

Chapter 7

Policy Recommendation

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Chapter 7

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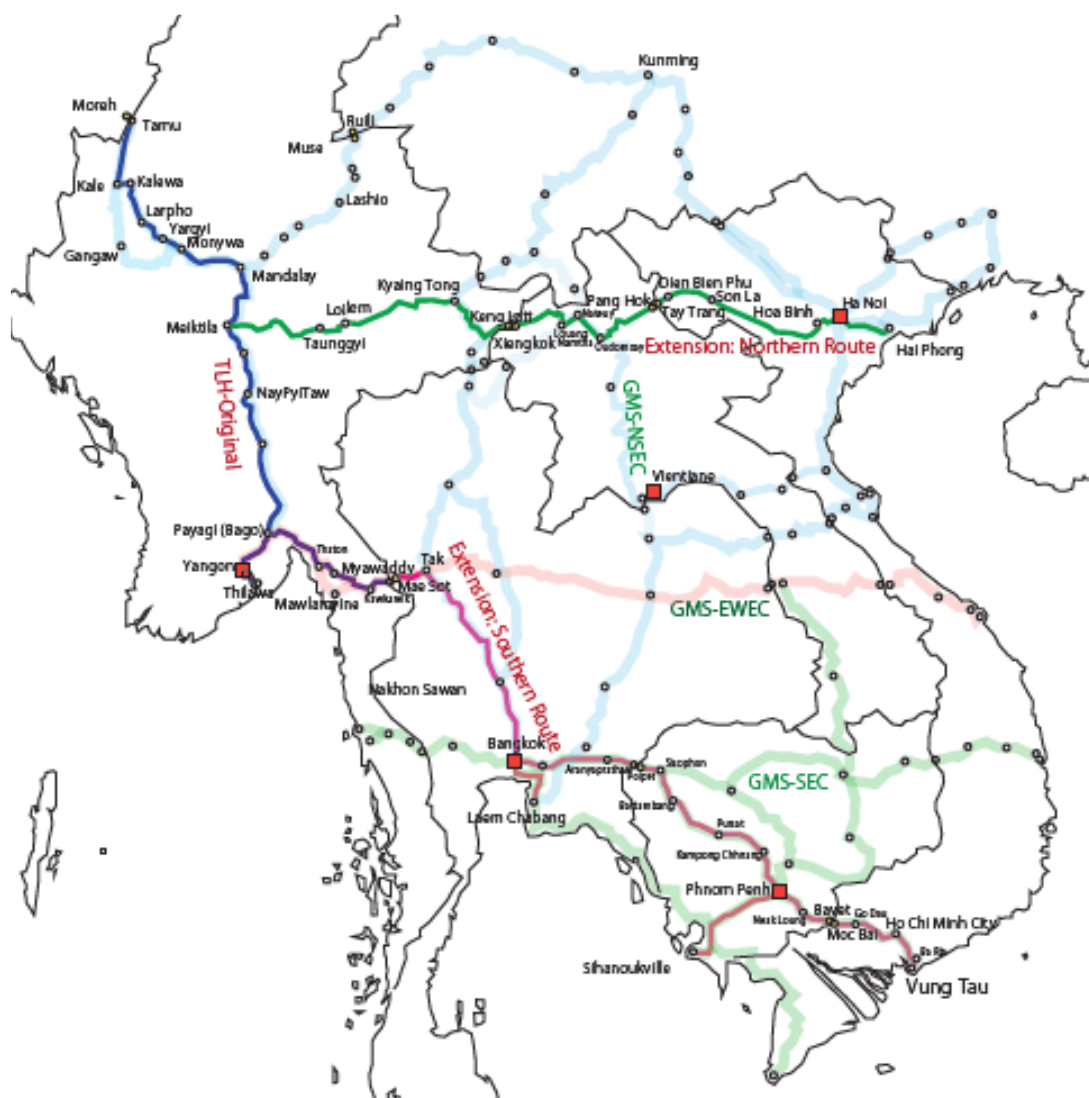
7.1. The Trilateral Highway and Its Eastward Extension: A Stocktaking

Greater connectivity between India and ASEAN has long been both an economic and strategic objective for the ASEAN–India partnership. The TLH was first conceived at the Trilateral Ministerial Meeting on Transport Linkages in April 2002, where India, Myanmar, and Thailand agreed to make all efforts to establish trilateral connectivity by 2016. Along the TLH, ‘there are two border crossings, four customs check points, three international time zones, three customs EDI systems, two different vehicle driving standards and three different motor vehicle laws. Challenge is to reach convergence in standards and procedures along the corridor’ (AIC–RIS, 2015: p.70). The Chair’s Statement of the ASEAN–India Summit in 2010 and 2012 further acknowledged the importance of linking the TLH with ASEAN’s connectivity plans, as well as its extension to the Lao People’s Democratic Republic (Lao PDR), Cambodia, and Viet Nam.

Although significant progress has been made in the development of the TLH, particularly since 2011, it is still a project under construction, and therefore its contribution to the economic growth and development of the region has not yet reached its potential. At the ASEAN–India Informal Summit held on 15 November 2018 in Singapore, the Government of India proposed to commission the Economic Research Institute for ASEAN and East Asia (ERIA) to conduct a study on developing an economic corridor along the TLH and the feasibility of its extension to Cambodia, the Lao PDR, and Viet Nam, and the proposal was welcomed by the Leaders.

Based on the Thai proposal at the 16th ASEAN Highways Sub-Working Group Meeting in August 2018 and other existing initiatives, such as the Greater Mekong Sub-region (GMS), Ayeyawady–Chao Phraya–Mekong Economic Cooperation Strategy, Master Plan on ASEAN Connectivity (MPAC) 2025, and the ASEAN Highway Network, as well as the recognition that the connectivity to international ports is an important factor for the development of economic corridors, this study will consider the following as the potential eastward extension routes (Figure 7.1).

Figure 7.1. Trilateral Highway and the Potential Eastward Extension Routes



Source: Drawn by Umezaki and Kumagai (2020) based on ADB (2018b).

