

Relocating Capital City to Nusantara Will Enhance Regional Shipping

V.L. FORBES & B.A. HAMZAH

Introduction

Indonesia's capital city of Jakarta experiences extreme amounts of rainfall that is exacerbated by climate change, regularly causing severe flooding. For example, in 2007, the city was flooded after torrential rains and a tidal surge submerged half the city under nearly four metres of water, displacing a million people and causing USD550 million in damage.¹ Floods have always plagued Jakarta, however, in recent years they have become more severe. Heavy rainstorms are also becoming more frequent and tropical cyclones have become more intense in South and Southeast Asia.

These problems have a long history. During the colonial period, the Dutch Administrators considered abandoning the city, then known as Batavia. Since 1945, successive Indonesian Governments had initiated plans to relocate the capital, however, these never came to fruition. Consequently, massive extraction of groundwater from aquifers beneath the city is causing Jakarta to sink. The day-time population of Greater Jakarta is estimated to be 20 million, which makes it one of the most

Professor V.L. Forbes (PhD, DLitt) is affiliated with the University of Western Australia; the National Institute for South China Studies, Haikou; Maritime Institute of Malaysia & CDiSS. He was a Merchant Navy Officer, cartographer, Map Curator and lecturer in nautical studies. His interests are in marine awareness and ocean governance and specializes in maritime boundary delimitation.

Professor B.A. Hamzah (PhD) is a Senior Research Fellow at the Centre for Defence and International Studies, National Defence University Malaysia in Kuala Lumpur; a founding Director-General of the Maritime Institute of Malaysia and has a special interest in geopolitics and regional security.

crowded cities in the world. Consider that the island of Taiwan has a population of 24 million and the island continent, Australia, a mere 23 million.²

At least 40% of Jakarta's residents tap into the city's aquifers, either because they are not connected to main water supply or, if they are, their fresh water supply is unreliable and deemed to be polluted. As they withdraw the underground reserves, the soil is compressed. Indeed, coastal Jakarta is sinking by 25cm annually according to the finding by Bandung Institute of Technology.³ The new capital city, known as IKN (Ibu Kota Nusantara), will therefore be located on relatively higher elevation. The rationale for this move is to ease the pressure on land utilization, create a better environmental quality to that being experienced, and reduce the population in the conurbation of Jakarta.

Ibu Kota Nusantara (IKN)

Located between the two East Kalimantan port cities of Balikpapan and Samarinda, the new city is named after the ancient name of the Indonesian Archipelago, i.e., Nusantara. The move of the capital will begin by gradually relocating all ministerial personnel and civil servants, with a target of complete relocation by 2045.

On 16 January 2022, Indonesia's Parliament enacted the *National Capital City Bill* into law indicating that the construction of the country's new capital was given the green light.⁴ Relocating the capital of Indonesia, presently in Jakarta, is merely to transfer the federal administration to an area between North Penajam Paser and Kuta Kartanegara regions in East Kalimantan on the Indonesian sector of Borneo Island. The location will be known as Nusantara (Ibukota Nusantara/IKN)) comprising a surface area of 2,561sqkm (Figure 1). The transfer of the capital, with an estimated cost of USD35 billion, is expected to commence during the first quarter of 2024 until 2027.⁵ Another objective of relocating the present capital is intended to boost the economy of eastern Indonesia and to reduce the welfare gaps that presently exist throughout the archipelagic State.

Figure 1. The locations of Jakarta and Nusantara in a Regional Context



Source: Nikkei Asia (2019)

Jakarta, the nation's present capital of about 700km,² is over-populated and has environmental vulnerabilities with complex urban development issues—i.e., overcrowding, daily traffic problems, flooding, pollution, and rising sea-levels. These issues have worsened during the past few decades. There are also defence and military strategic issues, and severe restrictions on Jakarta's port infrastructure development.⁶

The decision to relocate the capital was based on domestic considerations; however, there will be regional security implications that will potentially generate economic and environmental consequences. The move will require considerable resources—economic and human—constraining Indonesia's capability to deal with regional tensions and possible security threats. With increasing tensions in the Indo-Pacific region, the government must address these implications to mitigate any future security risk associated with the relocation. The security in the regional context concerns not only defence and military issues, but also economic security, environmental security, and the needs of the country with regards to ports, shipping, and domestic and international maritime trade.

In this brief study, we assess what the future holds for Tanjung Priok following the re-location of the capital city in the context of other ports within Indonesia's archipelagic waters, the development of the eastern sector of the country, and the ports within the region and the effects on the adjacent straits by the sheer volume of anticipated international maritime trade.

