## MARITIME DEFENCE

## SAILING INTO THE WIND

The significance of maritime is growing with India establishing itself as a strong regional power. It is vital for trade as well as national security



from a security point of

Solution Maj Gen Rohit Gupta (Retd) and Amit Dugar

**"TO BE SECURE** on land we must be supreme at sea"- Maritime domain has

always been a critical piece in shaping both, a dominance in trade as well as regional geopolitics from the point of national security. This is especially true for India, with her peninsular geography extending along a 7,500 kms coastline, over 1,300 islands and an EEZ of over 2 million sq kms. The importance of this segment is further established by the fact that 95% of India's trading by volume and 70% by value is done through maritime transport. The Indian Ocean Region (IOR) is also strategically important

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view. Many future challenges are possibly going to be in the maritime domain. Further, emergence of the Indo-Pacific region as an important space is a logical development and India's role as part of the Ouad becomes critical. Along with the other three partner countries in the Quad (US, Australia and Japan), relationships with other island countries including Maldives, Seychelles, Mauritius and Sri Lanka also will impact the security environment in the region. While India rises and establishes herself as a regional power in the APAC region, it is important to accordingly build the partnerships and infrastructure. The current Indian Navy force levels include 130 ships, 200-220 aerospace fleet and 15

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submarines and

targets a force level of 200-220 ships and submarines and 500 aerospace platforms within the next 5-7 years. Few of the key ongoing procurement programs that should be finalised soon to plug this gap include the below.

• The Naval Utility Helicopter (NUH) program for the procurement of 111 helicopters has not progressed much in the last 12 years since the Naval QRs were first uploaded in 2008. Categorised to be progressed under the SP policy, the program however has not been finalised as there continues to be a discussion on both the platform and the partner.

• The Naval Multi Role Helicopter (NMRH) program saw some progress as a USD 2.4 bn worth contract for 24 MH-60Rs got signed in a G2G deal in February 2020 with 6 expected to be delivered in 2021 and remaining 18 over the next 2 years. The earlier running program for 123 NMRH currently still holds, and clarity is awaited on the progress and the quantum.

• P-75I program worth USD 8 bn to

USD 9 bn for the procurement of six conventional submarines (with AIP) moved a step ahead under the SP policy as two Indian firms (a DPSU and a private company) have been shortlisted and the RFP is expected soon.

• The RFI for **Multi Role Carrier Borne Fighter aircraft (MRCBF)** for 57 aircraft was released in January 2017. However, there has not been much reported progress on the same. Meanwhile, the Twin Engine Deck Based Fighter (TEDBF) project was approved by the Indian government in June 2020 after it was decided that a single engine fighter aircraft would not be suitable for deck based operations.

• The USD 5 bn worth procurement program for 12 **Mine Counter Measure Vessels (MCMV)** has witnessed a lot of activity since the tender was released. The contract awarded to an Indian shipyard (with a South Korean company as the foreign partner for technical collaboration) was cancelled in 2018 for reasons including high costs and compliance issues. The total

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requirement of India is reported to be for 24 MCMVs.

The USD 3 bn contract for the procurement of 4 Landing Platform Docks (LPDs) was recently cancelled after undergoing extensions and even a bid resubmission since the RFP was issued in November 2013. New QRs and / or RFP is expected to be in progress.
The contract for procurement of 8 anti-submarine warfare shallow watercrafts (ASWSWCs) was awarded to GRSE in 2019. Worth ~\$800-900mn, the deliveries are expected to begin around 2022-23.

• Under the Advanced Technology Vessel (ATV) program, indigenously developed **nuclear powered SSBNs** are being developed. The INS Arihant is in service while the second SSBN INS Arighat is reportedly under harbour trials and two more SSDBNs are under final assembly at the Ship Building Centre in Vishakapatnam. There also were reported discussions between India and Russia for leasing a third Akula-class nuclear powered attack submarine.

The above procurements alone would result in increasing force levels by 200+ helicopters, 50+ aircraft and 6 submarines and others. More importantly, these procurements will possibly have significant IC levels thereby further adding to the domestic industry landscape. The Indian Navy arguably is the most indigenised when compared to the Indian Air Force and Indian Army. With a 90% IC in float category, 60% in move and 50% in fight, there is an increased focus on further strengthening the indigenous ecosystem in segments including the propulsion systems, weapons, and radars.

'Swavlamban', a perspective showcasing Indian Navy's indigenisation efforts has highlighted the roadmap to develop domestic capabilities. The indigenisation strategy of the Indian Navy has been planned at three levels viz, (1) the system level which is based the NSQRs and are developed by DRDO, (2) subsystem level based on specifications by the Indian Navy and undertaken by DRDO and industry, and (3) spares level which are the fast moving components aimed at sustenance of inventory and can be indigenised by the industry. The Swavlamban initiative, aligned with the Indian Naval Indigenisation Plan, focusses on import substitution via technology development. Major systems including among others, hull construction materials, foldable hangar doors, steam turbines and EW systems have been indigenised. However, there still are stores including test equipment, countermeasure systems, ammunition and weapons that are being imported to a large extent. In order to ensure a reduction in imports and fast paced and efficient development of the domestic ecosystem, it is imperative to provide equal opportunity to the private industry also. While policies have been liberalised to a large extent thereby allowing FDI and enhanced private participation, more can be done to ensure that the naval manufacturing ecosystem in the country is not just selfsufficient but also a net exporter in the near future.

• The DAP 2020 for example has a section on awarding contracts on nomination basis. For any industry to develop, it is important to give equal opportunities to the private industry especially when few in the industry have proven their efficiency and the rest are willing to take the step forward. More importantly, instead of working in silos it is important for the public and private sector to collaborate on projects. Competitive risk sharing also results in an efficient achievement of objectives.

• The defence part of ship building is a limited market and can be well supported by a domestic demand for commercial shipbuilding. This would enable the shipyards in India by having a more consistent order book and vendor base. There are few such established use cases in the broader aerospace and defence sector which highlight the importance of having the diversity of both commercial and defence based customers and capabilities.

• Being a capital intensive industry, it is also important to have continuous government support in terms of low cost financing and export enhancing measures like LCs.

• The private sector can also be further supported as lack of orders is a primary

concern for them. Currently there are three private shipyards under the NCLT resolution mechanism and they have not yet found buyers.

The Atmanirbhar Bharat Abhiyaan was evolved with a focus on indigenous manufacturing and giving more to the domestic ecosystem in India. The ongoing pandemic has arguably put forth a case more strongly than ever for:

 Having a diverse but complementing product portfolio, clientele and vendor base
 Importance of having an indigenous supply chain that meets most of the requirements.

• Focussing on core capabilities as that is what will help sustain the company in critical situations

• Focussing on the R&D ecosystem Swavlamban, coupled with the components in DAP 2020 including Buy(Indian-IDDM) and Make projects aim to do just that for the naval ecosystem in India. This decade is hence very critical for India's manufacturing ecosystem and by end of 2030 India would have hopefully gone well past its targets set out in the draft DPEPP 2020. While policies continue to evolve, it is hoped that as the domestic industries gain a stronger foothold, the policies giving the required consistency.

—The authors work as Head of A&D and as VP, A&D respectively at a private consulting firm



## NAVAL TECH: Significance of indigenisation

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