(1) Original alignment:

Moreh–[**India/Myanmar Border**]-Tamu-Kygone-Kalewa-Lar Poh-Yargyi-Monywa-Mandalay-Nay Pyi Taw-Bago (-Yangon) -Thaton-Eindu-Hpa-An-Kawkareik-Myawaddy [**Myanmar/Thailand Border**] Mae Sot

(2) Northern route for the eastward extension:

Meiktila-Loilem-Keng Tong-Tarlay-Keng Lap [**Myanmar/Lao PDR Border (Myanmar-Lao PDR Friendship Bridge)**] Xieng Kok-Muang Sing-Louang

Namtha–Nateuy–Oudomxay–Muang Khua–Pang Hok [**Lao PDR/Viet Nam Border**] Tay
Trang–Dien Bien Phu–Son La–Hoa Binh– Ha Noi–Hai Phong

(3) Southern route for the eastward extension:

Mae Sot–Tak–Nakhon Sawan–Bangkok (– Laem Chabang)–Hinkong–Kabinburi
–Aranyaprathet [**Thailand/Cambodia Border**] Poipet–Sisophon–Battambang–
Pursat–Kampong Chhnang–Preach Kdam–Phnom Penh (– Sihanoukville) –Neak
Loung–Bavet [**Cambodia/Viet Nam Border**] Moc Bai–Go Dau–Ho Chi Minh City–Ba Ria–
Vung Tau

In 2018, the Asian Development Bank (ADB) released a series of comprehensive reports on the assessment and review of the configuration of the economic corridors under the Greater Mekong Subregion (GMS) Economic Cooperation Programme (ADB 2018a-h)¹. As a result of the reconfiguration, a significant part of the TLH was designated as part of the North–South Economic Corridor (NSEC). The section between Tamu and Mandalay, via Kyigone, Kalewa, Lar Poh, Yargyi, and Monywa, was named as the sub-corridor No. 6 of the NSEC (NSEC-6). The section between Mandalay and Bago, via Meiktila and Nay Pyi Taw, was designated as sub-corridor No. 5 of the NSEC (NSEC-5). And the section between Yangon and Myawaddy, via Bago, Thaton, Hpa-An, Kawkaleik, was confirmed as a part of the East–West Economic Corridor (EWEC) with some minor reconfiguration.

The northern route of the eastward extension does not overlap with GMS economic corridors, except for short sections between Luang Namtha and Nateuy (NSEC-1), which is also a part of Asian Highway No.12 (AH-12) under UNESCAP, and Nateuy and Oudomxay (Muangsai) (NSEC-2),

¹ The recommendations on the configuration of GMS Economic Corridors in ADB (2018a:19) are closely related to the TLH and its eastward extension, namely (i) include an extension at the western end of the EWEC to *Yangon–Thilawa using the Myawaddy–Kawkaeik–Eindu–Hpa-An–Thaton–Kyaikto–Payagi–Bago–Yangon–Thilawa route*, with a possible extension to Pathein; (ii) include the Kunming–Dali–Ruili–Muse–Mandalay–Nay Pyi Taw–Yangon route in the NSEC; (iii) add an extension to the Kunming–Dali–Ruili–Muse–Mandalay–Nay Pyi Taw–Yangon route *to link Mandalay to Tamu at the border with India, using the Mandalay–Kalewa–Tamu route via Monywa or Shwebo*; (iv) add the *Boten–Oudomxay–Luang Prabang–Vang Vieng–Vientiane–Nong Khai–Udon Thani–Nakhon Ratchasima–Laem Chabang* route to NSEC; and (v) include a Bangkok and Ha Noi link in NSEC using the Bangkok–Nakhon Ratchasima–Udon Thani–Sakon Nakhon–Nakhon Phanom–Thakhek–Na Phao–Chalo (via Route No.12)–Vung Ang–Vinh–Ha Noi route; (vi) include a link between Vientiane and Ha Noi using the Paksan–Nam Phao–Cau Treo–Vinh route with an extension to Vung Ang.’ *Italic highlights, added by the author, indicate the sections directly related to the TLH and its eastward extension.*

which is also a part of the Asian Highway No. 12 (AH-12). Several sections overlap only with the Asian Highway. Meiktila–Tarlay in Shan State of Myanmar is a part of Asian Highway No. 2 (AH-2). The long section from Oudomxay in the Lao PDR to Ha Noi in Viet Nam via the Pang Hok/Tay Trang border overlaps with the Asian Highway No.13 (AH-13), whereas the remaining Hanoi–Haiphong section is also a part of Asian Highway No. 14 (AH-14). In 2019, ASEAN, with support from the World Bank and Australian Aid, identified the upgrading of the section between Tarlay and Keng Lap (Kyainglat) as one of the 19 initial pipeline projects (World Bank et al. 2019b)². In summary, the remaining section on the northern extension route, which has not been covered by any international cooperation initiative, is between Xieng Kok and Luang Namtha via Muang Sing in the Lao PDR. In particular, the section between Xieng Kok and Muang Sing has long been left out of development, being the only section along the northern extension route that is still unpaved.

The southern route of the eastward extension overlaps with the EWEC from Mae Sot to Tak, and with the NSEC-1 from Tak to Bangkok, and with the Southern Economic Corridor (SEC-1) from Bangkok to Ho Chi Minh City in Viet Nam via Cambodia. Two branch routes from Bangkok to Laem Chabang and from Phnom to Sihanoukville are also parts of the SEC-3 and SEC-4, respectively.

Overlapping with international cooperation initiatives does not guarantee assistance from the coordinating institutions, yet these sections are in a favourable position because they are closely connected with the international aid community. As the Asian Development Bank (ADB) has its own funds for financing infrastructure projects, the sections that overlap with the GMS economic corridors are more likely to get access to external finance. The potential benefits of road infrastructure can be explored when the section is well connected to existing road networks and other modes of transportation. Therefore, it is important to design road infrastructure projects for the TLH and its eastward extension with close communication with these international cooperation initiatives. This also applies to the initial pipeline of transport infrastructure projects identified in the MPAC 2025 that are at an advanced stage of project preparation and are also being considered for co-financing from ASEAN's Dialogue Partners and international organisations.

² World Bank et al (2019a) also identifies the section between Takaw and Keng Tung (Kyaington) as one of the potential pipeline projects.

7.2. Key Findings

The original alignment of the TLH is basically a domestic road in Myanmar plus minimal infrastructure to cross the borders with India and Thailand, and, therefore, the development of the TLH had been slow until 2011. Since then, the development of the TLH has been accelerated mainly in terms of physical infrastructure, such as roads, bridges, and logistic facilities, such as dry ports and border-crossing facilities. In contrast, progress in making institutional arrangements for trade and transport facilitation has been slow. Myanmar's border trade has been mainly with China, followed by Thailand. India's share is increasing but still very small. That is, there remains ample room for expanding border trade along the TLH. Similarly, border trade along the northern route of the eastward extension is very small for both Myanmar and the Lao PDR, and the Lao PDR and Viet Nam, mainly because of the low economic complementarity with neighbouring countries.³

(1) Physical infrastructure

Most of the original alignment of the TLH has been recently upgraded or has been under upgrading, improvement, or repair work. Completed projects include the bypass road connecting Myawaddy and Kawkaileik (Thailand) and the second friendship bridge connecting Myawaddy and Mae Sot. The ongoing projects include the road upgrading between Kalewa and Yargyi (India), the road upgrading between Yargyi and Monywa (BOT), the new Bago bridge (Japan), and the construction of an arterial road connecting Bago and Kyaikto (ADB). Assuming the timely completion of the ongoing projects, the remaining bottlenecks are the replacement of 69 bridges along the Tamu–Kyigone–Kalewa road, which is expected to resume soon as the legal case at the Manipur High Court was concluded in favour of the Government of India in October 2019, and the upgrading of the Thaton–Eindu road, which has been stuck under a build–operate–transfer (BOT) arrangement with a Chinese company.