Indonesia's Ports and Shipping

During 2018, ships at Indonesian ports collectively loaded 310 million metric tonnes (mt; 1mt=1,000kg) of ship freight bound for international ports. This was a slight improvement after a steady decline from a high of 510 million mt in 2013. During 2018, total inter-island cargo unloading in Indonesia totaled 410 million mt of ship freight.⁷ Container port traffic in Indonesia during 2020 recorded 14 million 20-Foot Equivalent Unit (TEUs) representing a slight decline (14.76 million) from the previous year of 2019. Indonesia's Liner Shipping Connectivity Index (LSCI) was 34.91.⁸

The four major Indonesian ports serving international shipping are Balikpapan, Makassar, Tanjung Priok, and Tanjung Perak. In 2017, there were 636 ports in Indonesia, 29 of which were classified as main ports and 164 were termed as operating feeder ports located around growth centres in the provinces. Tanjung Priok has always been the busiest port in Indonesia and Palembang (a river port, Sumatra Island) is the least busy domestic and international port in the archipelago. Potential network expansion has commenced in earnest as infrastructure is established along identified locations along the coast of the eastern islands and main coastal cities and coastal towns in the eastern sector of the Indonesian Archipelago.⁹

It was generally acknowledged that Asia was, and still is, the world's largest regional economy, and its collective economic power was expected to grow as its component economies integrated more deeply with one another in innovation, trade, culture, and human migration mainly for job opportunities and enhancement of living conditions.

However, between late-2019 and mid-2022, there was a slight hiccup in trade and financing as the world, including Indonesia, was gripped and hindered by the Covid-19 pandemic and its associated issues.¹⁰ The pandemic, which initially brought global shipping to a virtual standstill, did not bode well for the industry as well as for national economies of many nations. Disruptions to loading and unloading operations, from dockers falling ill, Covid-19 restrictions, to unforeseen events like the shipping backlog, caused the blockage of the Suez Canal in March 2021 and other maritime accidents at sea. These events have only exacerbated the trend of progressive growth. Even China's impressive growth pre-2019-, with Chinese characteristics, was severely affected, especially in Shanghai, as late as mid-2022-.

Congestion at the ports of China and in the United States allegedly contributed to rising costs in freight rates in November 2021. Rates for 40-Foot Equivalent Unit (FEU) cargo containers tripled, while major ports in Vietnam and Thailand, and some ports in Indonesia and Malaysia, witnessed conspicuous growth in freight rate by up to USD3,000, a record high, according to industry analysts. Within the ports of Indonesia and Thailand the rate was around USD1,000 in May 2021. However, it was expected to rise to a high of USD5,000 for FEU during 2022.¹¹

Shipping companies had diverted some of their ships to serve distant routes to the detriment of the regional Southeast Asian ports and, by inference, several domestic traders and suppliers had been affected by the higher consumer prices. An alternate view suggests that rising freight rates are also a reflection of booming trade in the Southeast Asian region, energized by the regional demand for closer cooperation and a freer market policy. There are many ports in the regional context, so there are more options for traders to redirect their trade if one port is incapable of handling the traffic. The ports in the region are generally under normal operations and possess relatively high automation rates. ASEAN remained China's largest trading partner with a total bilateral trade of over USD800 million, a year-on-year increase of 20.6%.¹²

The development of the maritime sector based on the notion of ships promoting trade is one option for realising equitable development between the western and eastern sectors of Indonesia. The island of Java presently is the focus of attention because its industries and population are dynamic and highly productive. The concept of ships promoting trade prioritizes the procurement of port infrastructure and the opening of shipping lanes to create new trade routes, reduce logistics costs, and accelerate economic growth in the Eastern Indonesia Region.¹³ Indonesia's ambitions are to enhance its maritime status, via its 'Global Maritime Fulcrum' (GMF) policy, using the full length of its nearly 95,000km coastline and vast surface area of archipelagic waters and internal waters effectively and within the context of the *Third United Nations Convention on the Law of the Sea, 1982* (the 1982 Convention).¹⁴

Indonesia's meticulous definition of archipelagic baselines, delineation of archipelagic sea lanes and management of the marine environment are all in accord with the provisions of the 1982 Convention.¹⁵ Between 2015 and 2021, the government has undertaken practical and positive actions in port development and establishing aids to navigation within the sea lanes of communications. Under the GMF vision, all government agencies are

encouraged to work towards a single, unified aim to realize the benefits of the policy. If there is much to be done, it is not through a lack of political will but rather a lack of funds and foreign direct investments. No doubt, there are many external parties, notably Australia, China, and Japan, willing to advise and financially assist and physically partake in the enhancement of Indonesia's maritime industry.

Maritime infrastructure development and relocating the capital city are distinctive features of the present government's policies. Indonesia desires to be more competitive within ASEAN (the Association of South-East Asian Nations) but also globally by improving ports, maximizing the inter-island connectivity, and transforming the nation into a 'global maritime axis.' Indonesia's vision for its ports is to be efficient, competitive, and fully responsive to support domestic and international trade, as well as to promote economic growth and developments of the entire archipelago.

Indonesia's merchant fleet consists of 11,961 ships, totalling nearly 17 million of gross tonnages. With the adoption of the cabotage principle reserving ownership, management and operations of ships operating in Indonesian waters to nationals of Indonesia, almost 99% of domestic shipping is served by Indonesian-registered ships.¹⁶ Implementation of the cabotage principles has been a key factor of the growth of Indonesia's shipping industry. Indonesia ranks third in the world for the supply of all seafarers; 5th for ships' officers; and 3rd overall for ratings on board ships.¹⁷

The Indonesian Government enacted *Law No. 17 of 2008 on Shipping (Shipping Law)* to introduce the cabotage principles. This law generally requires that domestic maritime trade is undertaken by an Indonesian shipping entity, flagged in Indonesia, and crewed by Indonesian nationals. However, several exemptions to the restrictions have permitted the operations of foreign-flagged vessels to support certain activities in particular sectors, notably in offshore hydrocarbon exploration and extraction.¹⁸

Potential of Tol Laut Initiative

The development of at least 30 main commercial ports and nearly 1,600 collector or feeder ports are part of the 'Maritime Highway' (Sea Toll Road Initiative or *Tol Laut* in Bahasa Indonesia). It aims to enhance shipping lanes particularly in eastern Indonesia which are worth an estimated USD430 billion. An increase in shipping lanes (Sea Lanes of

Communication or SLOCs) will improve logistics distribution to remote, outermost and disadvantaged areas.

