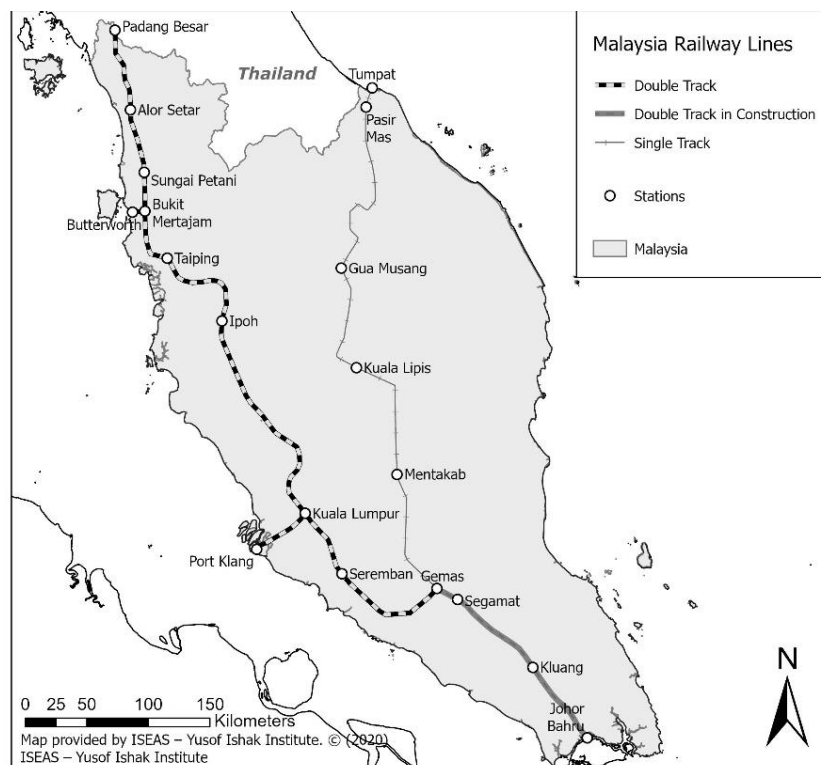


Case Study #2 - Gemas-Johor Bahru Electrified Double Track Project

I. Project Summary

The Malaysian Ministry of Transport (MOT) is undertaking the construction of a double-track electric rail line from Gemas to Johor Bahru in Malaysia at the **expected cost of RM8.9 billion**. The project was awarded in October 2016 to a Chinese consortium consisting of China Railway Construction Corporation Ltd (CRCC), China Railway Engineering Corporation and China Communications Construction Co Ltd. The Gemas-Johor Electrified Double-Tracking Project (GJBEDTP) involves the upgrading and construction of a 197km double-track electric rail line between Johor Bahru in the state of Johor and Gemas in the state of Negeri Sembilan. It also includes the construction of stations, depots, yards, underpasses and bridges, the installation of signalling and communication systems, and the remodelling and renovation of 11 intermediate stations. The main objectives of this project are to improve the quality of rail infrastructure, provide better quality train services to passengers, and to improve rail safety for operations. The GJBEDTP is also the final package for the MOT's electrified double-tracking project and its completion will ensure a continuous double track line from Padang Besar to Johor Bahru. The project received a groundbreaking ceremony marking the start of the construction on 3 April, 2018 and is expected to be completed by October 2022.