The northern extension route still has a lot of bottlenecks, some of which are beyond the scope of infrastructure development. Although the Myanmar–Lao PDR Friendship Bridge opened in 2015, its utilisation is still very limited, mainly because of the lack of a bilateral agreement for

³ During the field trips in December 2019 and January 2020, we observed many trucks exporting agricultural products from Viet Nam to the Lao PDR and from Myanmar to the Lao PDR. However, the final destination of most of these exports was China instead of the Lao PDR. They exported to the Lao PDR first in order to avoid the export quotas imposed by China.

cross-border transport. The most significant bottlenecks in Myanmar are the restriction on foreigners in entering some parts of Shan State and the night-time closure of the Thanlyin bridge in Takaw for security reasons. The road connecting Tarlay and Keng Lap is narrow, and the surface has been damaged. In the Lao PDR, the road section between Xieng Kok and Muang Sing is still unpaved. Although most of the road infrastructure in Lao PDR has not been severely damaged, some sections may require minor repair works or expansion to accommodate large trucks. The Lao PDR stopped issuing on-arrival visas at the Pang Hok border check point, facing Tay Trang in Viet Nam, at the end of 2019. Although the mountainous section between Tay Trang and Na Thin in Viet Nam was heavily damaged, repairs and expansion work have been in progress.

In comparison, the southern extension route has been better developed as parts of the GMS economic corridors, including the already well-developed road networks in Thailand and the construction of Tsubasa Bridge over the Mekong River in Neak Loung, Cambodia. At least in terms of physical infrastructure, the southern route for the eastward extension of the TLH will not require a large amount of additional investment, although the critical issue of institutional arrangement still remains.

Given its limited government revenue, Myanmar has a large dependence on foreign assistance in order to meet the vast demand for infrastructure investment in roads and other infrastructure. The role of the private sector, through BOT arrangements, has been significant for construction and maintenance. In addition, local townships along trunk roads, including the TLH, have been playing an important role in maintenance, using the funds collected as the wheel tax.

(2) Institutional arrangements

At present, there is no transport facilitation agreement covering the three member countries of the TLH.

The Bangladesh, Bhutan, India, and Nepal Motor Vehicles Agreement (BBIN–MVA) was signed on 15 June 2015, and is being prepared for implementation amongst Bangladesh, India and Nepal.⁴ India has proposed a transport facilitation agreement based on the BBIN–MVA for

⁴ 'Joint Press Release on the Meeting of Bangladesh, Bhutan, India and Nepal on the Motor Vehicles Agreement (BBIN MVA)', *Press Releases*, Ministry of External Affairs, the Government of India, 8 February 2020. Bhutan temporarily withdrew from the agreement in 2017 because of the fear of an influx of vehicles from other countries impacting its own transporters and degradation of the environment ('Bhutan says exit from BBIN motor vehicles pact is temporary,' *The Hindu: Business Line*, 7 May 2017).

Myanmar and Thailand to adopt for the TLH, although it is not in the public domain yet. As of today, India has not received a response from either country.

The contracting parties of the Cross Border Transport Agreement (CBTA), including Myanmar and Thailand, completed the ratification process in 2015, more than 20 years since the initial discussion in September 1994. During this time, some parts of the CBTA became outdated and needed to be revised, and the GMS Transport Ministers agreed in 2016 to launch the Early Harvest implementation of the CBTA and to complete the revision process. The Initial Implementation of the CBTA (II-CBTA) between Thailand and Myanmar took effect with a Memorandum of Understanding signed in March 2019. Under the II-CBTA, Thai trucks are now allowed to enter the territory of Myanmar to Thilawa, and Myanmar trucks can go directly to Lashio.

Despite the high aspiration of the GMS–CBTA, it has not been in full implementation, even after two decades of continuous efforts.⁵ The reasons for the delay include (1) security concerns at border areas, including the risk of smuggling; (2) difficulties in harmonising related rules and regulations, such as right-hand/left-hand drive and insurance; (3) protectionist motives for domestic logistics services providers (LSPs); (4) unwillingness of LSPs to expand their business too deep into the neighbouring countries; and (5) low demand, particularly for long-haul transportation, which is assumed in the design of the GMS–CBTA in the form of transit transport.⁶ On the other hand, during the process of deepening economic integration in ASEAN and the surrounding regions, manufacturing activities have been fragmented into several production blocks, and some of them have been relocated to neighbouring countries with better-fit location advantages for the production blocks (ERIA, 2010). As a result, the cross-border trade of raw materials, parts, and final products has increased, accompanied inseparably by the demand for cross-border transportation on a more frequent basis. While negotiating for the GMS–CBTA, GMS countries enabled cross-border transportation by using bilateral agreements with neighbouring countries. Although such a combined use of bilateral agreements may not be the first-best solution to meeting the increasing demand for cross-border transportation, it has indeed worked well enough as a second-best solution. From a pragmatic perspective, a feasible

⁵ Transport facilitation agreements in ASEAN have also stalled due to the difficulty in reaching an agreement on transit transport. More than two decades have passed since the initial conceptualisation.

⁶ Our small sample survey shows that the demand for cross-border transportation is not high amongst logistics services providers.

second-best solution is often better than an unfeasible first-best solution.

(3) Implications from GSM analyses

The expected impact of the TLH, including its eastward extensions, is not quantitatively large in terms of both increasing gross domestic product and narrowing development gaps for the region as a whole (Umezaki and Kumagai, 2020). This is mainly because of the lack of vibrant economic agglomeration along the route. Although Bangkok, Ho Chi Minh City, and Ha Noi are included in the eastward extension routes, they are located only on one side of the original alignment of the TLH. In order to transform a transport corridor into an economic corridor by stimulating two-way trade, it is important to have at least two economic agglomerations on both ends of the route.⁷

Myanmar is the largest beneficiary of the development of the TLH and its eastward extension, reflecting the fact that most of the original alignment of the TLH is in the territory of Myanmar. Thailand is the second beneficiary, and the impacts on India are positive but presently limited in scale. However, from an inclusive growth perspective, both real and potential impacts are welcomed. Despite different levels of impact along the TLH, a seamless transport corridor provides a real opportunity for setting processes and mechanisms that offer the most towards the reconciliation of the costs and benefits.

