THE NORTHERN SEA ROUTE: 
FROM STRATEGIES TO REALITIES

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One of the stunning news I learned when coming back to Moscow after six and a half years’ service in Reykjavik was that during this time annual cargo shipments on the Northern Sea Route had increased 8 times. Up to 33 million tons, by far surpassing historic USSR 1987 record of 6 million tons.

The current volume is obviously quite modest compared to the Suez or Panama canals cargo transit (1031 and 469 million tons correspondingly in 2019). However, the dynamic is impressive, and Russia intends to sustain it, pushing the NSR figure further to 80 million tons in 2024 and 130 million in 2035. Authorities in Panama, Egypt, Singapore and elsewhere are beginning to follow the trend with growing attention.

Development of the NSR is the backbone of the national Arctic strategy. The NSR is viewed, for a good reason, as a main artery of the Russian Arctic. It has three main tasks, to:
- Become an energy superhighway for export of hydrocarbons and other natural resources of the Russian Arctic;
- Supply everything needed to the ports and new “points of economic growth” of the Arctic Zone of the Russian Federation (AZRF);
- Assure smooth international transit.

A detailed plan of practical measures to develop the NSR infrastructure up to 2035, backed by the budget, was adopted by the Russian Government in December 2019. It provided, inter alia, for:
- Renovation of ports;
- Building of SAR (search & rescue) and auxiliary fleet;
- Expansion of navigational and hydrographic surveys;
- Building new icebreakers;
- Stimulating cargo shipments and international transit;
- Boosting local energy supply, staff education, encouraging domestic shipbuilding and assuring environmental safety.

Even in the pandemic 2020 the Government strictly controlled implementation of this plan and pointed to the areas which lagged behind the schedule, such as building new SAR and auxiliary vessels.

Ensuring safety and security of the NSR is one of the obvious tasks of the Russian military. SAR facilities and capabilities of Emercom and Ministry of Transport will also be seriously enhanced. The 2011 Arctic SAR Cooperation Agreement will play a role.

Safety will also be assisted by modernization of communications. Murmansk and Vladivostok will be connected by 12,5 thousand km underwater high-speed optic-fiber cable with links to all major points along the NSR. Constellation of high-orbit navigation satellites over the Arctic will be launched and aviation transportation to the AZRF will be expanded.

Important management reform is under way, aimed at attaining transparency and immediacy of navigation information and all administrative decisions – collecting all this data on one open digital platform. At the end of the game it will additionally bring enhanced safety to the users of the NSR.

Thawing of ice, coupled with technology breakthroughs, widen the navigable period of the NSR, especially of its troublesome eastern part, thus allowing shipments to be more regular and predictable. Before, this window of opportunity usually opened in June and closed in November. But in May 2020, Sovcomflot successfully sent its Arc7 LNG super-carrier along the NSR in a record-early voyage. In January 2021 (nobody did it so late before) another record was broken when two LNG Arc7 super-carriers successfully sailed without icebreaker escort, one from Sabetta to China, another – the opposite way. More so, driven by the rising LNG prices because of cold winter and Panama canal congestion, Novatek is planning to ship LNG from Sabetta to Japan in February and maybe even March 2021, albeit with icebreaker escort. This would prove right an estimation of the NSR operators that today the route may be used 10 months a year, and even year-round when the “Leader”-class 120 MWT icebreakers appear on the scene.

It would be an illusion, however, to foresee no need for icebreaker escort at NSR at all in the short- and medium-term future. We have read stories about even ice-hardened vessels stuck in and damaged by ice in 2020 and 2021. Experts say that if the surface ice melts, remaining underwater ice can pose an even higher risk. Russian Atomflot is undoubtedly
interested in doing business by providing escort by its icebreakers, but not to the extent of eradication of competitive edge of the NSR by unreasonable escort costs. Safety and economics of navigation require more and more powerful icebreakers and Russia will deliver.

Russian Arctic Strategy, updated in 2020 for a period of up to 2035, prioritizes environmental safety of the NSR. Russia is more than anyone else interested in keeping the NSR clean. So far, the NSR traffic has been free from ecological accidents, but the 1989 Exxon Valdez oil spill disaster near Alaska and 2020 oil spill in Norilsk are just two grim reminders that we should be vigilant. Some key points of attention in Russia are:

- Navigation safety, construction and crewing of vessels up to the IMO Polar Code standards;
- Decrease of heavy fuel oil use and wider use of nuclear power and LNG for the engines;
- Implementation of the 2013 Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic and other related international instruments (such as non-legally-binding recommendations of the Arctic Council Arctic Marine Shipping Assessment);
- Introducing and enforcing strict and clear regime of the NSR;
- Modernization of environmental monitoring system.

At the same time, Russia will definitely hold out against attempts of unfair competition under the pretext of “ecological concerns.”

If everything goes well, the NSR can basically become technically “ripe” for international transit by the end of the decade. The target for 2035 is to make it competitive on the world market.

As of now, the bulk of the cargo shipped on the NSR are Russian mineral resources and non-ferrous metals. This will not change in the visible future and is destined to become an ever-growing factor in the world energy (first of all LNG and oil) and raw materials market.

Number of international transits on NSR peaked in 2013 (71, 1.4 million tons), dropped in 2014-2018 (23-27, 0.3-0.5 mt), and began to rise again in 2019-2020 (37-62). Official Russian projections are cautious for the 2020s (0.7 mt in 2019, 1 mt in 2024, 2 mt in 2030), but optimistic for the first half of the 2030s (10 mt in 2035). However, the high dynamic of NSR can by itself become a serious factor of even more substantial transit growth. The major winners will be Northern half of Europe and North-East Asia who will save the most from the shorter (and safer) connection.
Statistics of the Administration of the NSR show, that, contrary to the habitual view, in the last couple of years most active among the non-Russian vessels on the NSR were those from Europe, by far outnumbering those from Asia. Although with further retreat of the ice, new icebreakers coming, infrastructure development of Eastern part of the NSR, and opening of the NSR transshipment hubs in Kamchatka and Murmansk, the share of Asian vessels is expected to grow. It is also worth mentioning here that in case of lack of substantial interest of foreign shipping companies to send their container carriers to the NSR, Russia could consider building its own ice-hardened container fleet in order to take full advantage of the NSR.

If sometime in the future the Arctic Ocean becomes ice-free in summer/autumn and allows direct and shortest navigation between the Bering Strait and North Atlantic via the North Pole, the modernized and well-equipped NSR will still be a much more attractive choice for many seafarers because of its safety, security and maintenance gains. Therefore, the NSR will remain a major constant in the world shipping equation.