## **INS** Vagir

INS Vagir is a Kalvari Class submarine of the Indian Navy. It was launched from the Mazagon docks on 12 November 2020.

It is the fifth submarine of the first batch of six Kalvari-class submarines for the Indian Navy. It is designed by the Naval Group of France and manufactured by Mazagon Dock Limited.

INS Vagir is expected to be commissioned into the Indian Navy by 2022

This article will give details about the INS Vagir within the context of the IAS Exam.

## Background of INS Vagir

The second INS Vagir is an iteration of a submarine purchased from Russia on December 3, 1973. It was decommissioned on June 7, 2001.

Vagir is named after the Sand fish, a deep sea predator found in the Indian Ocean.

As stated earlier, INS Vagir is a Kalvari class submarine. The Kalvari class is a type of diesel-electric attack submarine based on the Scorpène-class. These class of submarines derive their name from the first submarine inducted in the Indian Navy, INS Kalvari, that was launched in October 2015.

INS Vagir is a part of Project 75. Project 75 is an indigenous project for the construction of 6 attack submarines for the Indian navy.

The \$3.75 bn project is supported by the Department of Defence Production, which in turn is part of the Ministry of Defence. The Naval Group of France is lending its technological expertise to the project.

The status of the remaining submarines is as follows:

- INS Kalvari and INS Khanderi have been commissioned into the Indian Navy
- INS Karanj finished its sea trials and was inducted into the Indian Navy on March 10, 2021
- INS Vela is undergoing sea trials and is expected to be commissioned by the end of 2021
- INS Vagsheer is currently under construction.

## Specifications of INS Vagir

The INS Vagir comes with state-of-the-art stealth features like advanced acoustic absorption technique, low radiated noise and hydro-dynamically optimised shape.

Alone with launching attacks with torpedoes and anti-ship missiles when underwater or on surface, it can undertake multifarious types of missions like, Anti-Submarine, Anti-Surface warfare, surveillance, intelligence gathering etc

It can operate in all theatres of operation, showcasing its inter operational capabilities

Characteristics of INS Vagir	
Displacement	Surfaced: 1,615 tonnes (1,780 short tons) Submerged: 1,775 tonnes (1,957 short tons)
Length	67.5 m
Height	12.3 m
Speed	Surfaced: 20 km/h Submerged: 37 km/h
Range	12,000 km at 15 km/h (surfaced) 1,020 km at 7.4 km/h (submerged)
Electronic warfare	C303/S anti-torpedo countermeasure system
Armament	<ul> <li>6 x 533 mm (21 in) torpedo tubes for 18 SUT torpedoes</li> <li>SM.39 Exocet anti-ship missiles</li> <li>30 mines in place of torpedoes</li> </ul>

Further details of the INS Vagir are given in the table below:

## Importance of Submarines for Indian Navy

At present India operates one submarine each in the nuclear-driven classes of Chakra and Arihand in addition to 14 submarines belonging to the Diesel-Electric category, like the Shishumar and Sindhughosh, most of which are ageing.

Both nuclear powered and diesel-electric submarines have their roles in Carrier Battle Groups. Carrier Battle Groups are naval formations of ships and submarines with the Aircraft Carriers playing the central role. Submarines like the INS Vagir are crucial for India's strategic deterrence and in protecting its sovereignty in the Indian Ocean Region. In the wake of the "string of pearls" doctrine followed aggressively by China, the submarines of Project 75 will prove to be a crucial asset.