

NON-PHYSICAL BARRIERS FOR THE SOUTH EAST ASIA (ASEAN) MAINLAND CROSS BORDER RAIL FREIGHT MOVEMENTS: FACTORS THAT COULD AFFECT THE REGION'S SEAMLESS RAIL FREIGHT MOVEMENTS

Adi Aizat Yajid

Ph. D Candidate

Malaysia Institute of Transport (MITRANS),

Universiti Teknologi MARA (UiTM),

Shah Alam, Selangor, Malaysia

adiyajid11@gmail.com

ASEAN Rail Performance

In this sub-region, the dependency of rail transportation, specifically the train, to carry freight is not obvious. Instead, the train could be said among the least use mode of transportation for carriage of freight crossing the international borders, in this sub-region. The less reliance of train to move freight crossing the international border in this sub-region is also influenced by the fact that there are a very limited number of facilities that enable the cross border rail freight movements to happen. As on 2014, there is only one border which the cross border freight trains services available in this sub-region, which is between Malaysia and Thailand through Padang Besar of Malaysia and Padang Besar of Thailand. There is another rail link connecting two neighbouring countries, which is between Thailand and Lao PDR, through the Friendship Bridge located between Nong Khai in Thailand and Vientiane in Lao PDR. The carriage of freight through this particular link would only commence in 2015 (The Nation, 2013). As for the time being, the movements between Malaysia and Thailand will become the only active cross border rail freight movements in this sub-region.

In ASEAN, the train services are been made available by the local governments. Most of the service providers are either owned by the governments or controlled by the governments. Indirectly it means that the governments operate the trains' services in their respective countries. Kereta Api Tanah Melayu Berhad (KTMB) in Malaysia (Yeow, 2008), State Railway of Thailand (SRT) in Thailand (Devakula, 2008), Vietnam Railways in Vietnam (datviet, 2014) and Myanmar Railways in Myanmar (KPMG, 2013) are the sole train service provider in their respective countries, which are under the control of the government. They are also the sole service provider for rail freight in the countries. As for another two countries, Lao PDR and Singapore, the trains' services in their countries are and were operated by their neighbours. As for Lao PDR, SRT of Thailand provides the train services in the country. Meanwhile as for Singapore, the trains' services are and were operated by KTMB of Malaysia. For these two countries, the unavailability of railway facilities for freight trains limiting their opportunity to have their own state run railway companies. The situation in Cambodia is different from its neighbours. In Cambodia, the train services had been privatised in some area in the country (Hilton, 2012). Thus, two different companies run the operations of trains in Cambodia.

Under the managements of the local governments, most of the rail freight services in this region do not seems to performs very well. The table below shows the amounts of freight carried by ASEAN mainland countries, through rail freight services, for the past few years, as recorded by the World Bank:

	2010	2011	2012
Singapore	-	-	-
Malaysia	1384	1535	3071
Thailand	3161	2455	2455
Vietnam	3901	4101	3959
Lao PDR	-	-	-
Cambodia	-	-	-
Myanmar	-	-	-

Table 1: Goods carried by train (million ton-km) (World Banks, 2014)

Looking at the available data, Malaysia is the only country, which had increment in volume of freight carried. As for the other two countries, the numbers are not very encouraging. The data showed above only cover the freight carried in the countries. As for cross border rail freight movements, there is still yet to be available the data on the volume of freight carried.

Malaysia railway industry could be said as owning the most advance railway facilities in this sub-region. With the on-going constructions of double tracks and electrifying them, and also constructions of inland containers depot (ICD), it can be said that Malaysia is currently leading the developments of the railway facilities. Eventually, such developments of new facilities do not provide positive impacts on Malaysia rail freight performance. With the available facilities, KTMB is still facing losses and debt. Until 2014, current KTMB chairman, Ir. Nawawi Ahmad mentioned that they had earned 380 million Ringgit Malaysia, equivalent to about 118.07 million US Dollar. Eventually, such amount of profit would not be sufficient enough to cover the debt and losses they faced so far. For the same period of services, KTMB is facing the loss of 700 million Ringgit Malaysia, which equal to about 217.49 million USD (Bernama, 2014). Such losses are made available by the media to the public. KTMB Gemas Operation Executive, Basri Abu Bakar, mentioned about the financial losses faced by KTMB as follow: "In total, income for KTMB had been mentioned through media. KTMB had never gain profits. KTMB is facing losses every year."

