GeoMaritime X Hegemonic Transtition

Andi Widjajanto

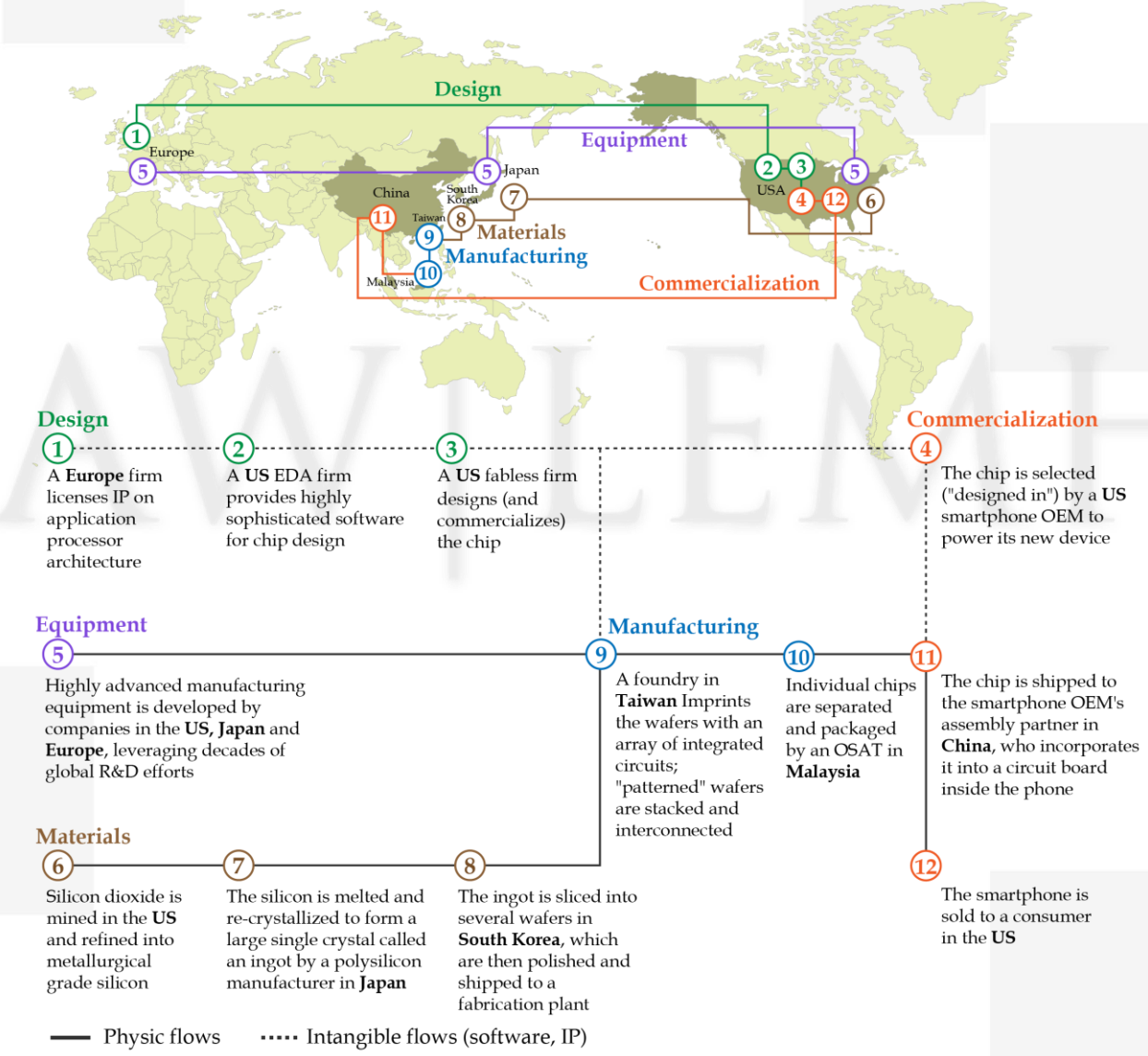
Geomaritime

Geomaritime Evolutions

15-17th Century	18-19th Century	20th Century	21st Century
Spanish, Portuguese & Dutch Empires	British Empire	United States of America	X
Age of Exploration	European Imperialism	Pax Americana	Global Connectivity
Finding new routes to trade Eastern goods	Gaining full political and economic control of other regions	Projecting power and exploiting maritime resources	Safeguarding global supply chain
Sailing Ship	Steam Engines	Internal Combustion Engine, Gas Turbine & Nuclear Propulsion	Digital Space

