THE DEVELOPMENT OF CONTAINER LANDBRIDGE TRAIN SERVICES BETWEEN MALAYSIA AND THAILAND

A. Valautham*

BACKGROUND

Containerization in Malaysia began in 1973 when the first container vessel berthed at Port Klang. Although containers had gone through Port Klang much earlier, those came by conventional vessels and were unloaded by using the ship’s own gear as the quayside equipment for container handling was not available at that time. In order to serve the growing need of container movement, container handling facilities were introduced at major ports of Port Klang, Penang, Kota Kinabalu, Sandakan, Sibu and Kuching.

Subsequent to this development in the port sector, and as a preparation to overland container transportation by railways, in 1972 the then Malayan Railway successfully ran a special train of mock up containers made of wooden structure to determine the clearance on all bridges and in tunnels. After the successful trial run and making necessary facilities available, container transportation by railways in Malaysia started in 1974. From an initial carriage of 974 TEU in 1974, container transportation by railways in the country has grown over the years to more than 334,300 TEU by the end of 2006 (see figure 1).

I. CROSS BORDER TRAFFIC

Container haulage by rail: KTMB container and landbridge services

The container haulage operation by railways is carried out by Keretapi Tanah Melayu Berhad (KTMB), the Malaysian State Railway Authority. Apart from container haulage from Port Klang, Penang and until recently from the Port of Tanjung Pelepas, KTMB’s rail connection also links to Inland Clearance Depots (ICDs) at Ipoh Cargo Terminal, Sg Way, Nilai Inland Port and Segamat Inland Port.

* Senior Manager, Strategic Business Unit, Keretapi Tanah Melayu Berhad Corporate Headquarters, Kuala Lumpur; e-mail: valautham@ktmb.com.my.
KTMB also operates a landbridge service in collaboration with the State Railway of Thailand (SRT). The landbridge service permits cross border movement of containers between Malaysia and Thailand by railways. The service links the Malaysian ports having railheads with the ICDs at Bang Sue and Lat Krabang in Thailand. The service is currently managed by four private operators, namely T.S. Transrail (M) Sdn Bhd, Freight Management (M) Sdn Bhd, T.S. Allied Solution Sdn Bhd and PTP Landbridge Services Sdn Bhd. It provides a third alternative to road and sea transports between Malaysia and Thailand, as well as an overland transit linkage from the Malaysian ports to third countries in the ASEAN subregion namely, Cambodia, the Lao People’s Democratic Republic and Viet Nam.

Container haulage by railways was developed as one of the means to reduce congestion and improve efficiency of the ports. In 2006, KTMB carried more than 334,000 TEU, which represented an annual average growth rate of about 8.6 per cent between 1999 and 2006. In order to provide a door-to-door service and improve the quality of service, KTMB has introduced the concept of intermodal transport in its container haulage operation. It has formed a subsidiary road haulage company called Multimodal Freight Sdn Bhd to facilitate its intermodal haulage operation. In order to enhance the capacity of container haulage by rail, the Government has allocated M$ 4.5 billion in the Eighth Malaysia Plan for double tracking of the main railway line that will eventually connect Padang Besar at the Malaysia-Thailand border with Johor Bahru at the Malaysia-Singapore border. Apart from this, the Government is also contemplating a railway link connecting the city of Kunming in China with Singapore via Malaysia, which would further boost the role of railways in container transportation in the region.
A Joint Traffic Agreement between the State Railway of Thailand and the Malayan Railway was made in 1954 to facilitate the free flow of goods between the two neighbouring countries. Currently, the Joint Traffic Agreement is being reviewed and a draft has been submitted to Governments of both the countries for their approval.

A variety of goods are transported across the border of Malaysia and Thailand. Goods that mainly constitute the current cross border traffic include cement, gypsum, food products and containerized cargo. The main flows of goods between the points in two countries take place as follows:

(a) Cement from Bukit Ketri (Malaysia) to Wakaf Bharu (Malaysia) to Thailand via Hatyai;
(b) Gypsum from Thong Soon (Thailand) to various cement plants in Malaysia;
(c) Food products from Bangkok, Thailand to Malaysia;
(d) Containers between ICDs in Thailand and ports and ICDs in Malaysia.

