# Next Generation Missile Vessel (NGMV)

***Prelims:*** *Current events of national and international importance | Defence*

## Why in News?

*The keel-laying ceremony of the first Next Generation Missile Vessel (NGMV) for the Indian Navy was held at Cochin Shipyard Limited (CSL).*

- **Role –** The NGMV is primarily designed to function as a **high-speed missile combatant**.
- **Offensive role –** The vessel is capable of conducting the following operations:
  - Maritime Strike Operations
  - Anti-Surface Warfare (ASuW)

    - Potential targets include:
        - Enemy warships
        - Merchant vessels
        - Land targets
    - **Sea-denial operations –** These operations are particularly effective in the vicinity of maritime choke points.
- **Defensive role**
    - Local naval defense
    - Seaward defense of Offshore Development Areas (ODAs)

## Weapon system & Sensors

- **BrahMos – Surface-to-Surface Missile (SSM)**
- It enables the vessel to engage targets at long range, offering both anti-ship and land-attack capabilities.
- NGMV models are equipped with **inclined BrahMos missile launchers**.
- **VLSRSAM –** Vertically Launched Short Range Surface-to-Air Missile
    - Delivers air and missile defense capabilities.
    - Designed to intercept and neutralize incoming aerial threats.
- **76 mm SRGM**
    - Serves as the primary naval gun system.
    - Positioned on the forward section of the vessel.
- **CIWS –** Close-In Weapon System
    - Offers short-range defense against incoming projectiles and threats.
    - The NGMV model features a CIWS mounted at the stern.
- **Multi-Function Radar**
    - Performs air surveillance operations.
    - Supports fire-control functions.
    - X-band radar.
    - Approximate range - 200 km.

## Indigenous Defence Ecosystem

- The Defence Research and Development Organisation (DRDO) developed the Multi-Function Radar (MFR).
- Bharat Electronics Limited (BEL) supplies the Multi-Function Radar (MFR).
- Hindustan Aeronautics Limited (HAL) assembles LM2500 gas turbines.
- Cochin Shipyard Limited (CSL) designs and constructs vessels.

> ***INS Vikrant****, India's first indigenous aircraft carrier, was built by Cochin Shipyard Limited.*

**Reference**

[The Hindu | Next Generation Missile Vessel (NGMV)]

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