

**Opinion of the Independent Financial Advisor
Concerning the Connected Transaction**

(Supporting Document for Agenda 2 of
the Extraordinary General Meeting of Shareholders No. 1/2024)

of



**Bangkok Expressway and Metro
Public Company Limited**

The Independent Financial Advisor

CapAd
Capital Advantage

Capital Advantage Company Limited

October 10, 2024

- TRANSLATION -

The English Translation of the Independent Financial Advisor's Opinion has been prepared solely for the convenience of foreign shareholders of Bangkok Expressway and Metro Public Company Limited and should not be relied upon as the definitive and official document. The Thai language version of the Independent Financial Advisor's Opinion is the definitive and official document and shall prevail in all aspects in the event of any inconsistency with this English Translation.

No. 132/2024

October 10, 2024

Subject: Opinion of the Independent Financial Advisor Concerning the Connected Transaction of Bangkok Expressway and Metro Public Company Limited

Attention: Shareholders
Bangkok Expressway and Metro Public Company Limited

Attachments: 1) Information and Credentials of Infra Asia (Thailand) Company Limited, an Independent Expert
2) Stations of the MRT Blue Line Project that have Connections with Other Mass Rapid Transit Systems

- Business overview and operating performance of Bangkok Expressway and Metro Public Company Limited is shown in Part 2, Clause 1 - 4 of the Information Memorandum on the Connected Transaction (Enclosure No. 2), which is enclosed with the notification of this Extraordinary General Meeting of Shareholders.
- Business overview and operating performance of CH. Karnchang Public Company Limited can be found on www.set.or.th and www.ch-karnchang.co.th.

- References:**
- 1) Resolutions of the Board of Directors' Meeting No. 4/2024 of Bangkok Expressway and Metro Public Company Limited, held on September 13, 2024;
 - 2) Information Memorandum on the Connected Transaction of Bangkok Expressway and Metro Public Company Limited dated September 13, 2024;
 - 3) Annual Registration Statement/Annual Report (Form 56-1 One Report) of Bangkok Expressway and Metro Public Company Limited for the year ended December 31, 2021 - 2023;
 - 4) Audited financial statements of Bangkok Expressway and Metro Public Company Limited for the 12-month period ended December 31, 2021 – 2023 and reviewed financial statements for the 6-month period ended June 30, 2024;
 - 5) Annual Registration Statement/Annual Report (Form 56-1 One Report) of CH. Karnchang Public Company Limited for the year ended December 31, 2021 - 2023;
 - 6) Audited financial statements of CH. Karnchang Public Company Limited for the 12-month period ended December 31, 2021 – 2023 and reviewed financial statements for the 6-month period ended June 30, 2024;
 - 7) Concession Agreement between the Mass Rapid Transit Authority of Thailand and Bangkok Expressway and Metro Public Company Limited for the MRT Chaloeem Ratchamongkhon Line Project (MRT Blue Line) dated March 31, 2017 (the concession period is 30 years, from March 30, 2020 and ending in 2050);
 - 8) The Draft Engagement Agreement with CH. Karnchang Public Company Limited as the contractor for the procurement of additional rolling stocks and improvements to the related MRT system of the MRT Chaloeem Ratchamongkhon Line Project (MRT Blue Line);
 - 9) Cost Estimate Report on the procurement of additional rolling stocks and improvements to the related electrical system of the MRT Chaloeem Ratchamongkhon Line Project

- (MRT Blue Line) dated June 2024, prepared by Infra Asia (Thailand) Company Limited, an independent expert on the railway core systems¹; and
- 10) Company Affidavit, Memorandum of Association, and other information and documents, as well as interviews with the management and relevant staffs of Bangkok Expressway and Metro Public Company Limited

- Disclaimers:
- 1) Results of the study conducted by Capital Advantage Company Limited (the **"Independent Financial Advisor"** or the **"IFA"** or **"CapAd"**) in this report are based on information and assumptions provided by management of Bangkok Expressway and Metro Public Company Limited and CH. Karnchang Public Company Limited, as well as information disclosed to the public on the websites of the Securities and Exchange Commission (www.sec.or.th) and the Stock Exchange of Thailand (www.set.or.th).
 - 2) The Independent Financial Advisor shall not be held responsible for profits or losses and any impacts resulting from the transaction.
 - 3) The Independent Financial Advisor conducted the study with knowledge, skills, and cautiousness in accordance with the professional ethics.
 - 4) The Independent Financial Advisor considered and provided its opinions based on the situation and information at the present time. If such situation and information change significantly, the study results in this report may be affected.

The Board of Directors' Meeting No. 4/2024 of Bangkok Expressway and Metro Public Company Limited (the **"Company"** or **"BEM"**) on September 13, 2024, resolved to propose the Extraordinary General Meeting of Shareholders No. 1/2024, which will be held on October 31, 2024, to consider and approve the entering into a connected transaction concerning the execution of an agreement engaging CH. Karnchang Public Company Limited (**"CK"**), a major shareholder of the Company, to be responsible for procurement of additional 21 three-car rolling stocks and improvements to the related MRT systems (**"M&E Upgrade"**)² of the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line) (**"MRT Blue Line Project"**) in a total amount of Baht 6,800.00 million (exclusive of VAT).

The aforementioned transaction is considered as connected transaction pursuant to the Notification of the Capital Market Supervisory Board No. TorChor. 21/2551 Re: Rules on Connected Transactions and the Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosure of Information and Other Acts of Listed Companies Concerning the Connected Transactions B.E. 2546 (2003) (collectively referred to as the **"Notifications on Connected Transaction"**), as it is carried out with CK, the Company's major shareholder that has 3 common directors with the Company.³ The transaction value, in the case of VAT exclusive, is Baht 6,800.00 million, equivalent to the transaction size of 18.67% of net tangible assets of the Company and its subsidiaries as of June 30, 2024. Transaction value, in the case of VAT inclusive, is Baht 7,276.00 million, equivalent to the transaction size of 19.98% of net tangible assets of the Company and its subsidiaries as of June 30,

¹ Infra Asia (Thailand) Company Limited (**"Independent Expert"** or **"InfraAsia"**) is a company under Infra Asia Group, with offices in Hong Kong and Thailand. It has the team with extensive experience in appraisal of the rail projects and is recognized by government and corporates in Thailand and overseas. InfraAsia is the project advisor of the Mass Rapid Transit Authority of Thailand (MRTA), the State Railway of Thailand (SRT), and BTS Rail Mass Transit Growth Infrastructure Fund (BTSGIF). Please refer to the information and credentials of InfraAsia, an Independent Expert on the railway core systems, in Attachment 1 of this report.

² The procurement of 21 additional rolling stocks will include the installation of signaling system and in-train communication system, as well as testing, and trial run until service opening. Meanwhile, the M&E Upgrade will encompass the improvement of the central signaling system, improvement of the central communication system, and improvement of the remote-control system of the new rolling stocks to be integrated with the existing M&E equipment of the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line). This will enable a through operation of all 75 rolling stocks (comprising of 54 existing rolling stocks and 21 newly procured rolling stocks). Please refer to additional details in Part 1, Clause 1.4, and Part 3, Clause 1.1, of this report.

Currently, there are 54 three-car rolling stocks operating in the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line). After entering into this transaction, the total number of three-car rolling stocks of the MRT Blue Line Project will increase by 21 rolling stocks to a total of 75 rolling stocks by 2028.

³ According to the closing of the Company's share registration (XM) on March 13, 2024, CK owned 5,402,967,284 ordinary shares, representing 35.35%, of the Company's total paid-up capital and CH. Karnchang - Tokyu Construction Company Limited, a subsidiary of CK (with 55% ownership), held 119,659,952 shares, representing 0.78% of the Company's paid-up capital.

In addition, the Company and CK have 3 common directors, namely Mr. Plew Trivisvavet, Mr. Phongsarit Tantisuvanitchkul, and Ms. Supamas Trivisvavet (excluding the audit committee and independent directors). Please refer to additional details in Part 1, Clause 1.3 of this report.

2024. Such transaction size is higher than 3% of net tangible assets of the Company and its subsidiaries. The Company had not entered into any connected transaction with CK in the previous 6 months prior to the date the Company's Board of Directors' Meeting passed the resolution to propose the shareholders' meeting to consider and approve this transaction.

In this regard, the engagement of CK, the Company's major shareholder, for the aforementioned contract is considered as a connected transaction, categorized as normal business transaction without general commercial term, according to the Notifications on Connected Transaction.

Therefore, the Company is required to disclose information on the entering into the connected transaction to the Stock Exchange of Thailand ("**SET**") and appoint an independent financial advisor to render an opinion to the shareholders of the Company. It also must obtain approval from the shareholders' meeting with affirmative votes of at least three-fourths of the total votes of shareholders who attend the meeting and are eligible to vote, excluding shareholders with conflict of interest.

The Company has appointed Capital Advantage Company Limited as the independent financial advisor ("**Independent Financial Advisor**" or "**IFA**" or "**CapAd**") to render an opinion to shareholders concerning the reasonableness and appropriateness of price and conditions of the connected transaction.

CapAd has studied details of the Information Memorandum on the Connected Transaction of the Company, Annual Registration Statement/Annual Report (Form 56-1 One Report), and information from interviews with management and executives of the Company, as well as documents from the Company such as financial statements, Concession Agreement for the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line), Cost Estimate Reports prepared by the Independent Expert, and other documents relevant to the transactions, including information disclosed to the public, information disclosed on websites of the SET and the Securities and Exchange Commission ("**SEC**"), and financial information available on various websites as a basis for rendering our opinion on such transaction.

The opinion of CapAd in this report is based on the assumption that all information and documents received from the Company's management are accurate and complete. CapAd is unable to assure or guarantee any accuracy or completeness of such information. However, CapAd has reviewed the information and documents and opined that they are reliable and can be used for consideration. In deriving its opinion, CapAd considered current operating environment and most up-to-date information at the time of this report. Any change or future incident may have a material impact on assessment and analysis of the Independent Financial Advisor, as well as shareholders' decision on such connected transaction.

In providing the opinion to shareholders, CapAd has studied and analyzed information stated above by considering the reasonableness of the connected transaction and all relevant factors. CapAd has considered such information thoroughly and reasonably according to the professional standards for the best interest of shareholders.

The attachments to this report of opinion of the Independent Financial Advisor are deemed as part of this opinion report and are information that shareholders should consider in conjunction with this report.

After considering and studying all information on the connected transaction, CapAd would like to summarize the study results as follows:

Abbreviation	
The "Company" or "BEM"	Bangkok Expressway and Metro Public Company Limited
"CEM"	Maintenance of civil & architecture and electrical and mechanical systems
"Civil"	Civil works
"EuroStat"	The Statistical Office of the European Union
"M&E"	The design, supply, installation, integration, testing, and commissioning of mechanical and electrical equipment
"MRT"	Mass Rapid Transit system
"NTP"	Notice to Proceed
"CK"	CH. Karnchang Public Company Limited
"MRTA"	Mass Rapid Transit Authority of Thailand
"MRT Chaloe M Ratchamongkhon Line Project (MRT Blue Line)" or "MRT Blue Line Project"	The MRT project: Bang Sue Station - Hua Lamphong Station Section, Hua Lamphong Station - Lak Song Station Section, and Bang Sue Station - Tha Phra Station Section
"MRT Initial Blue Line Project"	The MRT Blue Line Project: Hua Lamphong Station - Bang Sue Station
"MRT Blue Line Extension Project"	The MRT Blue Line Project, which is extended and can be divided into 2 sections, namely Bang Sue Station - Tha Phra Station and Hua Lamphong Station - Lak Song Station
"MRT Chalong Ratchadham Line Project (MRT Purple Line)" or "MRT Purple Line Project"	The MRT Chalong Ratchadham Line Project (MRT Purple Line): Bang Yai - Bang Sue Section (Khlong Bang Phai Station - Tao Poon Station) and Tao Poon - Rat Burana Section (Tao Poon Station - Khru Nai Station)
"MRT North Purple Line Project"	MRT Purple Line Project: Bang Yai - Bang Sue Section (Khlong Bang Phai Station - Tao Poon Station)
"MRT South Purple Line Project"	MRT Purple Line Project: Tao Poon - Rat Burana Section (Tao Poon Station - Khru Nai Station)
"MRT Orange Line Project"	The MRT Orange Line Project: Bang Khun Non - Min Buri (Suwinthawong) Section, which can be divided into 2 sections, namely the West Section (Bang Khun Non Station - Thailand Cultural Centre Station) and the East Section (Thailand Cultural Centre Station - Yaek Rom Klao Station)
"MRT Orange Line Project: West Section"	The MRT Orange Line Project: Bang Khun Non Station - Thailand Cultural Centre Station
"MRT Orange Line Project: East Section"	The MRT Orange Line Project: Thailand Cultural Centre Station - Yaek Rom Klao Station
"BTS Skytrain Green Line Project"	The Bangkok mass transit system project, consisting of Silom Line (Bang Wa Station - National Stadium Station) and Sukhumvit Line (Kheha Station - Khu Khot Station)
"MRT Yellow Line Project:	The MRT Nakhara Phiphat Line Project (MRT Yellow Line): Lat Phrao - Samrong Section
"Concession Agreement for the MRT Blue Line Project"	Concession Agreement between the Company and the MRTA for the MRT Blue Line Project dated March 31, 2017. The concession period is 30 years from the date of full Blue Line operation on March 30, 2020 and ending in 2050.
"Concession Agreement for the MRT Purple Line Project"	Concession Agreement between the Company and the MRTA for the MRT Purple Line Project dated September 4, 2013
"Independent Financial Advisor" or "IFA" or "CapAd"	Capital Advantage Company Limited
"Independent Expert" or "InfraAsia"	Infra Asia (Thailand) Company Limited, an independent expert
"SEC"	The Securities and Exchange Commission, Thailand
"SET"	The Stock Exchange of Thailand
"Notifications on Connected Transaction"	The Notification of the Capital Market Supervisory Board No. TorChor. 21/2551 Re: Rules on Connected Transactions and the Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosure of Information and Other Acts of Listed Companies Concerning the Connected Transactions B.E. 2546 (2003) and its amendments
"DSCR"	Debt Service Coverage Ratio
"NTA"	Net Tangible Assets

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Executive Summary

The Board of Directors' Meeting No. 4/2024 of Bangkok Expressway and Metro Public Company Limited (the "**Company**" or "**BEM**") on September 13, 2024, resolved to propose the Extraordinary General Meeting of Shareholders No. 1/2024, which will be held on October 31, 2024, to consider and approve the entering into a connected transaction concerning the execution of an agreement engaging CH. Karnchang Public Company Limited ("**CK**"), a major shareholder of the Company, to be responsible for procurement of additional 21 three-car rolling stocks and improvements to the related MRT systems ("**M&E Upgrade**")⁴ of the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line) ("**MRT Blue Line Project**") in a total amount of Baht 6,800.00 million (exclusive of VAT).