The transportation of cement between the two countries was not covered under the 1954 Agreement. To permit cement transportation, an addendum was made to the Joint Traffic Agreement in 1989 which was signed by the Ministers of Transport of the two countries.

The cross border trade and traffic received a big boost when the landbridge container train services from Sri Setia in Malaysia to Bangsue, Thailand were launched in 1999. The landbridge train services also marked a new era in the rail transportation industry in the ASEAN subregion.

II. THE GENERAL CONCEPT OF LANDBRIDGE

The landbridge concept was first conceived in the early 1960s to promote a more efficient means of shipping between East Asia and Europe. It is an intermodal service involving land and sea transport as an alternative to transportation service entirely by sea. Many landbridge services are now operated in the world. Some well-known landbridge operations in different parts of world are mentioned below.

---

1 The cross-border agreement between the two railways was originally made in 1922. This agreement was amended in 1954 to incorporate upgrades in technical standards of railways.
The North-American landbridge links the two major gateway systems of North America. It links the major ports on the west coast (Los Angeles and Long Beach) and New York/New Jersey on the east coast via Chicago. The landbridge also has a Canadian and a Mexican section. The landbridge service offers an alternative to freight shipment between Asia and the American east coast via the Panama Canal or the Straight of Magellan. By operating double-stack container trains between the east and west coasts of the United States of America the landbridge service offers a significant reduction in shipment cost and time between Pacific-Asia and the American east coast. The reduction in shipment time can be from 6 days to two weeks. The landbridge service also competes for a market share of the freight traffic between Asia and West Europe. A significant share of the domestic rail freight in North America is also carried by this service. An important characteristic of this landbridge service is that it provides transcontinental link through a single country namely, Canada, United States or Mexico.

The Mexican Landbridge spans across the Isthmus of Tehuantepec in Mexico. It represents the shortest overland distance of 182 miles between the Gulf of Mexico and the Pacific Ocean linking the Port of Salina Cruz (on the Pacific) and Port of Coatzacoalcos (on the Gulf of Mexico). The overland transport service is provided both by railway and highway carriers. The alternative to this landbridge service is using a sea route via the Panama Canal, which may require ships to wait as long as five days owing to congestion. The landbridge was opened to traffic in 1907. However, it gained prominence in the recent years as an alternative to an all-sea route between East Asia and the American east coast.

---

2 An isthmus is a narrow strip of land that is bordered on two sides by water and connects two larger land masses.

---

Table 1. Freight traffic between Malaysia and Thailand (tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inbound</td>
<td>409845</td>
<td>355720</td>
<td>285677</td>
<td>123961</td>
<td>112390</td>
<td>103195</td>
<td>110343</td>
<td>86920</td>
<td>40724</td>
<td>59153</td>
<td>20975</td>
</tr>
<tr>
<td>Outbound</td>
<td>31804</td>
<td>35338</td>
<td>39264</td>
<td>43627</td>
<td>48473</td>
<td>53859</td>
<td>64469</td>
<td>66243</td>
<td>74885</td>
<td>78391</td>
<td>86211</td>
</tr>
<tr>
<td>Landbridge Traffic</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>75948</td>
<td>281520</td>
<td>164704</td>
<td>169132</td>
<td>200874</td>
<td>215982</td>
<td>152504</td>
<td>152135</td>
</tr>
<tr>
<td>Total</td>
<td>441649</td>
<td>391058</td>
<td>324941</td>
<td>243536</td>
<td>442383</td>
<td>321758</td>
<td>343944</td>
<td>354037</td>
<td>331591</td>
<td>290048</td>
<td>259321</td>
</tr>
</tbody>
</table>

Note: The landbridge service started in June 1999.
The Siberian Landbridge operation is a combination of land and marine transportation between Japan and the Republic of Korea, and Europe and the Central Asia via ports in the Russian far east using the Trans Siberian Railroad. This landbridge service was developed as an alternative to all-marine transportation between North and East Asia and Europe.