The Indonesian Government’s rationale is to reduce commodity prices and level-up the imbalance in trade between the eastern and western sectors of Indonesia. The government aims to assist local industries and create opportunities for the construction of all ‘state-owned vessels,’ including those in use in the oil and gas sectors and naval (military) purposes.

On a typical day, the number of ships in the Sunda and Karimata Straits and Sunda Sea is evident in Figure 2, which was captured on 11 August 2022 at 08:31:31 (UTC) – local time in Perth 1631 hours (Jakarta time 1531 hours). The image depicts the sheer volume of marine traffic within Indonesia’s western archipelagic waters at that moment in time.¹⁹

Figure 2. Ships transiting Western Indonesia archipelagic waters



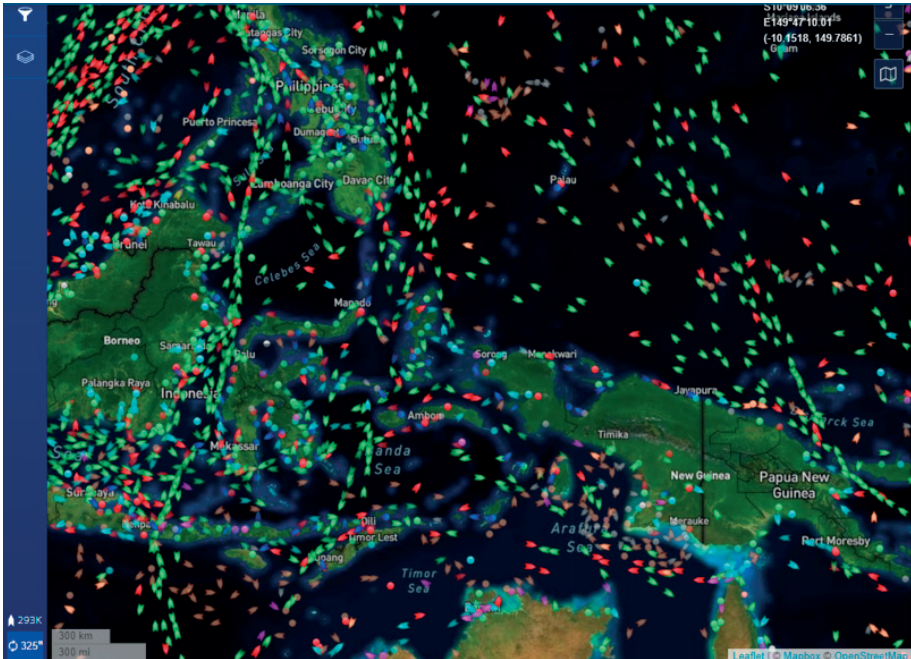
Source: Hellenic Shipping News Worldwide

Note: Each icon is a marine craft.

Figure 3 shows the number of ships and boats transiting the Lombok and Makassar Straits and the Sulawesi and Sulu Seas. The image of Figure 3 was captured a few minutes later, namely, at 08:33:30 (UTC) on 11 August 2022. Note: the images depict the vessels that have their AIS (Automatic Identifier System) transmitter switched on which is mandatory

by the International Maritime Organization. It is a well-known fact that many marine crafts switch off their AIS during a voyage for reasons best known by the Masters of the vessels—dry cargo, fishing, tanker and auxiliary craft—and even government and military ships—blatant disregard for the rule of international maritime law.

Figure 3. Ships transiting Eastern Indonesia’ seas and interconnecting straits



Source: Hellenic Shipping News Worldwide

As an exercise, a count was undertaken by one of the authors whilst studying and viewing the above and below images in real-time on *Live Ships Traffic*. It was noted that there were 20 ships north bound for the Lombok Strait from Port Hedland, Australia—stretched the entire north/south alignment of the Timor Sea (as shown in the lower left-hand corner in Figure 3). There were four south bound vessels. All 24 presumably engaged in the shipment of iron ore from Australia to East Asian ports. Within the Lombok Strait, at that instant of time, there were 44 ships and many smaller boats. Within the Sulawesi Sea there were at least 65 cargo vessels, and through the Sulu Sea about 45 cargo ships. Within the Sunda Strait there were 11 cargo ships and numerous ferry vessels on cross-strait inter-island voyages.