The performance of Malaysian northern neighbour, Thailand, is not very encouraging either. Through the services provided by SRT, the company had yet to earn enough profit to enable them to cover the operation cost. According to Prasong Poonthanet, the director-general of the State Enterprise Policy Office, SRT was facing the debt of 7.58 billion baht, which is equivalent to about 0.23 billion USD (Chantanusornsiri, 2012). As on April 2014, according to Public Debt Management Office of Thailand, SRT is facing 113,484.970 million baht of debt (Public Debt Management Office, 2014). The company, which was founded as Royal State Railway of Siam in 1890, was reportedly bankrupt in the mid of 2000. From that incident, SRT required 60 billion baht to cover future losses and investment, on top of to cover the existing obligations of the company (Brixi and Schick (2002).

In Vietnam, the needs for railway facilities are overshadowed by the performance of other mode of transportations and its geographical landscape. As for the time being, the only international railway connection that it has is between Vietnam and China. The connectivity that Vietnam has with its region is fairly new. As far as the performance of its rail industry is concerned, according to Myint Thein, who is the Deputy Minister for Rail Transportation of Vietnam, Vietnam government is operating the railway industry at a loss. The government spend Ks 45 billion, which is nearly US\$463,717 just to run the railway and maintain them in the country (Eleven, 2014).

"That's why our government is spending Ks 40 or Ks 45 billion yearly for the public. On the other hand, we are facing difficulties because the government has spent money for the upgrading of railroads and the renovation of coaches and locomotives (Myint Thein, 2014)."

Also, the railway transportation is among the seven sectors that had caused the nation to own the debt of Ks 900 billion, equivalent to 0.22 billion USD (Nyein Nyein, 2013).

The seamless movements suggested that the movements of rail freight could be made throughout the sub-region to maximise the capability and reliability of the rail freight services. As for now, the railway industry is moving inside the country, which limiting the possibility of generating the income for the country. By having the seamless journey, it could support the neighbouring countries in providing the services so that the demand and reliability of the rail freight could increase to the level where it could compete or even perform better than the other mode of transportations.

Institutional seamless journey

Uninterrupted journey will increase the value of rail freight services. The confidence level of the market is important to ensure the sustainability of the rail freight movements. In term of definition of seamless journey, it could be seen through three different perspectives namely linguistically, terminologically and conceptually. Macmillan had define the term seamless as below (2007):

1. Made without seams
2. Changing or continuing very smoothly and without stopping."

Terminologically, seamless carries the same meaning as coherent or uninterrupted. As for the seamless journey concept for cross border rail freight, deriving from the definition of seamless

linguistically and terminologically, it is a cross border journey from the point of origin until the point of destination without having to undergo any changes in between. Under this particular category, the seamless journey will exist if the shipments do not need to change legal documentations or formalities upon crossing the international borders. Documentations and information prepared at the place of origin will be use for the whole journey and border inspections are unnecessary. For the time being, the local government controls the regulations relating to cross border rail freight movements. There are a few ASEAN level declarations made concerning either freight movements or transportation, but the option of enforcing such regulations is within the hand of the members. Thus, as far as the regulations are concern, changes are necessities for cross border rail freight movements. For the cross border movements that require going across a few countries, a lot of regulations from various countries need to abide to. For instance are the shipments between Thailand and Singapore back then. The regulations that need to be abide to consist of the combination of regulations from Thailand, Malaysia and Singapore. Even though the shipments just going through Malaysia, which were regarded as the transit process only by the Malaysian customs officers, still, the consignor and the carrier could not neglect on not to abide the regulations and prepared the legal documentations required by the authorities of the transit countries. Each institutional procedure will add more time on the shipments schedule.

There are a few ASEAN level declarations made concerning either freight movements or transportation. Declarations such as 1998 ASEAN Framework Agreement on the Facilitation of Goods in Transit (AFAFGIT), 2005 ASEAN Framework Agreement on Multimodal Transport (AFAMT) and 2009 ASEAN Framework Agreement on the Facilitation of Inter-State Transport (AFAFIT) are meant for the transportation of freight crossing the international borders. Eventually, the option of enforcing such declarations is within the hand of the members. Ratifications are not necessary mean that the members will apply such declaration. Thus, as far as the current individual regulations are concern, changes are necessities for cross border rail freight movements. For the cross border movements that require crossing few countries, a lot of regulations from various countries need to abide to. These various procedures would result in non-seamless journey.