The aforementioned transaction is considered as connected transaction pursuant to the Notification of the Capital Market Supervisory Board No. TorChor. 21/2551 Re: Rules on Connected Transactions and the Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosure of Information and Other Acts of Listed Companies Concerning the Connected Transactions B.E. 2546 (2003) (collectively referred to as the "**Notifications on Connected Transaction**"), as it is carried out with CK, the Company's major shareholder that has 3 common directors with the Company.⁵ The transaction value, in the case of VAT exclusive, is Baht 6,800.00 million, equivalent to the transaction size of 18.67% of net tangible assets of the Company and its subsidiaries as of June 30, 2024. Transaction value, in the case of VAT inclusive, is Baht 7,276.00 million, equivalent to the transaction size of 19.98% of net tangible assets of the Company and its subsidiaries as of June 30, 2024. Such transaction size is higher than 3% of net tangible assets of the Company and its subsidiaries. The Company had not entered into any connected transaction with CK in the previous 6 months prior to the date the Company's Board of Directors' Meeting passed the resolution to propose the shareholders' meeting to consider and approve this transaction.

In this regard, the engagement of CK (the Company's major shareholder) for the aforementioned contract is considered as a connected transaction, categorized as normal business transaction without general commercial term, according to the Notifications on Connected Transaction.

Therefore, the Company is required to disclose information on the entering into the connected transaction to the Stock Exchange of Thailand ("**SET**") and appoint an independent financial advisor to render an opinion to the shareholders of the Company. It also must obtain approval from the shareholders' meeting with affirmative votes of at least three-fourths of the total votes of shareholders who attend the meeting and are eligible to vote, excluding shareholders with conflict of interest.

The Company has appointed Capital Advantage Company Limited as the independent financial advisor ("**Independent Financial Advisor**" or "**IFA**" or "**CapAd**") to render an opinion to shareholders concerning the reasonableness and appropriateness of price and conditions of the connected transaction. CapAd has considered objectives and necessities of the transaction, as well as advantages, disadvantages, benefits, and risks as follows:

The Company has awarded concessions for the operation and maintenance of 3 electric train projects from the Mass Rapid Transit Authority of Thailand ("**MRTA**"), comprising of (a) the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line) (MRT Blue Line Project), (b) the MRT Chalong Ratchadham Line Project (MRT Purple Line) ("**MRT Purple Line Project**"), and (c) the MRT Orange Line Project,⁶ which is still underway and is expected to partially open for service as scheduled in January 2028 (East Section: Thailand Cultural Centre Station - Yaek Rom Klao Station) and to become fully operational in 2030 (West - East Sections: Bang Khun Non Station - Thailand Cultural Centre Station - Yaek Rom Klao Station).

The Company engaged CK to (a) carry out project management, including procurement, installation, and testing of the mechanical and electrical (M&E) equipment for the MRT Blue Line Project; and (b) undertake the management and construction of civil works of the MRT Orange Line Project: West Section and carry out the design, procurement, installation, testing of the M&E equipment and

⁴ Please refer to Footnote 2 on Page 2.

⁵ Please refer to Footnote 3 on Page 2.

⁶ The MRT Orange Line Project: Bang Khun Non – Min Buri (Suwinthawong) Section links West and East Bangkok, covering 35.9-kilometers distance. It has a total of 28 stations, of which 21 are underground stations and 7 are elevated stations, with Thailand Cultural Centre Station as the central station. The project is divided into 2 sections: the MRT Orange Line Project: West Section (Bang Khun Non Station - Thailand Cultural Centre Station) and the MRT Orange Line Project: East Section (Thailand Cultural Centre Station - Yaek Rom Klao Station).

the trial run of East Section and West Section of the MRT Orange Line Project (approved by the Extraordinary General Meeting of Shareholders No. 1/2022 of the Company on November 28, 2022), for which the Engagement Agreement was signed on July 23, 2024 (Please refer to additional details in Part 2, Clause 1 of this report).

Due to the fact that the route of the MRT Orange Line Project: East Section (Thailand Cultural Centre Station - Yaek Rom Klao Station) connects to the route of the MRT Blue Line Project at Thailand Cultural Centre Station, which is an interchange station where passengers will be in transit. Thus, when the MRT Orange Line Project: East Section commence its service on schedule in January 2028, it will transfer a large number of passengers to the MRT Blue Line Project, leading to a significant increase in the number of passengers of the MRT Blue Line Project. As a result, the Company needs to procure 21 additional rolling stocks and improve the related MRT systems for the MRT Blue Line Project in order to accommodate the increasing number of passengers in the future⁷.

The period for procurement until full delivery of all 21 rolling stocks will take approximately 3 years and 6 months (expects to complete by May 2028). With a gradual delivery, some of the rolling stocks will be ready for commercial operation in January 2028, which is the same period as the service commencement of the MRT Orange Line: East Section.

Currently, there are 54 three-car rolling stocks of Siemens brand (from Germany) in the MRT Blue Line Project. After entering into this transaction, the total number of rolling stocks in the MRT Blue Line Project will increase by 21 rolling stocks to a total of 75 three-car rolling stocks by 2028.

The Company is committed to operating the electric train services with efficiency, safety, rapidity, convenience, reliability, and punctuality. As set out in the Concession Agreements of the MRT Blue Line Project and the MRT Orange Line Project, the Company shall responsible for the procurement and management of M&E equipment for the electric trains (rolling stocks) to amply meet the passenger demand. The Company has expertise in operating train system; though, the procurement and maintenance of train system are specialized tasks that require a large number of specialists. It accordingly has a policy to outsource the management of train system procurement and maintenance to a third party to ensure the metro system service operation and maintenance are carried on uninterruptedly and efficiently and in line with the scope of work under the Concession Agreements.

With its intention to concentrate on its core business of metro service operation and to manage the investment risk by ensuring that the project cost does not exceed budget, which will otherwise impact the required rate of return, and that the task is completed within the specified period of time, the Company has a policy to engage a contractor on a lump sum turnkey basis to responsible for the procurement, installation, and testing of M&E equipment. Apart from the general contractor duties, the contractor shall also be tasked with project management, coordination, supervision, monitoring, quality control, and work delivery. The Company has adopted this practice to all of its projects, including the MRT Blue Line Project: Hua Lamphong Station – Bang Sue Station ("**MRT Initial Blue Line Project**"), The MRT Chalong Ratchadham Line Project (MRT Purple Line): Khlong Bang Phai Station - Tao Poon Station, the MRT Blue Line Extension Project: Bang Sue Station – Tha Phra Station and Hua Lamphong Station – Lak Song Station ("**MRT Blue Line Extension Project**"), and the MRT Orange Line Project.

Therefore, the Company has decided to engage a contractor on a lump sum turnkey basis for the procurement of additional rolling stocks (21 three-car rolling stocks of the same specification as that of the rolling stocks currently used in the MRT Blue Line Project) and M&E Upgrade of the MRT Blue Line Project so as to ensure that the Company could obtain the additional rolling stocks for operation of the MRT Blue Line Project from January 2028 onwards, which coincides with the commencement of service of the MRT Orange Line Project: East Section. This will support the ridership growth driven by connections with the MRT Orange Line Project and other projects that gradually become operational in the present and the future. Moreover, the Company will be able to operate its fleet of 75 rolling stocks (comprising of 54 existing rolling stocks and 21 newly procured rolling stocks) in the MRT Blue Line Project with highest efficiency and as a through operation and increase not only

⁷ It will also accommodate the growing number of passengers of the MRT Blue Line Project and other connected projects, including

- the projects already in operation such as the MRT Chalong Ratchadham Line Project (MRT Purple Line): Bang Yai – Bang Sue Section (Khlong Bang Phai Station - Tao Poon Station) ("**MRT North Purple Line Project**"), and the MRT Nakkhara Phiphat Line Project: Lat Phrao - Samrong Section ("**MRT Yellow Line Project**"); and
- the projects that are underway and will become operational in the future such as the MRT Chalong Ratchadham Line Project (MRT Purple Line): Tao Poon - Rat Burana Section (Tao Poon Station - Khru Nai Station) ("**MRT South Purple Line Project**") , which is expected to commence operation in 2027. (Please refer to additional details in Part 2, Clause 1, and Attachment 2 of this report)

the frequency of train operation, particularly during the peak hours, but also the convenience of passengers.

The advantages and benefits of the connected transaction are as follows:

- (1) The Company will have sufficient rolling stocks for the MRT Blue Line Project that are ready for use within the required time frame, whereby some rolling stocks will be ready for service in January 2028 to accommodate the rising number of passengers that will be transferred from the MRT Orange Line Project from 2028 onwards. The engagement of CK aims to combine the purchase order for 21 three-car rolling stocks of the MRT Blue Line Project with the purchase order for 32 three-car rolling stocks of the MRT Orange Line Project. In this regard, CK has earlier approached and coordinated with the manufacturer, and such order has already been incorporated into the manufacturer's production plan. As such, the engagement of CK will allow the MRT Blue Line Project to have sufficient rolling stocks that are ready for use within the required time frame to accommodate passengers after the commencement of service of the MRT Orange Line Project: East Section. Thus, the Company will benefit considerably from the increase in fare revenue, the fast and convenient train service, the management that conforms with the Concession Agreement, and the economies of scale arising from purchase order combination.
- (2) The engagement of additional rolling stock procurement and M&E Upgrade for the MRT Blue Line Project will enable the Company to concentrate on efficient train service operation in accordance with its policy without concern over the M&E and CEM maintenance works. Thus, the Company has a policy to outsource the M&E system procurement and CEM maintenance, which are complicated works, to a third party.
- (3) Risk of cost overrun and project delay can be mitigated through the lump sum turnkey contract.
- (4) Foreign exchange risk arising from import of M&E equipment can be mitigated through execution of the lump sum turnkey contract at a fixed price and in Baht currency.
- (5) The contractor (CK) is the country's large construction company with first-hand experience and expertise in works related to rail projects under lump sum turnkey contracts, and also serves as project manager of large projects. Therefore, the contractor (CK) is well prepared in all aspects for the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project for the Company and could deliver high-quality works on schedule and within the predefined budget.
- (6) The contractor (CK) has no record of job abandonment and has strong creditworthiness, financial position, and adequate liquidity for its business.
- (7) The contractor (CK) is familiar with the electric train system of the MRT Blue Line Project. Thus, it is confident that the contractor (CK) will manage the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project to be ready for use within the time frame required by the Company.

However, the disadvantages and risks of the connected transaction are as follows:

- (1) The Company has consistently and solely relied on the main contractor (CK) for the procurement, installation, and testing of M&E equipment. CK has been the sole main contractor of the Company for the procurement of rolling stocks and installation of M&E equipment of the MRT Blue Line Project (54 rolling stocks), the MRT Purple Line Project (21 rolling stocks), and the MRT Orange Line Project (32 rolling stocks). It has also been engaged by the Company to undertake the management, design, and construction of civil infrastructure and the management of CEM maintenance service.
- (2) The Company has no opportunity to compare CK's proposal for the rolling stock procurement with those of other service providers who are not the manufacturer, as it is challenging for the Company to procure other contractors/service providers who have an understanding of system of the MRT Blue Line Project and ensure that they can procure and deliver the work according to the conditions required by the Company, and use such information as basis for comparison with proposal from CK. However, the contract price is lower than the appraised value determined by the Independent Expert (InfraAsia). Moreover, the delivery period is definitely fixed according to the Company's requirement.
- (3) CK is neither a manufacturer nor a distributor of electric train systems. CK must import or purchase relevant equipment from an overseas manufacturer and, hence, cannot carry out the tasks comprehensively by itself, leading to a potential risk of CK failing to perform the works according to the specified details and conditions.

