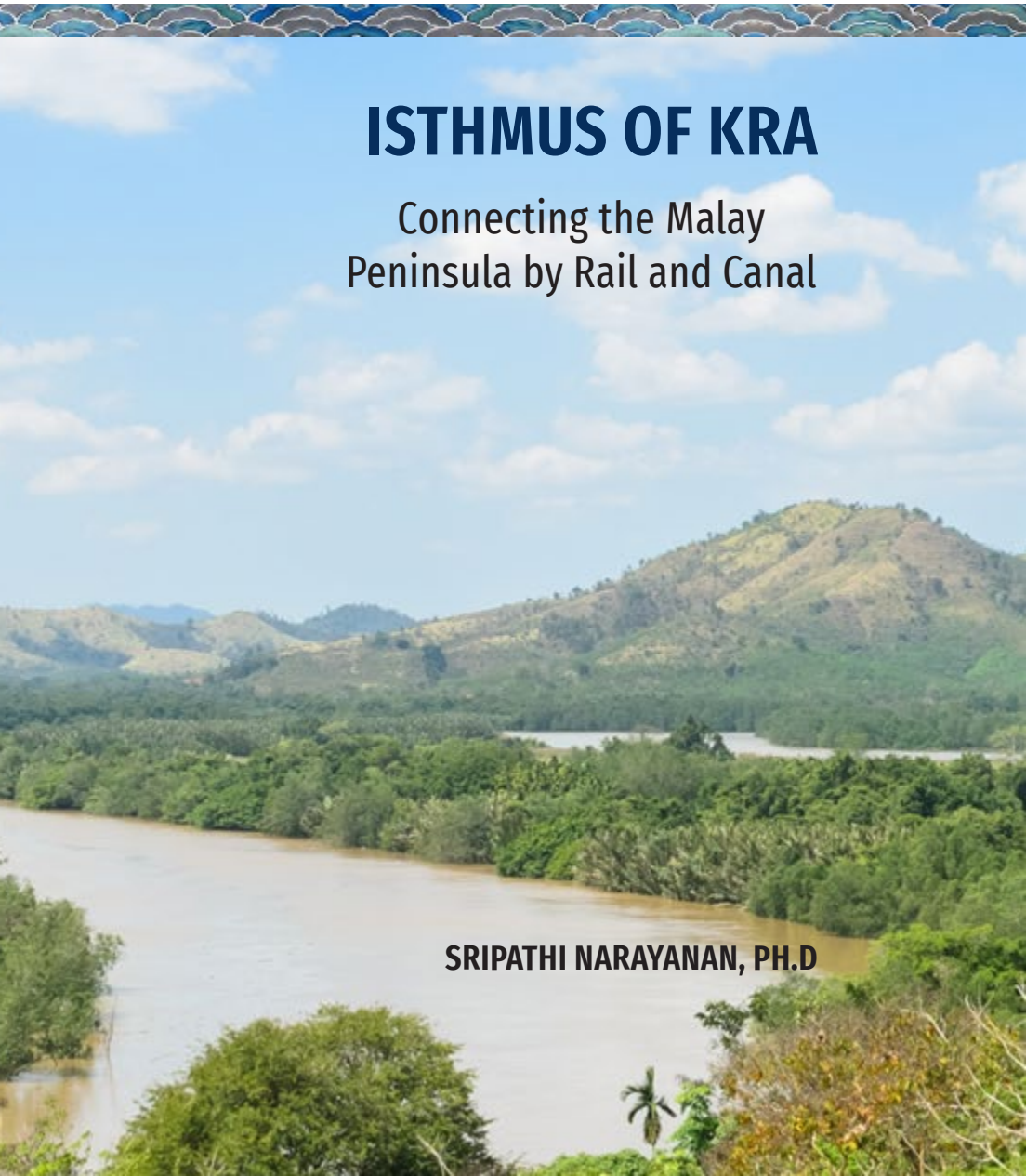
Indian Council of World Affairs

SAPRU HOUSE PAPER

ISTHMUS OF KRA

Connecting the Malay Peninsula by Rail and Canal



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The Indian Council of World Affairs (ICWA) was established in 1943 by a group of eminent intellectuals led by Sir Tej Bahadur Sapru and Dr. H.N. Kunzru. Its principal objective was to create an Indian perspective on international relations and act as a repository of knowledge and thinking on foreign policy issues. The Council today conducts policy research through an in-house faculty as well as through external experts. It regularly organizes an array of intellectual activities including conferences, seminars, roundtable discussions, lectures and brings out a range of publications. It has a well-stocked library, an active website, and publishes the journal India Quarterly. ICWA has over 50 MoUs with international think tanks and research institutions to promote better understanding on international issues and develop areas of mutual cooperation. The Council also has partnerships with leading research institutions, think tanks and universities in India.

Isthmus of Kra
Connecting the Malay Peninsula by Rail and Canal

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ABSTRACT

The Isthmus of Kra, which acts as a land bridge that connects the Malay Peninsula with the rest of continental Southeast Asia has been at the centre of two connectivity networks. The first is a canal cutting across the isthmus, thereby connecting the Andaman Sea and the Gulf of Thailand. The second is the Singapore-Kunming Rail Line (SKRL), which is aimed at providing rail connectivity within the continental part of Southeast Asia, with Kunming, the capital of Yunnan Province of China. Both these connectivity networks have been in the pipeline for many years. This paper analyses the progress that has been made in both these networks and the implication of the same on the region. The paper also examines the implications of these two connectivity networks in the context of the larger Indo-Pacific Region (IPR). Of note here is the potentiality of both these two communication networks increasing the level of economic and people to people contact, which in turn would be reflected on the influence of China upon the nations of Southeast Asian.

Keywords: Kra Canal, Singapore-Kunming Rail Line (SKRL), ASEAN Connectivity Master Plan (MPAC), China

INTRODUCTION: BY SEA AND BY LAND

The Isthmus of Kra, which serves as a land link between the Malay Peninsula and mainland Southeast Asia, is to be seen as a shared geographic space with an overlapping and interconnected history, civilisational linkages, trade ties, and political legacy. The geographic location of this region which covers much of continental Southeast Asia and the adjoining sea lanes of communication (SLOC) is not only important for nations within this region but also for regions that are far beyond. Given the location, this region continues to be a hub for both regional and international trade and people-to-people contacts since the early days of the Common Era,[1] and continues to be critical for global commerce and maritime traffic.

What makes this region vital for global commerce and maritime trade is the location of critical SLOC like the Strait of Malacca along with the Lombok and Sunda Strait. These water channels are the principal maritime highway, connecting the Indian Ocean Region and the waters of the Pacific Ocean through the South China Sea. Apart from geographic location, from a historical perspective, this region had served as a hub for trade between India and China, the two great economies in the pre-modern/industrial era, as the

The Isthmus of Kra, which serves as a land link between the Malay Peninsula and mainland Southeast Asia.

1 Leong Sau Heng, "Ancient trading centres in the Malay Peninsula", UNESCO is the United Nations Educational, Scientific and Cultural Organization, https://en.unesco.org/silkroad/sites/default/files/knowledge-bank-article/ancient_trading_centres_in_the_malay_peninsula.pdf, page 4, Accessed on June 2, 2022.

This region continues to be a hub for both regional and international trade and people-to-people contacts since the early days of the Common Era, and continues to be critical for global commerce and maritime traffic.

predictable wind patterns facilitated sailing of ships through these waters.[2] In the present-day context, this region has now come to become the highway for international trade between the littorals of the Indian Ocean and the Pacific Ocean, and even beyond these two oceans.

Owing to the centrality of the waters of Southeast Asia to global trade, this region has seen the rise and fall of not only a number of kingdoms but also of trade hubs. It is to be noted that the contemporary political history of this region to a large extent has been influenced in more ways than one, by the commercial imperatives of both regional and extra-regional nations. These commercial imperatives have not only been limited to the access of entrepôts within Southeast Asia but also served to secure the principal transit routes between the Indian Ocean and the Pacific Ocean. It is for this very reason that the waters of Southeast Asia and the littoral states in this geographical space are of strategic importance.

It is also owing to this factor that this region has been within the strategic calculus of successive thalassocracy. Resultantly, over centuries the region's culture, language and demography have

2 Barbara Watson Andaya, "Introduction to Southeast Asia", Asian Society, https://asiasociety.org/education/introduction-southeast-asia, Accessed on June 3, 2022.

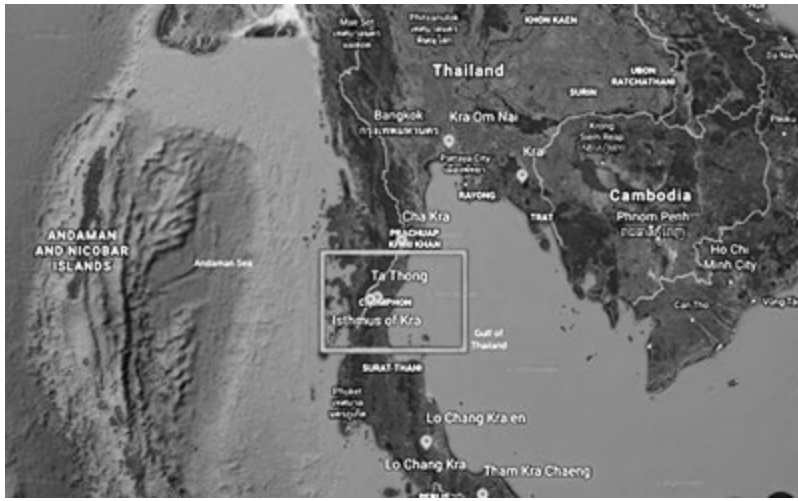
These external influences are not only limited to the region's historic ties with India, China and Arab traders but also includes the later-day European colonialism and the evolving global order since the end of the Second World War.

been influenced by a number of external/non-regional players. These external influences are not only limited to the region's historic ties with India, China and Arab traders but also includes the later-day European colonialism and the evolving global order since the end of the Second World War.

In the contemporary context, the shift in the global economic centre of gravity from the trans-Atlantic construct to the Indo-Pacific region has accentuated the importance of the whole of Southeast Asia as a single region. One of the salient features of the Indo-Pacific as a construct, which covers the whole of the Asian coastline, is the fact that this geographic space accounted for more than half the global maritime mercantile trade in 2019, prior to the onset of the COVID-19 pandemic.[3] This share in global economic pie gains greater significance as 80 per cent of global mercantile

In the contemporary context, the shift in the global economic centre of gravity from the trans-Atlantic construct to the Indo-Pacific region has accentuated the importance of the whole of Southeast Asia as a single region.