III. THE MALAYSIA-THAILAND LANDBRIDGE

Keretapi Tanah Maleyu Berhad (KTMB) and the State Railway of Thailand (SRT) were interested in transporting a part of the large number of maritime containers by rail from Port Klang and Klang Valley to Bangkok and vice versa. The idea conceptualised by the Railways required direct involvement of, and coordination with their counterparts in port authorities and ICDs at Port Klang and Bangkok. The concerned parties realized that a scheduled container block train service between Port Klang and Bangkok would offer a comparative advantage over the sea-route transhipment service of containers to/from Thailand via Singapore or Port Klang. With this business prospect in mind the Malaysia-Thailand Landbridge was launched in 1999. It uses KTMB services for the Malaysian part and the State Railway of Thailand (SRT) services for the Thai part of the journey.

The landbridge service offers intermodal transportation between the Klang Container Terminal, Port Klang or Kontena Nasional Inland Clearance Depot at Seri Setia in Malaysia to Bangsue and Lat Krabang in Thailand. In addition to transhipment service, it facilitates direct export and import of goods from Klang Valley to Bangkok and vice versa. The landbridge service also offers transhipment of containers for a third country by transporting the containers from a Malaysian port.

IV. WHY KTMB DEVELOPED THE LANDBRIDGE SERVICES

There are several factors that led to the development of the landbridge service. As a result of the 1997 Asian financial crisis, ASEAN countries went through a period of recession compounded by the weakening of their currencies against the United States dollar. KTMB suffered a sharp drop in its freight revenue. This decline in revenues required the company to develop a new demand-responsive business strategy for its freight operations with greater emphasis on containerized freight shipment.

Trade tariff rates were being continuously reduced in line with the ASEAN Free Trade Area (AFTA) framework to promote increased volume of
inter-country trade in the subregion. This required increased cross-border transportation of goods. As a part of its new strategy, KTMB wanted to position itself as one of the main logistic players and to benefit from the business opportunity provided by the growing trade in the subregion. It was also realized by both the railways that the proposed landbridge service would be a low risk venture for them as it would require minimum additional investment for infrastructure improvement and procurement of necessary equipment. Most of the infrastructural facilities including facilities at border points were already in existence to facilitate scheduled passenger services across the border.

With the advent of the landbridge Services in the year 1999, KTMB was able to increase its overall freight revenues after experiencing declines over the previous three years. As a result of the 1997 financial crisis KTMB was able to capitalize on transportation that was more economical and was able to offer an alternative far more efficient mode of transportation to shippers.

V. BENEFITS OF MOVING GOODS THROUGH RAIL LANDBRIDGE SERVICES

Service features

The landbridge service operators are offering weekly fixed day services between Malaysia and Thailand. The service accepts both import and export cargoes between Malaysia and Thailand and another country in full container load (FCL) of 20 ft and 40 ft sizes including high cubes in both sizes, as well as less than container load (LCL) of the same sizes of containers. The service include terminal-to-terminal, door-to-door, terminal-to-door, or door-to-terminal deliveries of shipment. The freight in FCL mode includes steel, rice, petrochemical products, manufactured goods and electronic parts and freight in LCL mode includes spare parts, food stuff, electrical goods and general merchandise.

Simple documentation procedure

Through the support of Malaysian and Thai Customs formalities can be performed at the port of loading and port of discharge. Goods are cleared at the border station of Padang Besar with minumum clearance formalities that requires only about three hours. The same station building houses custom officials of both the countries. The customs officials only check the documents without physical examination of the cargo contents.
An advantage of container transportation by the landbridge service is that they do no require unloading and reloading for inspection by the customs officials. It may be mentioned here that containers transported by trucks are unloaded and reloaded at a container depot beside the railway yard as it is not allowed to drive trucks into other countries.

**Competitive pricing**

This service with a shorter transit time and competitive price compared with other modes of transport (for example, about 15 to 30 per cent cheaper than transportation by road) offers a viable alternative to shippers. Landbridge operators offer differential pricing package to suit customers’ requirement. An inherent advantage of the railways over road is that railways can carry goods in larger volumes and weight over a longer distance that allows lower cost of transportation per unit. The savings incurred can be passed on to customers in the form of cheaper tariff.