The country's ship-building industry, which has great potential, has a proven internationally recognized track record of constructing all types of vessels for a variety of purposes. There are approximately 250 shipyards in Indonesia with a production capacity capable of one million DWT (Dead Weight Tonnage) and about 12 million DWT per year for new ship repairs.²⁰ These shipyards collectively could capture a large slice of ship building, while about 80% of the global shipbuilding business is held by North-East Asian nations, such as China, Japan and South Korea.²¹

The Maritime Highway concept underscored by President Jokowi is for the strengthening of shipping lanes focused on eastern Indonesia (See Figure 3). The increasing number of shipping lanes to eastern Indonesia is expected to improve the distribution of logistics to remote, outermost, and disadvantaged areas. In addition, the Maritime Highway is also expected to enable the facilitation of commercial access from south Pacific countries to countries in East Asia.

Of the 18 Maritime Highway routes that have been operating up until 2018, only two routes had not served ports in Eastern Indonesia. Good connectivity between the two regions will ensure that development is equitably distributed, while maintaining Tanjung Priok (Figure 4) as a major port.²² What does this maritime highway (*Toll Laut*) vision hold for the port city of Jakarta?

Port of Tanjung Priok

Tanjung Priok, the port of Jakarta, demonstrated a positive performance and created some records during the first quarter of 2022. Indeed, a prediction made in 2020 stated there was an improvement in performance after a 5.13 per cent decline. Throughput, especially for cargo-laden containers, increased significantly, while productivity showed an improvement. There is an optimistic growth rate prediction of 13% as Covid-19 cases drop globally and the scarcity issue of containers and vessel space end.²³

To solve the overcapacity of Tanjung Priok and the traffic congestion in Jakarta's marine area from cargo transport, the Patimban Deep-Sea Port was conceived in 2015 (Figure 4). The sea port is at Subang, West Java and is located about 145 km from Jakarta City and nearly 70 kilometers from the Karawang Industrial Estate. The Deep-Sea Port comprises a surface area of 654 hectares, nearly 50% of which is allocated for intermodal

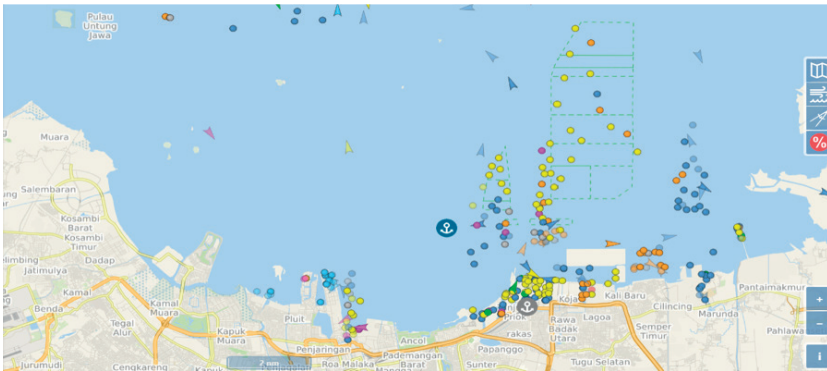
containers and vehicle terminals, while the remaining space will be used as a back-up area. The port development is expected to be fully completed by 2027. The Patimban Port will be Indonesia's primary export outlet. The port is managed jointly by Pelabuhan Patimban International (PPI) and the Toyota Tshusho Corporation, the trading arm of Japanese auto giant Toyota Motor Corporation.²⁴

Given that the establishment of the Patimban Deep Sea Port is relatively close to Tanjung Priok, it would be obvious that the two ports will be complimentary and, hence, the relocation of the capital of Indonesia will not affect the maritime trade to Java. However, if part of the country's economic growth and the future growth of Jakarta's port are considered, what does this relocation of the administrative complex (capital) mean for Jakarta as a whole?

A port development is also considered at Cilamaya on Java Island and east of Jakarta with a proposed railway link to Cikarang Dry Port (inland transport node). Once established, the Port of Cilamaya, and for that matter, other ports in the development stages of the eastern sector of Indonesia, will undoubtedly capture some of the trade that would have been destined originally for Tanjung Priok. At this early stage it would not be wise to make a prediction of the volume of trade, nor indeed, the number of ships that will cease calling in at Tanjung Priok. However, West Java will still attract much attention from developers, manufacturers, and international traders.

The move of the capital city may reduce the population of Jakarta by a fraction initially, however, its present status as a megacity of approximately 11 million people will ensure that it will remain a key urban center of Java Island and of the nation. The city will continue to be the cultural and financial center of the nation. According to the 2022 national census, Java (the island) has a population of 152 million or about 56% of Indonesia's population of 271 million.²⁵

Figure 4. Marine Craft at Tanjung Priok, Jakarta, 8 June 2022 at 15:35:56 WAST (07:35:56 UTC)

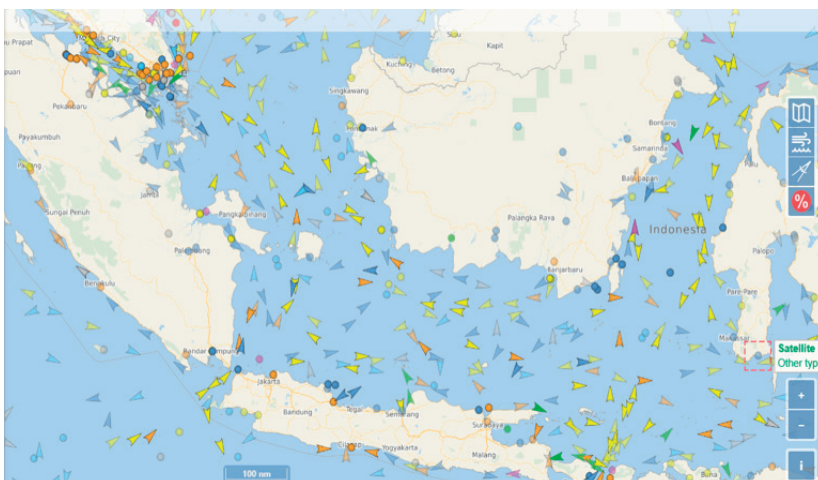


Source: Vessel Finder online.