Although the additional impacts caused by the northern extension route and the southern extension route are more or less similar in terms of their total amounts, the distributional implications differ substantially. If we compare only in terms of the expected economic impacts, Myanmar would prefer the northern extension route, and others would prefer the southern extension route. The smaller than expected impact can be explained by the low demand for transportation, mainly because of the lack of trade complementarities between the NER of India and Myanmar (De et al. 2020). On the other side of the TLH, Myanmar and Thailand have proactively enhanced bilateral connectivity since Myanmar's transition to a civilian rule, starting from the construction of the Myawaddy–Kawkaleik bypass and followed by the opening of the Second Friendship Bridge, the completion of the four-lane highway between Tak and Mae Sot in 2019, and the commencement of the Initial Implementation of the CBTA. Therefore, the room

⁷ A similar argument can be found in ERIA (2010), claiming that amongst the three economic corridors in the GMS, the Southern Economic Corridor would generate the largest economic impact on the region because of its alignment having Bangkok and Ho Chi Minh City on both ends of the route.

for additional gains from the completion of the TLH is already limited.

The economic impacts will be larger when the additional degree of improvement in road infrastructure is larger. The implication is twofold. First, the lower the quality of the original road is, the larger the region's potential to enjoy positive economic impacts. The relatively larger economic impact on Myanmar induced by the northern extension route is probably because it passes through Shan State, where economic development is still in an early stage, reflecting weak connectivity to neighbouring countries. Second, the larger the improvement in the road quality, the larger the expected economic impacts are. In both cases, the degree of improvement in road infrastructure depends on the amount of investment. The northern extension route will require larger investment in improving road infrastructure because it needs to start from a lower status quo. In contrast, the southern extension route has already been better developed as GMS economic corridors, and, therefore, the necessary improvement is much smaller than for the northern extension route. Similarly, constructing a highway-quality road requires larger investment than constructing a standard quality road.

7.3. Policy recommendations

7.3.1. General Direction

The economic impacts of the TLH per se would not be quantitatively large, at least in the short term, mainly because of the low economic complementarity in the region. This is the bottom line where we start considering the future path of the TLH, including its eastward extension. The smaller than expected economic impacts of the TLH and its eastward extension do not mean that the project is not worth implementing. Rather, it implies the importance of implementing policies beyond the scope of infrastructure development and institutional arrangements for cross-border transport facilitation, for example (1) *private sector development policy*, including industrial policy to promote specific industries based on endowments such as resource-based industry and special-purpose tourism and ; (2) *spatial development policy* to upgrade selected cities as business and logistic hubs with effective connectivity to the surrounding regions by various modes of transportation; and (3) *domestic security policy* to improve security conditions as an integral element of business environments.⁸ These are necessary, particularly for the NER

⁸ These are indeed very important issues in the NER of India and Myanmar in particular, where

of India and some parts of Myanmar, to embark on steady economic development, which has long been hindered by intertwined bottlenecks. Given the complexity of the problem, it may take a long time to solve and see tangible results. There is no magical solution. Steady and step-by-step implementation of a wide-ranging set of policies is key for inclusive, resilient, and sustainable economic development in the region. During the process, the TLH and the eastward extension can serve as a facilitating framework.

The distribution of the gains would differ significantly by country and region. Therefore, the development of the TLH and its eastward extension can be used to narrow development gaps in the region. Given the relatively fragile security conditions in some parts of Myanmar and India, it is important for policymakers to consider the distributional consequences of corridor development in addition to the usual concerns on the total return on investment. Otherwise, uneven economic impacts may cause unnecessary conflicts in the region or even within a country.

Another aspect of uneven expected impacts is related to the benefit principle in addition to the principle of ability to pay. As discussed above, the country-wise distribution of the expected economic impacts would differ significantly irrespective of the choice of the eastward extension routes. In this context, it is reasonable for Thailand to assist Myanmar to upgrade the road infrastructure along the Thai side of the TLH because it is expected to generate economic benefits for Thailand as well as Myanmar. A similar discussion holds for India in its assistance to develop the Kalewa–Yargyi section of the TLH.

Repeated natural disasters and the ongoing COVID-19 pandemic have reminded the world of the vulnerability, or the serious risk on the reverse side, of the global value chain. One way to strengthen the resiliency of value chains is to have alternative routes. In this context, the potential of the TLH could be fully explored when it is well connected to other road networks, such as the GMS economic corridors and the networks of other modes of transportation, such as railways, waterways, maritime, and air.

insurgencies still prevail in some border areas. For example, the Nationwide Ceasefire Agreement (NCA) in Myanmar prescribes 17 provisions that the Tatmadaw (Myanmar Armed Forces) and the Ethnic Armed Organization shall abide by for the protection of civilians. The first provision of the list is to ‘(p)rovide necessary support in coordination with each other to improve livelihoods, health, education, and regional development for the people.’ The English version of the NCA is available at the website of NCA-S EAO, which stands for NCA Signatories Ethnic Armed Organization (<https://www.ncaseao.org/>). Although there is a long and complex history of conflicts between Tatmadaw and each ethnic armed organisation, the development of the TLH and its eastward extension can be regarded as a way to realise the provision.

7.3.2. Specific recommendations

(1) Complete transport infrastructure along the original alignment of the TLH.

- Complete ongoing construction or upgrading projects according to the schedule.
 - **[Kalewa–Yargyi]** To be upgraded by May 2021 with the support of India.
 - **[Eindu–Kawkareik]** A 66.4 km section between Eindu and Kawkareik has been being upgraded under the assistance of ADB and co-financed by the ASEAN Infrastructure Fund (AIF). As of 15 September 2019, the overall progress of the project was 57.47%. The scheduled closing date of the project is 31 March 2020.
 - **[Gyaing Kawkareik Bridge]** A ground-breaking ceremony was held on 31 October 2019 for Gyaing Kawkareik Bridge (580m) in Kawkareik, to be completed by July 2021, replacing the existing two-lane structure with a four-lane bridge, with the assistance of the Japan International Cooperation Agency (JICA).⁹
 - **[New Bago Bridge]** A ground-breaking ceremony was held on 13 February 2019 for the New Bago Bridge, which is to be opened in 2021 with the objective to enhance connectivity between Yangon and the Thilawa Special Economic Zone (SEZ) by complementing the existing Thanlyn Bridge, which is too old to accommodate heavy trucks.
- Resume stalled projects immediately.
 - **[Thaton–Eindu] [MT]** Resume bilateral talks between Thailand and Myanmar to advance the upgrading project for the Thaton–Eindu section, which has been stuck under the existing BOT arrangement (Banomyong, 2020).
 - **[Bridge rehabilitation] [I]** Resume the bridge rehabilitation project on the Tamu–Kygone–Kalewa road based on the verdict in October 2019 at the Manipur High Court (De et al. 2020).
- Steadily move forward relevant infrastructure projects that are in the preparatory stages.
 - **[Bago–Kyaikto]** A new arterial highway between Bago and Kyaikto (76.6 km) is to be developed as a part of the 2nd GMS Highway Modernization Project of ADB (No.50381-006), which will be completed by the end of 2024. The new arterial

⁹ 'Japan Consortium Building Bridge on East–West Corridor in Myanmar,' *NNA Business News*, 6 November 2019.

highway is designed to be 32 km shorter than the current alignment, and the travel time will be halved. A tender for a consulting service for detailed technical preparation was closed on 20 December 2019. This process is expected to be completed in the 1st quarter of 2021, presumably followed by physical construction work.