Sources: Various Literatures

Global Supply Chain: Semiconductor



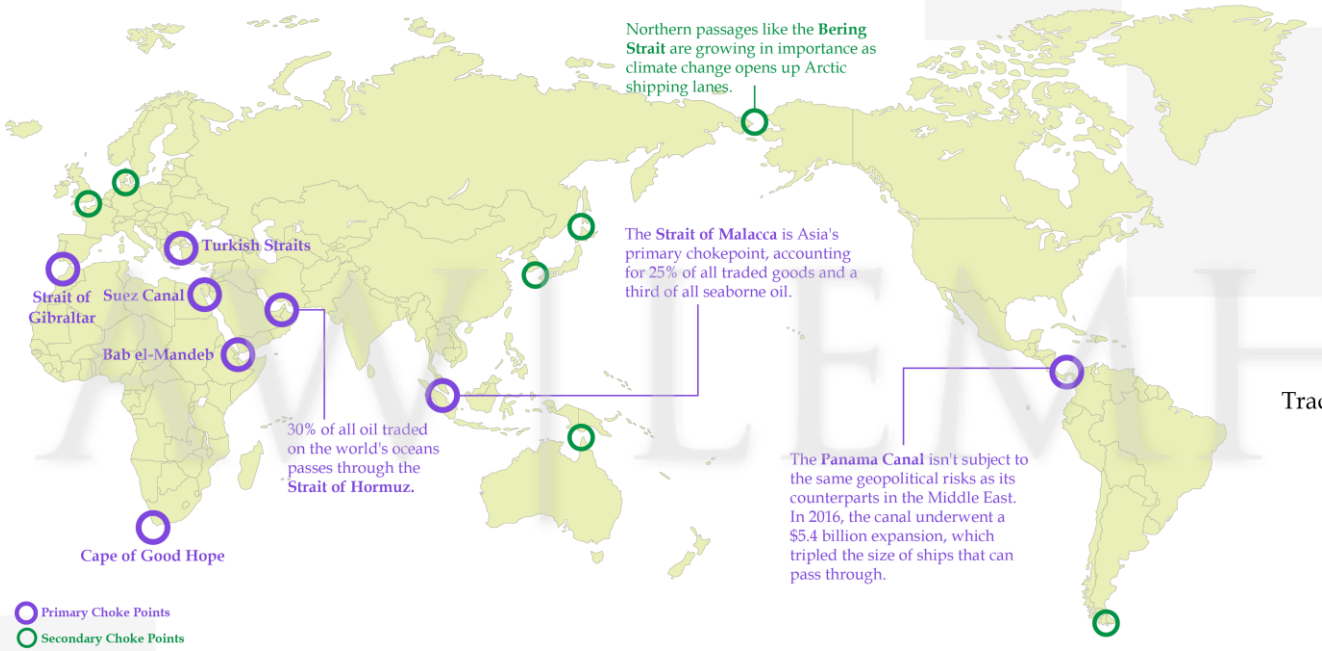
Sources: BCG and Semiconductor Industry Association

The graphic shows the **journey** of **semiconductor industry** that involves six major regions (US, South Korea, Japan, mainland China, Taiwan, and Europe) at different stages from the design to manufacturing process.

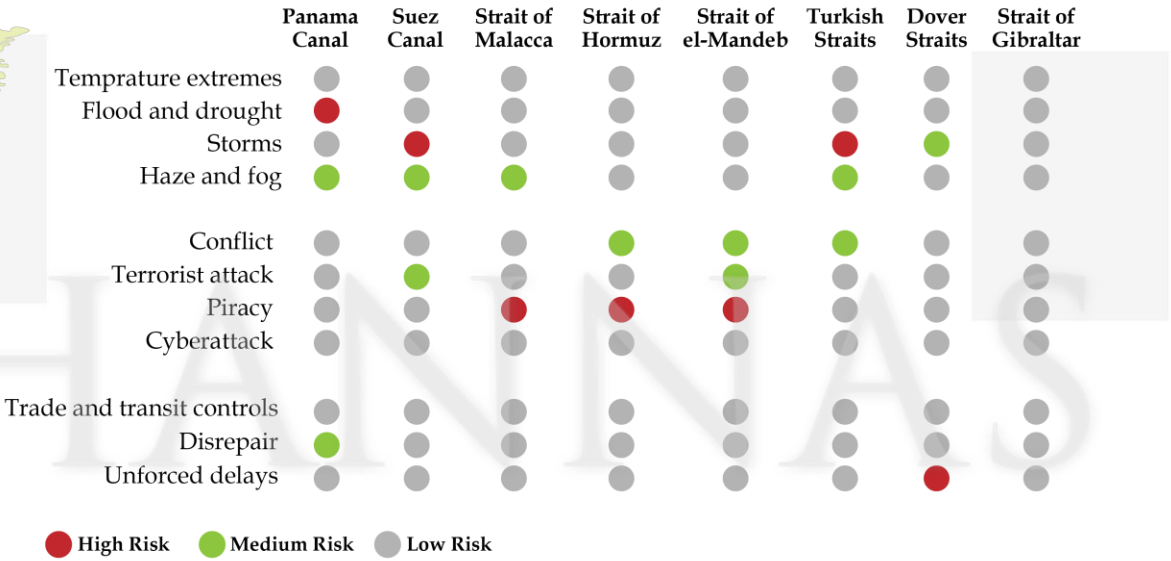
Despite the proximity to customers being an essential driver, there are **three additional key factors** influencing the global interdependent structure of semiconductor supply chain, such as global R&D networks, geographic specialization, and trade liberalization. In particular, global trade policies enable physical and intangible **flows** across semiconductor supply chain.