Figure 1. Gemas-Johor Bahru EDTP within the Malaysian railway network



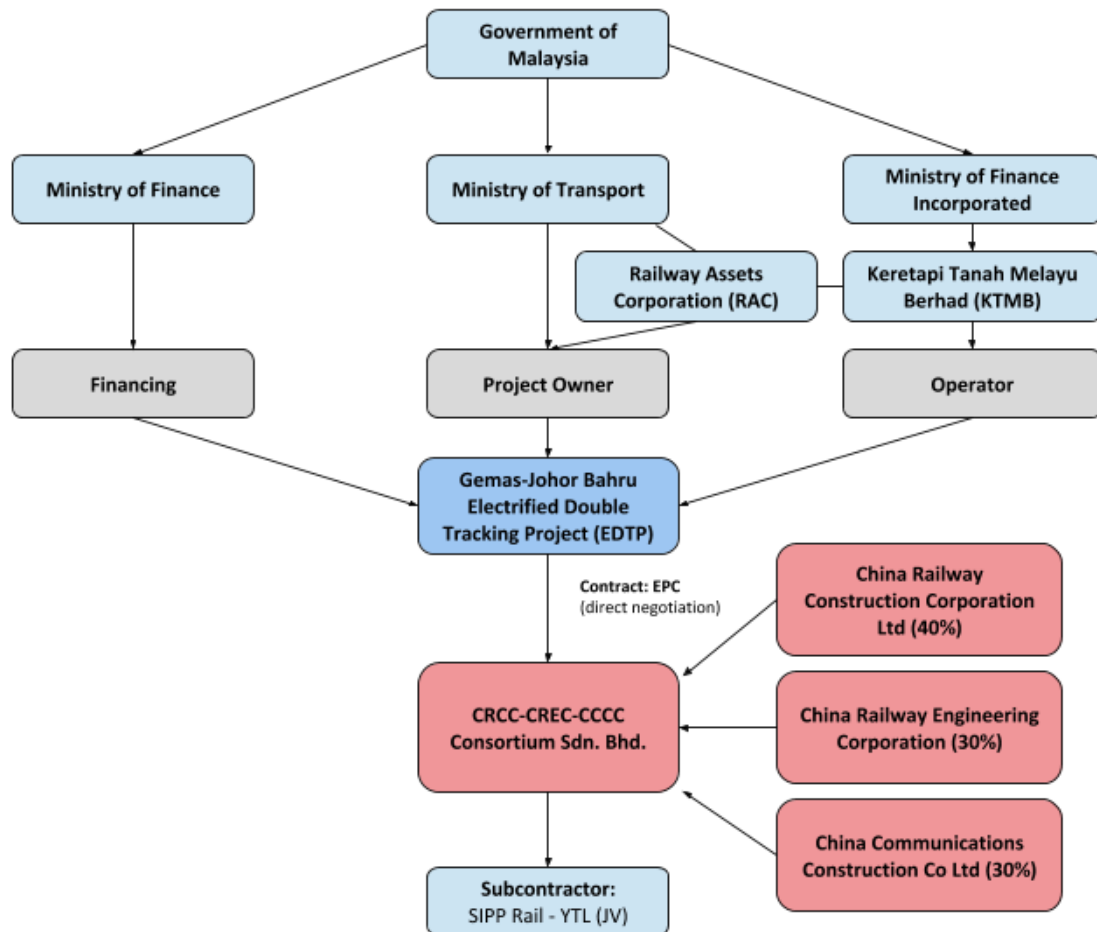
Source: Hutchinson (2020)

II. Project Structure

The Gemas-Johor Bahru EDTP (GJBEDTP) is owned wholly by the Government of Malaysia through the Ministry of Transport (MOT). It is a public procurement project funded by the Government of Malaysia through the Ministry of Finance (MOF). Established under Article 89 of The Railways Act 1991, the Railway Asset Corporation (RAC) is a statutory body under the MOT that owns and manages the railway assets of the GJBEDTP. Keretapi Tanah Melayu Berhad (KTMB), which is a state-owned entity under the Ministry of Finance Incorporated (MOF Inc.), will operate the EDTP line.

The Ministry of Transport awarded the contract to a Chinese consortium, CRCC-CREC-CCCC Consortium Sdn. Bhd., which consists of China Railway Construction Corporation Ltd (CRCC), China Railway Engineering Corporation (CREC) and China Communications Construction Company Ltd (CCCC) under a ownership breakdown of 40:30:30, respectively. A local consortium consisting of SIPP Rail Sdn Bhd & Syarikat Pembinaan Yeoh Tiong Lay Sdn Bhd has also been appointed as the main subcontractor for the project works.

Figure x. Project ownership structure of Gemas-Johor Bahru EDTP



Source: Author's compilations

III. Project Background

a. Context of Malaysian Railways

Keretapi Tanah Melayu Berhad (KTMB) or Malayan Railways Limited, was established as a government-linked company (GLC) under the Ministry of Finance Incorporated (MOF Inc.) in 1992 to operate the railroad networks in Peninsular Malaysia. Prior to its establishment, it was previously known as the Federated Malay States Railways (FMSR) and had consolidated the once-fragmented state railway operations under one company. During the corporatisation exercise in 1992, the government had separated the ownership and management of railway assets under FMSR to a statutory body called the Railway Assets Corporation (RAC), thus allowing KTMB to dedicate its focus on the successful operations of the railway line as a business.