Note: The scale bar for this map represents 2M.

About 60% of Indonesia's GDP (Gross Domestic Product) is concentrated on Java Island, with Jakarta contributing to one-fifth of Indonesia's GDP. The GDP in Indonesia was worth USD1,186.09 billion in 2021 according to official data from the World Bank. The justification for relocating the capital to East Kalimantan, according to the government, is to encourage greater investments to Indonesia's outer lying provinces, especially those towards the east of the country (Figure 5).

Figure 5. Ships in the Java Sea and Straits of Karimata and Makassar on 8 June 2022, 15:45:00 WAST



Source: Vessel Finder online.

Note: The scale bar for this map represents 100M.

According to *Statista*, Maritime transportation contributed IDR50.36 trillion (equating to over USD3,397 million) and waterway transportation contributed IDR16.15 trillion to the GDP. In 2021, preliminary figures showed that the GDP from road transportation in Indonesia was IDR407.34 trillion, showing an increase of around IDR26 trillion from the previous year. Comparing to other segments of Indonesia's transportation and warehouse industry, air transportation showed the highest decrease of around IDR9 trillion from the previous year.

Although there are at least 160 port facilities throughout the Indonesian Archipelago, nine of which are dedicated container ports, the lack of development in the nation's maritime infrastructure has been a crucial factor in the country's high logistics costs. Dwell time (ship's stay in port) in the country's ports, specifically at Tanjung Priok, which handled nearly 66% of all shipments, stood at seven days in 2014, which on international standards was excessive. However, in recent years, there has been an improvement in dwell time because of digitalization and relatively efficient cargo handling capacity and clearance of cargo at the port.

Such delays reduced the competitiveness of export-orientated industries throughout Indonesia, and the resulting bottlenecks at the port affected the costs for domestic businesses, and in turn, the prices paid by consumers. To compound the problems, worsening traffic surrounding the port area added to the already dire traffic conditions in the Greater Jakarta region.

Compared to the competitiveness of adjacent countries, the logistic costs of Indonesia constitute about 30% of GDP which is significantly higher than that of Malaysia (17%), Thailand (16%) and Singapore (15%). The seemingly inadequate performance of Indonesia's logistics system was preventing the nation from fully participating in the global production network. Developing much needed infrastructure was therefore vital for tackling regional disparities, the uneven distribution of the population throughout the archipelago and for making the country more cohesive.

Seizing the Initiative

In 2014 the Indonesian Government announced major policies that focused on infrastructure development, including transforming Indonesia into the epicentre of Indo-Pacific maritime activity. However, unless the

Indonesian Government boosted economic growth outside of the islands of Java and Sumatra, maritime infrastructure would have a limited impact in the areas that the development and economic policies were trying to connect.

Indonesia's logistics sector, pre-Covid pandemic, recorded strong double-digit growth due to the continuous development of the Indonesian economy that was driven by resilient domestic demand. Strong private consumption growth, higher trade growth, lower external financing costs, a depressed oil price (in 2019), and infrastructure development were the impetus that drove Indonesia's logistics industry forward.

Nevertheless, Indonesia's logistics performance in international rankings remained weak. The World Bank's latest Logistics Performance Index (2014) had Indonesia in 53rd place (out of 160 countries), well below its Southeast Asian neighbours: Singapore (5th), Malaysia (25th), and Thailand (35th).²⁶ At 24% of GDP, Indonesia's logistics costs are significantly higher than most other countries in the region. It is important for Indonesia's logistics sector to adopt a more integrated approach that ensures efficiencies across the entire supply chain. The Government of Indonesia appears to be taking steps in the right direction.²⁷

For example, infrastructure development and ambitious expenditure plans amounting to tens of billions of dollars for the construction of 3,600 km of new roads, 15 new airports, 24 new seaports, 3,258 km of railway network expansion, and for the improvement of public transportation in 29 cities were outlined in 2016. Positive developments for the marine transportation industry that include using ships as the primary means of lowering logistics costs within the nation are proposed.

In January 2022, an announcement was made that the Indonesia Government will build a new container port in the Batam Free Trade Zone and a Free Port at Tanjung Pinggir, Sekupang Sub-district.²⁸ The development area will cover 94 hectares but may increase to around 330 hectares through reclamation. Herein is a problem in the making if the surrounding wetlands and mangroves are not protected in a sustainable manner. This port is envisaged to be larger than Tanjung Priok. DP World (Dubai Port World) will use its world-class technology and best practices to develop new port terminals and assets that will enable greater shipping efficiency and enhance inter-island and international connectivity.