Global Logistics Risks

The World's Key Maritime Choke Points



Risks to Global Trade Choke Points

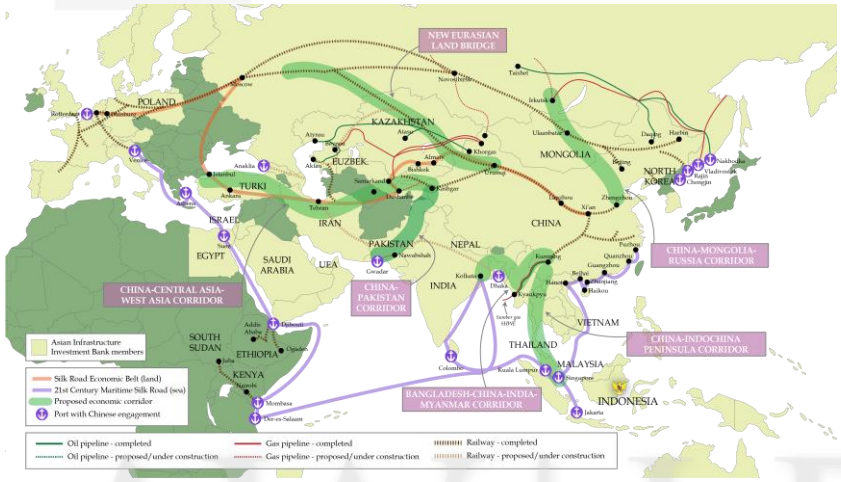


Approximately 80% of global trade is being **shipped by sea** which describes the **essential role** of **maritime transport**. Global Intelligence Services (GIS) identifies eight of world's major choke points. In the context of maritime trade, these are usually straits or canals located at strategic locations and have a high volume of traffic. In practice, these vital points pose several **risks**, both structural such as the recent Suez Canal blockage, and geopolitical risks. The data above represent threats at eight global choke points which vary in terms of type and degree depending on the location.

Sources: Adopted from Geopolitical Intelligence Services AG, Chatham House, and Visual Capitalist

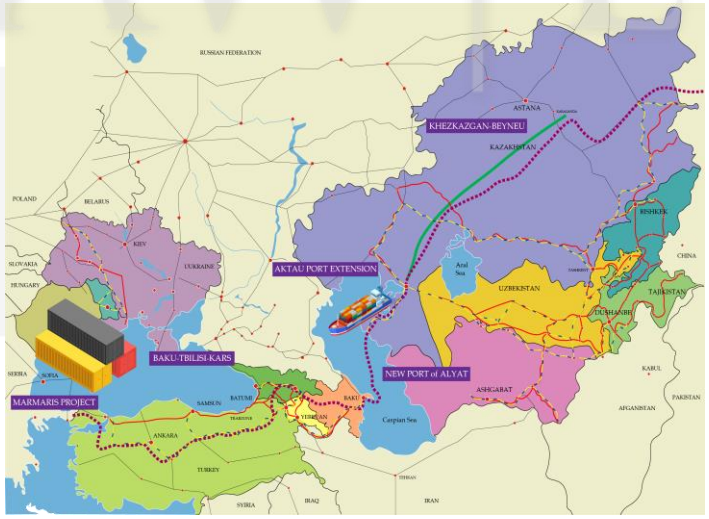
Global Connectivity Rivalry

Belt and Road Initiative (China)



Indo-Pacific Economic Framework (US)

Transportation Corridor Europe Caucasus Asia (European Union)



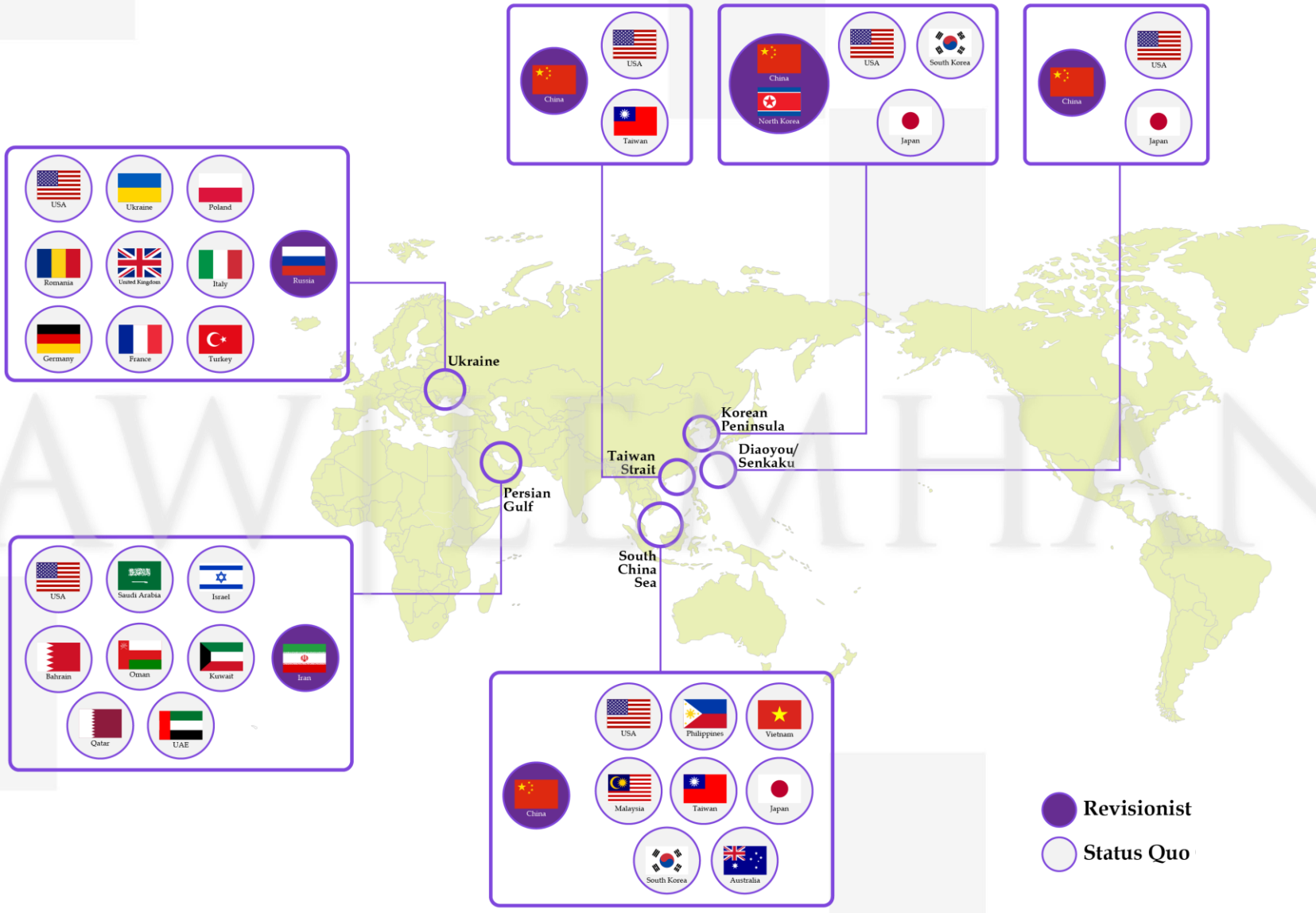
International North-South Transport Corridor (Russia)

