

Project 75

January 13, 2021

In News

- The **fifth Scorpene submarine of Project-75 named 'Vagir'** has been launched at Mazagon Dock Shipbuilders Limited (MDL) in Mumbai.

About Project 75

- "Project-75 India (P-75I)" is a **submarine project approved by the defence ministry in 2007.**
- Under this project, the Indian Navy intends to acquire six diesel-electric submarines.
- **French Company DCNS (Naval Group)** will provide design and technology to public sector Mazagon Docks to make **six Scorpene diesel submarines by 2022.**
- These will feature **advanced air-independent propulsion systems** to enable them to stay submerged for longer duration and substantially increase their operational range.
- They will be **capable of anti-surface and anti-ship warfare** missions equipped with a **vertical launch system (VLS)** to enable them to carry multiple Brahmos supersonic cruise missiles.
- They also have advanced stealth capabilities like noise and acoustic suppression.
- It is a **follow-on of the Project 75 Kalvari-class submarines** for the Indian Navy.
- The submarines are being constructed **under the Strategic Partnership (SP) model** that aims at providing a significant fillip to the 'Make in India' programme.

Strategic Partnership (SP) Model

- **The SP model in the Defence sector was approved by Defence Acquisition Council (DAC) in 2017.**

- This was implemented to enable participation of private Indian firms in Make in India in defence. This will also ensure development of a wider skill base and will trigger innovation.
- This model aims to revitalise defence industrial ecosystem, increase efficiencies, facilitate faster and more significant absorption of technology and progressively build indigenous capabilities in the private sector to design, develop and manufacture complex weapon systems for the future needs of the Armed Forces.
- The Indian strategic partner will be the systems integrator by building an extensive ecosystem and will tie-up with foreign manufacturers to cover manufacturing, transfer of technology and assistance in building

About Vagir

- Vagir, ex-Russia, named after the Sand Fish, a deadly deep-sea predator of the Indian Ocean, was commissioned into the Indian Navy on December 3, 1973, and was decommissioned on June 7, 2001.
- In true nautical tradition, it is refurbished under the same name – Vagir.
- It is rebuilt with superior stealth features (such as advanced acoustic absorption techniques, low radiated noise levels, hydro-dynamically optimized shape etc.) and precision-guided weapons.
- The attack can be launched with both torpedoes and tube-launched anti-ship missiles, whilst underwater or on the surface

Air-independent propulsion (AIP)

- AIP is any marine propulsion technology that allows a non-nuclear submarine to operate without access to atmospheric oxygen.

- It can augment or replace the diesel-electric propulsion system of non-nuclear vessels.