Port Developments for Eastern Sector of Indonesia

As early as 2005, the then Government of Indonesia requested the Asian Development Bank for a loan to expand and improve port facilities at Balikpapan, East Kalimantan, and Jayapura at Papua. The proposed projects comprised two major components: (1) ports construction and (2) capacity building. The development at Balikpapan included the Kariangau container terminal and the Kariangau Industrial Park on a 2,000 hectares complex. The development at Jayapura Port was to extend the existing wharf facility and to rehabilitate the port operation in phases.²⁹

To the north of Balikpapan, the port of Samarinda, additional infrastructure development on the current five cargo terminals will enable the handling of up to 630,000 TEUs (Twenty-foot Equivalent Units) of containers annually. Ships traversing the Lombok Strait usually travel through the Makassar Strait located between Kalimantan (Borneo Island) and the island of Sulawesi. The distance is approximately 600 M in length and 12 M in width. The average annual unique voyages in the Lombok Strait amounts to 29,850, which equates to about 83 ships per day. This is far less than the number of ships passing through the Straits of Malacca and Singapore daily.

The planned developments of eastern ports are long-term initiatives that are in-keeping with Nusantara's expansion, integration, and growth. The ports along the east coast of Kalimantan will become a Main Port Network.³⁰

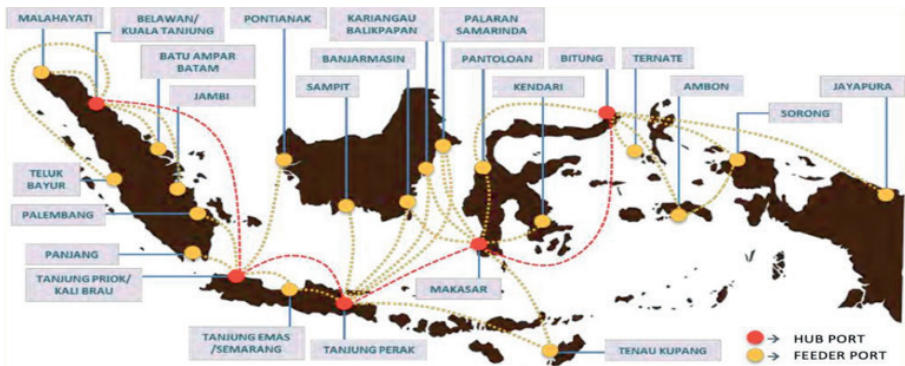
According to the Port Planning and Development initiative, there are more than 2,000 ports comprising 111 commercial ports (that includes 29 strategic ports) and 1,129 non-commercial ports. There are more than 800 special terminals and dedicated private ports for industries such as mining, oil, gas, and chemical industries. There are 33 main ports, 217 collector ports and 990 are termed feeder ports. On past performances, in terms of revenue generated by ports, the ports of Java accrue a greater share followed by the ports of Sumatra (Sumatera). The ports of Kalimantan generated about 25% of that garnered by Java, whereas the ports of Papua accrued about 50% of Java's income.

Prospects Ahead: For Indonesia

The prospects for marine transportation in Indonesia are positive. By 2030, container logistic handling for the domestic sector is estimated to be 18 million TEUs; for the international component, it will be more than 29 million TEUs, equating to over 47.7 million ETUs. Dry bulk cargo handling is estimated to be 960 million tons, liquid cargo is about 413 million tons and general cargo is more than 290 million tons. However, there are issues that are often raised regarding the process of shipping goods from the point of production to the destination—the consumer, which remains high. The cost component includes haulage charges, documentation fees and associated delays in processing, and terminal handling payments with the potential of bribery to get prompt responses.

In addition, there is the performance of loading and unloading services that, when compared to other competitive ports in the region, are low in productivity and efficiency. The effectiveness of *Tol Laut* (Maritime Highway) has been hampered by irregular schedules for ship arrivals, lack of transparency regarding quotas and loading priorities. A less competitive market structure also encourages high prices in destination areas, especially in the hinterland. To raise the effectiveness of the programme, the government must build the capacity of governance and supervising goods to increase the transparency of quotas and loading priorities, and to develop new region-based economic activity centres in Eastern Indonesia.³¹

The major ports in Eastern Indonesia are: (1) Tenau/Kupang; (2) Bitung; (3) Pantoloan; (4) Makassar; (5) Ternate; (6) Ambon; (7) Sorong; and (8) Jayapura (See Figure 6). The development of ports in Eastern Indonesia could be analyzed through the shipping capacity at these ports. The shipping capacity of these ports cannot be ascertained immediately from the depth of the draft due to several reasons—i.e., inadequate quality of dock infrastructure, low efficiency in equipment handling, and lack of shipping demand from the market.

Figure 6. Hub and Feeder Ports of Indonesia in 2015: More Ports Are Planned

Source: BAPPENAS, 2015.

What are the geostrategic implications, if any, for Indonesia and the regional states, near and further afield? Will the relocation affect the maritime trade within the Straits of Malacca and Singapore and indeed within the Straits of Makassar and the Sulu and Sulawesi Seas? The new capital, although administrative in concept, will be located relatively close to the ports of Balikpapan and Samarinda, both on the western side of the Strait of Makassar, which connects the Java Sea and Sulawesi Sea.