A core component of global politics in this era lies on the competition of strategies for **connectivity**. Recent strategic **rivalries** between **U.S.** and **China** are an illustration of this competition. On its part, Beijing has initiated the **Belt and Road Initiative** (BRI) promoting infrastructure development and placing the country at the heart of Asian trade. On the other hand, the U.S. proposed an **Indo-Pacific Economy Framework**. The idea is to establish a solid regional economy by enacting structural reform in Asia-Pacific countries.

In similar vein, the operationalization of the multimodal International **North-South Transport Corridor** (INSTC) become an important strategy for **Russia** to adjust its logistics needs. INSTC may imply a major geopolitical change in the region as it competes with the previously **EU**-initiated **Transportation Corridor Europe Caucasus Asia** (TRACECA) in terms of connecting Europe to Asia.

Sources: Adopted from AMTI, Mercator Institute for China Studies, White House, Eurasian Development Bank, and TRACECA

Hegemonic Conflict Hotspot



Currently, there are six hotspot areas prone to become a locus for hegemonic conflict: **South China Sea, Taiwan Strait, Diaoyou/Senkaku, Korean Peninsula, Persian Gulf, and Ukraine**. These hotspot areas are mostly located in Asia with China acting as a revisionist power. The United States presents as a status quo power in all hotspots area. As a hegemonic power, the United States has interests to maintain its political, economic, and military predominance.

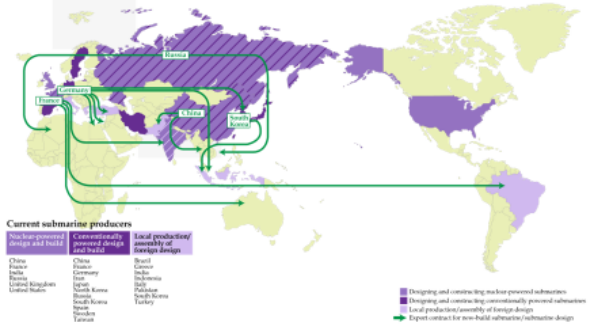
Sources: Adopted from LAB 45 (2022)

Global Trend: Submarine Development

Type of Submarine

Source: Adopted from IISS Military Balance 2021

Submarine Producers and Export and/or Licence-Production Contract

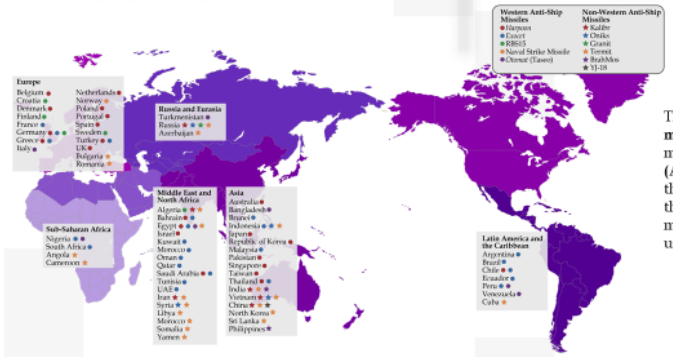


Submarine capabilities are an increasing focus of global competition. Submarine forces has a strategic role as a platform of **power projection** due to their potential for **clandestine activity** in contested maritime domain.

Moreover, submarines are arguably **the most complex naval platform**. The number of countries able to design and build modern submarines remains **limited**. However, several countries, including Indonesia, are in the process to develop their capacity to build submarines, through local production or assembly of foreign or collaborative design.

