make regular transshipping through the Arctic feasible.

The presentation is based on a study to investigate economic feasibility of container shipping through the Arctic. A number of scenarios were investigated and compared to shipping containers using traditional routes. The analysis is based on several assumptions and the results must be viewed in light of these assumptions, but the overall conclusions are of interest.

The attractiveness of the Arctic for transshipping depends on the freight rates, ice cover, available ice breaking support, infrastructure, and technology. The study shows that year-around container shipping through the Arctic is unlikely still for decades because of the presence of ice for most of the year. However if the predictions on the practically ice free Arctic by as early as 2030 become reality then these shorter routes can become economically feasible and the study illustrates some of these hypothetical scenarios.