Prospects Ahead: For Malaysia

Malaysia's Sabah ports, such as Sandakan, Tawau and Kudat, are set to play a major role in catering for future needs and driving the nation's economy according to an announcement that port infrastructure will be developed with larger capacity handling to attract trade. These ports are over 30 years old, hence, there is a need to upgrade and enhance port efficiency.³² Seaborne trade between Eastern Sabah with neighbouring countries, such as the Philippines and Indonesia, China and Japan, were expected to grow.

Such bright and positive outlooks may be dampened by the fact there is a prospect of a seafarer shortage. The Covid-19 pandemic has forced up to 400,000 seafarers to work beyond their contracts due to the barring of crew changes by governments. They are also denied basic human rights such as healthcare. The extent to which the industry is facing a shortage of seafarers both now and in the future is a matter of concern. For example, nearly 15% of international seafarers presently are either

Russian or Ukrainian nationals. This fact may change in the years to come. Even larger proportions are from the Philippines, India, Bangladesh, China, and Indonesia.

Potential Effects on Straits of Malacca and Singapore

Collectively, the Straits of Malacca and Singapore have about 70% of global maritime transport transit annually.³³ Regardless of any diminishing or increase in status of cargo handling (throughput) at Tanjung Priok and the relocation of the capital city of Indonesia, it is unlikely that there will be any significant change in the above-named Straits. These Straits are crucial for global commerce as are the Sunda/Karimata, Lombok and Makassar Straits to a slightly lesser extent, but nevertheless, just as important. Naturally, the Makassar Strait will increase in importance if the ports along the east coast of Kalimantan are enhanced and attract more maritime growth (See Figure 7).

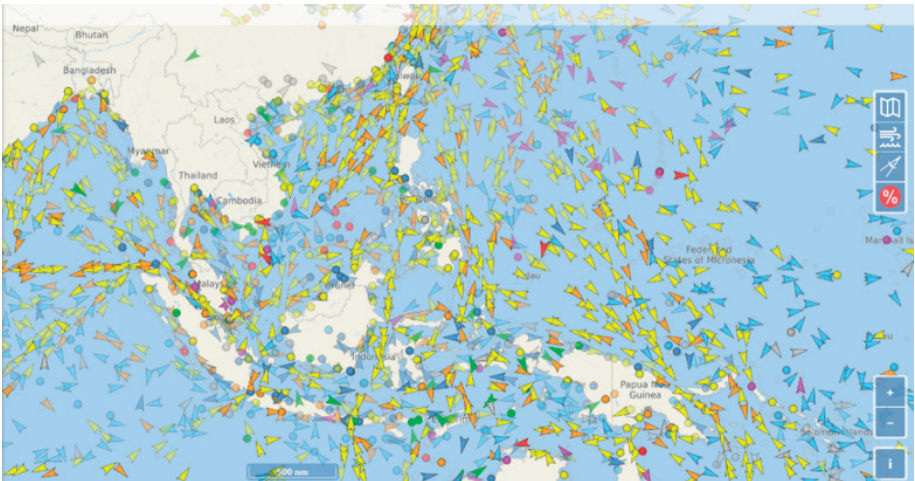
Naturally, the anticipated growth in maritime trade within the Indonesian archipelagic waters and adjacent seas of Southeast Asia will attract attention to armed robbers, pirates, terrorists, and cyber attackers and financial scammers based on past experiences and historical records. The *One Belt, One Road* (OBOR) initiated by China is intended to boost maritime trade and bring economic prosperity to Southeast and South Asia (and perhaps further afield); however, there are geopolitical implications based on the mutual respect and trust of all parties and countries within the region, and of course, the international community.

The Sunda Strait remains an important waterway for ships travelling by the Cape of Good Hope, the route from South Africa to East Asia, as well as for vessels sailing from Australian ports to Southeast or East Asian destinations. The Sunda Strait is relatively deep in its western approaches, but the depth decreases towards its eastern approaches with irregular bottom topography. Unlike the Straits of Malacca and Singapore, which is about 1.3M at its narrowest point at the Philips Channel, the Sunda Strait is much broader, about 13M wide at its narrowest.

However, the Sunda Strait is less convenient than the Straits of Malacca and Singapore as it contains many navigational hazards: strong tidal flows, sandbank formations along the waterway, a live volcano, poor visibility during squalls, and the existence of numerous oil drilling platforms and small islands and reefs which may disrupt safe navigation. Annually, about

2,280 ships transit the Sunda Strait carrying in total some 100 million tons of cargo valued at USD5 billion. The ships must travel from the Indian Ocean through the Java Sea, which is linked to the South China Sea. Figure 8 illustrates the location of the Straits in the context of the South-East Asian region. The map also appears to show the delimited maritime boundaries and the 200-M arcs representing the Exclusive Economic Zones claimed by the littoral States of the region.

Figure 7. An overview of maritime transport in the greater SE Asian region. Image of 8 June 2022 at 15:42:17 (WAST) or 07:42:17 UTC. The scale bar represents 500M.



Source: Vessel Finder online.

