

## European Heavyweight Torpedoes Vie for Critical Indian Navy Contract



A significant competition is underway for the Indian Navy's urgent requirement of 48 submarine-launched heavyweight torpedoes (HWTs) for its Kalvari-class submarines. Italy's Whitehead Alenia Sistemi Subacquei (WASS), a subsidiary of Leonardo, with its Black Shark torpedo, and France's Naval Group, offering its F21 torpedo, are the primary contenders in a tender expected to finalize price bids by the end of July 2025. This procurement is vital for equipping India's advanced submarine fleet and highlights the complex dynamics of global defense acquisitions.

The need for these HWTs has been a long-standing challenge for the Indian Navy, with previous procurement attempts encountering hurdles. The current tender for the initial batch of 48 torpedoes, valued at approximately ₹3,000 crore (approximately \$360 million USD), is part of a larger requirement exceeding 200 units, with subsequent orders likely to fall under the "Make in India" initiative. This emphasizes India's dual strategy of addressing immediate operational gaps while simultaneously fostering indigenous defense manufacturing capabilities.

The Italian Black Shark Advanced (BSA) torpedo, a 533mm (21-inch) dual-purpose HWT, boasts a 350 kg high-explosive warhead and is powered by an aluminum-silver oxide battery, achieving speeds over 50 knots and a range of 50 kilometers. Notably, WASS is reportedly exploring partnerships with Indian firms for local production, aligning with India's defense export ambitions. The Black Shark's prior testing by the Indian Navy in 2009 may provide an advantage, especially if the current tender relies on past trial data rather than new field evaluations.

Conversely, France's F21 torpedo, developed by Naval Group, is a 6-meter, 1.5-tonne HWT with a 250 kg warhead. It also utilizes an aluminum silver-oxide battery for propulsion, offering speeds in excess of 50 knots and a range exceeding 50 kilometers. The F21 has a strong track record, having been qualified in 2017 and delivered to both the French and Brazilian navies. Its prior technical compliance in Indian trials positions it as a robust contender, though cost competitiveness remains a critical factor.

The withdrawal of Germany's ThyssenKrupp Marine Systems (TKMS) in April 2025 has streamlined the competition, leaving Italy and France in a direct contest. While both systems offer comparable technical specifications crucial for modern underwater warfare, the final decision is anticipated to hinge on a combination of cost-effectiveness, industrial partnership terms, and long-term strategic relationships. The outcome of this tender will not only significantly enhance the Indian Navy's submarine capabilities but also shape future collaborations in India's evolving defense landscape.