The benefits and advantages between entering into the transaction with the connected person and the transaction with the third party are as follows:

- (1) CK carried out the procurement of 54 rolling stocks and management of CEM maintenance service for the MRT Blue Line Project and, therefore, is ready to promptly undertake and commence these new tasks.
- (2) The fact that CK is the Company's major shareholder demonstrates its strong commitment to work at its full capability and responsibility and without abandoning the job, in order to maintain value of its investment in the Company. On the contrary, if the transaction is executed with a third party, it may not pay full attention to the quality of work or may abandon the job with no concern about a longstanding relationship.
- (3) The coordination and operation will be flexible since CK and the Company have worked together on the MRT Blue Line Project and other previous projects and are well acquainted with one another.
- (4) The Company will indirectly benefit from CK's protection of confidential information regarding the technical information and other crucial information of the electric train projects, especially the metro system, which will substantially contribute to the Company's competitiveness.

The disadvantages between entering into the transaction with the connected person and the transaction with the third party are as follows:

- (1) The Company has to rely more on CK as CK has been the sole main contractor of the Company for the procurement of rolling stocks and installation of M&E equipment of the MRT Blue Line Project (54 rolling stocks), the MRT Purple Line Project (21 rolling stocks), and the MRT Orange Line Project (32 stocks). It has also been engaged by the Company to undertake the management, design and construction of civil infrastructure, and management of CEM maintenance service. Therefore, the Company will incur the risk in the future if CK does not work for the Company for any reason.
- (2) The Company will be required to disclose detailed information, leading its competitors to gain access to information regarding costs and details of the M&E Upgrade since the engagement of CK is considered as the entering into a large transaction according to the connected transaction criteria. The Company is required to seek an approval for the connected transaction from its shareholders' meeting and appoint an independent financial advisor to provide opinion to its shareholders, thus incurring extra costs and requiring disclosure of detailed information on the M&E Upgrade to ensure that the shareholders have sufficient information for their decision-making.

After considering the conditions of the Draft Engagement Agreement with CK, the Independent Financial Advisor is of the opinion that conditions of the relevant agreements are appropriate and in the normal course of business. Such conditions are in line with the scope of work in terms of the contractor's responsibility, agreement term, delivery period, payment condition, security and bonds, variation order, and penalty. The Independent Financial Advisor considered and compared such conditions with those of the general turnkey contracts and the Concession Agreement between the Company and the MRT, which is a contract between the public and private sectors and is a standard contract that the government applies to various MRT projects.

The scope of work and responsibility specified therein can support efficient train service operation in accordance with the Concession Agreements between the Company and the MRTA.

After considering objectives and necessities of the transactions as well as advantages, disadvantages, benefits, risks, and the potential impacts, the Independent Financial Advisor is of the opinion that the entering into the connected transaction shall contribute to ongoing growth and, thus, be beneficial to the Company. In addition, it will enable the Company to focus on provision of electric train services with highest efficiency, without any concern or burden of train and related MRT system procurement. Meanwhile, the disadvantages and risks are limited. Therefore, **the entering into the Connected Transaction is considered reasonable.**

The opinion of the Independent Financial Advisor regarding the appropriateness of the price and conditions of the connected transaction is as follows:

The Independent Financial Advisor is of opinion that the cost estimation of the procurement of additional rolling stocks and improvements to the related MRT systems of the MRT Blue Line Project prepared by InfraAsia is appropriate and can be applied in the comparison of the transaction as InfraAsia is the professional with extensive experiences in the cost estimation of several rail projects.

Since the cost estimation prepared by InfraAsia is the value of the work excluding VAT, thus, the Independent Financial Advisor compared such cost estimate with the contract price with CK without taking VAT into consideration.

The comparison of cost estimation of the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project prepared by InfraAsia and the contract price of CK (Baht 6,800.00 million) is as follows:

	Detail of M&E Upgrade of the MRT Blue Line Project	Cost Estimation of M&E Upgrade by InfraAsia ^{1/}	Contract Price of M&E Upgrade according to the Agreement with CK	Contract Price of CK is (Lower) Higher than Cost Estimation of M&E Upgrade by InfraAsia	
		(Baht million)	(Baht million)	(Baht million)	(%)
		(1)	(2)	(3)=(2)-(1)	(3)/(1)
1	Rolling stocks ^{1/}	6,254.95 - 6,657.48 ^{2/3/} (Baht 297.85 – Baht 317.02 million/rolling stock)			
2	Signaling system	332.20 - 351.79 ^{3/} (Baht 15.82 – Baht 16.75 million/rolling stock)			
3	Communication system	241.14 - 255.73 ^{3/} (Baht 11.48 – Baht 12.18 million/rolling stock)			
4	SCADA (Supervisory Control & Data Acquisition)	30.84 – 30.90 ^{3/} (Baht 1.47 million/rolling stock)			
	Total value of M&E Upgrade (exclusive of VAT)	6,859.18 – 7,295.84 (Baht 326.63 – Baht 347.42 million/rolling stock)	6,800.00^{4/} (Baht 323.81 million/rolling stock)	(495.84) – (59.18)	(6.79) – (0.86)

Remark:

- 1/ Based on the exchange rate of EUR/Baht 37.00 – EUR/39.50 (the exchange rate of EUR/ Baht 39.50 is the approximate exchange rate in May 2024, which is the time when the Independent Expert (InfraAsia) prepared the cost estimation, while the exchange rate of EUR/Baht 37.00 is the approximate exchange rate on the date prior to the date of the Board of Directors Meeting No. 4/2024 on September 13, 2024).
- 2/ Comprise of 21 three-car rolling stocks for the MRT Blue Line Project, approved by the Board of Director Meeting No. 4/2024 of the Company on September 13, 2024.
- 3/ Each item comprises of related system work as determined by InfraAsia and the pro-rated of operating costs in Group 5 – 10 from the table on Page 34 of this report.
- 4/ The contract price according to the Engagement Agreement with CK is fixed price on the lump sum turnkey basis.

In conclusion, the Independent Financial Advisor is of opinion that contract price of the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project in the Draft Engagement Agreement with CK, at the amount of Baht 6,800.00 million (exclusive of VAT) is **lower than** the cost estimation determined by InfraAsia (Baht 6,859.18 – 7,295.84 million), by Baht (495.84) – (59.18) million or lower by (6.79%) – (0.86%). **Therefore, the contract price according to the Engagement Agreement with CK is appropriate.**

Regarding the payment condition, the Independent Financial Advisor is of opinion that the payment condition for the contractor (CK) according to the interim payment schedule, which is set to be in line with the work progress, is in the normal course of business of the lump sum turnkey project, of which the payment will be made in installations in accordance with the work progress. Therefore, **the payment condition is appropriate.**

When considering reasonableness of the connected transaction and the appropriateness of price and conditions of the connected transaction, **the Independent Financial Advisor opines that shareholders should approve the entering into the connected transaction.**

The shareholders should study information in the documents attached to the notification of the shareholders' meeting prior to making the decision. The consideration to approve the connected transaction rests primarily on and is the sole discretion of the shareholders.

CapAd, as the Independent Financial Advisor, hereby certifies that the above opinion is rendered with due care in accordance with the professional standards for the benefits of shareholders.

Details of the Independent Financial Advisor's opinion are as follows:

Part 1: General Details of the Connected Transaction

1. Characteristics and Details of the Transaction

1.1 Objectives and Background of the Transaction

The Board of Directors' Meeting of the Company No. 4/2024 on September 13, 2024 resolved to propose the Extraordinary General Meeting of Shareholders No. 1/2024, which will be held on October 31, 2024, to consider and approve the entering into a connected transaction concerning the execution of an agreement engaging CH. Karnchang Public Company Limited, a major shareholder of the Company, to be responsible for procurement of additional 21 three-car rolling stocks and improvements to the related MRT systems (M&E Upgrade) of the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line) in a total amount of Baht 6,800.00 million (exclusive of VAT).

1.2 Date of the Transaction

The Company will enter into the transaction after obtaining approval from the Extraordinary General Meeting of Shareholders No. 1/2024, which will be held on October 31, 2024. It expects to sign the engagement agreement with CK by November 2024.

After that, the Company will issue the Notice to Proceed ("**NTP**") to CK, by which CK has an operational period under the agreement of 3 years and 6 months, starting from the date of the NTP. Thus, it is expected that CK will deliver the rolling stocks and related MRT systems according to the scope of work by May 2028.

1.3 Contract Parties and Relationship with the Company

Employer	: Bangkok Expressway and Metro Public Company Limited (the Company or BEM)
Contractor	: CH. Karnchang Public Company Limited (CK)
Relationship with the Company	: - CK is the major shareholder of the Company, holding 5,402,967,284 shares, representing 35.35% of paid-up capital of the Company. ^{1/} - CH. Karnchang - Tokyu Construction Company Limited, a subsidiary of CK (with 55% ownership), is the Company's shareholder, holding 119,659,952 shares, representing 0.78% of paid-up capital of the Company. ^{1/} - The Company and CK have 3 common directors, namely: (1) Mr. Plew Trivisvavet, Chairman of the Board of Directors of the Company (holding directly and indirectly 0.12% of the Company's paid-up capital ^{1/}), is a director and Chairman of the Executive Board of CK. (2) Mr. Phongsarit Tantisuvanitchkul, a director and Chairman of the Executive Board of the Company and a shareholder of the Company (holding 0.02% of paid-up capital ^{1/}), is a director, Vice Chairman of the Executive Board, and Deputy Managing Director of CK. (3) Miss Supamas Trivisvavet, a director and member of the Executive Board of the Company, is a director and Vice Chairman of the Executive Board of CK. As a result, CK is deemed as a connected person of the Company under the Notifications on Connected Transaction.

Remark:

1/ Information from the latest closing of the Company's share registration (XM) on March 13, 2024.

1.4 General Characteristics of the Transaction

The Company, which has obtained the concession for the MRT Blue Line Project from the Mass Rapid Transit Authority of Thailand (MRTA), wishes to engage CK for the procurement of additional rolling stocks and M&E Upgrade for the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line) in order to accommodate the services for both current and potential passengers that may increase in the future in a total amount of Baht 6,800 million (exclusive of VAT). The total number of newly procured rolling stocks is 21 three-car units, which will be of the same specification as that of the rolling stocks currently used in the MRT Blue Line Project.

The summary of the Engagement Agreement with CK is as follows:

Summary of the Engagement Agreement with CK	
For additional rolling stock procurement and M&E Upgrade of the MRT Blue Line Project	
Contract parties	Employer: Bangkok Expressway and Metro Public Company Limited (the Company or BEM) Contractor: CH. Karnchang Public Company Limited (CK)
Agreement date	By November 2024 ^{1/} (after the Company has obtained approval from the Extraordinary General Meeting of Shareholders No. 1/2024, to be held on October 31, 2024, for execution of the Engagement Agreement with CK)
Scope of work and contractor's responsibility	The main duties of CK under the Engagement Agreement are: (1) Procurement of 21 additional rolling stocks, together with installation of signaling and communication systems on the trains;

Summary of the Engagement Agreement with CK	
For additional rolling stock procurement and M&E Upgrade of the MRT Blue Line Project	
	(2) Improvement to the central signaling system and supporting equipment installed between stations to increase the frequency of rolling stocks operation and support the increasing number of rolling stocks; (3) Improvement to the central communication system to support communication with the new rolling stocks; and (4) Improvement to the remote-control system to enable the train operation control center to appropriately control the ventilation system in the tunnel and cover all possible incidents.
Agreement term	CK has an operational period under the agreement of 3 years and 6 months, starting from the date of the Notice to Proceed (NTP). ^{1/}
Agreement value	Baht 6,800 million (exclusive of VAT)
Terms of payment	The Company agrees to pay CK on a monthly basis according to the completion progress (based on the Interim Payment Schedule, which is in line with the progress of the works as specified in the agreement) within 30 days from the date that the Company receives the invoice.
Security & bonds	CK will deliver a performance bond of Baht 300 million, which will remain effective until CK delivers 21 rolling stocks and complete the M&E Upgrade so that the Company can provide its train service.
Variation Order	The Company may issue a change of work order as stipulated in the agreement, by which CK shall carry out in accordance with such change, provided that the parties agree on the responsibility, costs, conditions, and related details prior to the change of work made by CK.
Insurance	CK shall be held responsible for the provision of all risks insurance and third-party liability insurance with the insurance companies operating in Thailand at its own expense. The Company and CK shall be the insured and the MRTA and the main lending banks of the Project (if any) shall be the co-insureds and co-beneficiaries. Such insurance shall be valid throughout the term of the agreement.
Penalty	In the event that CK is unable to complete the works according to the material schedule specified in the agreement, CK shall pay penalty to the Company as specified rate (Baht 200,000 per day during the agreement term and/or Baht 200,000 per day per a rolling stock when the agreement term expires (as the case may be).