- **[New Sittaung Bridge]** As a part of the new arterial highway between Bago and Kyaikto, a new bridge (2.3 km) over the Sittaung River will be constructed by the Ministry of Construction with assistance from JICA. The expected year of completion is 2026.¹⁰
- **[Yangon–Mandalay Expressway] [M]** Move forward with the upgrading of the Yangon–Mandalay Expressway, which is listed as one of the 19 initial pipeline projects of the ASEAN infrastructure project and as an integral part of the MPAC 2025. According to World Bank et al. (2019b), this project is to upgrade the existing 589 km two-lane expressway to a design speed of 100 km per hour. Several feasibility studies have been conducted by ADB, China Road and Bridge Cooperation, and the Korea International Cooperation Agency, amongst others.

(2) Set up a high-powered committee to facilitate cross-border transportation and trade.

- The proposed ‘high-powered committee’ can be organised with reference to the Joint Committee under the GMS–CBTA, which is formed by the representatives of the National Transport Facilitation Committees (NTFCs) of member countries.¹¹ Thailand and Myanmar have already established their respective NTFCs, and they have the capacity to represent each country in the ‘high-powered committee’. In order to take advantage of such existing framework, India is recommended to organise a national committee corresponding to the NTFCs to represent the country during the process of negotiation and the subsequent implementation.

¹⁰ ‘New Thanlyin–Bago–Kyaikhto Highways Proposed,’ *Myanmar Times*, 26 February 2020. According to the article, ‘work is expected to start soon on a new road link connecting Thanlyin in the Yangon Region to Bago in the Bago Region. The project, expected to cost US\$160 million (MK228.5 billion), will be built with help from JICA.’

¹¹ ‘Agreement between and amongst the Governments of the Lao People’s Democratic Republic, the Kingdom of Thailand, and the Socialist Republic of Viet Nam for the Facilitation of Cross-Border Transport of Goods and People’ stipulates the establishment of NTFCs and the formation (Article 28) of the Joint Committee (Article 29). See ADB (2011) for the original text of the agreement.

- Compare the pros and cons of multiple options for transport facilitation arrangements, such as the MVA, CBTA, and the ad hoc use of bilateral agreements. It is recommended to start from the use of bilateral agreements, in particular, by making a bilateral cross-border transport agreement between India and Myanmar, as the II-CBTA between Myanmar and Thailand is already in operation.
- **[M]** Issue special permission for the registered trucks under the TLH cross-border transport agreement to use the Yangon–Mandalay Expressway, in case this section is covered by the agreement. As the registered trucks are mainly for long-haul transportation, the permission can contribute not only to reducing time but also to improving road safety. In addition, due to the registration procedures, the number of trucks concerned will be limited, and the axle load controls can be easily enforced.
- Discuss desirable or acceptable specifications of cross-border facilities, such as operating hours (24/7, or other), single-window and/or single-stop services, customs cooperation, banking facilities, and so on.
- Conduct a ‘reality check’ study to explore the current situation and understand whether there is real demand for transit goods along the TLH (Banomyong, 2020).
- Share best practices of cross-border trade and transportation.

(3) Improve infrastructure and the business environment of the border area.

- **[Friendship Bridge at Moreh/Tamu] [IM]** The existing Friendship Bridge, built by India in 2001, has to be redeveloped to accommodate cargo vehicles of a larger size (De et al., 2020).
- **[IM]** Narrowing the infrastructure gap between Moreh and Tamu. Specifically, cold storage, food testing laboratory, container handling, and hotels are available in Moreh, but not available in Tamu. On the contrary, foreign exchange facilities and medical facilities are available in Tamu but not available in Moreh (De et al., 2020). For example, while the food testing laboratory in Moreh needs to be strengthened, a similar facility needs to be developed in Tamu.
- Other border infrastructure and facilities to be considered include a reliable electricity supply, good quality internet, a full-body cargo scanner for containers, cargo vehicle yards, border fencing, a warehouse for refrigerated goods, a warehouse for seized items, plant and quarantine facilities, and a control office for drugs and narcotics (De et al.,

2020).

- Gradually formalise border administration by shifting informal trade to formal trade, by enforcing administrative controls at an appropriate level for the cross-border movement of people and vehicles, and so on. The objective of the formalisation is not to hinder but to facilitate the cross-border movement of goods, people, and vehicles by raising the transparency and predictability of border administration as well as by enhancing the effectiveness of border controls at the time of emergency, in particular.
- **[I]** Facilitate the movement of people between Moreh and Imphal. Foreigners entering at Moreh, mostly Myanmar nationals, face multiple security checks between Moreh and Imphal that cause time delays and costs (De et al., 2020).

(4) Develop logistics infrastructure along the TLH.

- **[M]** Developing dry ports in key locations, such as Myawaddy and Tamu, while considering the division of labour with existing dry ports in Yangon and Mandalay, with reference to the design of cross-border transport facilitation arrangements for the TLH. The suitable location for dry ports depends on the content of the cross-border transport agreement.
- **[M]** Develop Mandalay as the logistics hub connecting (1) Yangon and Thailand through the Myawaddy/Mae Sot border, (2) the NER of India through the Tamu/Moreh border, (3) China through the Muse/Ruili border, and (4) the Lao PDR, China, and Viet Nam through Keng Lap/Xieng Kok border.
- **[I]** Develop Guwahati in Assam State as the logistics hub connecting mainland India and the entire NER together with a hub-and-spoke network to the capital city of each state through existing road and railway networks. The spoke from Guwahati to Imphal should be effectively and efficiently connected to the TLH through the Imphal–Moreh bypass road, which is to be completed in 2022 with assistance from ADB.

(5) Establish a mechanism to ensure the financial sustainability of road maintenance.