**Security features**

The containers are sealed as per normal shipping procedures. The Malaysian and Thai Customs will seal the boxes at the port of loading and at the border crossing at Padang Besar. An added security feature of the specialized chassis is provided by KTMB. Because of this safety feature, the doors of the loaded wagons sitting on the chassis cannot be opened fully to discharge the cargo. This feature minimizes any form of pilferage.

A comparison of the container shipment services provided by alternative modes of transportation is provided in table 2.

<table>
<thead>
<tr>
<th></th>
<th>Transit time (days)</th>
<th>Freight charge</th>
<th>LCL services</th>
<th>Security</th>
<th>Door-door delivery</th>
<th>Suitability for heavy cargo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landbridge</td>
<td>3</td>
<td>xx</td>
<td>Yes</td>
<td>xxx</td>
<td>Yes</td>
<td>Good</td>
</tr>
<tr>
<td>Air Freight</td>
<td>1</td>
<td>xxxxxxx</td>
<td>Yes</td>
<td>xxx</td>
<td>No</td>
<td>Poor</td>
</tr>
<tr>
<td>Sea Freight</td>
<td>6</td>
<td>xxx</td>
<td>Yes</td>
<td>xxx</td>
<td>No</td>
<td>Good</td>
</tr>
<tr>
<td>Road Transport</td>
<td>3</td>
<td>xxx</td>
<td>Yes</td>
<td>xx</td>
<td>Yes</td>
<td>Fair</td>
</tr>
</tbody>
</table>

Notes: “x” represents average values on Bangkok-Kuala Lumpur route. The interpretation is as follows:

Freight charge: less “x”s means lower cost.

Freight security: more “x”s means lower level of security protection.

LCL: Less than Container Load.
VI. OPERATIONS OF LANDBRIDGE SERVICES

Technical arrangements

The technical aspects of train operations focus on six major areas as follows:

- Infrastructural requirement;
- Rolling stock requirement;
- Motive power requirement;
- Container handling facilities;
- Vessel concept; and
- Transit time.

Infrastructural requirement

The infrastructural requirements as provided in the Joint Traffic Agreement made by the railways ensure the smooth carriage of containers on both the railways.

Rolling stock requirement

It was agreed that in the initial period years of operation KTMB would provide container wagons which would run everyday with a turnaround time of about five days. It was estimated that minimum of 90 container wagons were required for 6 trips per week for a round-the-clock operation without considering any spare capacity. KTMB agreed to source the Bogie Container Flat Wagons for this new service. The increase in demand for the landbridge services requires more wagons which are currently being supplied only by KTMB. In the future, The State Railway of Thailand (SRT) will have to provide more wagons in order to sustain the growth of landbridge services.

The container wagons can either be of a multipurpose type or dedicated type of custom-built flat wagons. The advantage with multipurpose wagons is that the tare weight can be kept to a minimum. It is essential that all wagons should have a secured locking mechanism to hold the boxes in place. In cases where the overhead structures of the railway system restrict the loading of overheight containers, one possible solution would be to use of wagons fitted with smaller wheels. KTMB has over 200 such low-floor wagons.
with wheel diameter of 788 mm. Wagons of axle load of at least 15 tons are needed and currently the new fleet of KTMB wagons meets this requirement.

**Motive power requirement**

For a five-day turnaround time two locomotives are required to have a trailing load of 1,200 tons daily on the Malaysian side.

**Container handling facilities**

On the Malaysian side, support is provided through container handling facilities at Port Klang and Kontena Nasional Berhad ICD at Seri Setia. The Klang Port Authority and Kontena Nasional Berhad have been supportive and are actively promoting the services, as they also benefit from the landbridge service. Padang Besar remains the transit border township with institutional arrangements made with the support of the Customs Departments of both Malaysia and Thailand.

**Vessel concept**

It was agreed that the train would be run under the vessel operating concept where the trains would be named and a number would be given to each train, for example, Trans Perdana Voyage No. 007. This voyage concept is contrary to the traditional train operation concept, which was practiced earlier.