Remark: 1/ The Company expects to issue the NTP by November 2024. It is therefore expected that CK will deliver the rolling stocks and related MRT systems according to the scope of work by May 2028.

However, the terms of engagement of CK are based on a lump sum turnkey basis that guarantee the work by assuming all potential risks if the project is not completed within the specified period. As a result, it limits the potential risks from the implementation of the project.

CapAd received a confirmation that the essence of the executed version of the Engagement Agreement with CK will not be materially changed from the drafted version.

1.5 Total Value of the Consideration, Payment of the Consideration, and Criteria for Determining Total Value of the Consideration

Total Value of the Consideration

Total value of the consideration comprises of value of the procurement of 21 additional rolling stocks and M&E Upgrade of the MRT Blue Line Project in a total amount of Baht 6,800.00 million (exclusive of VAT)

Payment of the Consideration

The Company agrees to pay for the consideration (in Baht currency) to CK on a monthly basis according to the completion progress (based on the Interim Payment Schedule, which is in line with the progress of the works as specified in the Engagement Agreement with CK). The payment will be made within 30 days from the date that the Company receives invoice from CK.

Criteria for Determining Total Value of the Consideration

CK has proposed a price of Baht 6,800.00 million (exclusive of VAT) for the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project.

In considering the appropriateness of the price, the Company appointed Infra Asia (Thailand) Company Limited ("**Independent Expert**" or "**InfraAsia**") as an independent expert engineer to evaluate the appropriate value. InfraAsia is a reputable independent expert with experience in assessing the value of rail transportation projects recognized by government and corporates in Thailand and abroad, such as the State Railway of Thailand, the BTS Skytrain Project, the Gold Coast TRT Project in Australia. InfraAsia has completed the evaluation and submitted a report to the Company. After examination and evaluation, a reasonable price under the scope of work for this project (procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project) is approximately Baht 7,295.00 million (exclusive of VAT).

When comparing the proposed price by CK with the price appraised by the Independent Expert (InfraAsia) under the same type of scope of work, the proposed price by CK is lower than the price appraised by InfraAsia by Baht 495.00 million or 6.79%. Having considered the matter, the

management and the Board of Directors of the Company are of the opinion that the proposed price by CK is appropriate.

1.6 Calculation of Transaction Size

Connected Transaction

Criteria for Calculation of Transaction Size	Calculation Formula	Transaction Size
Net tangible asset (NTA) criteria	= Baht 6,800.00 million ^{1/} / Baht 36,414.08 million ^{2/}	18.67%
Connected transaction size (The Company had no connected transaction with CK, during the previous 6 months)		18.67%

Remark:

- 1/ Total value of the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project is Baht 6,800 million (exclusive of VAT).
If VAT (7%) is included in the connected transaction size calculation, the transaction size shall be 19.98% (based on contract price of Baht 6,800 million and VAT of Baht 476 million).
- 2/ Net tangible asset of the Company = Total asset of Baht 113,850.08 million - Net intangible asset of Baht 21.32 million - Deferred tax asset of Baht 13.74 million - Total liabilities of Baht 77,399.24 million - Non-controlling interests of Baht 1.69 million, based on the Company's reviewed consolidated financial statements for the 6-month period ended June 30, 2024.

1.7 Sources of Funds for the Entering into the Transaction

By entering into this transaction, the Company shall make the installed payment to CK in accordance with the work progress for the period of 3 years and 6 months. The Company shall use various sources of fund as deem appropriate and beneficial to the Company at that time. The Company expects to use external sources of funds by borrowing from financial institutions and/or issuing debentures and/or internal source of funds from its operating cash flow. The Company views that such sources of funds are sufficient for the transaction.

CapAd has analyzed the Company's capability to make payment under the Engagement Agreement with CK in Part 2, Clause 4.1 of this report.

1.8 Conditions on the Entering into the Transaction

The Company will execute the Engagement Agreement with CK after obtaining approval from the Extraordinary General Meeting of Shareholders No. 1/2024, which will be held on October 31, 2024 with affirmative votes of at least three-fourths of the total votes of shareholders who attend the meeting and are eligible to vote, excluding shareholders with conflict of interest.

1.9 Connected Persons and/or Shareholders who have Conflict of Interest and are not Eligible to Vote

The list of connected persons and/or shareholders who have conflict of interest and are not eligible to vote on Agenda 2 Re: "To consider the connected transaction concerning the engagement of CH. Karnchang Public Company Limited for Procurement of Additional Rolling Stocks and Improvements to the Related MRT Systems of the MRT Blue Line Project" at the Extraordinary General Meeting of Shareholders No. 1/2024, which will be held on October 31, 2024, is in Part 1, Clause 7 of the Information Memorandum on Connected Transaction of the Company (Enclosure No. 2) attached to the notice of this Extraordinary General Meeting of Shareholders.

1.10 Agreements Related to the Entering into the Transaction

Please refer to details in Part 1, Clause 1.4 of this report.

2. Information and Credentials of Infra Asia (Thailand) Company Limited, an Independent Expert

Please refer to details in Attachment 1 of this report.

Part 2: Opinion of the Independent Financial Advisor on Reasonableness of the Connected Transaction


In assessing the reasonableness of this transaction, the Independent Financial Advisor has considered the following key factors:

1. Objectives and Necessity of the Transaction

The Company's main business is management and operation of metro system services and expressway network under the Concession Agreements, as well as commercial developments related to the metro and expressway systems. Having expertise in operation of these systems, the Company is committed to developing qualified personnel for the provision of the expressway network and metro system services.

The Company has obtained concessions for the operation of 3 electric train projects from the Mass Rapid Transit Authority of Thailand ("MRTA"), namely the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line), the MRT Chalong Ratchadham Line Project (MRT Purple Line), and the MRT Orange Line Project, as follows:

Commercially Operated Projects

The MRT Blue Line Project	The MRT Purple Line Project
38 stations; 48-km. length; 54 trains (3 cars/unit) of Siemens brand	16 stations; 23-km. length; 21 trains (3 cars/unit) of J-TREC brand
	

Ongoing Project

The MRT Orange Line Project
28 stations; 35.9-km. length; 32 trains (3 cars/unit)


Opening schedule

- East Section: 2028 (Jan)
- West Section: 2030

Commercially Operated Projects

1. The MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line), consisting of 38 stations along a total of 48-kilometers distance with 54 three-car rolling stocks of Siemens brand

- The project is under the Concession Agreement for the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line) with MRTA, dated March 31, 2017 ("**Concession Agreement for the MRT Blue Line**").^{1/}
- The concession period is 30 years, from the date of full Blue Line operation on March 30, 2020 to March 29, 2050. The MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line) has 54 three-car rolling stocks of Siemens brand from Germany, with each rolling stock comprising of 2 motored cars with driving cabs and a trailer car, as follows:
 - (a) MRT Initial Blue Line Project (Bang Sue Station – Hua Lamphong Station), which commenced services on July 3, 2004, whereby
 - the Company engaged CK (by CKET Joint Venture) on a lump sum turnkey basis to undertake the project management with respect to the procurement of rolling stocks, installation of equipment, testing of system integration, and trial run of 19 three-car rolling stocks, to be ready for official opening on July 3, 2004, and also engaged CK to procure another 7 three-car rolling stocks during 2019 - 2020,^{2/} totaling 26 three-car rolling stocks; and
 - the Company has outsourced maintenance service on civil & architecture and electrical & mechanical systems (CEM) to CK since November 2015, with the CEM Contract expiring on March 31, 2027; and
 - (b) The MRT Blue Line Extension Project (Bang Sue Station – Tha Phra Station and Hua Lamphong Station – Lak Song Station), which commenced full commercial operation on March 30, 2020^{3/} and thereby resulted in a through operation in a circle line of the MRT Initial Blue Line Project and the MRT Blue Line Extension Project, covering Bangkok's midtown areas and linking travels between Bangkok and Thon Buri, whereby
 - the Company engaged CK on a lump sum turnkey basis to undertake the procurement and installation of M&E equipment, testing of system integration, and trial run of 28 three-car rolling stocks;^{2/} and
 - the Company has outsourced the CEM maintenance service for the entire MRT Blue Line Extension Project to CK for a period of 8 years and 7 months, from August 29, 2018 to March 31, 2027.
- Pursuant to the Concession Agreement for the MRT Blue Line, the Company is responsible for the procurement, installation, and testing of M&E equipment for the MRT Blue Line Project to sufficiently accommodate the passengers. The Company has the right to collect fare revenue and undertaking commercial development throughout the

Commercially Operated Projects

1. The MRT ChaloeM Ratchamongkhon Line Project (MRT Blue Line), consisting of 38 stations along a total of 48-kilometers distance with 54 three-car rolling stocks of Siemens brand

concession period. It shall make the investment and bear all operating expenses for the entire concession period and shall share the returns or benefits to MRTA as agreed upon in the agreement (PPP Net Cost).

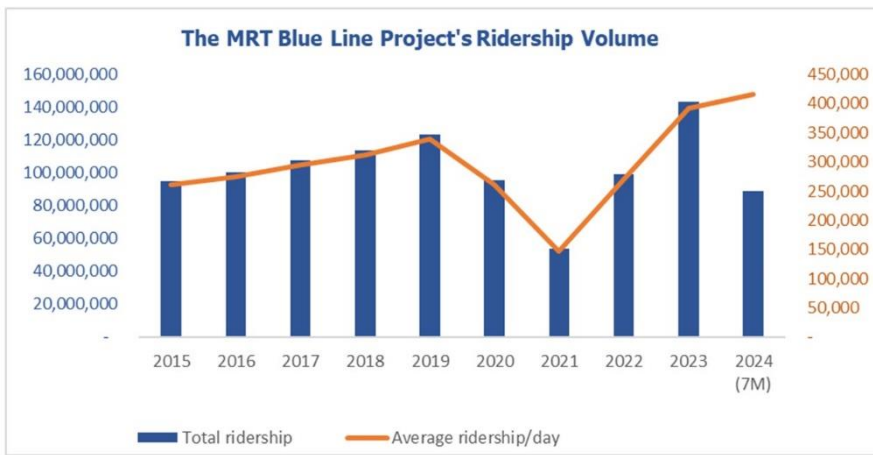
- The MRT Blue Line Project connects with the MRT Purple Line Project at Tao Poon Station (and Sam Yot Station in the future).
- The MRT Blue Line Project's ridership over the past 10 years, up to July 2024, is shown below:

The MRT Blue Line Project's Ridership	2015	2016	2017	2018	2019
Total ridership (million passenger-trips)	95.02	100.34	107.54	113.71	123.62
Average ridership/day (passenger-trips)	260,435	274,235	294,632	311,538	338,689

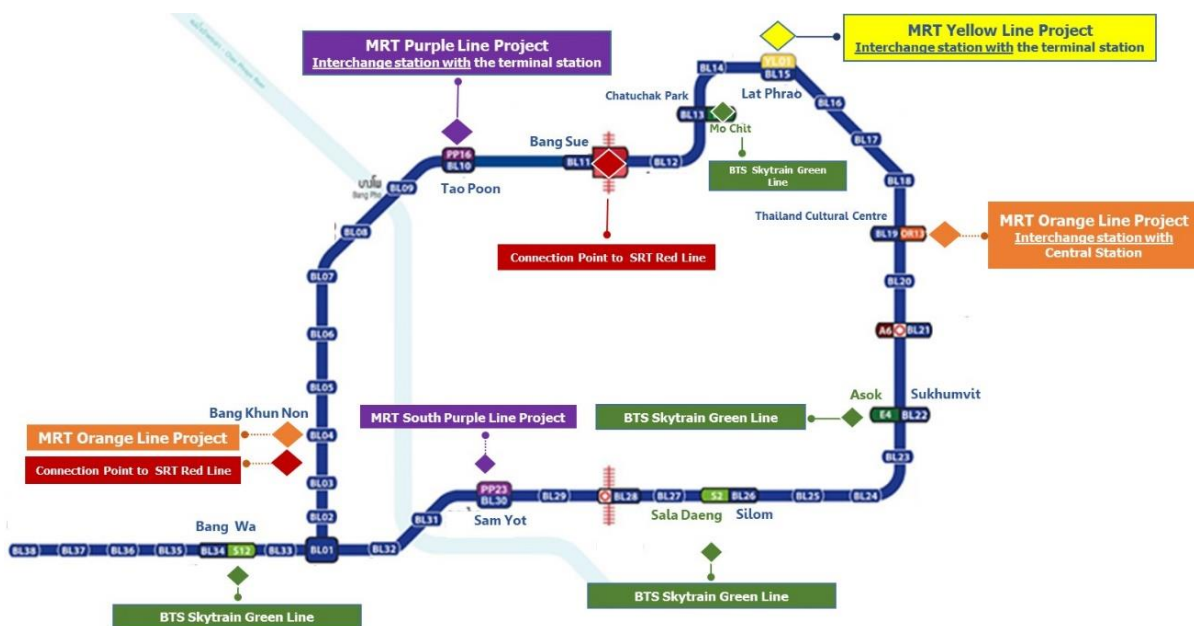
The MRT Blue Line Project's Ridership Volume	2020	2021	2022	2023	2024 (7M)
Total ridership (million passenger-trips)	95.60	53.53	99.00	143.38	88.71
Average ridership/day (passenger-trips)	261,198	146,656	271,237	392,814	416,489

Source: MRTA's website

Remark: The Covid-19 pandemic in Thailand during March 2020 – June 2022 (Source: https://th.wikipedia.org/wiki/covid-19pandemic_inThailand)



- In addition to interchanging with the MRT Orange Line Project at Thailand Cultural Centre Station and Bang Khun Non station, the MRT Blue Line Project also connects with the terminal station of other electric train systems such as Tao Poon Station (connecting to the MRT North Purple Line Project), Lat Phrao Station (connecting to the MRT Yellow Line Project), Bang Sue Station (connecting to the MRT Red Line Project), and Bang Wa Station (connecting to the BTS Skytrain Green Line Project). Additionally, it provides interchanges at stations as Silom Station, Sukhumvit Station, Lat Phrao Station, and Chatuchak Park Station (connecting to the BTS Skytrain Green Line Project), and Sam Yot Station (which will connect to the MRT South Purple Line in the future).



