L&T, Navantia sign teaming deal for Project 75(I) submarines at ₹43K cr

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AJAI SHUKLA New Delhi, 10 July

A month after German submarine builder ThyssenKrupp Marine Systems signed an agreement with Mazagon Dock Shipbuilders to build six submarines for the Indian Navy, a competing partnership was announced by Larsen & Toubro (L&T) and Spain's Navantia.

"L&T and Navantia signed a teaming agreement (TA) on Monday for submission of a techno-commercial bid for the Indian Navy's prestigious Project 75 (India) submarine programme," Navantia's media release announced.

Project 75(I) requires the Indian bidder to tie up a technology partnership with a foreign collaborator and build six conventional submarines equipped with air-independent propulsion (AIP).

This contract, valued at over \notin 4.8 billion (₹43,500 crore), will be amongst India's largest defence acquisition projects.

The building of six AIP submarines will be followed by a 30-year lifecycle sustenance contract of similar value.

Project 75(I) is amongst the first programmes to be processed under the strategic part-

LARGEST DEFENCE BUY

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Project 75(I) requires Indian bidder to tie up with a foreign collaborator and execute the programme for delivery of six conventional submarines equipped with air-independent propulsion while achieving targeted indigenous content



nership acquisition model of the Ministry of Defence (MoD). L&T and Navantia signed a memorandum of understanding for the programme on April 11 in Madrid, which has now culminated in this TA.

It is possible that the current two consortia may be joined by a third if Russian submarine builders partner an Indian shipyard to form a third consortium. AIP submarines provide major operational advantages over conventional diesel-electric submarines. The latter can operate underwater for no longer than 48 hours, after which they must surface for battery charging. While surfaced, diesel-electric submarines are easily detected by enemy radar, which spots masts or snorkels protruding out of the water.

AIP-driven submarines can remain underwater for up to two weeks before surfacing for battery charging.

Navantia's design for Project 75(I) submarines will most likely be based on its S80class of submarines. The first S80 was launched in 2021 and is undergoing sea trials prior to its delivery to the Spanish Navy at the end of 2023.

Navantia has earlier partnered French shipbuilder Naval Group in designing and constructing the Scorpène class of submarines. Six Scorpène submarines have been built for the Indian Navy in Mazagon Dock as the Kalvari-class.

According to Navantia, its "state-of-the-art third-generation AIP is the most advanced and efficient AIP system in the world, apart from also being the most compact, easiest to exploit and maintain, and environment-friendly".

"It uses bioethanol as a source of hydrogen, which is known to be cost-efficient, easily available, and does not call for any special infrastructure. A high density of hydrogen in ethanol improves the AIP system's efficiency. Ethanol, being in liquid form, eliminates the risks associated with storing hydrogen. In addition, the wide availability of ethanol enables the system to be refuelled anywhere in the world," said Navantia's media release.

The most operationally effective are nuclear-powered submarines, which can remain submerged indefinitely, during which time they are almost impossible to detect.

India's Defence Research and Development Organisation (DRDO) is pursuing the development of nuclear-powered attack submarines (SSNs). But a nuclear propulsion system that is silent and effective will take several more years to operationalise.

Meanwhile, MoD announced in January that the AIP developed by DRDO would be reverse-integrated into the Indian Navy's six Scorpène submarines. L&T and Navantia are also cooperating in other shipbuilding programmes, such as building landing platform docks for the Navy.

Said L&T's Chief Executive Officer S N Subrahmanyan: "Navantia's glorious 300-yearold track record in naval construction and technical expertise gives us a competitive advantage in this programme."

They are also joining hands for green energy opportunities, including offshore wind power through Navantia's Seanergies division.