3 "UNCTAD's Review of Maritime Transport 2020: highlights and figures on Asia and the pacific", United Nations Conference on Trade and Development (UNCTAD), November 12, 2020, https://unctad.org/press-material/unctads-review-maritime-transport-2020-highlights-and-figures-asia-and-pacific, Accessed June 2, 2022.



Map I: Location of Isthmus of Kra *Source: India-Australia-US join party to shatter Chinese dream of Kra canal project in Thailand, India Blooms, https://www.indiablooms.com/world-details/SA/25935/india-australia-us-join-party-to-shatter-chinese-dream-of-kra-canal-project-in-thailand.html*

trade is seaborne.[4] In the context of Southeast Asia, the waters of this region are by far the busiest waterways for global trade and commerce. The Strait of Malacca, which lies at the tip of the Malay Peninsula, alone is witness to over 80,000 vessels transiting its waters on an annual basis.[5]

4 Review of Maritime Transport 2021, United Nations Conference on Trade and Development (UNCTAD), 2021 https://unctad.org/webflyer/review-maritime-transport-2021, Accessed June 2, 2022.

5 The Prosperity Of The Straits Of Malacca as a Major Maritime Trade Route, Maritime Institute of Malaysia, November 25, 202, https://www.mima.gov.my/news/the-prosperity-of-the-straits-of-malacca, Accessed June 2, 2022.

CONNECTING ASIA
A Legacy in the Making

Both the Kra/Thai Canal and the Kunming–Singapore High Speed Rail (HSR) can be called as 'legacy projects' as both were envisaged at least a century ago. Between the two, the history of the Kra/Thai Canal dates back to 1677[6] during the reign of the Thai King Narai the Great, of the Ayutthaya Kingdom. The Thai King had sought the assistance of France in this endeavour. However, after an initial study, it was realised that the prospects of constructing a canal was not feasible.[7] For the Ayutthaya King, the primary motivation for constructing a sea link between the eastern and western coasts of Thailand was to facilitate rapid troop movement between these two water bodies so as to defend the nation from hostile actions by the then Burmese kingdom.[8]

However, this did not deter successive generations of decision makers from aspiring for a maritime channel of communication that could link the Gulf of Thailand and the Andaman Sea. Some of the notable studies undertaken for the construction of a canal were by Britain in 1843, 1849, 1863 and 1872; and by France in 1883.[9] However, the British and French imperatives during the nineteenth century for a sea link were not driven by immediate military

The history of the Kra/Thai Canal dates back to 1677 during the reign of the Thai King Narai the Great, of the Ayutthaya Kingdom.

6 Meghan Rouillard and Asuka Saito, "Building the Kra Canal and Southeast Asian Development", EIRInfrastructure, October 11, 2013, https://larouchepub.com/eiw/public/2013/eirv40n40-20131011/16-24_4040.pdf, page 17. Accessed on June 8, 2022.

7 Shaun Cameron, "By land or sea: Thailand perseveres with the Kra Canal", Lowy Institute, September 22, 2021, https://www.lowyinstitute.org/the-interpreter/land-or-sea-thailand-perseveres-with-kra-canal, Accessed on May 30, 2022.

8 Rhea Menon, "Thailand's Kra Canal: China's Way Around the Malacca Strait", The Diplomat, April 06, 2018, https://thediplomat.com/2018/04/thailands-kra-canal-chinas-way-around-the-malacca-strait/, Accessed on June 3, 2022.

9 Ian Storey, "Thailand's Perennial Kra Canal Project: Pros, Cons and Potential Game Changers" ISEAS–Yusof Ishak Institute, September 24, 2019, https://www.iseas.edu.sg/images/pdf/ISEAS_Perspective_2019_76.pdf, page 3, Accessed on June 7, 2022.

Notable studies undertaken for the construction of a canal were by Britain in 1843, 1849, 1863 and 1872; and by France in 1883.

consideration but owed to their larger colonial interests in the region.

Owing to the fact that a number of project studies had been undertaken over the years, a number of prospective routes had been identified. In the 1950s, as many as four possible channels were shortlisted from out of a potential twelve[10] with only one, called the Route '9A', being considered as promising.[11] But then, the prospect of constructing a canal was again shelved until it was again revisited in 1972 by a Thai industrialist, K.Y. Chow. The study undertaken on the behest of K.Y. Chow had identified Route '5A' as being the most

Map II: Prospective Kra Canal Routes as Proposed in 1950s *Source: The Thai Canal – The proposed canal across the Isthmus of Kra in Southern Thailand, Future Southeast Asia, https://futuresoutheastasia.com/thai-canal/*

In the 1950s, as many as four possible channels were shortlisted from out of a potential twelve

10 Phuket Poll: Should Thailand build the Kra Canal?, The Phuket News, February 14, 2018, https://www.thephuketnews.com/phuket-poll-should-thailand-build-the-kra-canal-65961.php, Accessed on June 8, 2022

11 Kavi Chongkittavorn, Is digging Kra Canal still a pipe dream?, Bangkok Post, January 28, 2020, https://www.bangkokpost.com/opinion/opinion/1845214/is-digging-kra-canal-still-a-pipe-dream-, Accessed on June 3, 2022.

Map III: Prospective 12 Routes of the Kra Canal routes *Source: The Thai Canal – The proposed canal across the Isthmus of Kra in Southern Thailand, Future Southeast Asia, https://futuresoutheastasia.com/thai-canal/*

viable route, instead of Route 9A. The 1972 study had also identified that avenues of making this canal project financially viable were based on the prospective revenues that would be generated from port operations, transit fees and transhipment charges. However, the global economic downturn owing to the 1973 Oil Crisis had resulted in this project once again being shelved.[12] Despite this economic downturn, in the 1970s and 1980s, Japan too has scouted at the prospects of building as alternate sea route when compared to the congested and pirate-infested Strait of Malacca[13], with the primary aim of securing its oil shipments from West Asia.[14]

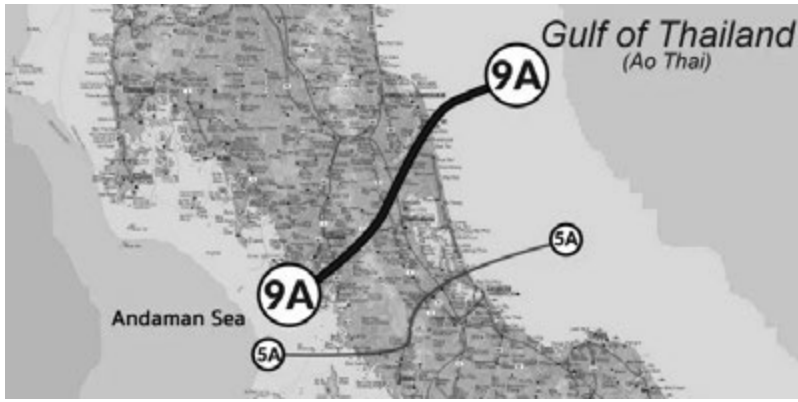
On the other hand, the land bridge that is to connect Thailand and Singapore by rail is a relatively new concept. Unlike shipping, railway as a means of communication is also relatively a new means of transportation. It was only in 1900 that both Britain and France had proposed a railway network between Singapore and

12 Ian Storey, "Thailand's Perennial Kra Canal Project: Pros, Cons and Potential Game Changers" ISEAS–Yusof Ishak Institute, September 24, 2019, https://www.iseas.edu.sg/images/pdf/ISEAS_Perspective_2019_76.pdf, page 3, Accessed on June 7, 2022.

13 Achmad Zuhdi and Eda Turan, "Kra canal project and its influence on world maritime trade", Journal of Engineering for the Maritime Environment, January 26, 2021, https://journals.sagepub.com/doi/abs/10.1177/14750902211033690 Accessed on June 21, 2022.

14 Ian Storey, "Thailand's Perennial Kra Canal Project: Pros, Cons and Potential Game Changers" ISEAS–Yusof Ishak Institute, September 24, 2019, https://www.iseas.edu.sg/images/pdf/ISEAS_Perspective_2019_76.pdf, page 3 Accessed on June 7, 2022.

Japan too has scouted at the prospects of building as alternate sea route when compared to the congested and pirate-infested Strait of Malacca, with the primary aim of securing its oil shipments from West Asia.



Map IV: Route 5A and 9A *Source: Phuket Poll: Should Thailand build the Kra Canal?, The Phuket News https://www.thephuketnews.com/phuket-poll-should-thailand-build-the-kra-canal-65961.php*

Kunming in China, and connecting all the nations in the region.[15] This proposal however was not realised then. It is to be noted that there are a number of railway lines and road networks that dot this region. Some of these surface transportation networks were already operational even before the Kunming-Singapore rail line was being proposed. These surface transportation networks and others that succeeded them are in parts are inherited legacy like the

It was only in 1900 that both Britain and France had proposed a railway network between Singapore and Kunming in China.

15 SE-Asia railway idea revived, BBC, November 4, 2001, http://news.bbc.co.uk/2/hi/asia-pacific/1637032.stm., Accessed on June 7, 2022.

Effects of any transnational connectivity projects are felt in terms of the "political, economic, social, cultural, and religious domains". This in turn is also materialises terms of the "political institutions, physical infrastructures, knowledge regimes, populations, markets and visual imaginaries. It contributes to the creation of geopolitical imaginaries of order, power, and governance".

Burma Road, the Death Railway, and the Stilwell Road of the Second World War vintage. Though these communication networks were constructed to facilitate war efforts, there are other networks that have been instrumental in foresting regional trade and commerce under the oversight of the European colonial masters. Currently, the rail line in the region has been reconceptualised as a high-speed rail under the aegis of the Belt and Road Initiative (BRI) of China.

For a theoretical perspective, the implication of both these two connectivity undertakings lines on the fact that the effects of any transnational connectivity projects are felt in terms of the "political, economic, social, cultural, and religious domains"[16]. This in turn is also materialises terms of the "political institutions, physical infrastructures, knowledge regimes, populations, markets and visual imaginaries. It contributes to the creation of geopolitical imaginaries of order, power, and governance".[17]

16 The Politics of Global Connectivities, University of Groningen, https://www.rug.nl/research/icog/research/research-centres/centre-for-internatlonal-relations-research-/history-and-theory-of-international-relations/htir-research-themes/politics-of-global-connectivities/?lang=en, accessed on September 25, 2022.

17 The Politics of Global Connectivities, University of Groningen, https://www.rug.nl/research/icog/research/research-centres/centre-for-internatlonal-relations-research-/history-and-theory-of-international-relations/htir-research-themes/politics-of-global-connectivities/?lang=en, accessed on September 25, 2022.