- **[M]** Review the fiscal system to ensure sustainable funding sources for the construction and maintenance of road infrastructure.
- **[M]** Review the wheel tax system, under which townships along trunk roads collect user fees from drivers, to remove frictions on road transportation.
- **[M]** Review the efficiency and effectiveness of the BOT system.

(6) Connect the TLH effectively with other transport networks.

- Expand the aviation network amongst Myanmar, Thailand, and the NER of India to promote regional tourism and to complement road-based connectivity.
- Take account of access roads to other modes of transportation, such as inland waterways and maritime transportation (ports), railway (stations), air transportation (airports), and other logistic facilities, such as dry ports and inland container depots during the process of developing road infrastructure along the TLH.

(7) Enhance collaboration with the private sector.

- Organise a business-matching forum by inviting traders, logistic services providers (LSPs), and local government officials back-to-back with the official meeting for the TLH. In particular, it is important to facilitate the networking of LSPs to enable seamless logistics services along the TLH.
- **[I]** Promote domestic investment to the NER with an explicit focus on enhancing the competitiveness of resource-based industries in the NER.
- **[I]** Promote services industries, such as education, tourism, and medical treatment, etc.
- Supporting small and medium-sized enterprises in the border areas to meet the new business opportunities to be opened by the TLH (De et al., 2020).

(8) Conceptualise and develop eastward extensions

- **[IMLV]** Design and promote the northern extension route under the concept of the Second East–West Economic Corridor, which skewers sub-corridors of the GMS–NSEC in an east–west direction, with the multiple aims of (1) enhancing the resiliency of the road network by offering alternative routes and, thereby, enabling a flexible choice of routes; (2) improving the security conditions of the region along the route by offering new opportunities for economic development; as well as (3) invigorating local economies by facilitating border trade. Closer collaboration with ADB is highly recommended.
- **[ML]** Commence negotiation on the bilateral cross-border transport agreement, based on the draft proposed by the government of the Lao PDR. Once the agreement is done, both governments are recommended to operationalise the agreement in a timely manner.

- **[M]** Upgrade the Tarlay–Keng Lap section (54 km) to Class III or better in the Asian Highway standard. The section is listed as one of the 19 initial pipeline infrastructure projects for MPAC2025. The funding source has yet to be decided.
- **[L]** Upgrade and pave the Xieng Kok–Muang Sing section (69 km) to Class III or better in the Asian Highway standard. A recent listing up of the Tarlay–Keng Lap section as one of the 19 initial pipeline projects for the MPAC2025 would be effective in attracting the attention of potential donors, which may include India, the World Bank, ADB, and the Japan ASEAN Integration Fund (JAIF), amongst others.
- **[M]** Promote the Nationwide Ceasefire Agreement (NCA) as widely as possible to normalise the security condition of Shan State. In parallel with the progress of national reconciliation, when the opportunity comes, lift the restriction on the entry of foreigners in Shan State and the night-time closure of the Thanlyin bridge in Takaw.
- **[M]** Complete repair and upgrading work along the 61.2 km mountainous section between Yin Mar Bin and Kalaw in Shan State.
- **[V]** Upgrade and widen the road section from Dien Bien Phu to Tay Trang, or the 13 km mountainous section between Na Thin and Tay Trang, in particular, to ensure a good connection with the Lao PDR via the Tay Trang/Pang Hok border gate, with financial assistance from cement and stone mining companies operating along the road, which are regarded as responsible for the existing damage of the surface.
- **[V]** Upgrade roads and signalling systems at unfavourable points, such as the mountain passes and slopes of Cun, Thung Khe, Chieng Dong, Pha Din, Tang Quai, and Na Loi (Nguyen et al., 2020).
- **[LV]** Improve the provision of public services at the Tay Trang/Pang Hok border gate, including the shortening of the lunchtime, shortening time for procedures, and improving the transparency of procedures and fees (Nguyen et al., 2020).
- In contrast to the northern extension route, the southern extension route has already been better developed as a part of the national road network in Thailand as well as a part of the GMS economic corridors and, therefore, the necessary improvement is much smaller than the northern extension route. As the road condition is at least ‘fair’, there is no urgent need to develop physical infrastructure along this route.

(9) Study the possibility of developing alternative routes.

- As the next step after the completion of the original alignment of the TLH, it is recommended to consider the possibility to develop alternative routes to enhance the resiliency of the TLH from a longer-term perspective. This process could be done in parallel with the development of the northern route of the eastward extension, which is expected to take a long time.
- **[Zawkohtar/Rihkhawdar] [IM]** In order to enhance the resiliency of the TLH, an alternative route needs to be listed in the pipeline, in addition to the existing route through the Moreh/Tamu border, which has effectively been the only route connecting India and Myanmar by road. In order to take advantage of the border between Zawkohtar in Mizoram State of India and Rihkhawdar in Chin State of Myanmar as the alternative gateway, two road segments from Rihkhawdar need to be upgraded. One is to Kalemmyo through Tedim and the other is to Gangaw via Thantlang and Hakha. Kalemmyo and Gangaw are major cities along the Monywa–Kyigone segment of the Asian Highway No. 1 (AH-1). These alternative routes will enhance the resiliency of the connectivity between India and Myanmar and facilitate the spreading of the economic impacts of the TLH.
- **[Payathonzu/Three Pagoda Pass] [MT]** In order to enhance the resiliency of the TLH, an alternative route needs to be listed in the pipeline, in addition to the existing route through the Myawaddy/Mae Sot border, which has effectively been one of the two major routes connecting Myanmar and Thailand by road. Another major route through the Tachileik/Mae Sai border is difficult to substitute for the route through the Myawaddy/Mae Sot border because they are geographically far away. The signing of the NCA by the New Mon State Party (NMSP) on 13 February 2018 was a major step to improving security conditions in Mon State.¹² Being the

¹² Unfortunately, there was a clash between the Tatmadaw (military) and the NMSP near the Thai–Myanmar border for the first time since the NMSP’s signing of the NCA in February 2018 (‘Tatmadaw, Mon ethnic armed group clash on Thai–Myanmar border,’ *Myanmar Times*, 28 November 2019). In addition, several clashes between the NMSP and the Karen National Union (KNU), which is one of the original signers of the NCA since 15 October 2015, have been reported even after the agreement between leaders to halt fighting (‘NMSP, KNU Clash After Reaching Agreement to Halt Fighting,’ *Myanmar Peace Monitor*, 28 October 2019). As the security condition is still unstable, the development of the route through the Payathonzu/Three Pagoda Pass border will take a long time.

third-largest city after Yangon and Mandalay, Mawlamyine, the capital of Mon State, has the potential to enlarge the economic impacts when it takes part in the TLH.¹³ In addition, the route from Mawlamyine to the Payathonzu/Three Pagoda Pass border along the old Thai–Burma Railway could be a candidate for the alternative route to complement the existing route through the Myawaddy/Mae Sot border.