Non-physical barriers

“Anything that prevents progress or makes it difficult for someone to achieve something.” Linguistically, that is the meaning of barrier as been defined by MacMillan (2011). In order to have institutional seamlessness, the important things that need to be looked into are the institutional barriers, which are also known as the non-physical barriers. Theoretically, these barriers are the factors that hindering the seamless journey, institutionally. According to Regmi (2013), there are various barriers that could hinder the cross border movements generally. Among them are as such:

1. Inconsistent and time consuming, costly border crossing formalities and procedures.
2. Restriction/limitation on entry of vehicles.
3. Transshipment needed at the border.
4. Different standards of vehicles and drivers.
5. Restrictive visa requirement.
6. Difficult and different process for transit traffic.
7. Differential/reciprocal tariffs/charges.
8. Incompatible working hours at borders.
9. Coordination among various stakeholders.
10. Excessive security checks.

Looking at the list above, the institutional barriers had been highlighted in the form of formalities and regulations of the country in enabling the cross border movements. There are some of the institutional barriers mentioned above, which could not be avoided. But, for some of the others, by improvising the formalities available, the idea of seamless journey could be materialised.

Knowledge

The experience of this sub-region in handling the cross border rail freight movements is fairly new. With the experience of having a few cross border movements collectively throughout the history, it might be a very challenging situation in finding the best practice of cross border rail freight movements.

The knowledge under the scope of cross border rail freight movements could be looked into through a few ways namely through the knowledge of physical aspect of the movements and the knowledge over institutional aspects of the movements. As for the physical aspect of the movements, as for the time being, most of the technologies or facilities available in this sub-region are different from one country to another. David B. Hill had mentioned this particular situation by taking the example of Europe (2013):

“...cross border is a major issue in Europe because technology is different in the other side of the border...” (2013)

In this sub-region, Ruth Banomyong mentioning the same example over the differences that exist between neighbouring countries on the aspect of facilities:

“...Malaysia is electrified its rail system but Thailand, they still using diesel locomotive. So that means that you can't even cross the border. You stuck because you don't have any energy (2013).”

Such situation requires the knowledge of various parties in enabling the movements of train on the other side of the border. The knowledge in this context touches on the knowledge's own by the service providers. If the service providers have no knowledge of the facilities and condition of railway facilities at the other side of the border, it would be difficult for them to move the shipments seamlessly.

The factor of knowledge also touched on the procedures of movements on the other side of the border. As for the time being, the regulations applied are local based regulations. Thus, the formalities and formats are different from the other side of the border. Take a good example of customs procedures between Malaysia and Thailand. Both countries have their own set of rules regarding the international shipments. Although there are a lot of similarities between them, but the effect of non-similarity is more obvious, whereby it will hinder the seamless journey. For example is the aspect of documentations. Each country requires different set of documentations to enable to freight to be moved inside the country. With lack of knowledge available that could be used as the references to the stakeholders, seamless journey concept might be far from reach. On top of that, the standard of procedures between these countries are different, which make the customs of both countries difficult to work together uniformly.

Regulations

ASEAN is very well known for the working groups created by the members in dealing with various issues concerning the sub-region. In most occasions, the members will make a declaration in translating their efforts of working together for certain issues. AFAFGIT, AFAMT and AFAMT are the good examples of declarations made between the members concerning the issue of transportations and logistics. Eventually, the enforcements of those declarations are in the hands of the members, which made the uniformity of regulations is yet to be materialised. The tendency of the members in this sub-region to use mutual agreed declarations is not high. Instead, when it comes to the transportation and logistics sector, the members tend to use their local regulations to assist the industry, even though there are declarations made on the said industry. The local regulations will weight on the need and necessary of the country. Protocol 6 of AFAFGIT, which touched on the Railways Border and Interchange Stations, had yet to be ratified by any of ASEAN members, as on 2012 (Foreign Affairs Division Office of the Permanent Secretary for Interior, 2012).