PART I

ISTHMUS OF KRA

Between the Canal and a Land Bridge

The primary attraction for constructing the Kra Canal since the seventieth century was in its ability to reduce the sailing distances between the Indian Ocean Region and the waters of eastern Asia. Shorter sailing distance would not only translate into shortening the sailing time but would also result in lower logistics cost for the shipping industry. The canal, if and when constructed, is expected to reduce the distance between the waters of the Indian Ocean region and the eastern Asian waters by around 700 nautical miles[18], or two-three days of sailing time at sea.[19] In monetary terms, according to a UN study in 2011, it was estimated that the total financial benefit for the shipping industry in the event of this canal becoming an alternative route to the Strait of Malacca would not amount to more than US$ 500 million[20] for the shipping companies, in form of saving on fuel and transportation cost, charter fees and bunkering. This financial saving was largely based on the then prevailing global crude oil prices that was averaging around US$ 111/ barrel[21]. It is similar to the current forecast, of oil prices, of about US$ 108/ barrel for the second half of 2022.[22]

The primary attraction for constructing the Kra Canal since the seventieth century was in its ability to reduce the sailing distances between the Indian Ocean Region and the waters of eastern Asia.

18 Joseph V. Micallef, 'Geopolitics of the Kra Canal', Military.Com, October 4, 2017, https://www.military.com/daily-news/2017/10/04/geopolitic-kra-canal.html, Accessed on June 7, 2022

19 Randy Thanthong-Knight, 'Thailand to Start Shipping Line to Boost Status as Logistics Hub', Bloomberg, September 23, 2021, https://www.bloomberg.com/news/articles/2021-09-23/thailand-to-start-shipping-line-to-boost-status-as-logistics-hub, Accessed on June 8, 2022.

20 Alan Dawson, 'Kra me a river', Bangkok Post, September 17, 2017, https://www.bangkokpost.com/opinion/opinion/1325803/kra-me-a-river, Accessed on June 3, 2022.

21 2011 Brief: Brent crude oil averages over $100 per barrel in 2011, US Energy Information Administration, January 12, 2012, https://www.eia.gov/todayinenergy/detail.php?id=4550 Accessed on June 8, 2022.

22 Short-Term Energy Outlook, US Energy Information Administration, July 12, 2022, https://www.eia.gov/outlooks/steo/#:~:text=The%20Brent%20crude%20oil%20spot,potential%20for%20oil%20price%20volatility, Accessed on June 8, 2022.

In early 2000s, the government of the then Thai Prime Minister Thaksin Shinawatra revived the nation's desire to construct this canal and set up a committee to conduct a feasibility study.

In early 2000s, the government of the then Thai Prime Minister Thaksin Shinawatra revived the nation's desire to construct this canal and set up a committee to conduct a feasibility study. The reasons for revisiting this project at the turn of the millennium was based on a study carried out by the Malaysian Maritime Institute. This study, citing World Bank data, had predicted that the Straits of Malacca would have to cater to an annual traffic of over 140,000[23] vessels transiting its waters by the 2030, while the channel is not expected to sustain shipping traffic of over 122,600 vessels per year.[24]

However, this committee's work was cut short by the military coup of 2006 in Thailand. Even when the government study was at a nascent state, it had been observed that the possibility of this project becoming a viable undertaking was under question owing

World Bank data, had predicted that the Straits of Malacca would have to cater to an annual traffic of over 140,000 vessels transiting its waters by the 2030, while the channel is not expected to sustain shipping traffic of over 122,600 vessels per year

23 Praveen Swami, "Fears rise in India as China pushes plan for canal to reshape Indian Ocean", Business Standard, April 6, 2018, https://www.business-standard.com/article/economy-policy/china-pushes-plan-for-canal-to-reshape-indian-ocean-118040600034_1.html, Accessed on June 17, 2022

24 Abdul Rahman, N.S.F., Mohd Salleh, N.H., Ahmad Najib, A.F. et al. "A descriptive method for analysing the Kra Canal decision on maritime business patterns in Malaysia" Journal of Shipping and Trade, November 21, 2016, https://jshippingandtrade.springeropen.com/articles/10.1186/s41072-016-0016-0, Accessed on June 15, 2022.

to technical challenges.[25] Nonetheless, the seeds sowed by Thaksin Shinawatra was not cast aside as a small group of retired generals, politicians and corporate executives have been perusing this idea since 2015, under the banner of the Thai Canal Association (TCA) in association with the Thai-Chinese Cultural and Economic Association (TCCEAT).[26] The TCA is also called "New Gateway to Maritime Silk Road."[27]

A Memorandum of Understanding (MoU) was inked in the same year, between two entities, namely, the China-Thailand Kra Infrastructure Investment & Development Company and Asia Union Group, for constructing the canal at a projected cost of US$ 28-36 billion, subjected to the kind of construction technique being adopted.[28] However, there have also been other estimates that pegs the construction cost at a high US$ 55 billion.[29] Apart from TCA and TCCEAT, the Khlong Thai Party, or the Thai Canal Party, a local political party, too, was in favour of the canal and campaigned for realising the same in the 2019 general elections. However, the party failed to make any real electoral

25 Controversial Thai Canal back in spotlight, Bangkok Post, October 14, 2020, https://www.bangkokpost.com/business/2001843/controversial-thai-canal-back-in-spotlight, Accessed on June 13, 2022.

26 Shaun Cameron, "By land or sea: Thailand perseveres with the Kra Canal", Lowy Institute, September 22, 2021, https://www.lowyinstitute.org/the-interpreter/land-or-sea-thailand-perseveres-with-kra-canal, Accessed on May 30, 2022.

27 Conference urges feasibility study on Kra Canal, Royal Thai Embassy, Washington DC,https://thaiembdc.org/2017/09/25/conference-urges-feasibility-study-on-kra-canal/, Accessed on June 14, 2022.

28 Lee Hong Liang, 'Thailand, China sign agreement to construct a new strategic Kra Canal', Seatrade Maritime News, May 19, 2015, https://www.seatrade-maritime.com/asia/thailand-china-sign-agreement-construct-new-strategic-kra-canal, Accessed on June 14, 2022.

29 Conference urges feasibility study on Kra Canal, Royal Thai Embassy, Washington DC, https://thaiembdc.org/2017/09/25/conference-urges-feasibility-study-on-kra-canal/, Accessed on June 14, 2022.

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impact despite its claims to representing the sentiments the people in Southern Thailand.[30]

Despite the advocacy for the construction of such a sea link, the Governments of Thailand and China have maintained their distance with respect to this TCA and TCCEAT. For China, the Kra/Thai Canal is not officially listed as part of its BRI undertaking,[31] while the Thai government under Prime Minister Prayuth Chan-o-cha, who took over the after a military coup in 2014, stated in February 2018 that the Thai Canal was not a priority for his administration.[32] The ambivalence about this undertaking in parts is because of the prospects of the economic windfall that Thailand could gain in the event of a sea bridge between its east and west coasts becoming a reality. But the challenges that the nation would have to overcome are seen as an uphill task in making the canal financially viable.

It was in this backdrop that the Thai Parliament constituted an *ad hoc* committee to study the feasibility of the canal project in

30 Termsak Chalermpalanupap, 'Canals and Land Bridges: Mega-Infrastructure Proposals for Southern Thailand', ISEAS–Yusof Ishak Institute, January 22, 2021, https://www.iseas.edu.sg/wp-content/uploads/2020/12/ISEAS_Perspective_2021_4.pdf, page 6, Accessed on June 29, 2022.

31 Ian Storey, 'India's Obsession With Thailand's Kra Canal: Much Ado About Nothing', ISEAS–Yusof Ishak Institute, September 8 , 2020, https://www.iseas.edu.sg/media/commentaries/indias-obsession-with-thailands-kra-canal-much-ado-about-nothing/, Accessed on June 7, 2022.

32 Proposed Kra Canal not priority project for Thai govt, Straits Times, February 13, 2018, https://www.straitstimes.com/asia/se-asia/proposed-kra-canal-not-priority-project-for-thai-govt, Accessed on June 21, 2022.

Beijing was enthusiastic in seeing such a canal being built as an alternative sea route from their perceived 'Malacca Dilemma'.

January 2020.[33] The findings of this committee and the report were presented to Parliament in January 2022. This feasibility report was put to vote in Parliament on February 4, 2022 and was rejected by the House by a vote of 144 members against and 121 members in favour of the canal construction project, with 53 abstentions.[34]

It is believed that the study was taken up under Chinese pressure[35] as Beijing was enthusiastic in seeing such a canal being built as an alternative sea route from their perceived 'Malacca Dilemma'. For China, the Strait of Malacca, is the principal SLOCs, similar to Japan, South Korea and other nations in East Asia, and is the mainstay for their energy security, independent of one another, and pertains especially to hydrocarbon shipments from West Asia and Africa, apart from supporting other aspects of their general international trade and commerce. It is the apprehension of any disruption of the maritime communication through the all-important Strait of Malacca and thus restricting energy shipment, which has been a cause for concern for Beijing. It is for this very reason that China has taken an interest in the canal project.

Additionally, some observers have pointed out that the desire for a connectivity project in and around the Isthmus of Kra get

33 Time to revisit canal project, Bangkok Post, January 20, 2020, https://www.bangkokpost.com/opinion/opinion/1839359/time-to-revisit-canal-project, Accessed on June 24, 2022.

34 Apinya Wipatayotin, 'Thai canal plan won't die, says activist', Bangkok Post, February 7, 2022, https://www.bangkokpost.com/thailand/general/2259755/thai-canal-plan-wont-die-says-activist, Accessed on June 24, 2022.

35 Yan Naing, 'Regional Effort Needed to Resist China's Renewed Push for Thai Canal', The Irrawaddy, March 8, 2022, https://www.irrawaddy.com/opinion/guest-column/regional-effort-needed-to-resist-chinas-renewed-push-for-thai-canal.html, Accessed on May 30, 2022.

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'resurrected' whenever the Thai economy is on a downward trajectory.[36] The prospective monetary windfall that the canal is projected to generate is seen as a panacea to the economic woes that plagues the Kingdom of Thailand from time to time.

At present, owing to the parliamentary vote, the desire to construct a canal has been shelved in favour of a land bridge across the Isthmus of Kra. The proposed land bridge, by and large, is conceptually on a similar alignment like the canal, as this too aims to connect the eastern and western coasts of Thailand through rail and road. This multimodal surface transport corridor would connect the yet-to-be-constructed deep sea port in the Chumphon Province on the Gulf of Thailand and also involve the upgrading of the existing small port of Ranong on the Andaman Sea into a modern

Observers have pointed out that the desire for a connectivity project in and around the Isthmus of Kra get 'resurrected' whenever the Thai economy is on a downward trajectory. The prospective monetary windfall that the canal is projected to generate is seen as a panacea to the economic woes that plagues the Kingdom of Thailand from time to time.