Global Trend: Anti-Ship Missiles

Operator of Major Surface-Launched Anti-Ship Missile

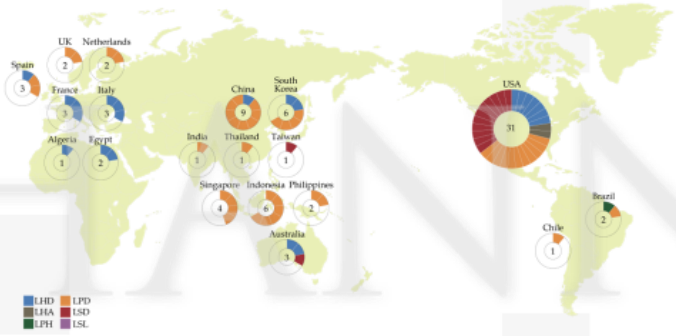


Source: Adopted from IISS Military Balances 2020

There has been a proliferation of **anti-ship-missile** capabilities in more countries. These missiles give states an **Anti-Access/Area Denial (A2/AD)** capability that is disproportionate to their cost and technical requirement. This means that states with a large supply of anti-ship missiles can easily disrupt important sea lanes used by more powerful navies.

Global Trend: Amphibious Ship

Global Principal Amphibious Ship Holdings



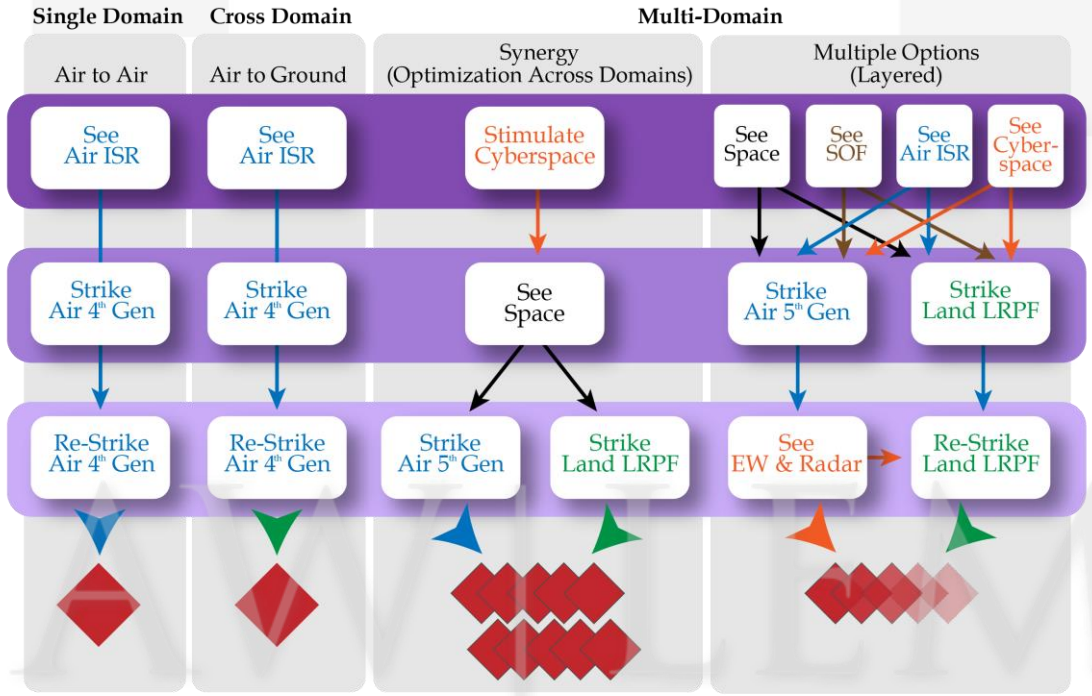
Source: Adopted from IISS Military Balances 2022

Amphibious capabilities provide a **versatile** and **responsive** force for crisis response and national defense. Amphibious forces can be deployed in a variety of mission profiles, including assault, raid, withdrawals, and support for other operations.

Contested maritime domains have increased the attractiveness of amphibious forces due to their ability to deploy and sustain forces in a wide range of areas. Furthermore, growing significance in disaster-relief missions further drives global ambition in amphibious capabilities.

Multi-Domain Operations (MDO)

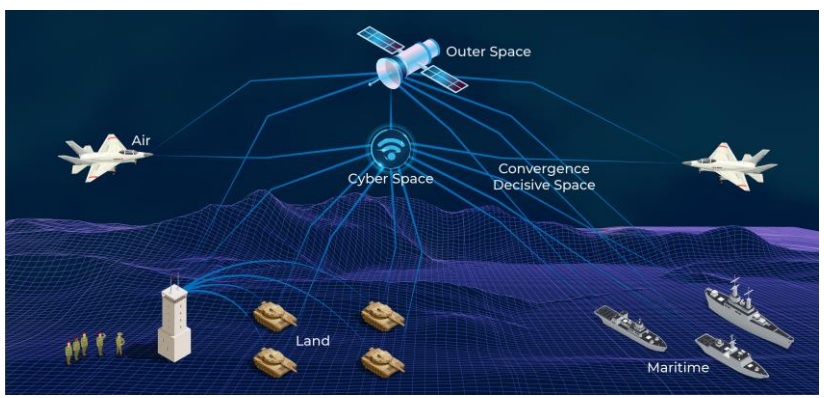
Military Operations Comparisons



Multi-Domain Operations propose solutions to solve the problem of a **layered standoff**. The central idea is the **rapid and continuous integration of all domains of warfare** to deter adversaries. If deterrence fails, the military **penetrates** and **disintegrates** enemy anti-access and area denial (A2/AD) systems; **exploits** the resulting freedom of maneuver to defeat enemy systems; and consolidates gains to force a **return to competition** on terms more favorable to our strategic objectives.