During the 1990s, the government sought to undergo a modernization programme for the country's railway infrastructure, which included the upgrading and electrification of existing lines, renovation of existing stations and the construction of new stations. In 1995, KTMB began operating the country's first electrified railway service, KTM Komuter, to provide local rail services in Kuala Lumpur and the surrounding Klang Valley suburban areas. Services were later expanded to other parts of Malaysia with the introduction of the Northern and Southern sections, and the expansion of the West Coast railway line. The MOT's electrified double tracking project refers to the large scale project to electrify KTM's West Coast railway line, which provides transport services to the western states of Peninsular Malaysia.

b. Context of West Coast rail line electrification

In early 2000s, Malaysia had started planning for the domestic segment of a proposed Pan-Asian railway that would connect China with Southeast Asian railways. This involved setting aside an estimated RM4.5 billion under the Eighth Malaysia Plan for the double-tracking project. This massive cross-country infrastructure project, spanning some 5,600km and running through 6 ASEAN countries as well as China, was first mooted by then prime minister Mahathir Mohamed during the ASEAN Summit in 1995.¹

The Government had commissioned a study to analyse the economic feasibility and engineering design of the domestic portion of the regional project, which required the electrification of the West Coast railway line. The line runs from Padang Besar railway station close to the Malaysia-Thailand border in Perlis (where it connects with the State Railway of Thailand) to the Johor Bahru station (where it connects to the Woodlands Train Checkpoint in Singapore).

¹ Chin, P. Y. 2003. "Double-tracking rail vision". Accessed through: http://lib.perdana.org.my/PLF/Digital_Content/Prominent_Leaders/Mahathir/News_1968-2004/2001-2005/nt2003aj/doail%20vision.pdf

China and India were slated to undertake the development of the entire stretch of the rail works for the double-tracking project, with both Indian Railway Construction Co (Ircon) and China Railway Engineering Corp (CREC) confirmed through letters of intent from the Malaysian government in mid-2002.² Ircon was slated to handle the northern line from Ipoh to Padang Besar, while CREC and its local partners (DRB-HICOM, Emrail and the Kien Huat Group) were to work on the southern line from Seremban to Johor Bahru. The Ircon-CREC bid was done through direct negotiations at a government-to-government level and the negotiations included the agreement for contract payments to be made through crude palm oil.

Domestic public concerns over the project had grown since the announcement of the letters of intent, primarily due to the abnormally high costs of the Ircon-CREC bid (valued at an estimated RM43 billion) as well as the government-to-government direct negotiations that awarded the contract to foreign entities. Responding to these growing concerns, prime minister Mahathir Mohamad cancelled the letters in late 2003. Then after a counter proposal was offered by local players, Mahathir awarded both projects to a local consortium made up of MMC Corp Bhd and Gamuda Bhd for a lower estimated cost of RM14.3 billion.

The public had voiced concerns over the direct awarding of the project to MMC-Gamuda, noting that it had been exposed to corruption during the proposal by the local firms and direct negotiations from the government. Opposing parties had called for the award to be cancelled and open for public tender to ensure fair play, competitive pricing, transparency and integrity.³

On 31 October 2003, Mahathir Mohamed stepped down as prime minister and handed power to a handpicked successor, Abdullah Ahmad Badawi. Under Badawi's premiership, the award to the MMC-Gamuda JV was cancelled in December 2003. The large scale double-tracking project had also been shelved temporarily, with Abdullah citing that the country's budgetary allocations at the time needed to prioritise other projects in the areas of health, education, agriculture and other projects geared to socio-economic development.⁴

The government had been overseeing the construction of double tracking and electrification of a smaller section of track between Rawang and Ipoh. The Rawang-Ipoh line was not included within the initial award to Ircon-CREC, but it is a crucial portion of electrification needed to fully connect the northern and southern portion of the West Coast line. The project was conducted in 2001 and completed in 2008.

The larger project for the electrification and double tracking of the entire West Coast line had been revived in 2007, but had been segmented into smaller infrastructure packages. This was

² Ibid.

³ Kit Siang, L. 2003. "DAP proposes that Cabinet should cancel award to MMC-Gamuda JV and re-open bidding for the multi-billion ringgit electrified double-tracking rail project in the interests of fair play, competitive pricing, transparency and integrity – giving Abdullah an opportunity to demonstrate that he is concerned not only about petty corruption but also "Grand corruption". Accessed through: <http://www.limkitsiang.com/archive/2003/nov03/lks2732.htm>

⁴ Wai, W.C. 2003. "Double-track railway not priority, says Abdullah". Accessed from: <https://www.thestar.com.my/news/nation/2003/12/12/doubletrack-railway-not-priority-says-abdullah>

an effort to simultaneously ease the fiscal strain of the “mega” infrastructure project as well as to lower the technical and financial requirements for local firms to bid for the main contract. MMC-Gamuda was given the stretch from Ipoh to Padang Besar for RM12.5 billion. Indian Railway Construction (Ircon) was awarded the Seremban-Gemas job at RM3.5 billion.

Since 2007, the mega project to electrify and double-track the West Coast line had progressed, although not without some challenges related to each infrastructure package. Following the Rawang-Ipoh line, the double-tracking and electrification of the Sentul-Batu Caves line was completed in 2010, Seremban-Gemas line in 2013 and Ipoh-Padang Besar line in 2014 (Table 1). Thus the Gemas-Johor Bahru section of track is the last portion of the entire West Coast double-tracking project that has yet to be upgraded.

