

Arrested development: India's plans for second indigenous carrier hampered by setbacks

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While the Indian Navy is determined to pursue its programme for a second indigenous carrier, the service still has still a long way to go to convince the government and MoD regarding its operational efficacy.

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The Indian Navy (IN) is battling acute financial constraints and enduring delays by the Ministry of Defence (MoD) in determining the future of its proposed Indigenous Aircraft Carrier-2 (IAC-2), which is aimed at enforcing sea control and boosting India's regional power ambitions.

The IN currently operates a single 46,000-tonne refurbished Kiev-class carrier, INS *Vikramaditya* (ex- *Admiral Gorshkov*), which was formally operationalised with a twin-engine MiG-29K/KUB ('Fulcrum-D') fighter group in May 2014.



INS Vikramaditya (foreground) pictured with INS Viraat in early 2014. Viraat was formally decommissioned in March 2017, leaving the IN with just one carrier in operation. (Indian Navy)

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Built initially as an aviation cruiser, *Vikramaditya* underwent an almost nine-year refit at Sevmash shipyard in northern Russia that cost USD2.33 billion – significantly more than the initial estimate of USD964 million. It is fitted with a ski-jump for short take-off but arrested recovery (STOBAR) fighter operations.

By 2021 *Vikramaditya* will be joined by *Vikrant*, a 37,500-tonne Project 71 STOBAR-equipped carrier that has been under construction at Cochin Shipyard Limited (CSL) on India's southeast coast since 2009.

Vikrant was originally scheduled for commissioning around 2015–16, but this has been delayed due to a resource deficit, technological problems and, more recently, Russia's Nevskoye Design Bureau (NDB) postponing installation of *Vikrant*'s Aviation Facility Complex (AFC).

The AFC, which is similar to the one installed by NDB on *Vikramaditya*, will eventually support *Vikrant*'s 40-strong fighter complement, comprising MiG-29K/KUBs, Russian Kamov Ka-31 helicopters, and the locally developed Dhruv Advanced Light Helicopter (ALH).

Once commissioned, *Vikrant*'s deck layout, which features dual runways, will be capable of launching two aircraft in quick succession (recovering them one at a time using its three-wire arrestor gear).

Construction of the IAC-2, tentatively named *Vishal* ('Grand'), was to have followed *Vikrant* at CSL, with a provisional commissioning deadline of 2030–32 in accordance with the IN's 2012–27 Maritime Capability Perspective Plan (MCP). The MCP is committed to fielding three carriers, one for each seaboard, with a third in reserve, to fulfill India's maritime power projection aspirations but, above all, to counter China's accelerating ambitious naval expansion.

In recent years, the IN's planning and force levels have been influenced by the People's Liberation Army Navy's (PLAN's) evolving concept of 'Far Seas' operations backed by five to six proposed carrier battle groups (CBGs), particularly in the strategic Indian Ocean Region (IOR).

According to the IN's maritime doctrine, CBGs comprise the most substantial instruments for projecting hard power, as they possess "ordnance delivery capability of a high order" capable of prevailing over the enemy's operational "centre of gravity by degrading his decisive points".

Consequently, around five years ago the IN's Directorate of Naval Design (DND) in New Delhi began conceptualising the conventionally powered 65,000-tonne catapult-assisted take-off but arrested landing (CATOBAR) IAC-2 to accomplish this aim.

It was deemed capable of embarking 50–60 fighters, helicopters, airborne early warning and control (AEW&C) platforms, and unmanned combat aerial vehicles (UCAVs). Under pressure from the IN, the MoD allocated INR300 million (USD4.17 million) to develop a concept plan or sketch design of the proposed platform, but little or nothing has progressed since.

“The IAC-2 programme faces a lack of MoD expertise on the operational efficacy and significance of carriers, opposition to it from the two other services and, above all, a severe shortage of funds,” retired IN chief of staff Admiral Arun Prakash told *Jane's*. It faces formidable challenges, he said, and it is unlikely that its future will be decided soon.

The intended carrier has not even managed to obtain an ‘in-principle’ or ‘acceptance of necessity’ approval from the MoD for its construction, as it continues to face quiet opposition even from within the navy. A cross section of senior officers continues to be focused on the largely unresolved debate of operationally pursuing a sea-denial strategy by deploying submarines and surface combatants, or alternately, seeking sea control via costly and asset-intensive CBGs.

These officers also question the financial effectiveness of investing in the IAC-2, projected to cost USD15–20 billion, at the expense of acquiring other much-needed equipment. This includes conventional and nuclear-powered submarines, ship-borne multirole and utility helicopters, mine countermeasures vessels, and multirole support vessels, among other varied platforms and force multipliers.

“CBGs entail an inordinately large number of surface and underwater escorts, which either the IN does not possess, or is seeking to replace or acquire but simply cannot afford,” one two-star IN officer told *Jane's*. The IN needs to prioritise between the IAC-2 and its other urgent requirements, for which the navy’s budget will need to be dramatically hiked, he said.

In February 2018 the MoD was allocated an outlay of INR2.793 trillion for fiscal year 2018–19 (FY 2018–19), which amounted to 1.4% of the country’s GDP, compared with 1.56% the previous year. Service officers said this was the lowest defence outlay since India’s 1962 border war with China, in which it came off worse.

The IN’s capital allocation for FY 2018–19 for new procurements and upgrades is INR208.48 billion, an outlay that has steadily declined in real terms since FY 2010–11, leaving the service with meagre resources for modernisation and new projects after defraying outstanding liabilities for previous acquisitions.

“The reduction in the IN’s financial allocation is in inverse proportion to its growing responsibilities in a deteriorating security situation in the IOR and adjoining seas,” said Amit Cowshish, the MoD’s former acquisitions advisor. This is bound to adversely affect the IAC-2 programme, he added.

The other two services, competing for a larger share of the shrinking military budget to make good their own long-deferred modernisation and equipment shortfalls, have dismissed the IAC-2 as an “overpriced indulgence”. They assert the CBGs are “operationally vulnerable”

to multitiered carrier-killer anti-access/area denial (A2/AD) anti-ship ballistic missile systems like the Chinese Dong Feng 21D (DF-21D), which has a 1,500 km range.

The principal opposition to IAC-2, however, emanates from the Indian Air Force (IAF), which claims that its SEPECAT Jaguar and multirole Russian Sukhoi Su-30MKI fighters, with long-range ordnance and supported by mid-air tankers, are capable of projecting power more economically and decisively than a carrier.

[Continued in full version...]

(995 of 3529 words)

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