Remark:

- 1/ The Concession Agreement for the MRT Initial Blue Line Project dated August 1, 2000 is deemed as a part of the Concession Agreement for the MRT Blue Line Project dated March 31, 2017. In addition, the Concession Agreement for the MRT Initial Blue Line Project has been extended from the original maturity date of July 1, 2029 to expire at the same time as the MRT Blue Line Extension Project in order for the project to operate as a through operation.
- 2/ Approved by the Extraordinary General Meeting of Shareholders No. 1/2017 of the Company on June 12, 2017. The purchase order for 7 rolling stocks of the MRT Initial Blue Line Project will be combined with 28 rolling stocks of the MRT Blue Line Extension Project, making up a total of 35 rolling stocks, since the producer does not accept small orders.
- 3/ The MRT Blue Line Extension Project is divided into 3 sections:
 - Section 1: Bang Sue Station – Tao Poon Station (1 station), commenced operation on August 11, 2017, with Tao Poon Station as an interchange station of the MRT Purple Line Project and the MRT Blue Line Extension Project;
 - Section 2: Hua Lamphong Station – Lak Song Station (11 stations), commenced operation on September 29, 2019; and
 - Section 3: Tao Poon Station – Tha Phra Station, commenced operation on March 30, 2020.

Commercially Operated Projects

2. The MRT Chalong Ratchadham Line Project (MRT Purple Line): Khlong Bang Phai Station - Tao Poon Station, consisting of 16 stations along a total of 23-kilometers distance with 21 three-car rolling stocks of J-TREC brand

- The project is under the Concession Agreement for the MRT Chalong Ratchadham Line Project (MRT Purple Line), Khlong Bang Phai Station – Tao Poon Station, with MRTA dated September 4, 2013 ("**Concession Agreement for the MRT Purple Line**"), for the investment, procurement of electric train system, and operation and maintenance services (PPP Gross Cost).
- The concession period is 30 years, from September 4, 2013 to September 3, 2043 (including construction period), which can be divided into 2 phases:
 - Phase 1: Design and construction; and
 - Phase 2: Service operation (including CEM), with official operation on August 6, 2016
- The Company engaged CK on a lump sum turnkey basis to undertake the project management with respect to the procurement of rolling stocks, installation of equipment, testing of system integration, and trial run of 21 three-car rolling stocks.^{1/}
- The Company has outsourced the CEM maintenance service to CK since November 2015, with the CEM Contract to expire on October 31, 2033.
- Tao Poon Station, which is the terminal station of the MRT North Purple Line, connects with the MRT Blue Line Project, leading to passenger crowding during the morning peak hours.
- The MRT North Purple Line's ridership from its official operation on August 6, 2016 to July 2024 is as follows:

The MRT North Purple Line Project's Ridership	2016	2017	2018	2019	2020
Total ridership (million passenger-trips)	3.07	11.63	17.64	19.73	16.84
Average ridership/day (passenger-trips)	20,773	31,855	48,341	54,044	46,002

The MRT North Purple Line Project's Ridership	2021	2022	2023	2024 (7M)
Total ridership (million passenger-trips)	9.84	16.15	21.51	13.90
Average ridership/day (passenger-trips)	26,964	44,250	58,927	65,272

Source: MRTA's website

Remark: MRTA agreed to cap the MRT Purple Line's fare at Baht 20, taking effect on October 16, 2023 from 11.00 hrs. onwards, to help ease the cost of living according to the government policy. (Source: <https://www.mrta.co.th/th/news-release/14694>)



Remark:

- 1/ Approved by the Extraordinary General Meeting of Shareholders No. 1/2015 of the Company on October 14, 2015.

Ongoing Project

3. The MRT Orange Line Project, covering a total of 35.9-kilometers length with 28 stations, comprising of 21 underground stations and 7 elevated stations (with Thailand Cultural Centre Station as the central station), and 32 three-car rolling stocks

- The Company entered into the Public-Private Partnership Agreement for the MRT Orange Line Project with MRTA on July 18, 2024^{1/} ("**Concession Agreement for the MRT Orange Line Project**"). Under such agreement, the Company shall be responsible for the procurement, installation and testing of M&E equipment for the MRT Orange Line Project to sufficiently accommodate the passengers. Moreover, the Company has an exclusive right to collect fare revenue and undertaking commercial development inside and outside the electric train system, on structures of the underground and elevated stations, on and in passenger trains, and along linkages with other buildings (if any), for the period of 30 years from the commercial operation date of the MRT Orange Line Project: East Section (PPP Net Cost).
- The MRT Orange Line Project is the main route of the mass rapid transit (MRT) system that links travels between East and West Bangkok and between the suburbs and downtown areas. The route passes through many densely populated areas and will be connected to the MRT Blue Line Project at Thailand Cultural Centre Station and Bang Khun Non Station.
- The MRT Orange Line Project: Bang Khun Non – Min Buri (Suwinthawong) Section is divided into 2 sections, **West Section** (Bang Khun Non Station - Thailand Cultural Centre Station) and **East Section** (Thailand Cultural Centre Station - Yaek Rom Klao Station).
- The concession period is 30 years from the commercial operation date of the MRT Orange Line Project: East Section, which is divided into 2 phases as follows:

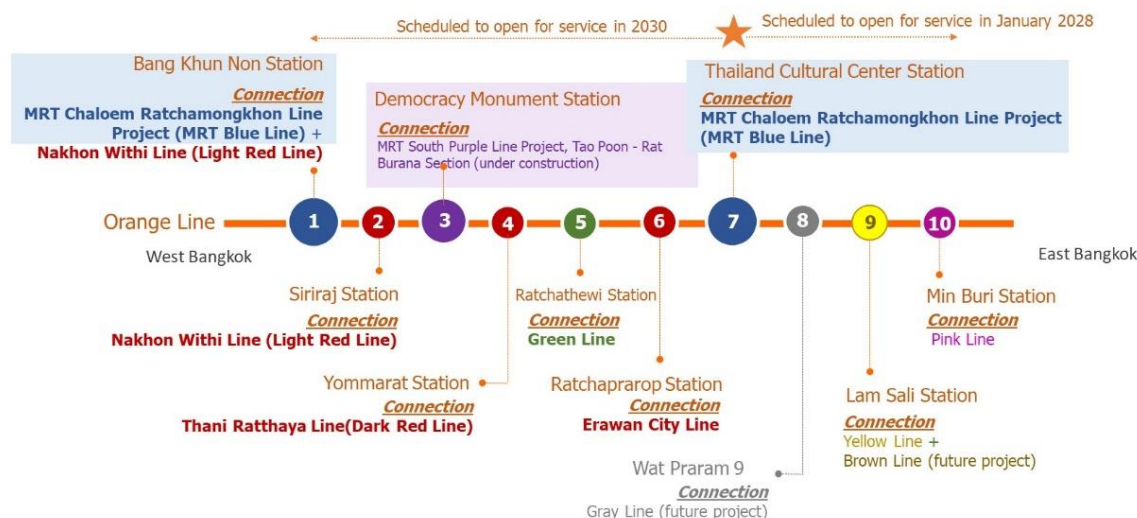


Phase 1: Design and construction of civil works and procurement of M&E systems for:

- 1) The MRT Orange Line Project: **East Section** (Thailand Cultural Centre Station - Yaek Rom Klao Station) - procurement of **M&E** systems with an operation period of 3 years and 6 months from the date specified by MRTA in the Notice to Proceed (NTP), i.e. July 31, 2024; and
- 2) The MRT Orange Line Project: **West Section** (Bang Khun Non Station - Thailand Cultural Centre Station) - design and construction of **civil** works and procurement of **M&E** systems with an operation period of 6 years from the date specified by MRTA in the NTP, i.e. July 31, 2024; and

Phase 2: Operation and maintenance (O&M) services for the MRT Orange Line Project (East Section and West Section) with an operation period of 30 years from the commercial operation date of the MRT Orange Line Project: East Section.

- The Company has engaged CK on a lump sum turnkey basis for (a) the management and construction of civil works of the MRT Orange Line Project: West Section, and (b) the design, procurement, installation and testing of M&E equipment, and the trial run of the MRT Orange Line Project: East Section and West Section, with 32 three-car rolling stocks,^{1/} which can be divided into: (a) 16 rolling stocks (including reserve rolling stocks) for West Section and (b) 16 rolling stocks (including reserve rolling stocks) for East Section.
- The commencement of service of the **West Section** (Bang Khun Non Station - Thailand Cultural Centre Station) is scheduled by 2030 and the **East Section** (Thailand Cultural Centre Station - Yaek Rom Klao Station) by January 2028.
- According to MRTA's estimation, after the commencement of service of the MRT Orange Line Project: East Section, the MRT Orange Line Project's ridership will reach approximately 150,000 passengers/trip/day, and the Company expects to transfer roughly 80% of the passengers to the MRT Blue Line Project.



Remark:

1/ Approved by the Extraordinary General Meeting of Shareholders No. 1/2022 of the Company on November 28, 2022.

The Company is committed to operating the electric train services with efficiency, safety, rapidity, convenience, reliability, and punctuality. As set out in the Concession Agreements of the MRT Blue Line Project and the MRT Orange Line Project, the Company shall be responsible for the procurement and management of M&E equipment for the electric trains (rolling stocks) to amply meet the passenger demand. The Company has expertise in operating train system; though, the procurement and maintenance of train system are specialized tasks that require a large number of specialists. It accordingly has a policy to outsource the management of train system procurement and maintenance to a third party. Therefore, to ensure the metro system service operation and maintenance are carried on uninterruptedly and efficiently and in line with the scope of work under the Concession Agreements of the MRT Blue Line Project, the MRT Purple Line Project, and the MRT Orange Line Project, the Company has adopted the operational policy and guidelines as follows:

Scope of Work	Details
Train system operation	Having expertise in train system operation, the Company therefore undertakes the operation by itself for the MRT Blue Line Project, the MRT Purple Line Project, and the future MRT Orange Line Project.
Procurement of electric train system and M&E system	Since this is a specialized task, the Company has a policy to outsource the procurement of electric train system and M&E system to a third party. The Company has then engaged CK to undertake almost all of such task and assigned the Company's team to closely and continually coordinate with CK. The train procurement takes at least 3 years to complete and requires a specialist to monitor, coordinate, and examine every steps with the producer, ranging from order placement to acceptance of the ordered equipment, system testing, and trial run.
CEM maintenance services	Since maintenance services are specialized tasks that require a large number of specialists, the Company has a policy to outsource CEM maintenance management to a third party, who has expertise in this field (the complicated tasks have been almost totally outsourced to CK), and to concurrently develop its employees' skills in simple CEM works.

With its intention to concentrate on its core business of metro service operation and in order to manage the investment risk by ensuring that the project cost does not exceed budget, which will otherwise impact the required rate of return, and that the task is completed within the specified period of time, the Company has a policy to engage a contractor on a lump sum turnkey basis to responsible for the procurement, installation, and testing of M&E equipment. Apart from the general contractor duties, the contractor shall also be tasked with project management, coordination, supervision, monitoring, quality control, and work delivery. The Company has adopted this practice to all of its projects, including the MRT Initial Blue Line Project, the MRT North Purple Line Project, the MRT Blue Line Extension Project, and the MRT Orange Line Project.