7.4. Ways Forward

The development of the TLH accelerated dramatically after Myanmar’s transition to civilian rule in 2011. Thailand and India immediately offered official assistance to enhance respective bilateral connectivity.

The bypass road connecting Thinggan Nyenaung (near Myawaddy) and Kawkaleik, which was constructed with Thai aid and inaugurated on 30 August 2015, has shortened the travel time significantly. The Second Friendship Bridge, connecting Myawaddy and Mae Sot, was officially opened on 30 October 2019. On the Thai side, a four-lane highway connecting Mae Sot and Tak was completed in 2019. Regarding the institutional arrangement for cross-border transportation, the memorandum of understanding for the II-CBTA was signed in March 2019, and the actual utilisation of the II-CBTA has just started in March 2020 (MSR, 2020). These changes have already been increasing the cross-border movement of goods, vehicles, and people between Myanmar and Thailand. For example, Thailand’s exports of motorcycles to Myanmar at the Mae Sot/Myawaddy border increased dramatically from B1,265 million in FY2014 to B3,136 million in FY2017 (Banomyong, 2020). It is natural to imagine that these imported motorcycles have been changing the lives of the people of Myanmar. Although the amount is much smaller than for exports, Thailand’s imports from Myanmar through the Myawaddy/Mae Sot border, consisting mostly of agricultural products, have been increasing as well.

¹³ Mawlamyine used to be the west end of the original alignment of the GMS–EWEC as a historic port town. After several revisions, the current west end of the GMS–EWEC is Yangon, without passing through Mawlamyine.

On the other side, India has been assisting Myanmar in the bridge replacement project on the Tamu–Kyigone–Kalewa road and in upgrading the Kalewa–Yargyi road, although both are not completed yet. In India, a bypass road connecting Imphal and Moreh is under construction and is to be completed by 2022 (De et al., 2020). The Integrated Check Post (ICP) started its operation in August 2018. Accordingly, the border trade between India and Myanmar through the Moreh/Tamu border has been increasing significantly. In addition, it was recently reported that an international bus service connecting Mandalay and Imphal was about to start operation on 7 April 2020.¹⁴ Although the size of border trade between India and Myanmar is much smaller than that between Thailand and Myanmar, it is also increasing significantly (De et al., 2020).

All these developments indicate that the TLH is entering a new phase, which is characterised by utilisation rather than conceptualisation and development. In parallel, Myanmar's economy has been undergoing significant changes. For example, Thilawa SEZ, inaugurated in September 2015, has received 111 investment projects as of 1 March 2020, of which 44 projects are export oriented and 66 projects are domestic market oriented.¹⁵ Japan is the largest source of investment, amounting to 55 investment projects, followed by Thailand (16 projects). With the operationalisation of the II-CBTA between Thailand and Myanmar, which allows Thai trucks to enter the territory of Myanmar directly to Thilawa SEZ, it has become easier for the factories operating in Thilawa SEZ to import raw materials and intermediate products from Thailand for subsequent processing. The final products can be transported by Myanmar trucks directly to Laem Chabang Port to export to the world. Although the utilisation of the II-CBTA has started recently, this kind of operation is expected to increase the share of horizontal trade (intra-industry trade) vis-à-vis vertical trade (inter-industry trade), leading to structural changes in border trade between Myanmar and Thailand. This in turn will contribute to upgrading Myanmar's industrial structure. On the other hand, investors from Thailand can take advantage of the difference in factor endowment, or location advantage, by utilising Thilawa SEZ as a new destination for the so-called 'Thai plus one' strategy.¹⁶

¹⁴ 'Imphal–Mandalay Bus Service to Begin from April 7,' *The Wire*, 20 February 2020.

¹⁵ Myanmar Japan Thilawa Development, Ltd.

¹⁶ A typical example of the 'Thai plus one' strategy is relocating a labour-intensive production process from the mother factory in Thailand to Thilawa SEZ in order to reduce the total cost of production. See ERIA (2010) for the mechanism of fragmentation. This kind of investment has already been observed in Cambodia and the Lao PDR.

In contrast, it is difficult to expect a similar type of investment from India to Myanmar, at least in the short run, mainly because India's manufacturing sector is still less developed compared with Thailand, and the distance to the main factories are far away from the India–Myanmar border. The manufacturing sector in the NER of India is mainly resource-based and, therefore, not suitable for the fragmentation of production. However, the reduced time and cost of transportation to Myanmar and hence to Thailand will open wide opportunities for exporters in the NER, and vice versa. Therefore, the NER has the vast potential to become a logistics hub, connecting mainland India and ASEAN through Myanmar and Thailand. In this context, Mandalay and Thilawa (or Yangon) in Myanmar have a similar potential to become logistics hubs connecting Thailand, India, and China as well. The resulting increase in transport demand along the TLH is expected to increase derived demands in other services sectors, such as banking and finance, hotels and restaurants, and other business services. Furthermore, the improved business environment supported by a vigorous services sector could in turn attract investment in the manufacturing sector. The eastward extension, once completed, would magnify such chain reactions by offering larger markets and sources of supply. After the winding down of the COVID-19 pandemic, global supply chain networks will be reviewed and restructured substantially in order to enhance resiliency by relocating production facilities and/or diversifying markets and sources of supply (Ni, 2020). Preparing alternative routes, in addition to the regular route, for trade will also be an important issue for manufacturers and traders.

Of course, there still remains a lot to do to complete the TLH as discussed in this report. Steady and step-by-step implementation of the recommended policy measures will contribute to the inclusive, resilient, and sustainable economic development of the region.

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Terms of Reference

No. JAK/ASEAN/106/18/2018

Dated 04 March 2019

Dear Kobayashi San,

I write with reference to our ongoing discussions on the TORs for the proposed ERIA Study to develop and Economic Corridor along the India-Myanmar-Thailand Trilateral Highway, and the feasibility of its extension to Cambodia, Lao PDR and Vietnam.

2. In this context I wish to convey the approval of the competent Indian authorities to the enclosed Terms of Reference for conducting the above mentioned study.
3. I look forward to collaborating with you closely during the course of this study, and also in keeping with paragraph IV of the TORs.
4. I thank you and ERIA once again for undertaking this study on our behalf.

Sincerely

(Rudrendra Tandon)

Mr. Izuru Kobayashi
COO, Director General of Administration
And Personnel Department
Economic Research Institute for ASEAN
And East Asia (ERIA), Jakarta, Indonesia

Copy to:

- (i) Shri Anurag Bhushan, JS (ASEAN-ML), MEA, JNB, New Delhi.
- (ii) Prof Sachin Chaturvedi, RIS, New Delhi.