Sumber: Adopted from *US-Army TRADOC* (2021)

MDO Illustration



MDO Solutions

Compete — Penetrate — Disintigrate — Exploit — Re-Compete

Convergence

Compete (Forward Presence Forces)
- Enable defeat of information in unconventional warfare
- Conduct intelligence & counter adversary reconnaissance
- Demonstrate credible deterrent

Whole of Government: Diplomatic; Economic

Penetrate (Forward Presence & Expeditionary Forces)
- Neutralize and disintegrate key elements of long-range fires
- Contest enemy maneuver forces
- Maneuver from operational and strategic distances

National & District Level Forces: Information Warfare; IRBMs/SRBMs; Cruise Missiles; Cyber; Long-Range SAMs

Disintegrate (Forward Presence & Expeditionary Forces)
- Exploit disintegration of long-range fires
- Neutralize mid-range fires
- Conduct independent operational maneuver
- Conduct deception

Conventional Forces: SRBMs; Mid-Range SAMs; Long-Range Multiple Rocket Launchers

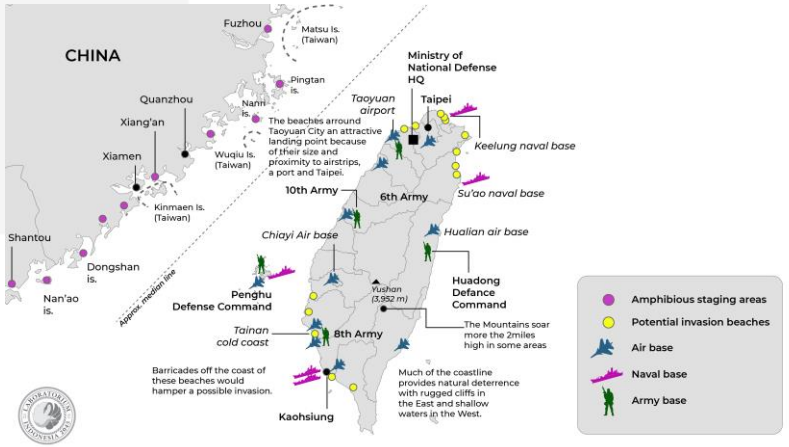
Eksploit (Forward Presence & Expeditionary Forces)
- Exploit disintegration of long-range fires and air defense
- Disintegrate medium-range fires
- Maneuver to positions of advantage
- Isolate and defeat enemy land forces

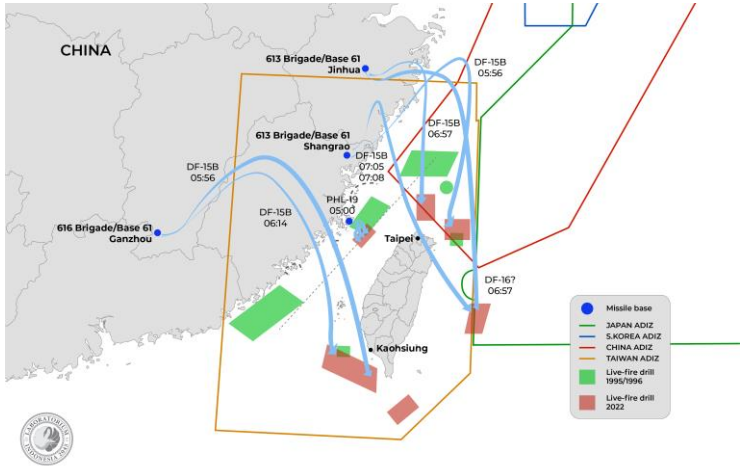
Conventional Forces: Maneuver; Short-Range Air Defense; Electronic Warfare; Counter-PNT, Cyber