Landbridge trains are, run on a full train load concept where possible. It may be mentioned here that KTMB runs most of its container trains on this modality. The container trains in Malaysia run from the ports to the inland areas for one particular customer. The customer undertakes marketing for traffic and organizes the containers available to be run as a complete train or block train. The train is run between two fixed points (one point in each country) as one complete train. The benefits of running a block train include lower operational costs, savings in transit time, and lower the turnaround time of wagons, and locomotives.

The smooth movement of freight trains can guarantee delivery time promised by the service operators to the shippers. To be more precise, the reliability in delivery times, and fewer stops mean decreased risk of accidents, less paperwork, higher productivity, and efficiency and lower cost.
Transit time

Table 3. Distance and transit time by the landbridge service

<table>
<thead>
<tr>
<th>Distance</th>
<th>Klang Container Terminal to Padang Besar</th>
<th>Padang Besar to Bangkok</th>
<th>Total distance of train journey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance</td>
<td>600 km</td>
<td>990 km</td>
<td>1 590 km</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transit time</th>
<th>Klang Container Terminal to Padang Besar</th>
<th>Border check</th>
<th>Padang Besar to Bangkok</th>
<th>Total transit time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit time</td>
<td>21 hours</td>
<td>3 hours</td>
<td>36 hours</td>
<td>60 hours</td>
</tr>
</tbody>
</table>

As can be seen from the above table that the important selling point in the promotion of the landbridge services to its customers is the reduced transit time of 60 hours, which is significantly lower compared to vessel movement that requires five days. The service is run somewhat similar to the international passenger express train now operating between Bangkok and Kuala Lumpur on a 24-hour journey time.

VII. COMMERCIAL ARRANGEMENTS OF THE LANDBRIDGE SERVICE

The commercial arrangements of the service include the following:

(a) Landbridge service provider;
(b) Linkages to other modes of transport;
(c) Customs documentation and clearance procedures; and
(d) Container and merchandise liability.

Landbridge service provider

The landbridge service can be provided by the freight forwarders as the non-vessel operating common carrier (NVOCC). They issue the bill of lading for the carriage of goods on trains which they neither own nor operate. The freight forwarders stand to gain significantly from the landbridge operation. This is so
because the entire consignment is entrusted under their custody and they become the sole liaison with other components in the whole chain of the transport system.

Currently four operators are involved in providing the service. They are: Freight Management, Profreight Group, T.S. Transrail and Infinity Logistics. The operators base their services on the platform of the two railways of Malaysia and Thailand. As such, some of the physical characteristics of the service are similar. However, there are differences in terms of pricing, container type, quality of terminal services, availability of special equipment, and application of information and communication technology and other value added services. Being attracted by the competitiveness of the landbridge service, some shipping lines are now using the service.

The Port Klang-based freight forwarder Freight Management of Malaysia and Bangkok-based Profreight Group of Thailand jointly operate the Asean Rail Express (ARX). The service is run between Klang, Ipoh and Penang in Malaysia and the Lat Krabang Terminal in Bangkok, Thailand. Currently, ARX is offering 4 weekly fixed day services each way between Malaysia and Thailand. ARX provides terminal-to-terminal, door-to-door, terminal-to-door and door-to-terminal services to suit the need of customers. It also accepts LCL cargo for transhipment through Port Klang to other countries. The ARX service represents a saving of approximately three days in terms of transit time and a saving of up to 10 per cent of shipping costs compared to transhipment via Singapore by sea.

T.S. Transrail’s (better known as T.S.) landbridge service connects Kontena Nasional’s Inland Clearance Depots (ICDs) at Sungai Way in Setia Jaya, Prai in Penang and the Ipoh Cargo Terminal with Bangsue ICD in Bangkok, Thailand. Shippers receive door-to-door deliveries. Although the service is half a day slower than by road, the rates are about 30 per cent cheaper. T.S. provides 1-2 weekly services.

Infinity Logistics operates services between Malaysia and places in the south of Thailand. Their link points are Klang, Ipoh and Penang in Malaysia and Hatyai/Surat Thani in Thailand. They provide about 1-2 weekly services.