36 Ian Storey, 'India's Obsession With Thailand's Kra Canal: Much Ado About Nothing', ISEAS–Yusof Ishak Institute, September 8, 2020, https://www.iseas.edu.sg/media/commentaries/indias-obsession-with-thailands-kra-canal-much-ado-about-nothing/ Accessed on June 7, 2022.

The proposed land bridge, by and large, is conceptually on a similar alignment like the canal, as this too aims to connect the eastern and western coasts of Thailand through rail and road. This multimodal surface transport corridor would connect the yet-to-be-constructed deep sea port in the Chumphon Province on the Gulf of Thailand and also involve the upgrading of the existing small port of Ranong on the Andaman Sea into a modern deep-sea port.

deep-sea port.[37] This multimodal land-bridge, which would consist of a dual track rail line and a road, would be about 120 km long and is seen as an alternative to the 102-km[38] Kra Canal. The rationale for pursuing such a mega project is also on the same lines as the Kra Canal.[39] However, irrespective of whether it is a canal or a land bridge, the challenges that both these projects would face are similar.

Map V: Thai Land Bridge and Kra Canal *Source: Canals and Land Bridges: Mega-Infrastructure Proposals for Southern Thailand, ISEAS–Yusof Ishak Institute, https://www.iseas.edu.sg/wp-content/uploads/2020/12/ISEAS_Perspective_2021_4.pdf Page 4*

37 Termsak Chalermpalanupap, 'Canals and Land Bridges: Mega-Infrastructure Proposals for Southern Thailand', ISEAS–Yusof Ishak Institute, January 22, 2021, https://www.iseas.edu.sg/wp-content/uploads/2020/12/ISEAS_Perspective_2021_4.pdf, page 3 Accessed on June 29, 2022.

38 Po-Hsing Tseng and Nick Pilcher, 'Examining the opportunities and challenges of the Kra Canal: a PESTELE/SWOT Analysis', Maritime Business Review, Emerald Insight, August 17, 2022, https://www.emerald.com/insight/content/doi/10.1108/MABR-02-2021-0011/full/pdf?title=examining-the-opportunities-and-challenges-of-the-kra-canal-a-pesteleswot-analysis, page 163 Accessed on June 26, 2022.

39 Randy Thanthong-Knight, 'Thailand Studies Malacca Bypass to Link Indian, Pacific Oceans', Bloomberg, August 24, 2020, https://www.bloomberg.com/news/articles/2020-08-24/thailand-studies-malacca-bypass-to-link-indian-pacific-oceans Accessed on June 8, 2022.

The Kra/Thai Canal at best is expected to save 2-3 days of sea time. This by itself will not make this route attractive for larger sea-liners. This is so as for larger ocean-going vessels; an alternative route is commercially attractive only if the same can 'save at least five days' of sailing.

CHALLENGES AND ISSUES OF CONCERN

The primary reservations that have been raised have been in the actual utility of this project.[40] The Kra/Thai Canal at best is expected to save 2-3 days of sea time. This by itself will not make this route attractive for larger sea-liners. This is so as for larger ocean-going vessels; an alternative route is commercially attractive only if the same can 'save at least five days' of sailing. This would also have to include the turnaround time in individual ports. Additionally, there have been other operational concerns that have been raised. For the canal to make commercial sense, Thailand would not only have to invest in it but also undertake additional investment in terms of developing transhipment infrastructure, bunkering, Special Economic Zone (SEZ), etc. The projected investment for the same, based on various studies, is estimated to range between US$ 30-80 billion.[41] While the most

40 Chatrudee Theparat, 'Controversial Thai Canal back in spotlight', Bangkok Post, October 14, 2020, https://www.bangkokpost.com/business/2001843/controversial-thai-canal-back-in-spotlight, Accessed on June 13, 2022.

41 Manoj Kewalramani, Anirudh Kanisetti and Kunaal Kini, 'The Kra Canal: What Does It Mean For India?', The Takshashila Institution, March 2019, https://static1.squarespace.com/static/618a55c4cb03246776b68559/t/62a6cd70feb13f141d78cf4a/1655098738592/TDS-The-Kra-Canal-MK-AK-KK-2019-02-1.pdf, page 5. Accessed on June 26, 2022.

While the most conservative estimate of developing the SEZ alone is pegged at US$ 22 billion.

conservative estimate of developing the SEZ alone is pegged at US$ 22 billion.[42]

The other issue that has been raised pertains to the operational cost of the canal. For the canal to recover its construction cost, it would have to charge a transit fee, similar to those that are being levied upon vessels that utilise the Panama Canal and the Suez Canal. As of 2018, the transit fees for Panama and Suez Canal were a minimum of US$ 125,000 and US$ 250,000 per transit respectively.[43] It has been estimated that in the event of this canal becoming operational, it would have to charge a transit fee to cover the capital cost of construction, which by some estimates has to be a minimum of US$ 115,000 per vessel, per transit.[44]

The third concern is the ecological and environmental impact of the canal. In this regard, the primary concern is the variation in the elevation of water level between the Andaman Sea and the Gulf of Thailand. The Andaman Sea is about three metre higher that the Gulf of Thailand.[45] The change in water level between the two

42 Gray Norman, 'The Oil Canal That May Never Be', Oil Price, March 15, 2018, https://oilprice.com/Energy/Energy-General/The-Oil-Canal-That-May-Never-Be.html, Accessed on June 17, 2022.

43 Praveen Swami, "Fears rise in India as China pushes plan for canal to reshape Indian Ocean", Business Standard, April 6, 2018, https://www.business-standard.com/article/economy-policy/china-pushes-plan-for-canal-to-reshape-indian-ocean-118040600034_1.html, Accessed on June 17, 2022.

44 Gray Norman, 'The Oil Canal That May Never Be', Oil Price, March 15, 2018, https://oilprice.com/Energy/Energy-General/The-Oil-Canal-That-May-Never-Be.html, Accessed on June 17, 2022.

45 Toru Takahashi, 'Thai 'land bridge' project caught in Sino-U.S. tug of war', Nikkei Asia, February 20, 2022 https://asia.nikkei.com/Spotlight/Comment/Thai-land-bridge-project-caught-in-Sino-U.S.-tug-of-war, Accessed on May 30, 2022.

The Kra Isthmus region, as a tourist hub of Thailand, is estimated to contribute 40 per cent of the total revenue from of this sector.

water bodies would have ecological and environmental impact.[46] In economic terms, the impact would be borne by 40,000 fishermen[47] in the Andaman Sea and in the Gulf of Thailand, whose livelihood could be affected by this canal. Though it has been projected that the canal would facilitate access to fishing grounds on either side of the isthmus for fishermen who could sail through the canal, it could be a pipe dream owing to the possible negative impact of the project on marine ecology and thereby on the fisheries sector that the construction of this canal could cause.

Another area of concern has been the potential negative impact that this canal can have on the lucrative tourism sector of Thailand. The Kra Isthmus region, as a tourist hub of Thailand, is estimated to contribute 40 per cent of the total revenue from of this sector.[48] Additionally, the cost of disruption to human life too would have to be factored in. By some accounts, a conservative estimate has identified that over 65,000 villagers would have to be relocated prior to the construction of this canal.[49] This, however, does not take into account the opportunity cost of livelihood disruption

46 Yan Naing, 'Regional Effort Needed to Resist China's Renewed Push for Thai Canal', The Irrawaddy, March 8, 2022, https://www.irrawaddy.com/opinion/guest-column/regional-effort-needed-to-resist-chinas-renewed-push-for-thai-canal.html, Accessed on May 30, 2022.

47 Thailand Eyes 'Land Bridge' to Link its Coasts, Radio Free Asia, September 14, 2020, https://www.rfa.org/english/news/myanmar/land-bridge-09142020112444.html, Accessed on June 20, 2022.

48 Praveen Swami, "Fears rise in India as China pushes plan for canal to reshape Indian Ocean", *Business Standard,* April 6, 2018, https://www.business-standard.com/article/economy-policy/china-pushes-plan-for-canal-to-reshape-indian-ocean-118040600034_1.html, Accessed on June 17, 2022.

49 Termsak Chalermpalanupap, 'Canals and Land Bridges: Mega-Infrastructure Proposals for Southern Thailand', *ISEAS–Yusof Ishak Institute*, January 22, 2021, https://www.iseas.edu.sg/wp-content/uploads/2020/12/ISEAS_Perspective_2021_4.pdf, page 7, Accessed on June 27, 2022.

By some accounts, a conservative estimate has identified that over 65,000 villagers would have to be relocated prior to the construction of this canal.

that could be caused by this canal as existing economic activities like fisheries and tourism could be adversely affected.

The fourth area of concern would be the impact of this waterway upon the shipping industry in the region. As such, the Port of Singapore, the world's largest transhipment hub[50] and Malaysia's Port Klang, which is the world's 12th busiest port, are situated in close vicinity of the proposed canal.[51] Both these ports are integral to the global shipping industry as they serve as critical transhipment hubs. These transhipment hubs, that are the bedrock of the global shipping industry, especially of container cargo, operate largely in a 'hub and spoke' model, as it offers greater level of operational flexibility in terms of logistics, resulting in significant reduction of operational cost for the global shipping industry.[52] In this regard, the notable hub ports or transhipment hubs in the periphery of the Isthmus of Kra are the ports in Colombo, Klang and Singapore. These ports also sit along the 'East-West trunk sea route'.[53]

50 Raunek, 'Top 10 Busiest Ports In The World', *Marine Insight,* February 2, 2021, https://www.marineinsight.com/ports/top-10-busiest-ports-in-the-world/, Accessed on June 20, 2022.

51 Top Fifty Container Ports, *World Shipping Council,* https://www.worldshipping.org/top-50-ports, Accessed on, June 26, 2022.

52 Transshipment, Deutsche Post DHL Group, https://lot.dhl.com/glossary/transshipment/#:~:text=Fueled%20by%20the%20growth%20in,bring%20about%20significant%20cost%20benefits, Accessed on June 21, 2022.

53 Chathumi Kavirathna, Tomoya Kawasaki, Shinya Hanaoka and Takuma Matsuda, 'Transshipment hub port selection criteria by shipping lines: the case of hub ports around the bay of Bengal', *Journal of Shipping and Trade*, April 20, 2018, https://jshippingandtrade.springeropen.com/articles/10.1186/s41072-018-0030-5, Accessed on June 21, 2022.

Direct shipment is opted only when much of the cargo carried by a vessel is between a single port of origin and the destination, such as bulk cargo like crude oil, natural gas, chemicals, and grain.

