Economic and Technological Constraints on Russia's Naval Ambitions

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The deployment of the aircraft-carrying cruiser, the *Admiral Kuznetsov*, to the eastern Mediterranean as part of a larger flotilla is yet another sign of a more assertive Russian security policy.

This deployment of substantial naval forces should not come as a surprise to those who are familiar with the updated maritime strategy (*Morskaia strategiia*) published in July 2015. This document was ambitious, stating a series of grand objectives, including the construction of a large, modern, blue water navy.

However, amidst a protracted economic slowdown that is putting pressure on Russian military expenditure, and in light of some problems encountered during the production of new vessels, it is worth considering whether the economic conditions are in place to realize the aspirations contained in the maritime strategy.

Dreaming of a blue water navy

The maritime strategy implies that all four of Russia's principal fleets will need to be equipped with modern and capable warships and support vessels. Collectively, the four fleets should possess true 'blue water' capabilities, i.e. the ability to sustain operations – in both peacetime and wartime – well beyond Russia's shores.

However, putting the type of fleet to sea that is required to reach such ambitious objectives was always going to prove challenging given the severity of the spending cuts that struck the navy over the course of the 1990s.

The state armaments programme that was scheduled to run from 2011 to 2020 (gosudarstvennaia programma vooruzheniia, hereafter the GPV-2020), envisaged the construction of new models of corvette, frigate, and submarine, as well as upgrading and refurbishing older warships, such as the Kirov-class and Slava-class cruisers and the Antei-class and Shchuka B-class attack submarines.

Once Russian shipyards had established serial production of these warships, it was hoped that they would be able to

supply larger quantities of the new designs, as well as larger vessels, over the course of the next state armaments programme (GPV-2025) that would supersede the GPV-2020.

By the mid-2020s, it was hoped, a mix of *Borei-* and *Yasen*-class nuclear-powered submarines, as well as *Lada*class diesel-electric submarines, would be in service. These would be deployed alongside *Buyan M-* and *Steregushchii*class corvettes, *Admiral Gorshkov-* and *Admiral Grigorovich*class frigates, and *Lider-*class destroyers. Such a fleet, it was hoped, would give Russia the material capabilities to meet the strategic objectives outlined in the maritime strategy.

Economic constraints

Equipping the navy with this range of new combat ships was, from the outset, always going to be expensive. As a result, the Russian navy was assigned 25 per cent (RUB 5 trillion) of the funds allocated to procurement and modernization under the GPV-2020, the largest share of the Russian armed services.

However, after peaking in 2015, defence procurement spending is scheduled to decline over the next few years as the wider economic slowdown places pressure on government spending. Not only is overall procurement likely to decline, but also the navy is unlikely to receive such a large share of the funding under the new armaments programme (GPV-2025), with Russia's ground and aerospace forces likely to receive larger shares of a reduced procurement budget.

Although new ships will continue to be built, and older ships will receive upgrades, the reduction in funding will impose constraints on the Russian navy's ability to modernize its fleet to meet the objectives contained in the naval strategy.

As financial resources are becoming scarcer, the ability of Russian shipyards to build high quality ships on time, on budget, and in large quantities will become even more

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important. However, the performance of the shipbuilding industry over recent years suggests that significant weaknesses exist.

While steady but significant progress has been made in building *Borei*-class strategic missile submarines (SSBNs) that will gradually replace the ageing fleet of Delta III and Delta IV submarines, progress in building more than one of the expensive *Yasen*-class multipurpose nuclear-powered submarines has been much slower.

Plans to build several *Lada*-class diesel-electric submarines have also foundered, causing planners to pin their hopes on a new, *Kalina*-class type of diesel-electric submarine. Until a new model is developed, the Russian navy has had to be content with deliveries of *Varshavianka*-class submarines, an advanced variant of the older *Paltus*-class submarine developed in the early 1980s.

For all submarine classes, it is clear that Russia's shipbuilding industry is able to build variants of older models with established production processes, but has greater difficulty in delivering submarines that have been developed in the post-Soviet period.

Similar trends are evident in the construction of surface combat vessels. The production of the *Admiral Grigorovich*class frigate, for example, was proceeding relatively smoothly until the Ukrainian-built engines became unavailable after Russia's annexation of Crimea. But this was largely due to the fact that the Grigorovich was based on the design of the Indian *Talwar*-class, exported by Russia in the early 2000s, which in turn was based on the Soviet-era *Krivak III*-class ship.

The development of the modern *Admiral Gorshkov*-class frigate has also experienced significant delays. Even before Ukraine ceased the supply of gas turbine engines produced by Zoria-Mashproekt, the series was beset by delays. The most recent problem with the functioning of the *Redut* air defence system has further delayed the introduction of the first ship of the class.

The sources of these problems in Russia's shipbuilding industry are deep-rooted, and include: a failure to restructure the industry and eliminate poorly-performing enterprises; weak links with foreign firms that can act as a source of technology and know-how, exacerbated by Western sanctions and the breakdown of relations with Ukrainian enterprises; a poorly performing research and development (R&D) system within the industry; and a general obsolescence of ship-building skills.

As a result, Russia's current shipbuilding capabilities are better suited to building smaller ships than the sort of blue water capabilities needed for long-range force projection.

Implications for the future of the Russian navy

Russia's recent deployment of naval forces to the eastern Mediterranean, while impressive to the casual observer, disguises significant weaknesses, especially those of the domestic shipbuilding industry.

The composition of the flotilla deployed to the Mediterranean illustrates this point vividly. Most of the combat ships are modernized vessels that were either built or designed during the Soviet era, such as the *Admiral Kuznetsov*, the *Petr Velikii*, and the *Udaloi*-class frigates. Only a small proportion of the flotilla was developed and built in the post-Soviet period, and even these are smaller vessels, such as the *Admiral Grigorovich* frigate and the *Buyan M*-class corvettes.

This demonstrates the scale of the problems encountered by Russia's shipbuilding industry in recent years, and shows how difficult it will be to meet the more ambitious objectives in the maritime strategy. To be sure, Russia's navy is more capable than it was only five years ago, especially as even smaller ships are equipped with long-range antiship and land-attack missiles. It will also remain capable of performing strategic nuclear deterrence missions, while plans to expand and upgrade naval bases abroad may further raise the international footprint of the Russian navy.

But we should not exaggerate the potential of a Russian navy that remains beset by a number of structural weaknesses. Chronic economic constraints and a dysfunctional shipbuilding industry mean that operations beyond Russia's shores are likely to be the exception rather than the norm.

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