Table 1. Chronology of past and ongoing double tracking projects

Rawang – Ipoh double tracking	Opened in 2008
Sentul – Batu Caves double tracking	Opened in 2010
Seremban – Gemas double tracking	Opened in 2013
Ipoh – Padang Besar double tracking	Opened in 2014
Gemas – Johor Bahru double tracking	Ongoing; expected to complete by October 2022

c. Project Background

There were several years of delay during the tendering process of the Gemas-JB EDTP, which was believed to have been a result of the turbulent political landscape (Abdullah would step down as prime minister in 2009) as well as competing bidders lobbying for which contractor would be chosen.⁵ By late-2011, the double-tracking for the Ipoh-Kuala Lumpur-Seremban (center) section had been completed, and the projects for Seremban-Gemas (southern) and Ipoh-Padang Besar (northern) had been 80% and 70% completed, respectively. In 2011, it was also expected that the Gemas-JB project would be completed by 2016, as the Minister of Transport said the design of the Gemas-JB stretch was ready and the project would go through a tendering process.⁶ However, the project tender remained in limbo for several years as the final contract would not be awarded until 2016.

During the years between 2011 and 2012, an unknown number of companies had submitted bids for the project, but there had been multiple reports that cited companies who had been selected as preferred bidders for the project. Common among these reported bidders were that were Chinese. This included a consortium between Chinese Road and Bridge Corporation (CRBC, a company which at the time was owned by CCCC) with Gamuda Bhd, CREC and

⁵ SCMP, 2012. “China rail builders unhappy with Putrajaya for delaying Gemas-JB link”. Retrieved from: <https://www.scmp.com/article/990313/chinese-railway-builders-hit-malaysian-politics>

⁶ The Star Malaysia, 2011. “Project to be ready in 2016: Tender on Gemas-jb stretch of double-tracking to be out soon”. Retrieved from: <https://www.pressreader.com/malaysia/the-star-malaysia-starbiz/20111019/281492158084691>

CRCC.⁷ In 2015, it was made clear that the three Chinese companies had agreed to establish a consortium to submit a joint bid for the project.

In 2015, MOT also said that it had submitted the plans of the GJBEDTP to the Land Public Transport Commission (SPAD) for public inspection.⁸ This included the planned route alignment, the details of the route alignment and other related items. On 27 October 2015, the public display exercise for the GJBEDTP began and ran for three months until 27 January 2016. This public display is a requirement for all new developments of railways under Section 84 of Malaysia's Land Public Transport Act 2010. Also submitted for public inspection were the book of references with the names of proprietors and lessees of the land required for the project.

During this period, the government was also conducting the necessary preparatory approvals for the project. The MOF approved the project at an expected cost of RM7.13 billion and MOT also issued a letter of intent to the Chinese consortium upon selecting it as the preferred bidder. The consortium was then given two months to submit a tender proposal after the letter of intent was issued which ended on Nov 30, 2015.⁹

After numerous years of delay since the tender was initiated, the Gemas-Johor Bahru EDTP was finally awarded on 28 October 2016 during the tenure of prime minister Najib Razak to the Chinese consortium comprising of China Railway Construction Corporation Ltd (CRCC), China Railway Engineering Corporation (CREC) and China Communication Construction Company Ltd (CCCC). CRCC holds a 40% stake in the joint venture while CREC and CCCC each own 30%. The Award Letter was granted from the Minister of Transport, Liow Tiong Lai, with a contract value of RM8.9 billion.¹⁰

d. Project Scope

The contract scope involves the design, construction, material supply, installation, completion, testing, trial operation and maintenance of Gemas-Johor Bahru electric double-track railway. Project outputs include a total length of 191.14 kilometers, nine new passenger stations, two rolling stock depots and three open stations next to the existing line, the newly-built railway stretches from Gemas Station to Johor Bahru Central Station. With a designed speed of 160km/h, the full line is covered by meter-gauge ballast seamless tracks.

⁷ SCMP, 2012. "China rail builders unhappy with Putrajaya for delaying Gemas-JB link". Retrieved from: <https://www.scmp.com/article/990313/chinese-railway-builders-hit-malaysian-politics>

⁸ Tay, C, 2015. <https://www.edgeprop.my/content/rm8-bil-gemas-jb-double-track-rail-plans-inspection>

⁹ *ibid*

¹⁰ CCCC, 2016. "Railway project in southern Malaysia is won by CCCC consortium." Accessed through: http://en.ccccltd.cn/newscentre/companynews/201611/t20161102_50676.html

e. Project Challenges

Following the contract award to CRCC-CREC-CCCC, the GJBEDTP experienced a number of setbacks before construction activities were able to commence:¹¹

Changes to construction plans: Several of the planned underpasses and overhead bridges between Kluang and Johor Bahru required alterations upon further consultation. For example, improved designs for underpasses in Kluang were required as the initial design would potentially cause more traffic congestion. Stakeholder consultations also requested that two overhead bridges planned to be built towards the end of the construction period should be brought forward, thus requiring the amendment to the work schedule.