This aspect of international merchant shipping is of importance as much of the logistics of global containerised freight is centred on transhipment hubs, and not direct shipment. Direct shipment is opted only when much of the cargo carried by a vessel is between a single port of origin and the destination, such as bulk cargo like crude oil, natural gas, chemicals, and grain. Given this paradigm, the Thai Canal, even with transhipment facility, may not attract adequate traffic as container vessels would opt for such ports that are efficient in their operation. It was in this light that the Singapore Prime Minister Lee Hsien Loong noted that "efficiency will keep us (Singapore) in the lead."[54]

The fifth point of concern is the security and political implication of constructing such a canal. This issue has been a serious bone of contention in the context of the Thai Canal ever since it was first articulated in the seventeenth century. However, in contemporary context, the political and security implications have been more pronounced than ever before. It was owing to such considerations that Britain had forced the Kingdom of Thailand into a treaty in 1946, which placed limitations on what the Kingdom can and

Singapore Prime Minister Lee Hsien Loong noted that "efficiency will keep us (Singapore) in the lead."

54 Alan Dawson, 'Kra me a river', *Bangkok Post*, September 17, 2017, https://www.bangkokpost.com/opinion/opinion/1325803/kra-me-a-river, Accessed on June 3, 2022.

cannot do in and around the Isthmus of Kra.[55] According to this treaty, Thailand was not to undertaken any project that would link the waters of the Indian Ocean and the Gulf of Thailand without prior British concurrence.[56] The rationale for Britain to take such an interest was to secure its interests in the region, in the colonial era, that is. For Britain, its colonial possession of Singapore was not only of significance but also the fact that this colonial outpost was overseeing the all-important Strait of Malacca. For Britain, any alternative SLOCs to the Strait of Malacca would have directly struck a blow to the remnants of the British maritime empire,[57] especially in the post-War era.

The British consideration was pre-defined by the remnants of its then prevailing colonial interests in Singapore. It was to preserve this colonial interest and the centrality of Singapore as the dominant port for the region's trade and commerce as a transhipment and logistic hub that this treaty was forced upon Thailand. Similarly, in the present-day context, the arguments in favour for a connectivity network via the Isthmus of Kra have been based upon political, security and strategic considerations.

The Chinese interests in Kra have been based on the so-called 'Malacca Dilemma' as articulated by the then Chinese President

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55 Rhea Menon, "Thailand's Kra Canal: China's Way Around the Malacca Strait", *The Diplomat*, April 06, 2018, https://thediplomat.com/2018/04/thailands-kra-canal-chinas-way-around-the-malacca-strait/, Accessed on June 3, 2022.

56 Meghan Rouillard and Asuka Saito, 'Building the Kra Canal and Southeast Asian Development', *Executive Intelligence Review*, October 11, 2013, https://larouchepub.com/other/2013/4040bld_kra_asia.html, June 8, 2022.
1946 Anglo-Thai Treaty Article 7 states: "The Siamese Government undertake[s] that no canal linking the Indian Ocean and Gulf of Siam shall be cut across Siamese territory without the prior concurrence of the Government of the United Kingdom."

57 Meghan Rouillard and Asuka Saito, 'Building the Kra Canal and Southeast Asian Development', *Executive Intelligence Review*, October 11, 2013, https://larouchepub.com/other/2013/4040bld_kra_asia.html, Accessed on June 8, 2022.

The quantum of energy that is sourced from this pipeline through Myanmar is rather negligible and stands at around three per cent of the total natural gas imports of China.

Hu Jintao in 2003, wherein Beijing was apprehensive of its energy supplies could be interceded by "certain major powers"[58] since Beijing was/is depended for much of its oil supplies plying through the Strait of Malacca. It was owing to this concern, among other factors, that China has started to undertake considerable infrastructure projects like developing/ constructing (greenfield) ports, railway networks, highways and pipelines in regions that are to the west of the Strait of Malacca. Such investments were aimed at securing energy shipments, most of which were sourced from West Asia or Africa as well as developing alternative routes for the transportation of the imported hydrocarbon resources. It was owing to this concern that China had also developed a hydrocarbon pipeline through Myanmar. However, the quantum of energy that is sourced from this pipeline through Myanmar is rather negligible and stands at around three per cent of the total natural gas imports of China.[59]

However, the rationale for China to secure an alternative SLOCs for energy shipments via either the Kra canal or the land bridge would not necessarily contribute to Chinese energy security. The first reason from this is that the Thai route would still have to traverse through a maritime space of the Indian Ocean and its chokepoints

58 Ian Storey, 'China's "Malacca Dilemma"', *James Town Foundation,* April 12, 2006, https://jamestown.org/program/chinas-malacca-dilemma/, Accessed on June 30, 2022.

59 China, US Energy Information Administration, September 30, 2020, https://www.eia.gov/international/analysis/country/CHN, Accessed on June 30, 2022.

An alternative SLOCs for energy shipments via either the Kra canal or the land bridge would not necessarily contribute to Chinese energy security.

wherein interdiction of global shipping by navies hostile to China would still be possible. Secondly, the waterways of the Isthmus of Kra would not fall under the UNCLOS-defined specific regime for "Straits Used For International Navigation", unlike the Strait of Malacca or for that matter even the Straits of Sunda or Lombok. The UNCLOS provision acts as a guarantor for 'innocent shipping'. As such, to access either the Thai canal or land-bridge, international shipping would have to transit via the Andaman Sea. It is to be noted that much of the Andaman Sea is within the Exclusive Economic Zone (EEZ) of a littoral State, and thus does not guarantee unrestricted passage of 'innocent shipping'.

Apart from this, owing to the evolving nature of international relations, the alternative route that Thailand could provide for global shipping could also upset the interests of a number of nations. It was in this context that sections of the Thai polity had expressed their reservations. Former Thai Prime Minister Abhisit Vejjajiva and the then Deputy Prime Minister Gen Prawit Wongsuwan had expressed their scepticism, especially over the canal project. So has the current Prime Minister, Prayut Chan-o-cha. One of the reasons given was the rivalry between China

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International shipping would have to transit via the Andaman Sea. It is to be noted that much of the Andaman Sea is within the Exclusive Economic Zone (EEZ) of a littoral State, and thus does not guarantee unrestricted passage of 'innocent shipping'.

and the United States, which in turn would force Thailand to take sides in the strategic rivalry between the two nations.[60]

Map VI: Ethnographic Map of Southern Thailand *Source: Barisan Revolusi Nasional, Wikipedia, https://en.wikipedia.org/wiki/Barisan_Revolusi_Nasional*

For Thailand as a State, the strategic implications are of utmost importance as the Kingdom has been following a largely hands-off policy in international relations, which in turn has been characterised as 'bending with the wind policy', 'bamboo diplomacy', or 'flexible approach to foreign policy'.[61] Thus, in other words, it means that the Thai approach towards its external ties can be articulated as 'flexible to bend in which way the wind blows',[62] or being non-confrontational in its external engagement. It is also because of

60 Termsak Chalermpalanupap, 'Canals and Land Bridges: Mega-Infrastructure Proposals for Southern Thailand', *ISEAS–Yusof Ishak Institute*, January 22, 2021, https://www.iseas.edu.sg/wp-content/uploads/2020/12/ISEAS_Perspective_2021_4.pdf, page 7 Accessed on June 29, 2022.

61 Peera Charoenvattananukul, 'Rethinking Approaches to the Study of Thai Foreign Policy Behaviours', *Kyoto Review of Southeast Asia*, March 2017, https://kyotoreview.org/yav/thai-foreign-policy-behaviours/, Accessed on June 26, 2022.

62 Arne Kislenko, 'Bending with the Wind: The Continuity and Flexibility of Thai Foreign Policy', *International Journal*, Autumn 2002, https://www.jstor.org/stable/40203691, Page 537 Accessed on June 27, 2022.

Thai approach towards its external ties can be articulated as 'flexible to bend in which way the wind blows', or being non-confrontational in its external engagement.

this nature of Bangkok's outlook towards its foreign relations that it was reported as late as September 2021 that India, Australia and the United States had expressed their interest in the canal project.[63]

However, for Thailand the political, security, and strategic considerations are not only limited to regional and global power rivalry but also of internal security/domestic politics. The primary concern for Thailand on this count, especially in the case of the canal, is that it would provide a physical barrier between the southern parts and the rest of the nation. This, by itself, is not of any great significance, particularly when taken in the context of the scattered archipelagic Southeast Asian region, but for the fact that Southern Thailand is a hot-bed of ethno-religious separatist insurgency that can be traced back to over half a century.[64] The genesis of this issue in turn can be located in the Anglo-Siamese Treaty or Bangkok Treaty of 1909, when the border between

It was reported as late as September 2021 that India, Australia and the United States had expressed their interest in the canal project.

63 Shaun Cameron, 'Thailand persisting with Kra canal', *Australian Naval Institute,* September 24, 2021, https://navalinstitute.com.au/19539-2/, June 30, 2022.

64 Peter Chalk, 'The Malay-Muslim Insurgency in Southern Thailand Peter Chalk', *RAND Corporation,* 2008, https://www.rand.org/content/dam/rand/pubs/occasional_papers/2008/RAND_OP198.pdf, page 1, Accessed on, July 26, 2022.

Southern Thailand is a hot-bed of ethno-religious separatist insurgency that can be traced back to over half a century.

Map VII: Malay-Muslim Dominated South Thailand Provinces
Source: Thailand's Southern Insurgency – who's fighting who?, The Thaiger, https://thethaiger.com/news/south/insurgency/thailands-southern-insurgency-fighting-violence

Thailand (then Siam) and Malaysia was demarcated under the watchful eyes of Britain.[65]

The hot-bed of this separatist movement is centred on the Malay-Muslim dominated Thai provinces of Yala, Narathiwat, and Pattani, bordering Malaysia, seeking self-determination from what is otherwise a Thai Buddhist nation. The violent movement has seen three distinct phases during 1960–1998, 1998–2004, and from 2004 onwards.[66] Since the resurgence of the armed

65 Uday Bakhshi, 'The Apparent Stalemate in Thailand's Deep South', *The Diplomat*, December 20, 2021, https://thediplomat.com/2021/12/the-apparent-stalemate-in-thailands-deep-south/, Accessed on July 26, 2022.

66 Peter Chalk, 'The Malay-Muslim Insurgency in Southern Thailand Peter Chalk', *RAND Corporation*, 2008, https://www.rand.org/content/dam/rand/pubs/occasional_papers/2008/RAND_OP198.pdf, page 1, Accessed on July 26, 2022.

This separatist movement has centred on the Malay-Muslim dominated Thai provinces of Yala, Narathiwat, and Pattani, bordering Malaysia, seeking self-determination from what is otherwise a Thai Buddhist nation.

movement in 2004, over 7000 people have lost their lives and nearly twice as many have been injured.[67] At present, the scope for a resolution of this dispute is rather slim, according to some critics. This insurgency movement has been a cause for concern for Thailand for these many decades and will continue to be a source of concern. It is also for this very reason that Thailand would be cautious when it comes to undertaking any major infrastructure development in the nation's isthmus region as the same can be seen as physically separating the 'deep south' from the rest of the country.