MDO Implementation

Russia-Ukraine Conflict

Taiwan Strait Crisis

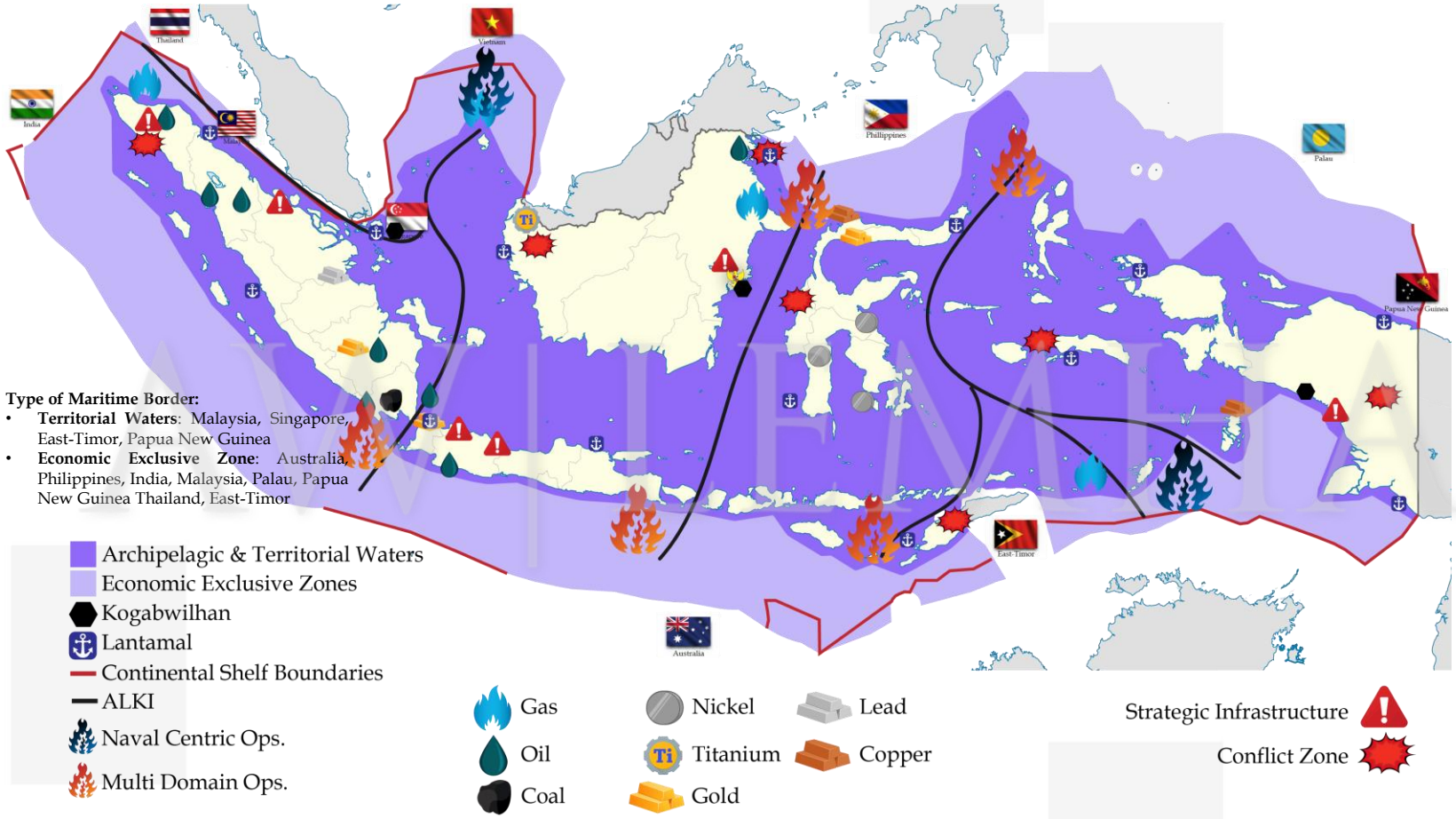




Penetrating and **disintegrating** enemy **A2/AD** systems is a key tenet of MDO. The Russia-Ukraine conflict and Taiwan Strait crisis clearly illustrate the MDO approach. Denying sea access is China's and Russia's priority to defeat their adversaries.