Issues with land acquisition: There were also ongoing issues related to the relocation of residents which had occurred during the initial land acquisition process. Although a majority of the residents had been successfully relocated, total of 1,360 squatters of various categories were recorded along the route of the GJBEDTP who were reluctant to agree to the relocation. Through a Statement of Need (SON) Clause 1.8 issued by the MOT, RAC was given the responsibility to remove all obstructions (squatters) at the project site.¹²

These setbacks had resulted in project delays lasting almost two years before the ground breaking ceremony was held on 3 April 2018, which marked the beginning of construction activities.

f. Addition of Local Contractors

In 2018, Syarikat Pembinaan Yeoh Tiong Lay Sdn Bhd (YTL), together with its joint venture partner, SIPP Rail Sdn Bhd, was appointed as the local sub-contractor to carry out the design, construction, supply, installation, completion, testing, commissioning and maintenance for the GJBEDTP.¹³ As stipulated by the contract's requirements, 50 per cent of the project's value must be undertaken by local firms, thus the SIPP-YTL JV was been appointed as the Malaysian sub-contractor to complete civil works along the route.

SIPP-YTL also has the ability to appoint additional sub-contractors for their portion of civil works. In 2018, Pestech's wholly owned subsidiary Pestech Technology Sdn Bhd received a letter of award from Syarikat Pembinaan Yeoh Tiong Lay Sdn Bhd, under SIPP-YTL JV, for

¹¹ Othman, A.F., 2017. "Gemas-JB rail line delay explained". *New Straits Times*. Accessed through: <https://www.nst.com.my/news/nation/2017/09/280372/exclusive-gemas-jb-rail-line-delay-explained>

¹² Railway Assets Corporation, 2018. Annual Report 2017.

¹³ YTL Corporation Berhad. 2019. Annual Report 2019. Accessed through: https://disclosure.bursamalaysia.com/FileAccess/apbursaweb/download?id=197231&name=EA_DS_ATTACHMENTS

the turnkey EPC and maintenance of electrification system for the Gemas-JB electrified double-track at a fixed sub-contract price of RM399 million.¹⁴

Table 2. Gemas-Johor Bahru EDTP project timeline

January 2011	MoT had announced plans to build a double-track electric rail line linking Gemas and Johor Baru. ¹⁵ The government had appointed two consultants to conduct studies on the Gemas-JB railway line, and was negotiating with Chinese consortiums for the job.
December 2011	CRBC with local partner Gamuda Bhd announced as the preferred bidder to be awarded the main contract
January 2012	CREC, CRCC, and CCC were selected as preferred bidders
February 2015	Design of the Gemas-Johor Bahru EDTP has been finalised
Q4 2015	MOT considering the proposal by Chinese consortium
31 March 2016	Land acquisition process completed and the Final Railway Scheme Approval granted by PM Najib
October 2016	Consortium of consisting of CRCC, CCC, and CREC awarded construction contract
March 2017	Pre-construction activities underway (EIA & SIA)
August 2017	Construction is delayed due to issues with state authorities
October 2017	Consortium is being delayed due to issues related to the coordination and relocation of residents along the route
January 2018	YTL Corporation Berhad appointed as the main sub-contractor for one package of the project. Contract value and package details have not been disclosed
April 3, 2018	Groundbreaking ceremony held on the project
March 2020	Construction activities halted due to Movement Control Order (MCO) to curb the spread of Covid-19
April 24, 2020	Johor government granted approval for the resumption of construction activities

Source: Author's compilation

¹⁴ <https://www.thestar.com.my/business/business-news/2018/09/26/gemas-jb-double-track-project-a-much-needed-win-for-pestech>

¹⁵ Timetric, 2018.

IV. Issues associated with the GJBEDTP

i. Opaque procurement evaluations

The procurement was conducted through a competitive tender and open to foreign firms, however there were signs that the Malaysian government had favoured or even reserved the project to Chinese contractors to begin with. Procurement practices in Malaysia requires the tendering be the primary method of procurement for works, supplies and services valued greater than RM500,000. This tender can be made open to local firms or foreign firms, but only if domestic firms do not have the capacity, expertise or capabilities to undertake the proposed works.