Any major infrastructure development in the nation's isthmus region as the same can be seen as physically separating the 'deep south' from the rest of the country.

67 Mariyam Ahmad, ' Thai Deep South Residents Don't Expect Much from Next Week's Peace Talks', *Benar News*, January 7, 2022, https://www.benarnews.org/english/news/thai/deep-south-residents-not-hopeful-about-peace-talks-01072022133307.html, Accessed on? June 30, 2022.

PART II

KUNMING–SINGAPORE RAILWAY LINE

The Singapore-Kunming Rail Link (SKRL) refers to the primary line that would connecting the two cities, running through Malaysia and Thailand, as a common link with parallel lines forking via Cambodia, Laos and Vietnam to the east, and a western line connecting Myanmar.

The Singapore-Kunming Rail Link (SKRL) refers to the primary line that would connecting the two cities, running through Malaysia and Thailand, as a common link[68] with parallel lines forking via Cambodia, Laos and Vietnam to the east, and a western line connecting Myanmar.[69] All three lines would originate in the Chinese city of Kunming and terminate in the city-state of Singapore. The Thai capital of Bangkok would be the fulcrum for the whole network, and would intersect and then terminate in Singapore by linking up with Kuala Lumpur in Malaysia.

As has already been pointed out, this high-speed rail line is not dissimilar to the Anglo-French proposal of connecting the continental Southeast Asia. However, the SKRL was revisited as part of a larger ASEAN wide connectivity project which as called as the Master Plan of ASEAN Connectivity (MPAC), sometimes

Thai capital of Bangkok would be the fulcrum for the whole network, intersect and then terminate in Singapore by linking up with Kuala Lumpur in Malaysia.

68 Singapore-Kunming Rail Link (SKRL), *Railway Technology,* December 18, 2019, https://www.railway-technology.com/projects/singapore-kunming-rail-link-skrl/, May 30, 2022.

69 SE-Asia railway idea revived, *BBC,* November 4, 2001, http://news.bbc.co.uk/2/hi/asia-pacific/1637032.stm, Accessed on June 7, 2022.

SKRL was revisited as part of a larger ASEAN wide connectivity project which called as the Master Plan of ASEAN Connectivity (MPAC), sometimes referred also as the Pan-Asia Railway Network. The MPAC was not solely focused on rail connectivity but has a larger focus that encompasses physical connectivity (transport, ICT, and energy) which includes both rail and highway connectivity; institutional arrangements (trade, investment, and services liberalisation); and people-to-people linkages (education, culture, and tourism), with and facilitating greater integrated ASEAN Community.

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It was only during the Fifth ASEAN Summit held in 1995 that the SKRL[71] was formally proposed and a Special Working Group was formed in 1996 as a part of the ASEAN-Mekong Basin Development Cooperation initiative.[72] After an informal summit of the regional

70 Master Plan on ASEAN Connectivity-2025, *ASEAN Secretariat Jakarta,* https://asean.org/wp-content/uploads/2018/01/47.-December-2017-MPAC2025-2nd-Reprint-.pdf, page 8, Accessed on September 28.

71 Teerarat Songmuang and Witchayanee Ocha, 'ASEAN Connectivity: What could high speed rail bring to Thailand?', *Association of Private Higher Educations Institutes of Thailand (APHEIT),* December 2016, https://apheit.bu.ac.th/jounal/Inter-vol5-1/p28-39-Teerarat%20Songmuang.pdf page 29 Accessed on July 14, 2022.

72 Tauch Chankosal, "The Singapore Kunming Rail Link', *Infrastructure Investor: ASEAN Intelligence Report,* February 2013, http://aadcp2.org/wp-content/uploads/ASEAN_InfrastructureIntelligenceReport.pdf, page 11 Accessed on, July 18, 2022.

The sixth ASEAN Transport Ministers and the Fourth ASEAN Informal Summit held in 2000, the feasibility study was accepted with an estimated price-tag, upwards of US$ 15 billion, covering a total distance of the over 6,600 km.

grouping in 1997, a consensus was arrived at, on the need for such a rail line. A feasibility study was undertaken in 1997-99.[73]

During the Sixth ASEAN Transport Ministers and the Fourth ASEAN Informal Summit held in 2000, the feasibility study was accepted with an estimated price-tag pegge at being upwards of US$ 15 billion[74], covering a total distance of the over 6,600 km.[75] The basic approach of this rail line was not to construct a network from scratch but to link the existing railway network in the region by bridging the gaps in the proposed network. The primary gaps that were identified were on the trans-national network which needed either new lines to be laid or for old ones to be upgraded and not as much as intra-national networks of the participating

It was expected, at that time that the missing links in SKRL of 4,069 km between Cambodia, Lao PDR, Malaysia, Myanmar, Thailand and Vietnam could be completed by 2015.

73 Teerarat Songmuang and Witchayanee Ocha, 'ASEAN Connectivity: What could high speed rail bring to Thailand?', *Association of Private Higher Educations Institutes of Thailand (APHEIT),* December 2016, https://apheit.bu.ac.th/jounal/Inter-vol5-1/p28-39-Teerarat%20Songmuang.pdf, page 29 Accessed on, July 14, 2022.

74 Singapore-Kunming Rail Link (SKRL), *Railway Technology,* December 18, 2019, https://www.railway-technology.com/projects/singapore-kunming-rail-link-skrl/, Accessed on May 30, 2022.

75 Singapore – Kunming Rail Link, *United Nations Economic and Social Commission for Asia and the Pacific,* March 2015. https://www.unescap.org/sites/default/d8files/Malaysia%20-%20Present%20Singapore%20-%20Kunming%20rail%20link.pdf, page 2 Accessed on July 18, 2022.

The railway line is not to be seen as a single undertaking but as a series of individual projects that would feed into a larger network.

nations. It was expected, at that time that the missing links in SKRL of 4,069 km between Cambodia, Lao PDR, Malaysia, Myanmar, Thailand and Vietnam could be completed by 2015.[76]

As such, the railway line is not to be seen as a single undertaking but as a series of individual projects that would feed into a larger network. It is also to be noted that the original ASEAN proposal was and is based on linking the conventional rail network of the region.

Map VIII: Singapore- Kunming Rail Line *Source: Kunming-Singapore High Speed Rail Network, Geopolitical Monitor, https://www.geopoliticalmonitor.com/wp-content/uploads/2017/12/Nanning-Singapore-HSR-FULLSIZE-FINAL-900.jpg*

However, the high-speed rail (HSR), which China has been keen to export to other nations, especially in Southeast Asia, has also now become a part of the SKRL. At the same time, since the announcement of the Belt and Road Initiative

The high-speed rail (HSR), which China has been keen to export to other nations, especially in Southeast Asia, has also now become a part of the SKRL.

76 Master Plan on ASEAN Connectivity, *ASEAN Secretariat,* January 2011, https://www.usasean.org/system/files/downloads/MPAC.pdf, page 12 Accessed on July 18, 2022.

The 414-km Laos-China railway line was inaugurated on December 12, 2021, between Vientiane, the capital of Lao PDR with the border town of Boten at a cost of US$ 6 billion.

(BRI) by China in 2013, SKRL has been incorporated as part of the BRI. Since its conceptualisation by ASEAN members in 1997, this railway network has been envisaged as a vehicle that would "facilitate regional economic integration and serve as a catalyst for economic development."[77]

THE THREE ROUTES OF SKRL

Thus far work on the sections of the missing links in the SKRL are being undertaken in stages and are still a work in progress – but for one line that has been completed. The 414-km Laos-China railway line was inaugurated on December 12, 2021, between Vientiane, the capital of Lao PDR with the border town of Boten at a cost of US$ 6 billion.[78] The importance of this rail line would be easing the dependency on maritime trade in favour of a shorter overland trade route for Cambodia. It is estimated by the World

It is estimated by the World Bank that the commercial traffic between Laos and China could increase to a high of 3.9 million tonnes by 2030, compared to 1.6 million tonnes in 2016.

77 Tauch Chankosal, "The Singapore Kunming Rail Link', *Infrastructure Investor: ASEAN Intelligence Report,* February 2013, http://aadcp2.org/wp-content/uploads/ASEAN_InfrastructureIntelligenceReport.pdf, page 11 Accessed on July 18, 2022.

78 Ayman Falak Medina, 'The Completed China-Laos Railway: Bringing Opportunities for ASEAN and the Asia Pacific', *ASEAN Briefing,* December 21, 2021, https://www.aseanbriefing.com/news/the-completed-china-laos-railway/, Accessed on July 19, 2022.

Bank that the commercial traffic between Laos and China could increase to a high of 3.9 million tonnes by 2030, compared to 1.6 million tonnes in 2016.[79]

The western line in Myanmar is 1,920 km long and is between Kunming and Yangon. The construction work is being undertaken in two phases. This first leg is within China, between Kunming and the border township of Ruili. The second leg is between Ruili and Yangon via Mandalay. Thus far, the section within China has been completed, with construction on the Myanmar side still underway. It is to be noted that there already exists a roadway between Kunming and Yangon that is on a similar alignment to the old Burma Road of the Second World War era.[80] It is also to be noted that under the BRI, China has proposed another rail line, linking Kyaukphyu on the Bay of Bengal coast of Myanmar with Mandalay. In this regard, the two sides have inked an agreement to undertake an 18-month long feasibility study in January 2021.[81]

On the central and eastern lines, upgrading the rail infrastructure within the Thailand was completed in 2014. The construction of 302 km of rail line within Cambodia was completed by 2018. The upgrading of railway tracks in Cambodia and Vietnam are

79 From Landlocked to Land-Linked: Unlocking the Potential of Lao-China Rail Connectivity, *World Bank,* 2020, https://openknowledge.worldbank.org/bitstream/handle/10986/33891/Main-Report.pdf?sequence=5&isAllowed=y, page 9 Accessed on July 19, 2022.

80 M Shahidul Islam, "When the dragon meets the elephant in Myanmar", *The Straits Times,* October 12, 2017, https://www.straitstimes.com/asia/south-asia/when-the-dragon-meets-the-elephant-in-myanmar-the-daily-star-columnist, Accessed on July 19, 2022.

81 Nan Lwin, 'Feasibility Study on BRI Railway Link in Myanmar to Take 18 Months', *Irrawaddy,* January 14, 2021, https://www.irrawaddy.com/news/burma/feasibility-study-bri-railway-link-myanmar-take-18-months.html, Accessed on July 19, 2022.