Maritime Challenges

Indonesia Maritime Boundaries

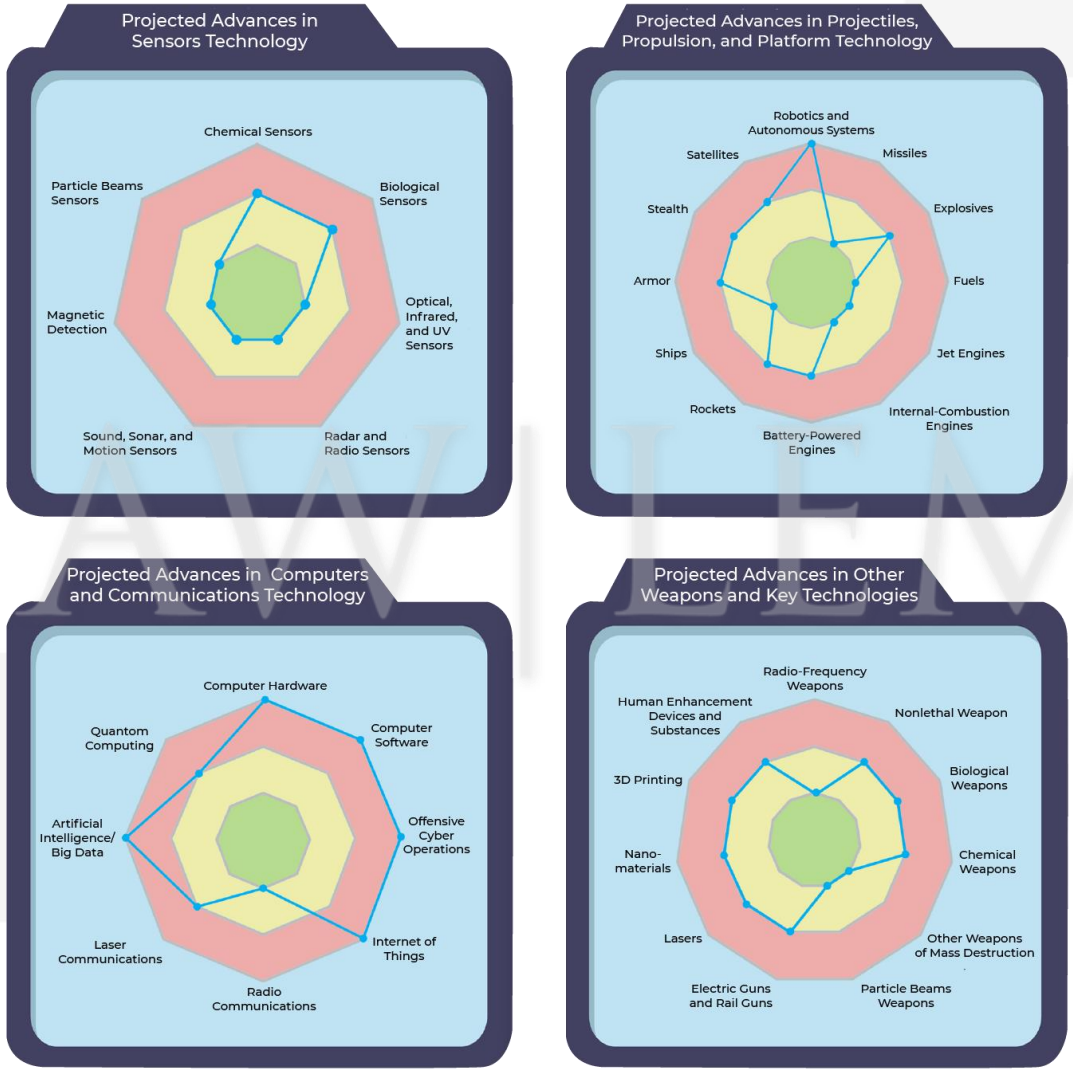


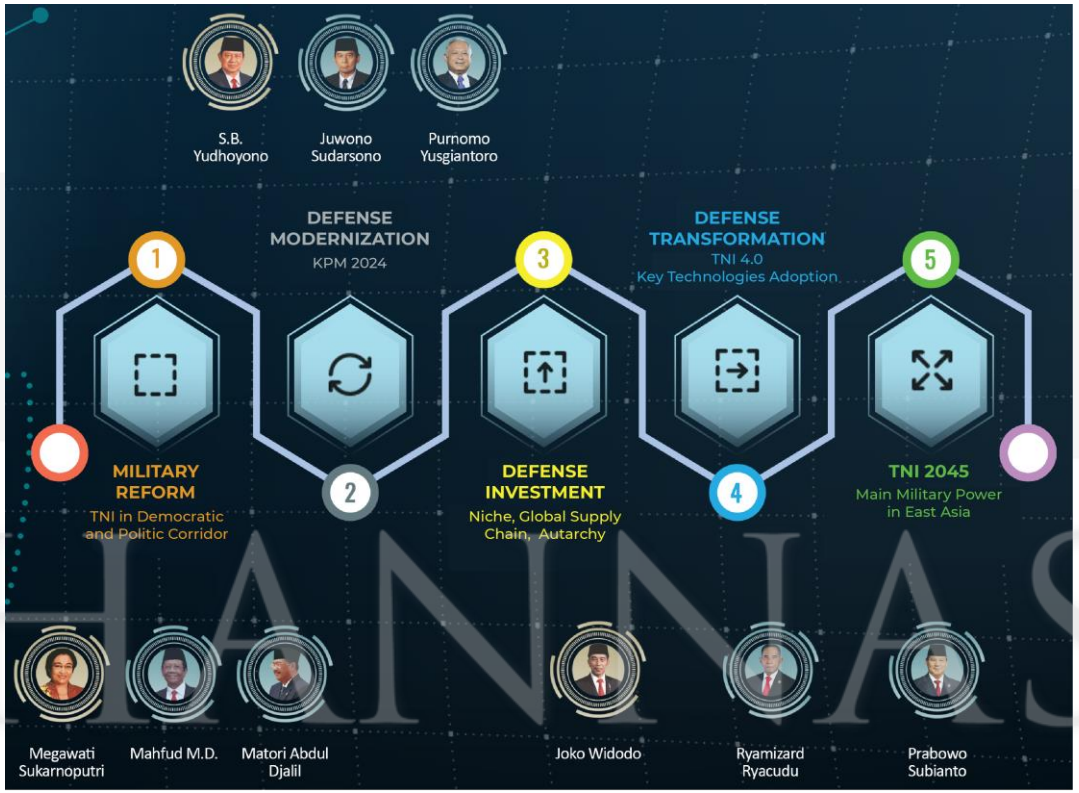
Geographical conditions and changes in the characteristics of threat pressure the defense paradigm to focus its transformation on **anti-access/area denial (A2/AD)** strategy. Securing national strategic infrastructures, such as capital city, natural resources exploration sites, and other vulnerable areas is a priority in this paradigm.

Defense strategy must be adapted to its surrounding terrain. **Choke points** requires a **multi-domain operations** strategy. On the other hand, the **open sea** call for a **naval-centric** strategy.

Defense Transformation

Moderate High Revolutionary





Development of **military technologies** ought to be a **priority** component for Indonesia's strategy to face **disruption** caused by **hegemonic war scenarios** and **revolutionary technological leaps**. Based on current projection, several sectors will experience technological disruption, such as artificial intelligence/big data, computer hardware, computer software, offensive cyber operations, the internet of things, and robotics systems.

In order to fulfill the vision of "Indonesia Defense Force" 2045, Indonesia **has passed** several stages. President Megawati has given the **foundation** for military reform in line with the establishment of the UU TNI. President Yudhoyono has prescribed Minimum Essential Force (Kekuatan Pokok Minimum) 2024 which becomes the **basis for defense modernization**. Finally, President Jokowi has encouraged **investment** in the defense area by passing the UU Cipta Kerja. Simultaneously, he also realizes defense transformation through the **adoption** of **the principal military technologies**.

Sources: LAB 45 (2022)


TANHANA
DHARMMA
MANGRVA