It should be noted that several local firms had also submitted bids for the project, but were not selected as successful bidders. In 2009, a joint proposal was submitted to the Government by Global Rail Sdn Bhd and Chinese partner China Infraglobe to build and upgrade the tracks from Gemas to Johor Bahru at a cost of RM5 billion. Within the proposal, the rail project would be on the basis of a Private Finance Initiative, where the developers will arrange funding, and it will also include a plan by China Infraglobe to invest in mineral processing and metal production in Johor.¹⁶ DRB Hicom Bhd had also submitted a bid for the project in 2009, partnering alongside another local firm MMC Corp, but the value and details of that proposal were not disclosed.¹⁷ Despite these proposals, however, the MOT continued to stress the need to open international tenders for the project.

No records were made publicly available over the specific tender method, the tender specifications or tender documents that were made available during the tendering period. However, numerous bids and wide reporting during the process provides evidence that the tender had been done through a relatively open process. The announcements of preferred bidders also points to some form of bidder qualification evaluations being conducted prior to selection, but it was not made clear what process the evaluation committees or Agency Procurement Boards used in their selection of preferred bidders.

There were numerous reporting that the Chinese companies, notably CREC, had been lobbying for the contract since even the early-2000s when they had been awarded a letter of intent for a section of the electrification and double-tracking project.^{15,18} Although the tender process seemed to be open, reports also suggest that the subject of the contract's award often came up during bilateral engagements between Malaysian and Chinese officials. Company media statements by CCCC mentions that the project award further strengthened the government's

¹⁶ Kaur, S. 2009. "RM5b rail project on drawing board." Business Times. Accessed through: https://web.archive.org/web/20090515093235/http://www.btimes.com.my/Current_News/BTIMES/articles/Rail_8-2/Article/index_html

¹⁷ <https://www.theedgemarkets.com/article/dr-b-hicom-bids-gemas-jb-rail-job>

¹⁵ Sharen Kaur, 2015. "Chinese firms get letter of intent for Gemas-JB line"

¹⁸ SCMP, 2012. "China rail builders unhappy with Putrajaya for delaying Gemas-JB link". Retrieved from: <https://www.scmp.com/article/990313/chinese-railway-builders-hit-malaysian-politics>

relationship between China and Malaysia, enhanced the economic and trade cooperation between the two countries, and accelerated the development of the “Belt and Road” initiatives.¹⁹

ii. Lack of transparency on feasibility study, impacts assessments, contract details and external auditing

Documents around the project remain relatively non-transparent, which makes it difficult for third parties to assess the project on an independent basis. The use of electric locomotives is expected to benefit local business, delivery services and cargo services by increasing the frequency and effectiveness of services via reduced traveling time and fuel costs in comparison to land or air transport. However, despite having conducted several feasibility studies on the electrification and double-tracking project, these studies remain unavailable to the public.

Furthermore, the benefit of the project have been argued to remain limited due to the potential underutilisation of the railway and to structural challenges with the Malaysian rail network.²⁰ The adoption and use of the GJBEDTP line for passenger transport would require a widespread switch from the public to choose road-based transportation as the option of choice. This requires substantial improvements in local bus service integration with the line to address the persistent last-mile connectivity issues in Malaysia. As evident in the Ipoh-Padang Besar EDTP line, freight transport utilisation of the GJBEDTP line may also be underwhelming issues such as competitive pricing are substantial challenges achieving the desired freight volumes. Ongoing construction of the Klang Valley Electrified Double Track, which is only expected to be completed in 2026, will also limit freight transport to Port Klang. These structural issues present significant challenges to KTMB in achieving the intended benefits and projected revenue.

The project also claims to bring environmental benefits arising from the use of electric locomotives, which reduce the emission of pollutants and reduce fuel consumption. However, there is also little transparency associated with the Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) for the project, although there is evidence that these assessments had been completed.

Information regarding the acquisition of land was publicly available during the public display exercise, however this transparency only lasted for the required three months and the records up for display are no longer made publicly accessible. In addition to the preparatory reports, there is generally a lack of transparency around the contracting terms between the government and Chinese consortium, as well as a lack of transparency on the terms around the consortium and local subcontractor.

¹⁹ CCCC Ongoing railway. <http://www.cccc.com.my/ongoing-railway>

²⁰ Hutchinson, F. 2020. The Gemas-Johor Bahru Railway Electrified Double-Tracking Project: Steady Progress towards Completion. ISEAS Yusof Ishak Institute. Accessed through: https://www.iseas.edu.sg/wp-content/uploads/2020/06/ISEAS_Perspective_2020_72.pdf

iii. Unknown role of Malaysian subcontractor SIPP Rail

One crucial principle in the Malaysian public procurement policy is to stimulate growth of local industries through the utilisation of local businesses and resources, therefore the contract awarded to CREC-CRCC-CCCC required that 50 percent of the project's value must be undertaken by local firms.²¹ The Chinese consortium appointed the SIPP-YTL as the main Malaysian sub-contractor to complete civil works along the route.