Therefore, the Company has decided to engage a contractor on a lump sum turnkey basis for the procurement of additional 21 three-car rolling stocks of the same specification as that of the rolling stocks currently used in the MRT Blue Line Project and M&E Upgrade of the MRT Blue Line Project so as to ensure that the Company could obtain the additional rolling stocks for operation in the MRT Blue Line Project from January 2028 onwards, which coincides with the commencement of service of the MRT Orange Line Project: East Section. This will support the ridership growth driven by connections with the MRT Orange Line Project and other projects that gradually become operational in the present and the future. Moreover, the Company will be able to operate its fleet of 75 rolling stocks (comprising of 54 existing rolling stocks and 21 newly procured rolling stocks) in the MRT Blue Line Project with highest efficiency and as a through operation and increase not only the frequency of train operation, particularly during the peak hours, but also the convenience of passengers.

2. Comparison of Advantages and Disadvantages of the Transaction

2.1 Advantages and Benefits of the Transaction

(1) The Company will have sufficient rolling stocks for the MRT Blue Line Project that are ready for use within the required time frame

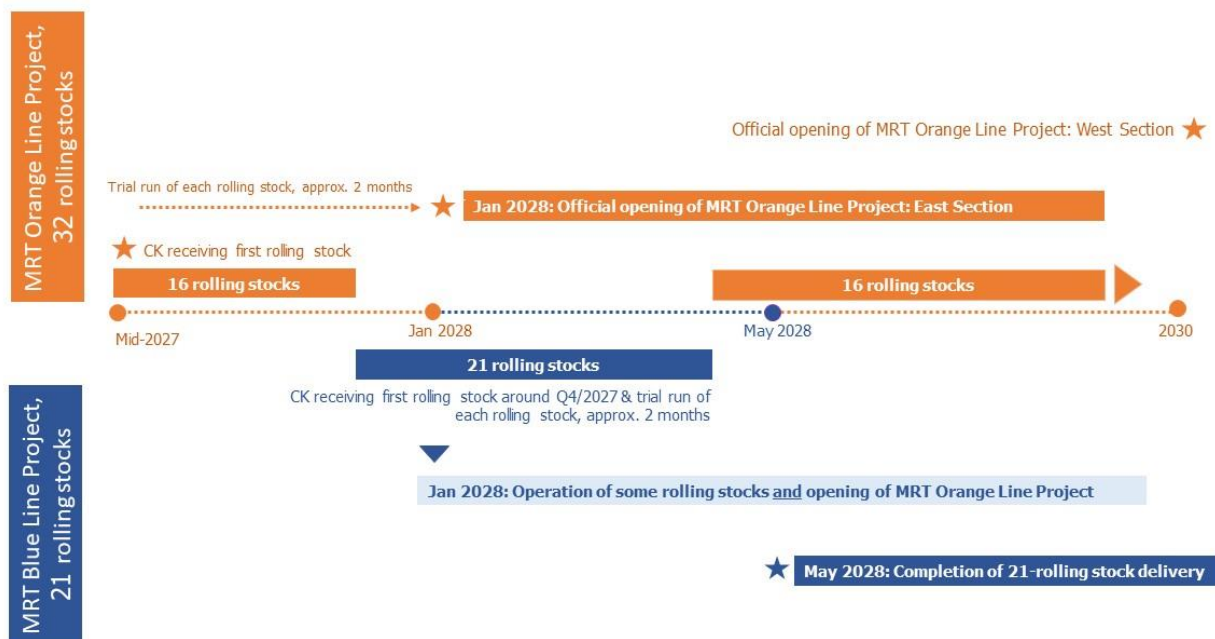
The engagement of CK under the connected transaction aims to combine the purchase order for 21 three-car rolling stocks of the MRT Blue Line Project with the purchase order for 32 three-car

rolling stocks of the MRT Orange Line Project.⁸ In this regard, CK has earlier approached and coordinated with the manufacturer, and such order has already been incorporated into the manufacturer's production plan, with the rolling stocks of the MRT Orange Line Project to be gradually delivered from mid-2027 onwards. The purchase order combination will result in the following benefits

(a) The MRT Blue Line Project will have an increasing number of fleet, whereby some rolling stocks will be ready for service in January 2028 and the delivery of the new 21 rolling stocks will be completed by May 2028, which will accommodate the rising number of passengers that will be transferred from the MRT Orange Line Project: East Section (commence service in the beginning of 2028) and the MRT Orange Line Project: West Section (commence service in 2030), as well as other future MRT projects. The Company will be able to increase the frequency of train operation during the peak hours to speed up passenger flow, reduce the station and train congestion, and decrease the long-waiting or stranded passengers;

(b) The procurement of rolling stocks will be efficiently managed and the arrival of new rolling stocks will be in a timely manner to respond to the commencement of service of the MRT Orange Line Project: East Section through the rearrangement of delivery schedule for 53 new rolling stocks, of which 32 rolling stocks are for the MRT Orange Line Project and 21 rolling stocks are for the MRT Blue Line Project, to optimize the utilization by the Company.

The manufacturer formerly set a condition on simultaneous delivery of all 32 rolling stocks for the MRT Orange Line Project, while the Company has divided the use of rolling stocks into 2 phases: 16 rolling stocks for commencement of service of the MRT Orange Line Project: East Section in January 2028 and another 16 rolling stocks for the MRT Orange Line Project: West Section in 2030. The said delivery and production schedule will then be revised according to the Company's requirement as follows:



(c) Economies of scale will be achieved from price bargaining with the manufacturer to obtain about the same price as that of the MRT Orange Line Project,⁹ as well as from negotiation for delivery period as required by the Company.

However, by placing separate orders through a new contact with the manufacturer, the new order will have to go through the process from the beginning while the production and delivery schedule

⁸ The Extraordinary General Meeting of Shareholders No. 1/2022 of the Company, held on November 28, 2022, approved the Company to engage CK on a lump sum turnkey basis to undertake (a) the management and construction of civil works of the MRT Orange Line Project: West Section (excluding the appointment of MRTA's consultant); and (b) the design, procurement, installation, testing of the M&E equipment and the trial run of East Section and West Section of the MRT Orange Line Project.

⁹ Based on price of the rolling stock for the MRT Orange Line Project as appraised by InfraAsia in 2022 and adjusted by the producer price index according to Germany's rolling stock industry to obtain an updated and comparable price. (Please refer to additional details in Part 3, Clause 1.3.3, of this report)

will be primarily managed by the manufacturer. This could cause the Company to fail to receive the rolling stocks by the desired period of time, which will impact the efficiency in train service operation of the MRT Blue Line Project, especially during the rush hours.

Therefore, the engagement of CK will allow the MRT Blue Line Project to have sufficient rolling stocks that are ready for use within the required time frame, i.e. some will be ready for service by January 2028 to accommodate passengers after the commencement of service of the MRT Orange Line Project: East Section from 2028 onwards. Thus, the Company will benefit considerably from the management of rolling stock delivery schedule, the increase in fare revenue, the fast and convenient train service, the management that conforms with the Concession Agreement, and the economies of scale arising from purchase order combination with that of the MRT Orange Line Project.

(2) The engagement of additional rolling stock procurement and M&E Upgrade for the MRT Blue Line Project will enable the Company to concentrate on efficient train service operation in accordance with its policy

As the Company aspires to be an efficient electric train operator without direct concern over the M&E and CEM maintenance works, it has a policy to outsource the management of electric train system and M&E system procurement and CEM maintenance, which are complicated works, to a third party. Therefore, the engagement of an administrator for CEM maintenance services is in line with the Company's objective and allows it to concentrate on efficient train service operation.

(3) Risk of cost overrun and project delay can be mitigated through the lump sum turnkey contract

The engagement of CK for the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project will be made on a lump sum turnkey basis, which specifies the definite construction period, a fixed contract value of Baht 6,800 million, the payment term based on the progress of work, and a penalty fee of Baht 200,000 per delay train per day totaling not more than 10% of the contract value. This will help to ensure that the procurement of 21 three-car rolling stocks and M&E Upgrade of the MRT Blue Line Project will be completed within the specified time frame and predefined budget, thus mitigating the risk of the Project cost overrun and project completion delay.

(4) Foreign exchange risk arising from import of M&E equipment can be mitigated through execution of the lump sum turnkey contract at a fixed price and in Baht currency

According to the Draft Engagement Agreement to be executed with CK on a lump sum turnkey basis, the payment is denominated in Baht currency and at a fixed price. However, CK will practically have to import the main equipment from overseas in foreign currencies (largely in EUR) and pay for such equipment to the manufacturer in foreign currency. The payments shall be made in installments over a period of approximately 3 years and 6 months, from order placement until delivery completion. Therefore, through the engagement of CK under the lump sum turnkey contract at a fixed price and in Baht currency, the Company will avoid the foreign exchange risk, bear no extra cost for executing an FX forward contract, and ease the burden of hedging against foreign exchange risk. Without such burden, it will be able to focus on the core business operation, which is more beneficial to the Company.

(5) The contractor (CK) is the country's large construction company with first-hand experience and expertise in works related to rail projects under lump sum turnkey contracts, and also serves as project manager of large projects

The contractor (CK), which is a large construction company in Thailand, has extensive experience and expertise in and familiarity with the civil works, M&E equipment, and CEM maintenance of the MRT Blue Line Project, and is well prepared to undertake the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project.

Experience Related to the MRT Blue Line Project		
1. Works under the Company's responsibilities with CK engaged as the contractor - M&E and CEM works		
1.1	CK (by CKET Joint Venture) was the project manager responsible for the design and installation of M&E systems* for the MRT Initial Blue Line Project, of which the Company is currently the concessionaire, also responsible for the system integration testing and the trial run of passenger trains until the MRT Blue Line Project launched its commercial operation on schedule (M&E Equipment Procurement, Construction and Management Contract). * Comprising of passenger train system (initial 19 three-car rolling stocks of Siemens brand), signaling system, communication system, supervisory control and data acquisition (SCADA) system, and other systems.	M&E

Experience Related to the MRT Blue Line Project		
1.2	CK was the project manager responsible for the design, procurement, installation, and testing of M&E systems [^] and trial run of the MRT Blue Line Extension Project (the systems must be connected with those of the MRT Initial Blue Line Project, with necessary equipment and facilities supporting their seamless connection installed) (M&E Equipment Procurement, Construction and Management Contract). ^ Comprising of passenger train system (35 additional three-car rolling stocks of Siemens brand), signaling system, automatic platform gate system, fare collection system, maintenance equipment for services inside and outside maintenance depot, power supply system, communication system, and supervisory control and data acquisition (SCADA) system.	M&E
1.3	CK undertook the management of civil & architecture and electrical & mechanical system (CEM) maintenance of the MRT Initial Blue Line Project (Hua Lamphong Station - Bang Sue Station).	CEM
1.4	CK undertook the management of CEM maintenance of the MRT Blue Line Extension Project, including preparation works in the initial phase and maintenance of equipment during trial run of stations in the mobilization period.	CEM
1.5	CK was responsible for upgrading and replacing the equipment of mechanical & electrical system of the MRT Initial Blue Line that had reached the end of their service lives, as well as procuring and installing equipment to improve the communication systems.	M&E
1.6	CK was responsible for the procurement, installation, and testing of M&E system for the MRT Purple Line Project: Tao Poon Station – Bang Sue Section (1 station), which has later become a part of the MRT Blue Line Extension Project, with Tao Poon Station as the interchange station between the MRT Blue Line Project and the MRT Purple Line Project (M&E Equipment Procurement, Construction and Management Contract).	M&E
1.7	CK was responsible for the installation of telecommunication network at 4 stations of the MRT Blue Line Extension Project, comprising Wat Mangkon Station, Sam Yot Station, Sanam Chai Station, and Itsaraphap Station.	M&E
1.8	CK was responsible for upgrading and replacing the equipment of mechanical & electrical system of the MRT Initial Blue Line Project that had reached the end of their service lives.	M&E
1.9	CK was responsible for the procurement and installation of equipment to improve the communication system of the MRT Initial Blue Line Project (Hua Lamphong Station – Bang Sue Stations) (<i>consisting of 18 stations covering approximately 20 kilometers</i>).	M&E
1.10	CK is the contractor of CEM maintenance service for the MRT Initial Blue Line Project (Hua Lamphong Station – Bang Sue Station) from November 17, 2015 to March 31, 2027, as follows: - Contract 1: Spanning approximately 8 years from November 17, 2015 to October 31, 2023; and - Contract 2: Extended for approximately 3 years and 5 months from November 1, 2023 to March 31, 2027.	CEM
1.11	CK is the contractor of CEM maintenance services for the MRT Blue Line Extension for 8 years and 7 months from August 29, 2018 to March 31, 2027, including preparation works in the initial phase and maintenance of equipment during trial run of stations in the mobilization period.	CEM
1.12	CK was responsible for replacement of equipment of the MRT Blue Line Project, by changing grout plugs and expansion rubbers in the tunnel wall between Bang Sue Station and Hua Lamphong Station, and injection of additional PU Foam.	CEM
2. Works engaged by MRTA – civil works		
2.1	CK (by BCKT Joint Venture) was responsible for the design and construction of 9 underground stations, including civil works, underground stations, tunnels, M&E systems, structures, and design of the MRT Initial Blue Line Project (Bang Sue Station – Hua Lamphong Station), covering approximately 10 kilometers.	Civil works
2.2	CK (by CKSL Joint Venture) was responsible for the design and construction of the ballasted and ballastless track work and conductor rail of the MRT Initial Blue Line Project (Bang Sue Station - Tao Poon Station).	Civil works
2.3	CK was the contractor for the construction of civil infrastructure, including design and construction of tunnels and 2 underground stations, for the MRT Blue Line Extension Project (Sanam Chai Station – Tha Phra Station) under Contract 2.	Civil works
2.4	CK was the contractor for the design of civil infrastructure and construction of ballastless track work and conductor rail for the MRT Blue Line Extension Project (Hua Lamphong Station – Bang Khae Station and Bang Sue Station – Tha Phra Station) under Contract 5. This included the design and construction of a cut and cover tunnel connected to a bored tunnel, and a ventilation building.	Civil works