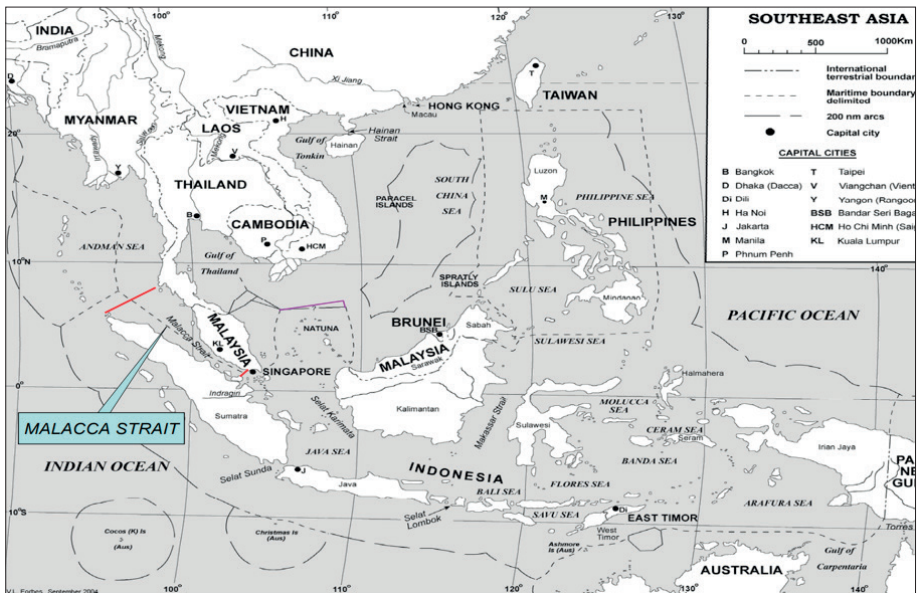
Note: in the three images sourced from *Vessel Finder*, the icons represent ships, including cargo ships, tankers; auxiliary, fishing boats, and passenger. The arrow heads represent the direction the ship is heading, and the circle is the ship at anchor or at berth in a port.

As shown in Figure 8, the Straits of Malacca and Singapore (SOMS) are still the best options for ships (especially tanker transportation) plying between the Indian and Pacific Oceans.³⁴ At present, the Straits are better surveyed and reliable charts are (readily) available for *bona fide* mariners. There are existing reliable aids for navigation, both visual and electronic: readily available emergency response systems, an Electronic Maritime Highway, excellent support facilities for shipping, including crew changes (notwithstanding, the problems inherent with the Covid-19 Pandemic between 2019 and mid-2020), port facilities, bunkering opportunities, ship repairs and transshipment.

Apart from the Under-keel Clearance (UKC) limitations, a 3.5-metre clearance for all ships, deep-draught vessels—especially, east bound traffic

from the Indian Ocean region, the voyage via the Straits of Malacca and Singapore offers a shorter distance. For example, a ship travelling from Aden (Yemen) to Yokohama (Japan) at a steady speed of 12.5 knots: (1) via Malacca Strait will take 21 days and 19 hours to cover 6,535M; (2) via Sunda Strait will take 23 days and 21 hours to cover 7,165M; and (3) via Lombok Strait will take 25 days and 4 hours to cover 7,549M.

Figure 8. South-East Asian Regional Seas and Actual and Potential Maritime Boundaries



Source: Map prepared by V.L. Forbes (2004), the present author. (Also Cited in Xiaobo Qu and Qiang Meng)

A knot is a unit of measurement of speed for marine crafts. Thus, 12.5 knots speed represents 12.5 nautical miles (M) covered in one hour. One nautical mile is equivalent to 1,852 metres. The voyage via the Sunda Strait will entail using the Strait of Karimata, whereas the voyage via the Lombok Straits involves transiting through the Strait of Makassar. The advantage that the Lombok option offers is its deeper water for navigation. Annual tanker traffic via the Malacca Strait is about 35% of global tanker trade.

Summary

The relocation of the capital city will be the catalyst to enhance the process of inter-regional connectivity and thereby improve inter-connectivity within the Archipelagic State. Human resources will be required to realize the dreams of the planners and policy makers. However, whether there will be an actual reduction in the population of the suburbanization of Jakarta is open to debate, as it is possible that many government personnel may still retain their Jakarta residences despite having accommodations at the new capital city. The commercial and business communities may also wish to seek similar benefits and privileges, perhaps placing greater pressure on the land and government's well-intended policies for re-locating the capital city.

Connectivity remains a major problem in Indonesia Government's efforts to accelerate the development of Eastern Indonesia. Maritime connectivity is essential to the archipelagic state and the region where goods, financial investment, trade, and people can flow relatively smoothly without hurdles to enhance trade, investment, and socio-economic growth.

An efficient maritime transportation system is one of the key prerequisites for the economic development of provinces in Eastern Indonesia. A positive attitude and political will in relocating the capital city without delays will assist in the development of the eastern sector of Indonesia and improving the welfare and economic activities of the Indonesian people. It will also ease the pressure of land use in Jakarta and improve the environmental conditions in western Java. Maritime trade within the Straits of Malacca and Singapore will not be adversely affected by any downsizing of activities at Tanjung Priok. Indeed, the development of the eastern sector of the Indonesian archipelago will probably enhance shipping within the regional seas, all things being equal.

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