The differences in regulations could be witnessed through different branches of enforcements bodies. From the regulations perspective, the protection of service provider in the country is very obvious. In most of the members' countries, there could only be a single service provider for the freight trains services. Such situation created monopoly environment that hinder other service providers from operating inside those countries. Mentioning on this problem, Multimodal Freight Sdn. Bhd. Branch Manager, Rizat Rahim had gave an example of Malaysia and Thailand situation. According to him:

“As for now, even if Malaysia (KTMB) wants to enter into Thailand, there are already a lot bureaucracies involved. Malaysia Customs with their customs bureaucracies and Thailand with theirs. Once the train want to cross to Lao PDR from Thailand, there are other bureaucracies involved. And so on. If all the procedures are not standardised, how will the train reach Kunming?”

Talking on the railway law in Thailand, Ruth Banomyong mentioned as follow:

“Currently, the issue with Thailand is that the SRT has its own law and in its law basically says that train and locomotives need to be one operated by staff of SRT and the locomotives need to belong to them.”

Looking at the two members of ASEAN as the example, the restriction from the regulations on the service providers in those countries had indirectly hindering the possibility of other service providers to operate in the countries. Such condition will definitely hinder the seamless journey for cross border rail freight movements. As for the time being, the shipments between Malaysia and Thailand have to undergo changes of locomotives. Aliffin Abu, Padang Besar KTMB officer stated that:

“For the movements inside Malaysia, the Thais need to deal with KTMB and for the movements in Thailand, we need to deal with SRT.”

The waiting time due to these procedures varies. It could be as early as a few minutes and it could be as long as days. Rizat Rahim explained that because of such regulations, sometimes the shipments faced a very long delay.

“Due to the problem with Thai locomotive, we reach here within a few days, but got stuck up to weeks. Thus, it creates problems for the shipment.”

Opening the opportunities for other service providers, which could be done by the regulations control, to operate in the countries of members will make the intention of seamless journey more reachable. The problem of unavailability of locomotives could be solved with the improvising or alteration of regulations.

Commitment

In enabling the cross border rail freight movements to be seamless, commitments from various parties are necessary. It will complete the needs of the other stakeholders, which at the end will complete the chain of cross border rail freight movements. Below is the stakeholders' dependency diagram for logistics service as presented by Ruth Banomyong.

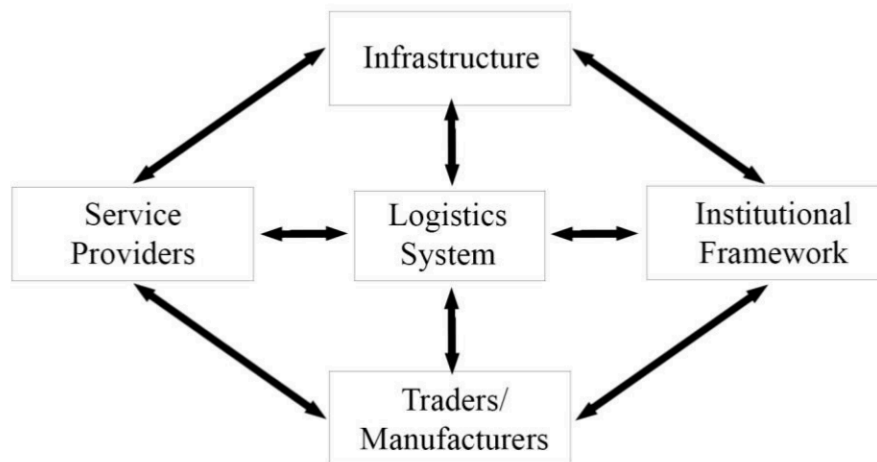


Figure 1: Macro Logistics System Framework (Banomyong, 2008)

Through the said diagram, it can be seen that every single stakeholders do rely on the other stakeholders in completing a shipment, especially the commitment from the country's government. The government of the country determines the shape and future of logistics industry using the regulations as the tool. The commitment of the governments could be seen through two different perspectives namely the commitments on shaping the future of rail industry and the commitments of preparing the ample preparation for the railway future.