YTL is a publicly listed company with past experience constructing rail projects in Malaysia, including the rail link between Kuala Lumpur International Airport (KLIA) and KL Sentral. SIPP Rail, on the other hand, is a private limited company newly incorporated on 14 August 2014, which is relatively small and inexperienced compared to its partner. SIPP Rail has a paid-up capital of only RM100,000 and total assets worth RM100,484 in financial year end 2015.²² In December 2015, SIPP Rail had acquired a 10% stake in Express Rail Link Sdn Bhd (ERL), the company operating the link from KLIA to KL Sentral which was also owned by YTL subsidiary, YTL Power International Bhd (45%) alongside Lembaga Tabung Haji (36%) and Trisilco Equity Sdn Bhd (9%).²³ Prior to the purchase of ERL shares, SIPP and YTL had collaborated in the past, through SIPP Energy Sdn Bhd and YTL Power, to bid for a coal-fired power plant project. Interestingly, SIPP Energy used to be majority owned by the Sultan of Johor, Sultan Ibrahim Sultan Iskandar.

SIPP Rail's holding company is another entity named SIPP Rail Limited, which is a company registered outside of Malaysia and thus the ultimate beneficial owner is not made available through the Companies Commission of Malaysia (SSM). There are reports that the firm also has ties to the Sultan of Johor.²⁴ Although the Sultan of Johor does not have a direct stake in the company, the two directors of SIPP Rail are Daing A Malek Daing A Rahaman and Anuar Ahmed, two individuals who have been closely linked to the Sultan in the past.

The subcontract details, which includes the portion of civil works allocated to SIPP-YTL JV have not been disclosed. This also makes it unclear what the role of the small and inexperienced SIPP Rail is in the joint venture or the percentage ownership breakdown of the partnership. Although the company has limited experience with railway construction and operations, its ties to the Sultan of Johor provides some strategic advantages, which as noted by the general manager of CRCC, was crucial as the project involves a lot of land acquisition.²⁵

²¹ Ibid.

²² Companies Commission of Malaysia, 2020.

²³ Lim, B. S., 2016. "SIPP takes 10% stake in ERL ahead of HSR project". The Edge. Accessed through: <https://www.theedgemarkets.com/article/sipp-takes-10-stake-erl-ahead-hsr-project>

²⁴ Tan, S.M. 2017. "RM8.9 bil Gemas-JB double-tracking project to spin off jobs for locals". The Edge Malaysia. Accessed through: <https://www.theedgemarkets.com/article/rm89-bil-gemas-jb-double-tracking-project-spin-jobs-locals>

²⁵ Ibid.

Furthermore, the award to SIPP Rail becomes more puzzling when looking at the other firms competing for the project. Several analysts had been looking at other potential subcontractors who had more experience with railway construction to benefit from the GJBEDTP contract.²⁶ For example, IJM Corporation was expected to be one of the main beneficiaries of the project as it had undertaken jobs under past mega railway projects such as the Seremban-Gemas EDT (RM343m), MRT1 (RM875m) and MRT2 (RM1.5bn). Gamuda was also expected to have the highest chance of bagging a portion of the civil works packages, as it too had undertaken similar jobs such as the Kaohsiung MRT (RM 400m), Northern EDT (RM 6bn), MRT1 (RM 22bn) and RT2 (RM 32bn).

iv. Cost Overruns and Project delays

Large scale infrastructure projects are usually prone to cost overruns and delays. When comparing the GJBEDTP with other double-tracking projects in Malaysia (Table 3), the 197km project had one of the highest costs per kilometer of rail, thus increasing the risk of potential cost overruns. After many stops and starts, the RM8.9 billion GJBEDTP project was finally awarded in 2016 after having been proposed 20 years earlier. Most of this delays occurred during the tendering process, initially caused by the change in leadership in 2003, then again during the politically turbulent period between 2007-2009.

The project then experienced major delays after award due to a land acquisition process that resulted in thousands of squatters who refused to leave. Despite the public display exercise receiving a 99.6% approval, project plans were also changed from the initial proposed plans as presented during the public inspection exercise.²⁷ This had resulted in both delay in time for revisiting the construction plan as well as additional costs from the exercise. A ground breaking ceremony for the project was scheduled for December 2016, but this had been delayed due to the issues with the state authorities. Further delays had occurred when the project had to be momentarily halted due to a nationwide Movement Control Order (MCO) introduced by the Government on 18 March, 2020 to curb the spread of the Covid-19 pandemic. Due to these obstacles, the estimated project completion date had been changed from October 2021, as originally planned, to October 2022.