**Linkages to other modes of transport**

Railways cannot perform landbridge services effectively if they are not directly linked to the seaports, airports, Inland Clearance Depots (ICDs) or Container Yards (CYs). These are the interfacing points where the transfer from
one mode to another mode takes place. In order for the railways to capture the
container traffic, these linkages are essential.

In Malaysia, the crucial linkages to the ports are clearly recognized and
the existing sea ports/facilities are in the process of being rail linked. While
planning rail linkages to ports, ICDs and container yards, it is essential that
operation and commercial practices be considered from the outset. Otherwise,
physical systems may be in place that would increase the operational costs to
the railways, as they may not have been designed to meet the particular needs
of railways operational and commercial practices.

**Customs documentation and clearance procedure**

The Malaysian Customs Department has agreed that the present
system could be further extended to transhipment of containers provided the
landbridge service operators and the shipping lines concerned lodge a “transit
manifest” covering containers to be moved to the border. Such movements are
allowed under bond covered by a Custom 8 (K8) Form. Procedures already
exist for sealing and dispatch of containers covered under the arrangements of
the K8 Form from KCT to Penang.

Currently, for container movements across the border, the importer
appoints a forwarding agent at Padang Besar who then lodges the appropriate
documents with the customs authority. However, such lodging process is
relevant only to border clearance purpose. Ultimate clearance by the customs
is done only at the final destination in Thailand after payment of due duty.

The procedure used for the movement of containers under bond are as
follows:

(a) The Customs seals the containers themselves at KN ICD before
endorsement the K8 Form;

(b) The sealing and endorsement of the K8 Form must be
completed before the loading of containers onto rail wagons;

(c) Customs at the destination checks containers’ numbers and
their seals against the original K8 Form carried by the train and
included in the manifest of the train.
At the border both Customs jointly inspect container numbers and seals with details appearing in the K8 Forms that are included in the manifest of the train.

If all relevant details are in order, the K8/K2 Form will be endorsed with Customs of both the countries retaining copies while the train proceeds to its final destination. Copies of the endorsed K8/K2 Form must then be sent to the destination points for clearance purposes.

At the destination (Bangsue or Seri Setia), containers will be inspected by the Customs to ensure that container seals and numbers match with details appearing on the K8/K2 Forms.

**Liability**

With intermodalism making tremendous inroads in the freight transport industry, KTMB had reacted positively by revising its liabilities governing the carriage of containers and its contents to be on par with international maritime container carriage practice. The new liabilities came into force on 1989 and covers Malaysia, Singapore and Thailand.

**Insurance**

To further enhance confidence, especially for transportation of containers on across border basis, KTMB has had in force, insurance coverage requirements for freight. Box 1 gives some of its important features.

**Box 1. Insurance coverage of freight**

- **Insured value:** Maximum M$ 5 million per accident.
- **Territorial limits:** Anywhere in West Malaysia including Singapore and Thailand.
- **Subject matter insured:** General Goods/Merchandise of every description belonging to the insured or on commission or for which insurer is responsible whilst in transit by container or non-container including damage to these items while using the railway on Railway track including handling/loading and temporary storage during transit not exceeding 14 days.

(continued to page 112)
The key factors for the successful launching of the first landbridge train are:

**Sufficient rolling stock**

Readily available Malaysian bogie container flats were used for the landbridge operation from Kuala Lumpur to Bangkok.

**Sufficient market demand**

Unlike the previous attempt to launch a landbridge operation 10 years ago with RCL, there is a huge demand for the service this time around.
**Cooperation from customs**

Minimum customs inspection at the border allows minimum train detaining time at the border. The cross-border customs clearance process is very smooth.

**Cooperation from the private sector**

The cooperation between freight forwarders from both countries plays a key role in the success of landbridge services.

**Joint Traffic Agreement**

Without doubt the most significant contributing factor to the success of the landbridge service is the Joint Traffic Agreement which facilitates the smooth and free running of train operations between both countries.