The service of cross border rail freight movements between Malaysia and Singapore had taken place for quite some time. Eventually, it had been stopped in 2011 (Agence France-Presse, 2011). The service had ended due to the changed of ownership over the land which the train facilities located. The Singapore government had discontinued the rail freight services between these two neighbouring countries. This particular historical event is a good example on how the commitment of the members could influence the sustainability of rail industry in this region, which indirectly influences the possibility of seamless movements for rail freight. For Malaysia and Thailand, the limitation made by

the government on who could run the service in the countries had indirectly limiting the possibility of seamless journey. But for Singapore, the rail freight industry had been stopped upon the closure of KTMB facilities in Singapore. As in Malaysia, even though there is suggestion made by Railwaymen's Union of Malaysia (RUM) to enable multiple service providers in Malaysia, but such idea is not been accepted very well. It shows that the government is still not committed to run the seamless rail freight movements.

Another commitment issue from the government is on the constructions of railway facilities. As on 2012, there are still some missing links on the railway connections between the countries. The table below shows the progress of developments of links connecting the ASEAN mainland members:

Country	Missing sections/ route & spur lines	Rail length (km)		Pre- feasibility (Pre-FS) or Feasibility Study (FS) status	Implementation status	Planned completion year
		Existing length of section	New construction			
Cambodia	Poipet (Thailand border) – Sisophon	-	28	Completed	Ongoing	2015
	Phnom Penh – LocNinh (Vietnam border)	32	254	Ongoing	Not commenced (under negotiation for funding)	2015
Vietnam	LocNinh (Cambodia border) – Ho Chi Minh City	20	129	FS Completed	Not commenced	2020
Thailand	Aranyaprathet – Klongluk	-	6	FS Completed	The budget for the rehabilitation had been allocated and is now in the process of bidding its contractor	2014
Lao PDR	Vientiane - Thakhek	-	330	FS Completed	Not commenced	2020
	Thakhek – Mu Gia (Vietnam border)	-	136	FS Completed	Not commenced	2020
Vietnam	Mu Gia (Lao PDR border) – Tan Ap	-	53	Pre-FS Completed	Not commenced	2020
	Tan Ap – VungAng	6	66	FS Ongoing	Not commenced	2020

Table 2: Current Status of SKRL Network Project (ASEAN, 2012)

With the absent of rail links, movements of trains could not take place. Thus, with the unavailability of rail links, there are concerns on the commitments made by the governments to complete such unavailability.

Finance

“If trillions of Vietnamese dong are invested in building roads only, they would be degraded in five or seven years because of overloading. However developing railways will help prevent money being wasted on constantly fixing roads or building new ones.”

Above are the words by the Deputy Minister of Planning and Investment of Vietnam, Dang Huy Dong on the issue of how important the railway in the effort to improve Vietnam's economy. Deputy Transport Minister of Vietnam, Nguyen Ngoc Dong, mentioned that there is a need to improve the rail service due to the benefits that the transportation could provide for the transportation of goods, which will indirectly benefits the nation's economy. (Viet Nam News, 2014). With the absent of rail links, the constructions of new rail links are must to ensure the connectivity, which at the end might enable to enable them to construct the facilities on their own. Due to such economic problem, some of the members of this sub-region need to request financing from outside of the country to enable them to construct the facilities.

A good example would be the finance constraint faced by Lao PDR. For the country, which only had a few kilometres of railways, and with the majority of the citizens earn less than five US Dollar per day, constructing the railway facilities would become a major finance problem. Thus, to finance the project, the nation has to put itself in the position of long-term financial restraint. Lao PDR needs 7.2 billion US Dollar to develop the rail facilities in the nation. In materialising the project, they had to make loans from China to finance the constructions. The amount of loan made by Lao PDR is high and it is very risky to the country considering the fact that the country only has the gross domestic produce (GDP) of 8.3 billion US Dollar. Indirectly, the loan made by the country equals to about 86% of its GDP (Campbell, 2013). The deal made between Lao PDR and China was considered as the economics' transformations for the country. According to Ekaphone Phouthonesy, which is the deputy editor of the government-owned Vientiane Times:

"The business sector has also welcomed the development project as they believe cheap transportation will make cost of production low."

Such dream will stay put as where it is right now until the funding arrived for them to develop the rail industry (Campbell, 2013).

Conclusion

The idea of connecting this sub-region through rail is within this sub-region reach. The institutional seamless journey will bring more opportunities for the members, not only economically but also the opportunities to improve the local railway industry. But, the institutional barriers are more complicated to tackle as compared to physical barriers. Institutional seamless will eventually increased the reliability of rail freight industry in the future as most of the problems hindering the seamless movements originated from the institutional barriers.

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