²⁶ DBS Group. 2017. Malaysia Infrastructure: Chinese Contractors – Friend or Foe? *DBS Asian Insights*. Accessed through: https://www.dbs.com.cn/sme/aics/pdfController.page?pdfpath=/content/article/pdf/AIO/062017/170602_insights_malaysia_infrastructure_chinese_constructors_friend_or_foe.pdf

²⁷ YTL Corporation Berhad. 2019. Annual Report 2019. Accessed through: https://disclosure.bursamalaysia.com/FileAccess/apbursaweb/download?id=197231&name=EA_DS_ATTACHMENTS

Table 3. Electrified Double Tracking Projects in Malaysia

Project Name	Project start date	Project End date	Length of railway	Total cost in RM*	Cost per Kilometer (km)
Gemas Johor Bahru EDTP	October 2016	October 2022	197km	RM8.9 billion	RM45.2 million
Rawang-Ipoh	2001	2008: project completed 2010: operations started	179km	RM6 billion	RM33.5 million
Ipoh Padang Besar	January 2008	2014	329km	RM12.48 billion	RM37.9 million
Batu Caves - Sentul Port Klang extension	November 2006	May 2009	7.5 km extension line	RM520 million	RM69.3 million
Seremban Gemas	May 2008	July 2013	97km	RM3.15 billion	RM32.5 million
Terminal Skypark Line	2013	May 2018	26km	RM500 million	RM19.2 million
Klang Valley Double Track Project	2016	2019	42km	RM4.47 billion	RM106.4 million

Source: Author's compilation

Initial opposition had noted that cost overruns had occurred earlier in the project, as reference to the project cost continued to report a total RM9.55 billion in total costs to the government as opposed to the RM8.9 billion stipulated in the contract. However, the clarification was that the estimated RM9.55 billion in total cost was a combination of the contract value, as well as RM400 million for coaches and RM200 million for consultation fees.²⁸ Construction activities are still underway, therefore it remains to be seen whether the project delays or additional costs for the project will result in cost overruns.

Examples of cost overruns and delays can be seen with the other double-tracking and electrification projects of Rawang-Ipoh, Ipoh-Padang Besar and the Seremban-Gemas lines. The RM6 billion Rawang-Ipoh double tracking and electrification project was originally targeted for completion in 2003 but only achieved completion in 2008, and ETS operations

²⁸ FMT News, 2020. "No increase in cost of RM9.55 billion Gemas-JB double-track rail project." Accessed through: <https://www.freemalaysiatoday.com/category/nation/2020/06/21/no-increase-in-cost-of-rm9-55-bil-gemas-jb-double-track-rail-project/>

only began in 2010. The estimated cost over-run amounted to a sum of approximately RM1.14 billion and was featured in the Auditor General's Report and probed by the Public Accounts Committee (PAC) in parliament in 2009.²⁹ Two other double tracking and electrification projects, the RM 12.5 billion Ipoh-Padang Besar and RM 3.45 billion Seremban-Gemas projects, were originally scheduled for completion in 2013 and 2012 respectively, but each of these projects experienced a year-long delay in completion.

V. Conclusions

What differentiates the Gemas-Johor Bahru EDTP from its BRI counterparts such as the East Coast Rail Link and the now defunct Kuala Lumpur-Singapore High Speed Rail is that it is wholly funded by the federal government and should thus be assessed based on its ability to uphold the principal policies of the Malaysian public procurement system. Although the project was initiated through a competitive tender, there had been signs that the process had favoured Chinese companies as the preferred contractors for the project. A substantial allocation (although the exact percentage remains undisclosed) has been awarded to a local consortium SIPP-YTL, however the ownership of these companies points to the capture of the benefits towards politically connected elites rather than towards the development of local industries and firms.

The involvement of China's CREC, CRCC and CCCC presents itself as an opportunity for local institutions and industries to benefit via the transfer of technology and expertise, however there is no evidence that the Chinese consortium is required to ensure that this transfer occurs. Finally, although Government procurement is intended to be used as a tool to achieve socio-economic and development objectives, the purported benefits of the Gemas-Johor Bahru EDTP continue to be challenged by structural issues that must be addressed in order to ensure the economic viability of the project.

These challenges are compounded and remain difficult to assess due to the overall lack of transparency and information disclosure associated with the project. From the project's inception in 1995, the various high-level direct negotiations thereafter, to the various feasibility studies, impacts assessments and contracts created by the government, it remains clear that public disclosure of information has largely been an afterthought.

²⁹ Peng, L.Y., 2009. "RM6bil Ipoh-Rawang track plan has cost overrun reaching RM1.14bil3

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