Link between Bangkok and Singapore, which is a part of ASEAN's Pan-Asia Rail Network, but later proposed as a High Speed Rail by China under the BRI, with a speed of 250 kmph has been shelved for the time.

underway[82] and nearing completion. However, the key link between Bangkok and Singapore, which is a part of ASEAN's Pan-Asia Rail Network, but later proposed as a High Speed Rail by China under the BRI, with a speed of 250 kmph has been shelved for the time, owing to the cost of constructing this line.

CHALLENGES TO THE SKRL

One of the challenges that this rail line faces is the varying gauge of the rail tracks. The most common form of rail gauge in Southeast Asia is the slower one-metre 'narrow gauge', and not the 1.435-m 'standard gauge',[83] which is used in China. Secondly, most of the rail line in the region is single track that limits the two-way rail traffic. The question of gauge gets further complicated, given the fact that the SKRL as a network would be operating on not two

The most common form of rail gauge in Southeast Asia is the slower one-metre 'narrow gauge', and not the 1.435-m 'standard gauge', which is used in China. Secondly, most of the rail line in the region is single track that limits the two-way rail traffic.

82 Singapore-Kunming Rail Link (SKRL), *Railway Technology,* December 18, 2019, https://www.railway-technology.com/projects/singapore-kunming-rail-link-skrl/ Accessed on May 20, 2022.

83 James Clark, 'What Would Southeast Asia Look Like if Every Proposed Railway Was Built?', *The Diplomat,* October 26, 2016, https://thediplomat.com/2016/10/what-would-southeast-asia-look-like-if-every-proposed-railway-was-built/, Accessed on July 21, 2022.

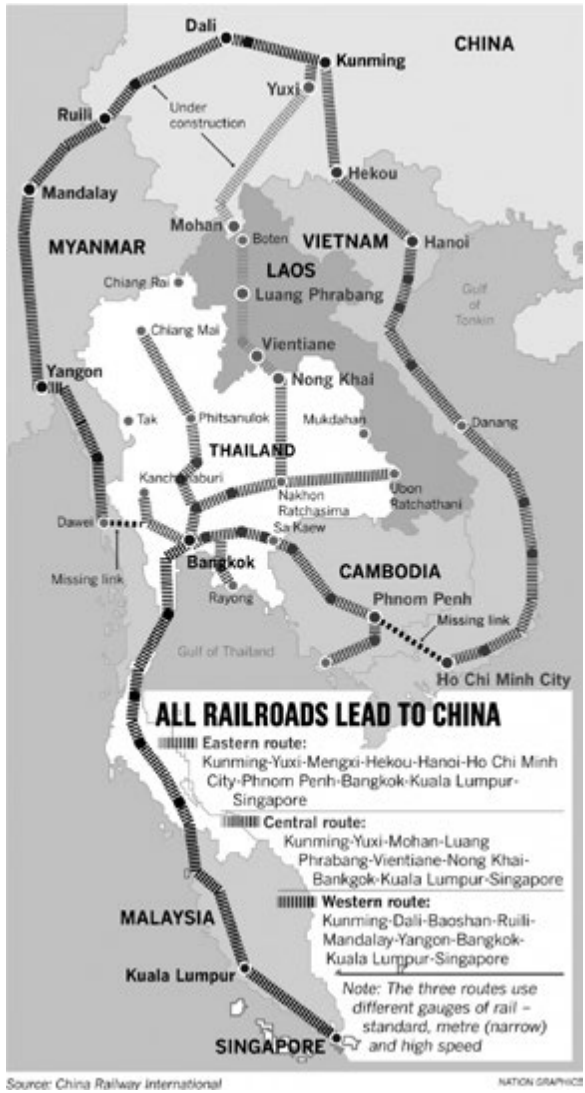
but three different gauges, namely, the narrow, standard and the high speed (which is actually standard gauge but is a dedicated track that is not connected to conventional trail network). The challenges with multiple gauges are not only limited to the logistics of rail transportation but are also reflected in the actual speed of rail transport. It is because of this that the projected top speed of the SKRL ranges from 150 kmph to 250 kmph.[84] Owing to this drastic variation, it is a misnomer to call the Kunming-Singapore network as high-speed rail (HSR) project, as the conventional understating of a HSR is a network with a top speed of at least 250 kmph.

The third is the fact that the most of the inland logistics in the region are based on roadways and not based on rail. For instance, in the case of Thailand, railways account for only a fifth of passenger traffic and about two per cent of cargo traffic.[85] It is for this very reason that this region is dominated by the narrow-gauge, single-track network. The fourth issue of concern is over the financing and commercial viability of the SKRL. This issue is not only limited to the economics of rail transportation in the region but also carries

The third is the fact that the most of the inland logistics in the region are based on roadways and not based on rail. For instance, in the case of Thailand, railways account for only a fifth of passenger traffic and about two per cent of cargo traffic.

84 Completion of high-speed Southeast Asian rail link is still far down the track, *The Nation- Thailand*, January 21, 2018, https://www.nationthailand.com/international/30336801, Accessed on July 21, 2022.

85 Toru Takahashi, 'China's pan-Asian railway sputters to a halt in Thailand', *Nikkei Asia,* January 16, 2022, https://asia.nikkei.com/Economy/China-s-pan-Asian-railway-sputters-to-a-halt-in-Thailand#:~:text=BANGKOK%20%2D%2D%20China's%20plan%20to,and%20both%20countries'%20diverging%20priorities, Accessed on June 3, 2022.



Map IX: Singapore- Kunming Rail Line *Source: Completion of high-speed Southeast Asian rail link is still far down the track, The Nation- Thailand, https://www.nationthailand.com/international/30336801*

In the case of Malaysia, the HSR, since its conceptualisation, has been planned to connect Kuala Lumpur with Singapore.

with it a degree of political and strategic consideration. It is this consideration that has been at the crux of SKRL.

Owing to the fact that the SKRL is not a single infrastructure undertaking but a series of projects that feed into a large network, the challenges that are faced in terms of the commercial viability of this railway system are quite significant. It is also for this very reason that sections of the SKRL have been revisited by some of the partner-nations. The two notable participating nations who have revisited their participation in the Chinese-sponsored railway network are Thailand and Malaysia.

Both Thailand and Malaysia are critical to the realisation of the SKRL as these two nations are at the heart of the network. In the case of Thailand, Bangkok serves as the nerve centre of this network with all three lines converging in this city and then leading further south to Singapore via Malaysia. It is for these very reasons that the largest railway station in Southeast Asia, Bang Sue Grand Station, was inaugurated for public use in November 2020 in Bangkok. The Bang Sue Grand Station would not only serve the existing rail transportation system in Thailand but would also serve as the hub for Thailand's HSR.[86] In the case of Thailand, the HSR is not solely

The SKRL is not a single infrastructure undertaking but a series of projects that feed into a large network.

86 Maya Majueran, 'Pan-Asian railway boosts regional connectivity', *China Daily,* January 8, 2022, https://global.chinadaily.com.cn/a/202201/08/WS61d8f3aba310cdd39bc7fdd3.html, Accessed on June 2, 2022.

Owing to political instability and change in government in Thailand, the proposal to construct a HSR was shelved.

a part of the SKRL but is also planned to serve the country. In the case of Malaysia, the HSR, since its conceptualisation, has been planned to connect Kuala Lumpur with Singapore.

THAILAND AND HSR

The primary contour of the HSR in Thailand was based on a north-south corridor with Kunming being the terminal station in the north and Singapore towards the south. To this end, the Thai HSR can be considered as two separate lines. The northern route is designed to provide a link between Thailand and China via Laos. The development of the northern HSR line was split up into two. The first phase of 253 km was between Bangkok and Nakhon Ratchasima, in central Thailand. The second phase was between Nakhon Ratchasima and the Nong Khai, closer to the Thai-Laos border.[87] From the border town of Nong Khai, the railway line was to link up the Kunming-Vientiane line.

However, owing to political instability and change in government in Thailand, the proposal to construct a HSR was shelved. It was for this reason that the Memorandum of Understand (MoU) that was inked with China in 2014 did not result in actual construction contracts being singed until 2020. The delay in work contracts

87 Michael Hart, From Bangkok to Nong Khai: China's Thai Railway Vision Edges Forward', *Geopolitical Monitor,* April 26, 2021, https://www.geopoliticalmonitor.com/from-bangkok-to-nong-khai-chinas-thai-railway-vision-edges-forward/, Accessed on June 20, 2022.

A change in government in Malaysia in 2018 resulted in the Kuala Lumpur revisiting the HSR. One of the reasons for this was an issue of the profitability of this line.

being inked also owed to the delays in completely in the Laos-China section.[88] The 2020 deal was only for the construction of the section till Nakhon Ratchasima with a price tag of US$ 5.85 billion. This section is to be made operational by 2026.[89] However, after the visit of Chinese Foreign- Minister Wang Yi to Thailand in July 2022, the two have decided that the 609 km HSR would be completed by 2028 and would also cover the Nonk Khai section.[90] The visit of Minister Wang Yi not only resulted in revising the stalled infrastructure project but has also reflected in the rapprochement in the bilateral ties that were not at their best owing to the 'divergent priorities'[91] of both nations.

On the other hand, the challenges faced on the southern section, the Bangkok-Kuala Lumpur-Singapore section budgeted at US$17 billion[92] was primarily with respect to Malaysia. The 350-km

88 Zsombor Peter, 'Thailand Sets 2028 Target to Finish High-Speed Rail Link with China', *Voice of America,* July 17, 2022, https://www.voanews.com/a/thailand-sets-2028-target-to-finish-high-speed-rail-link-with-china/6662154.html Accessed on June 221, 2022.

89 'China, Thailand sign agreement on high-speed rail line, set to open in 2026', *Global Times,* March 29, 2021, https://www.globaltimes.cn/page/202103/1219753.shtml, Accessed on June 21, 2022.

90 Zsombor Peter, 'Thailand Sets 2028 Target to Finish High-Speed Rail Link with China', *Voice of America,* July 17, 2022, https://www.voanews.com/a/thailand-sets-2028-target-to-finish-high-speed-rail-link-with-china/6662154.html Accessed on?, July 22, 2022.

91 Toru Takahashi, 'China's pan-Asian railway sputters to a halt in Thailand', *Nikkei Asia,* January 16, 2022, https://asia.nikkei.com/Economy/China-s-pan-Asian-railway-sputters-to-a-halt-in-Thailand#:~:text=BANGKOK%20%2D%2D%20China's%20plan%20to,and%20both%20countries'%20diverging%20priorities, Accessed on July 27, 2022.

92 Malaysia pays $76m to Singapore for cancelled high-speed rail project, *Railway Technology,* March 30, 2021, https://www.railway-technology.com/news/malaysia-singapore-high-speed-rail/, Accessed on July 23, 2022.