In addition, CK has extensive experience in the management of large-scale projects and rail projects in Thailand, including civil works, M&E systems, and maintenance services, whereby:

(a) The contractor (CK) is a large construction contractor with first-hand experience in rail projects in Thailand, including the design and construction of civil infrastructure, project management, design, procurement and installation of M&E systems, as well as management of CEM maintenance services for the MRT Purple Line Project, the BTS Skytrain Green Line Extension Project, the MRT Purple Line Project: Tao Poon – Rat Burana Section (Tao Poon Station - Khru Nai Station), and the MRT Orange Line Project. Track record of CK can be summarized as follows:

Experience Related to the MRT Purple Line Project		
1. Works under the Company's responsibilities with CK engaged as the contractor - M&E and CEM works		
1.1	CK was the project manager responsible for the procurement, installation, and testing of M&E systems* for the MRT Purple Line Project: Khlong Bang Phai – Tao Poon Section (M&E Equipment Procurement, Construction and Management Contract) and Bang Yai – Bang Sue Section. * Comprising of passenger train system, signaling system, automatic platform gate system, fare collection system, maintenance equipment for services inside and outside maintenance depot, power supply system, communication system, and supervisory control and data acquisition (SCADA) system.	M&E
1.2	CK was the contractor of CEM maintenance service for the MRT Purple Line Project: Bang Yai – Bang Sue Section (Khlong Bang Phai Station - Tao Poon Station) over a period of 7 years, 11 months, and 14 days from November 17, 2015 to October 31, 2023.	CEM
1.3	CK is the contractor of CEM maintenance service for the MRT Purple Line Project: Bang Yai – Bang Sue Section (Khlong Bang Phai Station - Tao Poon Station), including the replacement of equipment of some systems such as low voltage system, walk-through metal detector, and environmental control system (replacement of stations' air conditioners), for an extended term of 10 years from November 1, 2023 to October 31, 2033.	CEM
2. Works engaged by MRTA – civil works		
2.1	CK (by CKTC Joint Venture) was responsible for the construction of civil infrastructure (design of elevated railways and station structure, as well as construction of 8 elevated stations) and the mechanical & electrical system under Contract 1 for the MRT North Purple Line Project (Phra Nang Klao Bridge Station - Bang Sue Station).	Civil works

Experience Related to the BTS Skytrain Green Line Extension Project: Bearing – Samut Prakan Section		
1. Works engaged by MRTA – civil works		
1.1	CK was responsible for the construction of civil infrastructure (elevated structure and 9 elevated stations, including station structure, infrastructure improvement, and new design of elevated structure and station structure) and the design and construction of ballastless track work for the elevated structure, elevated railway, and maintenance depot for the BTS Skytrain Green Line Extension Project: Bearing – Samut Prakan Section.	Civil works

Experience Related to the MRT Orange Line Project: Bang Khun Non – Min Buri (Suwinthawong) Section		
1. Works under the Company's responsibilities with CK engaged as the contractor - civil works and M&E works		
1.1	CK undertakes the management and civil construction of the MRT Orange Line Project: West Section.	Civil works
1.2	CK is responsible for the design, procurement (32 three-car rolling stocks), installation, testing of M&E equipment, and trial run of passenger trains (East Section and West Section) of the MRT Orange Line Project: Bang Khun Non – Min Buri (Suwinthawong) Section.	M&E
2. Works engaged by MRTA – civil works		
2.1	The MRT Orange Line Project: East Section – 3 contracts (contract value (inclusive of VAT) of Baht 46,971.24 million) out of the total 6 contracts, representing 59.29% of total contract value, consisting of: - <u>Contract 1</u> : CK (by CKSL Joint Venture) is responsible for the design and construction of tunnels and underground stations of Thailand Cultural Centre – Ramkhamhaeng 12 Section (covering 6.29 kilometers with 3 underground stations); ^{1/} - <u>Contract 2</u> : CK (by CKSL Joint Venture) is responsible for the design and construction of tunnels and underground stations of Ramkhamhaeng 12 – Ramkhamhaeng 34 Section (covering 3.44 kilometers with 4 underground stations); ^{1/} and - <u>Contract 5</u> : CK (by CKSL Joint Venture) is responsible for the construction of maintenance depot and park & ride building.	Civil works

Remark: 1/ The MRT Orange Line Project: East Section consists of 10 underground stations and 7 elevated stations. The Company's contractor (CK) is a member of the joint venture that undertakes the construction of 7 underground stations.

Experience Related to the MRT Purple Line Project: Tao Poon – Rat Burana (Kanchanaphisek Ring Road) Section (Expected to Commence Service in 2027)		
1. Works engaged by MRTA – civil works		
1.1	CK (by CKST - PL Joint Venture) is responsible for the design and construction of tunnels and underground stations of Tao Poon – National Library Section and National Library – Phan Fa Section (a total of 6 underground stations).	Civil works

(b) The contractor (CK) has experience in executing lump sum turnkey contracts for the Company's electric train projects on a continuous basis. It has delivered high-quality works on schedule and within the predefined budget. In addition, it is a local contractor that can carry out the procurement, installation, and testing of the M&E system for electric train projects, which are the complicated and technology-intensive works and require the experience in designing, installation, trial run, and operation to ensure the project could be opened for public service smoothly, efficiently, and on schedule.

(c) The contractor (CK) is among the largest construction contractors in Thailand with experience as project manager of various projects, including large-scale infrastructure projects such as

the design and construction of the expressway network, the construction of metro system, the design and construction of a large hydroelectric power plant, the construction of water production and distribution system, and the construction of intercity motorways. These projects have demonstrated CK's potential and capabilities in managing large-scale projects.

(d) The contractor (CK) has been working well with relevant parties and could efficiently control the operation of suppliers in relation to the procurement of equipment and rolling stocks, the installation, trial run and operation. It has successfully achieved on-time delivery and within-budget targets, resulting in the timely commencement of service of the MRT Initial Blue Line Project, the MRT Blue Line Extension Project, and the MRT Purple Line Project: Khlong Bang Phai – Tao Poon Section and Tao Poon – Bang Sue Section.

Therefore, the contractor (CK) is well prepared in all aspects for the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project for the Company. CK has the experience in executing lump sum turnkey contracts for previous electric train projects with the Company, and could deliver high-quality works on schedule and within the predefined budget. Currently, there are only a few contractors in the country who are capable of undertaking the procurement, installation, and testing of M&E equipment for electric train projects since these tasks are complicated and technology-intensive and require not only profound understanding of electric train system but also experience in designing, installation, and operation to ensure the project could be opened for public service smoothly, efficiently and within the specified period.

(6) The contractor (CK) has no record of job abandonment and has strong creditworthiness, financial position, and adequate liquidity for its business

Since the Engagement Agreement for the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project is of a high value, the contractor should be trustworthy and never have any record of job abandonment in order not to affect the train operation. Moreover, the contractor must be reliable among the manufacturers and have adequate liquidity to make advance payments for some expenditures. If the contractor does not have sufficient credit facilities and liquidity, the project implementation may be interrupted. The contractor should therefore be reliable and financially sound and have adequate liquidity to ensure smooth project implementation.

According to its separate financial statements as of June 30, 2024, the contractor (CK) had total assets of Baht 90,721.48 million, cash and cash equivalents of Baht 3,966.28 million, and shareholders' equity of Baht 20,899.09 million. Its current ratio was at 1.21 times and interest-bearing debt to equity ratio was at 1.95 times, according to the consolidated financial statements (interest-bearing debt to equity ratio is calculated based on consolidated financial statements, in order to comply with terms and conditions of the debentures which specified that the ratio must not exceed 3 times). Therefore, CK is considered financially strong and has sufficient liquidity to operate its business.

In addition, the contractor (CK) has been in operation for more than 51 years and is a Class 1 (highest rank) contractor, enabling it to participate in bidding for any public sector construction project. The public sector normally takes into account the qualifications in 3 key areas when choosing a contractor: the contractor's experience and track records, its financial position, and the number and qualifications of its staff. Besides, CK is one of the construction companies that can carry out construction work which is complicated and requires sophisticated technology such as the construction of large-scale infrastructure projects. Therefore, the Company is confident that the contractor will be able to deliver the work under the scope and standards outlined in the Engagement Agreement and will not abandon the job.

(7) The contractor (CK) is familiar with the electric train system of the MRT Blue Line Project

CK has been acquainted with the electric train system of the MRT Blue Line Project, including the operating system, method and procedure, during the period of its working on the project site. For the entire period of undertaking the civil works and CEM maintenance service for the Company, CK has been able to achieve the operational plan with satisfactory results that are above the KPI. For instance, it could finish the maintenance of equipment and the delivery of ready-to-use rolling stocks and civil works on time and/or ahead of schedule (as the case may be), which is the key factor contributing to efficient train service operation. Thus, it is confident that the contractor (CK) will manage the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project to be ready for use within the time frame required by the Company.

2.2 Disadvantages and Risks of the Transaction

(1) The Company has consistently and solely relied on the main contractor (CK) for the procurement, installation, and testing of M&E equipment

CK has been the sole main contractor of the Company for the procurement of rolling stocks and installation of M&E equipment of the projects such as the MRT Blue Line Project (54 rolling stocks), the MRT Purple Line Project (21 rolling stocks), and the MRT Orange Line Project (32 stocks). It has also been engaged by the Company to undertake the management, design and construction of civil infrastructure, and the management of CEM maintenance service (*Please refer to the details in Part 1, Clause 2.1 (4), of this report*).

Therefore, this connected transaction will bear testimony to the Company's sole and consistent reliance on CK as the main contractor for the procurement, installation, and testing of M&E equipment.

(2) The Company has no opportunity to compare CK's proposal for the rolling stock procurement with those of other service providers

Since the engagement of CK will not be executed through an open bidding process, the Company has no opportunity to compare CK's proposal with those of other service providers who are not the manufacturers, as it is challenging for the Company to procure other contractors/service providers who have an understanding of system of the MRT Blue Line Project and ensure that they can procure and deliver the work according to the conditions required by the Company, and use such information as basis for comparison with proposal from CK. However, the contract price is lower than the appraised value determined by the Independent Expert (InfraAsia) (*Please refer to additional details in Part 3 of this report*). Moreover, the delivery period is definitely fixed according to the Company's requirement.

Taking into account the experience and expertise of CK, the mitigation of risks under CK's proposal, CK's profound understanding of the electric train system of the MRT Blue Line Project, and its capability in securing sources of funds, it is apparently somewhat difficult for the Company to acquire other contractors/service providers for comparison with CK.

(3) CK is neither a manufacturer nor a distributor of electric train systems

For the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project, CK must import or purchase relevant equipment from an overseas manufacturer and, hence, cannot carry out the tasks comprehensively by itself, leading to a potential risk of CK failing to perform the works according to the specified details and conditions. Nonetheless, CK has the experience in contacting and negotiation with the manufacturer of electric train system that was installed and has been used in the MRT Blue Line Project. Besides, the systems and equipment for the M&E Upgrade must be of the same specifications as and compatible with the existing systems. In this regard, risk of project delay due to integration of additional equipment with the existing systems could be mitigated, while CK team is prepared for the tasks.

3. Comparison of Benefits and Disadvantages between Entering into the Transaction with the Connected Person and the Transaction with the Third Party

3.1 Benefits and Advantages between Entering into the Transaction with the Connected Person and the Transaction with the Third Party

(1) CK carried out the procurement of 54 rolling stocks and management of CEM maintenance service for the MRT Blue Line Project and, therefore, is ready to promptly undertake and commence these new tasks

CK was responsible for the procurement of all 54 three-car rolling stocks, including M&E systems and other equipment, and the installation and trial run of electric trains of the MRT Blue Line Project, consisting of (a) 26 rolling stocks of the MRT Initial Blue Line Project (19 rolling stocks in July 2004 and 7 rolling stocks in 2019 - 2020; and (b) 28 rolling stocks of the MRT Blue Line Extension Project (2019 - 2020). It is therefore familiar and has good relationship with the manufacturer. CK has also administered CEM maintenance of the MRT Blue Line Project for the Company. Thus, it is ready to promptly undertake and commence the new tasks under this transaction.

