IDSS PAPER

24 March 2026

Optimum Essential Force at Sea
Building Coherence in Indonesia's Naval Modernisation

Chong De Xian and Joseph Kristanto

RSiS S. RAJARATNAM SCHOOL OF INTERNATIONAL STUDIES
Nanyang Technological University, Singapore

RSiS 30

RSIS S. RAJARATNAM SCHOOL OF INTERNATIONAL STUDIES
Nanyang Technological University, Singapore
Ponder the Improbable since 1996

IDSS Paper
Ponder. Analyse. Prepare. Engage. Refresh.

www.rsis.edu.sg No.051– 24 March 2026

Optimum Essential Force at Sea: Building Coherence in Indonesia's Naval Modernisation

Chong De Xian and Joseph Kristanto

KEY TAKEAWAYS

- *Indonesia's naval modernisation faces the risk of fragmentation in the absence of stronger integration across platforms and systems.*
- *Naval capability is determined less by procurement than by effective force generation, sustainment and operational practice.*

COMMENTARY

Indonesia's plan to acquire the Italian aircraft carrier *Giuseppe Garibaldi* has attracted significant attention, with much of the discussion focused on the platform's practicality and utility. Yet the central issue is not the ship itself but whether Indonesia can transform such acquisitions into usable, sustainable naval capability. This question underpins the broader challenge of modernising the navy effectively.

Can the *Giuseppe Garibaldi* become part of an integrated naval force that delivers sustainable, operational capability for Indonesia? *Image source: Wikimedia Commons.*

This challenge is central to the evolution of Indonesia's defence framework under the "Optimum Essential Force" (OEF), which replaces the long-standing Minimum Essential Force (MEF) model. The OEF itself is the latest phase in Indonesia's long-term defence modernisation and part of a broader defence transformation agenda to produce a modern, self-reliant, technologically advanced military, supported by a strong domestic defence industry and mastery of key strategic systems.

For Indonesia, an archipelagic state with significant maritime responsibilities, the OEF's effectiveness will be evident not just in procurement but also in its ability to produce a maritime force structure that transforms new platforms into enduring naval capability; the OEF should not constitute modernisation driven merely by partnership or industrial opportunity.

Procurement Coherence

Indonesia's recent naval modernisation shows both ambition and diversity. The navy is expanding through foreign acquisitions, licensed production and domestically built vessels developed with overseas partners. This approach offers several advantages: it broadens diplomatic and industrial options, reduces reliance on a single supplier, and creates opportunities for technology transfer and local industrial development.

However, diversification alone is not a strategy. The key issue is whether procurement decisions contribute to a deliberate fleet architecture aligned with Indonesia's maritime requirements. A coherent force design requires clear role definitions for surface combatants, submarines, amphibious ships, patrol assets, naval aviation and supporting enablers in archipelagic defence.

Indonesia's recent experience highlights both the potential and complexity of this approach. The launch of the first domestically built Merah Putih–class frigate, KRI *Balaputradewa*, in December 2025 marked a milestone for indigenous shipbuilding. Similarly, the Scorpène Evolved submarine programme, under which construction of two submarines began at PT PAL last year following the signing of a contract with France's Naval Group, shows how foreign partnerships can support capability development and industrial advancement.

Nevertheless, these achievements also highlight an emerging challenge. Even before these recent additions to the fleet, Indonesia had already been operating more than 15 surface combatant platforms from a huge variety of suppliers, ranging from the former East Germany and Yugoslavia to the Netherlands and South Korea, each of which is equipped with distinct combat systems, sensors, communications architectures, and maintenance ecosystems. Without efforts to standardise and integrate these components, the fleet risks developing into parallel subsystems rather than a unified force.

The potential acquisition of the *Garibaldi* exemplifies this challenge. Even in a limited aviation-support role, a carrier must have a clearly defined place within a fleet structure. Without integration with the rest of the fleet, it risks becoming just an isolated platform rather than part of a coherent maritime force design.

Force Generation

Naval power relies not only on platforms entering service but also on the ability to crew, maintain, repair, supply and train on them to a standard that enables repeated deployment. Modern ships place sustained demands on personnel pipelines, dockyard capacity, spare parts management, technical expertise, training cycles and lifecycle funding.

The OEF's success depends on generating these less visible foundations of readiness, i.e., trained crews, predictable maintenance, reliable logistics, and the ability to routinely field deployable units. Without these foundations, even advanced acquisitions may result in only intermittent readiness.

The challenge is especially acute for Indonesia. Operating across a vast, dispersed archipelago requires more than nominal platform ownership; it requires institutional depth to maintain operational readiness across distance and time. Regardless of size or sophistication, a fleet that cannot be reliably deployed provides limited strategic value – as illustrated by the struggle the Royal Navy appears to have faced following the attack on the British base in Cyprus at the outset of the ongoing Iran war.

The acquisition of complex platforms such as the *Garibaldi* makes this challenge even more apparent. Such ships require specialised personnel, aviation support, and sustained maintenance and operational funding. The real test is whether Indonesia can sustain the manpower and support systems needed to ensure the ship's operational availability.

Operational Integration

The clearest sign of effective naval modernisation is not procurement announcements, but how new capabilities are translated into operational practice. A navy moving towards a more mature maritime force should increasingly show the ability to assemble and command multi-ship formations, coordinate across different mission sets, and conduct repeatable operations that combine surface, amphibious, aviation, surveillance and command elements.

At this stage, doctrine, command arrangements and operating procedures become critical. The main issue is whether platforms acquired through various pathways can be integrated into effective maritime operational patterns. The use of unmanned systems is another test of this integration.

Indonesia has already taken steps in this direction. Exercises involving multi-unit deployments and a growing emphasis on joint maritime surveillance show an awareness of the need for integration. The acquisition of 12 long-endurance ANKA drones reinforces this trend, as these systems are intended to enhance maritime domain awareness.

However, genuine progress is measured by how much such capabilities become embedded in routine operations. Unmanned systems provide strategic value not through novelty but through consistent use, such as cueing surface units, supporting interdiction missions and extending surveillance coverage.

Similarly, platforms such as the *Garibaldi* will only be meaningful if they are integrated into routine operational patterns. A platform that cannot be combined with other assets contributes little beyond being a prestige symbol.

Taken together, these three pillars – coherent procurement, credible force generation, and operational integration – are the key measures of effective naval modernisation. If the OEF is working, Indonesia's navy will be defined not by the number of new platforms, but by a fleet built on clear design, sustained readiness, and integrated operations.

Chong De Xian *is an Associate Research Fellow, and* ***Joseph Kristanto*** *is a Research Analyst, in the Maritime Security Programme at the S. Rajaratnam School of International Studies (RSIS).*

S. Rajaratnam School of International Studies, NTU Singapore
Block S4, Level B3, 50 Nanyang Avenue, Singapore 639798

Please share this publication with your friends. They can subscribe to RSIS publications by scanning the QR Code below.