![Figure 2. Landbridge TEU, June 1999 to December 2006](chart)

<table>
<thead>
<tr>
<th>Year</th>
<th>Landbridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>12 658</td>
</tr>
<tr>
<td>2000</td>
<td>47 420</td>
</tr>
<tr>
<td>2001</td>
<td>41 152</td>
</tr>
<tr>
<td>2002</td>
<td>49 044</td>
</tr>
<tr>
<td>2003</td>
<td>52 760</td>
</tr>
<tr>
<td>2004</td>
<td>52 410</td>
</tr>
<tr>
<td>2005</td>
<td>44 314</td>
</tr>
<tr>
<td>2006</td>
<td>46 862</td>
</tr>
</tbody>
</table>
IX. POTENTIAL AND FUTURE PROSPECTS OF LANDBRIDGE SERVICES

AFTA enhancement of trade

Significant economic and social changes have taken place in ASEAN subregion. These changes include greater liberalization of economies and deregulation of services providing new challenges and opportunities for the countries in the region. The countries in the ASEAN subregion will continue with their efforts to improve their economic performance in the years to come. In this regard, regional cooperation will continue to be an important factor for improvement in transport efficiency.

Within ASEAN, the move towards AFTA will result in increase efforts to improve efficiency as well as increase economic integration among the members (allowing free trade and movements of resources among the member’s countries). With a population of over 400 million, ASEAN will be an attractive market for product such as food, textile, footwear, consumer electronics and machineries and selected transport equipment. With the introduction of AFTA, business in the region will be forced to focus their efforts to rationalize their operations and improve their efficiency in order to face the increase in competition.

Cross border facilitation

ASEAN transport officials are organizing intergovernmental meetings to formulate policy and plan for free flow of goods and to enhance seamless movement of goods between countries in the ASEAN subregion.

Trans-Asian Railway Network in ASEAN subregion

Activities to develop the Trans-Asian Railway Network in the ASEAN subregion have mostly been carried out within the framework of the Singapore-Kunming Rail Link (SKRL) project pursued by the ASEAN secretariat since 1995. Under the project, the governments and railway organizations of the countries concerned have discussed the construction of the missing links to complete the three route options between the two cities. Related feasibility studies have been carried out either by the countries themselves or through the technical assistance of donor countries/agencies such as the Korea International Cooperation Agency for the missing link between Myanmar and Thailand, or China for the Cambodian section of the missing link between Cambodia and Viet Nam.
Completion of the missing link will allow rail to play a part in the economic integration of ASEAN by extending the reach of the container landbridge currently operated between Malaysia and Thailand to a range of destinations in other countries such as Cambodia, the Lao People’s Democratic Republic and Viet Nam.

Challenges faced by landbridge service

The landbridge service has experienced growth for five consecutive years from its start in 1999 to 2004 in terms of both container throughput and revenue earnings. The volume of freight is however, currently on a declining trend due to capacity constraints on Thailand side because of shortage of locomotives. The service operators were also facing competition from larger and faster vessels now plying between Malaysian and Thai ports and from increasing competition from road hauliers.

CONCLUSION

Currently there are 28 weekly services between Klang Container Terminal Port Klang to Bangkok to Klang Container Terminal Port Klang and Singapore to Bangkok to Singapore. KTMB is also discussing with several potential landbridge operators to introduce new services between Kuala Lumpur and Bangkok. At the same time there exists potential of services from Pasir Gudang to Bangkok via the east-coast line in Sg. Golok.

There is no doubt that the landbridge services will contribute to promote the concept of borderless economy among the ASEAN countries. With the coming of AFTA and the proposed Trans-Asian Railway, KTMB has positioned itself to be a key player in free movement of goods in the ASEAN region. The service is expected to expand in the future by providing transit services to neighbouring countries of Cambodia, the Lao People’s Democratic Republic and Viet Nam. In order to gain from the new opportunity provided by the AFTA framework, KTMB has positioned itself to be a key player in carrying freight traffic in the ASEAN subregion.

The landbridge service is a testimony of KTMB’s commitment towards the setting up of the Trans-Asian rail link, the proposed rail network that has the potential to strengthen and enhance trade between ASEAN countries and China and beyond. With this prospect in mind KTMB is currently implementing projects to increase the capacity of the railway infrastructure in Malaysia, as well as making it suitable for the carriage of high containers, large refrigerated containers and dangerous goods.