Malaysia and Thailand have entered into MoU to study the feasibility of a HSR between their respective capital cities in February 2022.

southern link was originally conceptualised as a Kuala Lumpur-Singapore HSR in 2010 with a MoU being inked between the city state and Malaysia in 2016. At the time of the MoU, it was expected that the HSR would become operational by the end of 2026.[93] However, a change in government in Malaysia in 2018 resulted in the Kuala Lumpur revisiting the HSR. One of the reasons for this was an issue of the profitability of this line. According to some studies neither Singapore nor Malaysia would have a population density to make this HSR financially viable.[94] Another factor that played in Malaysia was the allegation of corruption and financial impropriety.[95] Owing to the lapse of the MoU and the subsequent cancellation of the HSR project, Malaysia had paid Singapore US$ 76.30 million in March 2021 as compensation that that the City-State had already incurred.[96]

Malaysia's exit from the HSR with Singapore as it stands is not the end of the road. This is because Malaysia and Thailand have

93 Tomoo Kikuchi and Akio Tanahashi, 'Profitability Of The Kuala Lumpur-Singapore High Speed Rail', *RSIS, NUS,* October 2018, https://www.rsis.edu.sg/wp-content/uploads/2018/10/PR181024_Profitability-of-the-KL-Spore-High-Speed-Rail.pdf, page 2, Accessed on July 14, 2022.

94 Tomoo Kikuchi and Akio Tanahashi, 'Profitability Of The Kuala Lumpur-Singapore High Speed Rail', *RSIS, NUS,* October 2018, https://www.rsis.edu.sg/wp-content/uploads/2018/10/PR181024_Profitability-of-the-KL-Spore-High-Speed-Rail.pdf, page 12, Accessed on July 14, 2022.

95 1MDB scandal: Najib Razak offered projects to Beijing in exchange for help to resolve debt, says former aide at trial, *South China Morning Post,* September 4, 2019, https://www.scmp.com/news/asia/southeast-asia/article/3025633/1mdb-scandal-jho-low-promised-najib-razaks-aides-boss-will, Accessed on July 21, 2022.

96 Malaysia pays $76m to Singapore for cancelled high-speed rail project, *Railway Technology,* March 30, 2021, https://www.railway-technology.com/news/malaysia-singapore-high-speed-rail/, Accessed on July 23, 2022.

Rail network would also have to factor in the challenges of land acquisition and subsequent rehabilitation and resettlement of people who would be displaced. This would in turn would entail additional time and cost in realising a railway network connecting Singapore with Kunming. The cost would also be reflected in in the national debt statistics of the individual nations that would be partnering in this multinational rail connectivity project.

entered into MoU to study the feasibility of a HSR between their respective capital cities in February 2022.[97] At the same time, the prospects of this HSR being extended to Singapore has also been under consideration. However, critics have questioned the financial viability of reviving this HSR. On the commercial front, the moot issue that has been pointed out has been the fact that the commercial value of an HSR is best realised if the operational distance ranges from 200 to 1000 km.[98] However, the distance between Kuala Lumpur and Bangkok is almost 1500 km. If extended to Singapore, it would be longer. Another commercial challenge that the HSR would have to factor in is the competition that it would face form the existing civil aviation industry, especially the low-cost carriers that are already providing the much-needed connectivity in this region. On the security front, the HSR even between Kuala Lumpur and Bangkok would have to traverse southern Thailand that is already facing separatist insurgency.

97 High Speed Rail Project Could Extend Into Bangkok, Feasibility Study To Be Conducted, *Business Today*, February 26, 2022, https://www.businesstoday.com.my/2022/02/26/high-speed-rail-project-could-extend-into-bangkok-feasibility-study-to-be-conducted/

98 Matteo Prussi, Laura Lonza, "Passenger Aviation and High-Speed Rail: A Comparison of Emissions Profiles on Selected European Routes", *Journal of Advanced Transportation,* February 2, 2018, https://www.hindawi.com/journals/jat/2018/6205714/#B55, Accessed on July 22, 2022.

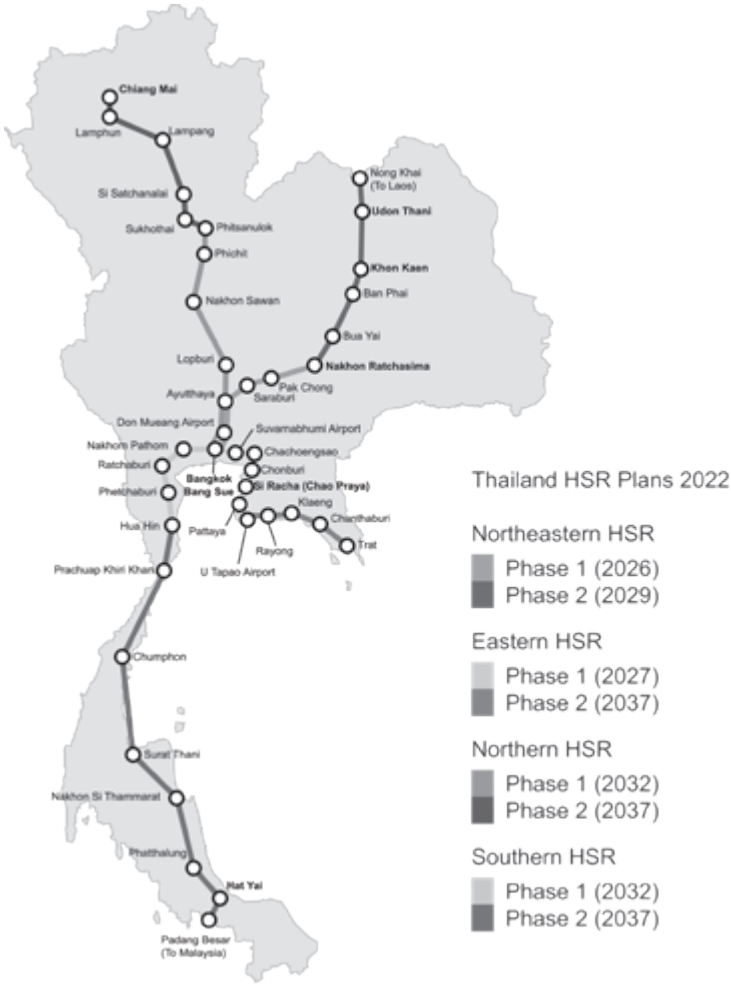
This would add to the security concerns and additional costs would have to be incurred to negate the same, thus hiking the overall cost of the HSR.[99]

Additionally, the realise this ambitions rail network would also have to factor in the challenges of land acquisition and subsequent rehabilitation and resettlement of people who would be displaced. This would in turn would entail additional time and cost in realising a railway network connecting Singapore with Kunming. The cost would also be reflected in in the national debt statistics of the individual nations that would be partnering in this multinational rail connectivity project. Apart from this, there is also the questing of training the required man power to both run and maintain such an exhaustive commination network.

99 Wu Shang-Su, Proceed with caution: High-speed rail for Bangkok and Kuala Lumpur, *Lowy Institute,* June 6, 2022, https://www.lowyinstitute.org/the-interpreter/proceed-caution-high-speed-rail-bangkok-and-kuala-lumpur, Accessed on July 21, 2022.

CONCLUSIONS

Ambitious,
futuristic, but...



Map X: High Speed Rail in Thailand *Source: Thailand HSR Plan 2022, Wikipedia, https://en.m.wikipedia.org/wiki/File:Thailand_HSR_2022.svg.*

At the time articulating its ambitious BRI project, China had identified six economic corridors. With respect to Southeast Asia, it is the China-Indochina Peninsula Economic Corridor (CICPEC) that extends from the Pearl River Delta on the South Chain Sea coast in China to Singapore. For Beijing, the CICPEC is seen as a land bridge that is to link up China with the Indochina Peninsula so as to boost cooperation among nations in the region and also "strengthen the China-ASEAN community of a shared future".[100]

Apart from the Chinese BRI, nations of this region have also had their own assessment of improving the corridors of connectivity among them. It was in this context that the Southeast Asian railway network as a Pan-Asia Railway Network was first proposed by ASEAN. This, in turn, was to be part of a much ambitious Trans-Asian Railway that as originally conceptualised by the United Nations in 1960, had gained some traction after an Inter-governmental Agreement was signed in April 2006.[101]

The multiplicity of connectivity projects, including the Thai/ Kra Canal and the SKRL are not to be seen only as BRI projects

Beijing, the CICPEC is seen as a land bridge that is to link up China with the Indochina Peninsula so as to boost cooperation among nations in the region and also "strengthen the China-ASEAN community of a shared future".

100 What are six economic corridors under Belt and Road Initiative?, *State Council Information Office, People's Republic of China,* August 4, 2020, http://english.scio.gov.cn/beltandroad/2020-08/04/content_76345602.htm, Accessed on July 19, 2022.

101 Trans-Asian Railway Network, *United Nations Economic and Social Commission for Asia and the Pacific,* https://www.unescap.org/our-work/trans0port/trans-asian-railway-network, Accessed on July28, 2022.

but initiatives by individual countries based on their national assessment. However, both in the case of the Canal and the SKRL, there have been a number of issues that have come to shape the implementation of such infrastructure projects. However, what is significant is that these projects, irrespective of the state of their implementation, are ambitious, futuristic and closely linked to the national priority of the concerned nations. Nonetheless, the PESTLE (Political, Economic, Sociological, Technological, Legal and Environmental) analyses that have thus far been carried out have been largely unfavourable towards constructing the canal. With respect to the railways, some specific issues have been raised.

However, the salience of both these undertaking is in their capacity to further integrate Southeast Asia with China. In the case of canal, the prospects of the same, if and when realised, it would alter the SLOCs network in the region, which in turn would have implication in terms of the political, security and strategic architecture of the region. The railway network on the other hand would not only further integrate the economies of the Southeast Asia with China, but would also entail greater people to people contact. This in turn can increase the dependency of this region on China.

However, with the Kra Canal seeming to have stalled for the time being and the SKRL is making some headway, there are certain factors that will have to be factored in ensuring that the rail line does not turn into a white elephant. This obstacle can be overcome only if there is significant commercial traffic plying on the rail line, especially two-way traffic. This two-way traffic would be possible only of there is commercial activity, which in turn would entail

PESTLE (Political, Economic, Sociological, Technological, Legal and Environmental) analyses that have thus far been carried out have been largely unfavourable towards constructing the canal. With respect to the railways, some specific issues have been raised.

a change in the existing nature of the industrial clusters in the both in China and in Southeast Asia. However, the restructuring of existing industrial clusters and the centres of economic activity would bring with them its own set of challenges and the same merits an appreciation on its own.

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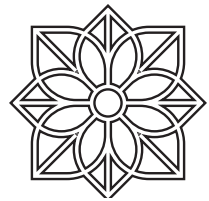

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