Study on the Trilateral Highway and Possible Extension to Cambodia, Lao PDR and Viet Nam: Current Status, Challenges, Opportunities

Concept Note and Terms of Reference

I. Background

At the ASEAN-India Informal Summit on 15 November 2018, the Leaders welcomed India's proposal for a study by the Economic Research Institute for ASEAN and East Asia (ERIA) on developing an economic corridor along the Trilateral Highway (TLH) and the feasibility of its extension to Cambodia, Lao PDR and Viet Nam.

Greater connectivity between India and ASEAN is both an economic and a strategic objective for the ASEAN-India partnership. The statements of Indian Prime Minister in the ASEAN-India Summit Meetings of 2011 and 2012 laid out the need for completion and extending the TLH to Cambodia, Lao PDR and Viet Nam. The Chair's Statement of ASEAN-India Summit in 2010 and 2012 acknowledged the importance of linking the TLH with ASEAN's connectivity plans, and its extension to Lao PDR, Cambodia and Viet Nam.

TLH was first conceived at the Trilateral Ministerial Meeting on Transport Linkages in Yangon in April 2002, where India, Myanmar and Thailand agreed to make all efforts to establish trilateral connectivity by 2016. Since then, progress has been made in the development of the TLH including the opening of new Myawaddy-Kawkareik road in 2015 and Integrated Check Post (ICP) at Moreh in January 2019. However, TLH is a project under-construction and therefore, its contribution to the economic growth and development of the region has not yet reached its potential.

The extension of TLH to Cambodia, Lao PDR and Viet Nam could further facilitate movement of goods and people between India and ASEAN, thereby strengthening the economic linkages between them. It will also be of particular importance for the economic growth of the Northeast Region (NER) of India, as this region will serve as the gateway on the Indian side, to the rest of the TLH and its eastward extension.

II. Scope of the Study

1. The study will focus on the feasibility of establishing an economic corridor along the TLH through a seamless, efficient and end to end transportation corridor along the existing TLH and the proposed extension towards Cambodia, Lao PDR and Viet Nam.
2. The study will examine the physical infrastructure of TLH such as road conditions, bridges and tunnels, and cross border facilities and institutional arrangements, and identify the factors that may hinder the seamless movement of goods and people across the length of the TLH and its potential eastward extension. The study will also cover the usage of the current TLH and suggest measures, both physical and institutional, to smoothen transportation and increase the movement of goods and people along the TLH.
3. The study will also examine the extension of the transportation corridor to Cambodia, Lao PDR and Viet Nam. For this purpose, the study will take into account the existing initiatives such as the Greater Mekong Sub-region (GMS), Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS), Master Plan on ASEAN Connectivity (MPAC) 2025 and the ASEAN Highway Network (AHN), and the existing transportation infrastructure and border arrangements along Cambodia, Lao PDR and Viet Nam. The

study will propose synergies with existing transportation connectivity initiatives while avoiding duplication.

4. The RIS (India) will provide inputs on potential economic and social linkages on Northeast Region of India (NER) due to the development of a transportation corridor along TLH and its potential extension to Cambodia, Lao PDR and Viet Nam.
5. On the basis of above findings, the study will suggest practical policy options for undertaking necessary actions for establishing a functional transportation corridor along TLH and its extension to Cambodia, Lao PDR and Viet Nam.
6. The outcomes of the study will be reported to the ASEAN-India Senior Officials Meeting, the ASEAN-India Ministerial Meeting and the ASEAN-India Summit.

III. Study Team (Tentative)

- Prof. Fukunari Kimura (Chief Economist, ERIA), Supervisor
- Mr. So Umezaki (ERIA), Project Coordinator
- Prof. Toshihiro Kudo (GRIPS, Japan)
- Mr. Satoru Kumagai (IDE-JETRO, Japan)
- Dr. Masami Ishida (IDE-JETRO, Japan)
- Dr. Ruth Banomyong (Thammasat University, Thailand)
- RIS, India [*will provide experts from its ASEAN India Centre and NER departments*]

- IV. The Study Team will regularly brief members of the Advisory Panel (either individually or jointly) on the progress of the study including at the planning stages of each step in the study. The Advisory Panel will comprise (i) Ambassador-Indian Mission to ASEAN; (ii) Chief Operating Officer & DG Policy Dept from ERIA.

V. Annotated ToR

(a) Introduction

- *Brief history of IMT and the value of TLH connectivity*
- *Backgrounds, objectives, and the scope of study, and the organization of report.*

(b) Current status of TLH and its eastward extension

- *Selective literature review.*
- *Cross-border trade flows along the TLH and its eastward extension.*
- *Traffic, both cargoes and passengers, and the provision of logistic services along the TLH and its eastward extension.*

(c) Physical infrastructure

- *Take stock of the current status and future plan of physical infrastructure development along TLH and its eastward extension such as roads, bridges, tunnels, and border facilities, with reference to the other relevant initiatives.*

[The study team will examine the physical infrastructure along: (1) the official alignment of TLH from Moreh to Mae Sot, (2) the eastward extension from Mae Sot using the best

possible alternative alignments, and (3) the road connectivity between Moreh at the beginning of the TLH, and the rest of the domestic road network in India (Based on RIS Study)]

- *Examine the sustainability of infrastructure from the viewpoints of demand, quality, and financing including those for maintenance.*

(d) Institutional arrangements

- *Take stock of the current status and future plan of institutional arrangements to facilitate seamless and effective movements of goods and people along TLH and its eastward extension, such as the Motor Vehicles Agreement (MVA), trade liberalization and facilitation, and visa regulation, with reference to the relevant existing initiatives.*
- *The scope of institutional arrangements is those designed and implemented along the road infrastructure covered in this study.*
- *Examine implementation aspects and possibility for harmonization with relevant existing initiatives in the region.*

(e) Economic impacts on India's NER (Based on RIS Study)

- *Need of infrastructure that may be needed to cope up the demand of trade and value chains that are established with India's NE region*
- *Potential hurdles and possible mitigation measures*

(f) For the better use of TLH: Key improvements and possible economic impacts to the region

- *Quantitatively investigate the impacts of enhanced connectivity along the TLH and its eastward extension using the Geographical Simulation Model based on several scenarios identified based on the above findings.*
- *Non-quantitative implications, such as the perspectives of the private sector, will be discussed as appropriate.*

Policy recommendations and Way Forward

VI. Schedule

March 4, 2019	:	Commencement
April-May 2019	:	Workshop/Field trip
July 2019	:	Submission of the Draft Mid-term Report
September 2019	:	Submission of Mid-term Report <i>(focusing on stocktaking)</i>
February 2020	:	Submission of Draft Final Report
April-May 2020	:	Submission of Final Report <i>(with deeper analyses and recommendations)</i>