(2) The engagement of CK will ensure that CK will work responsibly to its full capability and will not abandon the job

The fact that CK is the Company's major shareholder demonstrates its strong commitment to the procurement of additional rolling stocks and M&E Upgrade of the new rolling stocks to be ready for use and integrated with the existing 54 rolling stocks of the MRT Blue Line Project, in order not to adversely impact the Company's train service operation, with full capability and responsibility and without abandoning the job, in order to maintain value of its investment in the Company. On the contrary, if the transaction is executed with a third party, it may not pay full attention to the quality of work or may abandon the job with no concern about a longstanding relationship.

(3) The coordination and operation will be flexible

By engaging CK as the contractor, the Company will be able to negotiate and agree on all conditions and details with CK, as well as facilitate the coordination and operation rapidly and flexibly. In addition, obstacles arising from the collaboration throughout the contract period can also be eliminated since the professional team of CK and the Company have worked together on the MRT Blue Line Project and other previous projects and are well acquainted with one another.

(4) The Company will indirectly benefit from CK's protection of confidential information

In executing an electric train project management agreement with the public sector, the contractor needs to have first-hand experience in various aspects, including procurement of equipment, management of train operation, and CEM maintenance to ensure efficient train service operation. These skills are possessed by a limited number of service providers in the country. Among them, the Company and CK are regarded as Thailand's major operators with expertise in the underground electric train system.

The transaction with CK, a connected person, will involve the M&E Upgrade so as to integrate the existing rolling stocks with the new units into the same system, encompassing improvement to the central signaling system and supporting equipment installed between stations to increase the frequency of rolling stocks operation and support the increasing number of rolling stocks, improvement to the central communication system to support communication with the new rolling stocks, and improvement to the remote-control system to enable the train operation control center to appropriately control the ventilation system in the tunnel and cover all possible incidents. Thus, by engaging CK to continue to handle the tasks under the said scope of work, the Company will indirectly benefit from CK's protection of confidential technical information and other crucial information of the electric train projects, especially the metro system, which will substantially contribute to the Company's competitiveness.

3.2 Disadvantages between Entering into the Transaction with the Connected Person and the Transaction with the Third Party

(1) The Company has to rely more on CK

- Same as the details in Part 2, Clause 2.2 (1), of this report. -

CK has been the sole main contractor of the Company for the procurement of rolling stocks and installation of M&E equipment of the MRT Blue Line Project (54 rolling stocks), the MRT Purple Line Project (21 rolling stocks), and the MRT Orange Line Project (32 stocks). It has also been engaged by the Company to undertake the management, design and construction of civil infrastructure, and management of CEM maintenance service.

Therefore, the engagement of CK for the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project will increase the Company's reliance on CK. As a result, the Company will incur the risk in the future if CK does not work for the Company for any reason.

(2) The engagement of CK is considered as the entering into a large transaction according to the connected transaction criteria, whereby the Company is required to seek an approval for the connected transaction from its shareholders' meeting and appoint an independent financial advisor to provide opinion to its shareholders, thus incurring extra costs and requiring disclosure of detailed information on the M&E Upgrade

The transaction is considered as a significant connected transaction. As a result, the Company has to convene a shareholders' meeting to approve the transaction and appoint an independent financial advisor to express opinion on such transaction. The Company will incur additional costs and will be required to disclose detailed information on the scope of work, equipment, and appraisal value of the Engagement Agreement, to ensure that the shareholders have sufficient information for their

decision-making. In doing so, the Company's competitors will gain access to information regarding costs, details of the M&E Upgrade, and other significant information.

4. Other Analyses

4.1 The Company's capability to make payment under the Engagement Agreement with CK

The Company expects to use external sources of funds by borrowing from financial institutions and/or issuing debentures and/or internal sources of funds from its operating cash flow to pay for the project value of Baht 6,800.00 million (exclusive of VAT). The Company's payment will be made in monthly installments according to the actual amount incurred throughout the agreement term, from November 2024 to May 2028. The Company estimates the payments as follows: (a) Year 1 (November 2024 – December 2025) approximately Baht 3,486.46 million, (b) Year 2 - 3 (January 2026 – December 2027) approximately Baht 3,159.58 million, and (c) final period (January 2028 – May 2028) approximately Baht 153.96 million.

As of June 30, 2024, the Company had credit facilities from financial institutions and debentures available for drawdown (excluding credit facilities for the MRT Orange Line Project) totaling approximately Baht 29,665 million, comprising of debentures for the MRT Blue Line Project of Baht 4,500 million (out of the approved amount of Baht 16,000 million), the Company's debentures of Baht 16,915 million (out of the approved amount of Baht 48,000 million), and credit lines from financial institutions of Baht 8,250 million (out of the approved amount and under the loan agreement of Baht 28,800 million), which are deemed sufficient for this transaction.

According to its consolidated financial statements as of June 30, 2024, the Company had total liabilities of Baht 77,399.24 million and shareholders' equity of Baht 36,450.83 million, with debt to equity ratio of 2.12 times, net interest-bearing debt to equity ratio of 1.76 times, which allow it to incur new debts for additional investment (the threshold set out in the loan agreements with financial institutions and the debentures' terms and conditions is not over 2.50 times), and debt service coverage ratio (DSCR) of 1.87 times (the threshold set out in the loan agreements with financial institutions and the debentures' terms and conditions is not lower than 1.0 time).

If the Company raises full amount of funds by borrowing from financial institutions and/or issuing debentures and assuming that it pays CK in one lump sum amount, its debt will increase by the maximum of Baht 6,800.00 million. Therefore, after completion of this transaction, if calculated based on the above financial statements regardless of its future performance, the Company will remain capable of complying with the financial covenants specified by financial institutions, with its net interest-bearing debt to equity ratio rising to 1.95 times and DSCR of 1.80 times, which still meet the threshold set out in the loan agreements with financial institutions and the debentures' terms and conditions.

According to the separate financial statements of the Company as of June 30, 2024, its cash and cash equivalents amounted to Baht 1,629.88 million. In addition, the Company had profit and cash flow from operation in each of the previous years. In 2022 - 2023 and 1H/2024, it recorded net profit from operation of Baht 2,313.44 million, Baht 3,328.36 million, and Baht 1,782.17 million respectively and net cash flow from operation of Baht 5,136.97 million, Baht 6,782.40 million, and Baht 3,598.67 million respectively. Therefore, the Company has adequate liquidity to make the payment to CK throughout the entire period of the Engagement Agreement.

4.2 The Appropriateness of the Conditions of the Relevant Agreements

After considering the conditions of the Draft Engagement Agreement with CK, the Independent Financial Advisor is of the opinion that **conditions of the draft relevant agreements are appropriate and in the normal course of business**. Such conditions are in line with the scope of work in terms of the contractor's responsibility, agreement term, delivery period, payment condition, security and bonds, variation order, and penalty. The Independent Financial Advisor considered and compared such conditions with those of the general turnkey contracts and the Concession Agreement between the Company and the MRT, which is a contract between the public and private sectors and is a standard contract that the government applies to various MRT projects. The scope of work and responsibility specified therein can support efficient train service operation in accordance with the Concession Agreements between the Company and the MRTA.

5. Summary of the Independent Financial Advisor's Opinion on the Reasonableness of the Connected Transaction

The Company has awarded concessions for the operation and maintenance of 3 electric train projects from the Mass Rapid Transit Authority of Thailand (MRTA), comprising of (a) the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line), (b) the MRT Chalong Ratchadham Line Project (MRT Purple Line), and (c) the MRT Orange Line Project.

The Company is committed to operating the electric train services with efficiency, safety, rapidity, convenience, reliability, and punctuality. As set out in the Concession Agreements of the MRT Blue Line Project and the MRT Orange Line Project, the Company shall be responsible for the procurement and management of M&E equipment for the electric trains (rolling stocks) to amply meet the passenger demand. The Company has expertise in operating train system; though, the procurement and maintenance of train system are specialized tasks that require a large number of specialists. It accordingly has a policy to outsource the management of train system procurement and maintenance to a third party to ensure the metro system service operation and maintenance are carried on uninterruptedly and efficiently and in line with the scope of work under the Concession Agreements.

With its intention to concentrate on its core business of metro service operation and to manage the investment risk by ensuring that the project cost does not exceed budget, which will otherwise impact the required rate of return, and that the task is completed within the specified period of time, the Company has a policy to engage a contractor on a lump sum turnkey basis to be responsible for the procurement, installation, and testing of M&E equipment. Apart from the general contractor duties, the contractor shall also be tasked with project management, coordination, supervision, monitoring, quality control, and work delivery. The Company has adopted this practice to all of its projects, including the MRT Initial Blue Line Project, the MRT North Purple Line Project, the MRT Blue Line Extension Project, and the MRT Orange Line Project.

Therefore, the Company has decided to engage a contractor on a lump sum turnkey basis for the procurement of additional rolling stocks (21 three-car rolling stocks of the same specification as that of the rolling stocks currently used in the MRT Blue Line Project) and M&E Upgrade of the MRT Blue Line Project so as to ensure that the Company could obtain the additional rolling stocks for operation of the MRT Blue Line Project from January 2028 onwards, which coincides with the commencement of service of the MRT Orange Line Project: East Section. This will support the ridership growth driven by connections with the MRT Orange Line Project and other projects that gradually become operational in the present and the future. Moreover, the Company will be able to operate its fleet of 75 rolling stocks (comprising of 54 existing rolling stocks and 21 newly procured rolling stocks) in the MRT Blue Line Project with highest efficiency and as a through operation and increase not only the frequency of train operation, particularly during the peak hours, but also the convenience of passengers.

The advantages and benefits of the connected transaction are as follows:

- (1) The Company will have sufficient rolling stocks for the MRT Blue Line Project that are ready for use within the required time frame, whereby some rolling stocks will be ready for service in January 2028 to accommodate the rising number of passengers that will be transferred from the MRT Orange Line Project from 2028 onwards. The engagement of CK aims to combine the purchase order for 21 three-car rolling stocks of the MRT Blue Line Project with the purchase order for 32 three-car rolling stocks of the MRT Orange Line Project. In this regard, CK has earlier approached and coordinated with the manufacturer, and such order has already been incorporated into the manufacturer's production plan. As such, the engagement of CK will allow the MRT Blue Line Project to have sufficient rolling stocks that are ready for use within the required time frame to accommodate passengers after the commencement of service of the MRT Orange Line Project: East Section. Thus, the Company will benefit considerably from the increase in fare revenue, the fast and convenient train service, the management that conforms with the Concession Agreement, and the economies of scale arising from purchase order combination.
- (2) The engagement of additional rolling stock procurement and M&E Upgrade for the MRT Blue Line Project will enable the Company to concentrate on efficient train service operation in accordance with its policy without concern over the M&E and CEM maintenance works. Thus, the Company has a policy to outsource the M&E system procurement and CEM maintenance, which are complicated works, to a third party.
- (3) Risk of cost overrun and project delay can be mitigated through the lump sum turnkey contract.

- (4) Foreign exchange risk arising from import of M&E equipment can be mitigated through execution of the lump sum turnkey contract at a fixed price and in Baht currency.
- (5) The contractor (CK) is the country's large construction company with first-hand experience and expertise in works related to rail projects under lump sum turnkey contracts, and also serves as project manager of large projects. Therefore, the contractor (CK) is well prepared in all aspects for the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project for the Company and could deliver high-quality works on schedule and within the predefined budget.
- (6) The contractor (CK) has no record of job abandonment and has strong creditworthiness, financial position, and adequate liquidity for its business.
- (7) The contractor (CK) is familiar with the electric train system of the MRT Blue Line Project. Thus, it is confident that the contractor (CK) will manage the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project to be ready for use within the time frame required by the Company.

However, the disadvantages and risks of the connected transaction are as follows:

- (1) The Company has consistently and solely relied on the main contractor, CK, for the procurement, installation, and testing of M&E equipment. CK has been the sole main contractor of the Company for the procurement of rolling stocks and installation of M&E equipment of the MRT Blue Line Project (54 rolling stocks), the MRT Purple Line Project (21 rolling stocks), and the MRT Orange Line Project (32 rolling stocks). It has also been engaged by the Company to undertake the management, design, and construction of civil infrastructure and the management of CEM maintenance service.
- (2) The Company has no opportunity to compare CK's proposal for the rolling stock procurement with those of other service providers who are not the manufacturer, as it is challenging for the Company to procure other contractors/service providers who have an understanding of system of the MRT Blue Line Project and ensure that they can procure and deliver the work according to the conditions required by the Company, and use such information as basis for comparison with proposal from CK. However, the contract price is lower than the appraised value determined by the Independent Expert (InfraAsia). Moreover, the delivery period is definitely fixed according to the Company's requirement.
- (3) CK is neither a manufacturer nor a distributor of electric train systems. CK must import or purchase relevant equipment from an overseas manufacturer and, hence, cannot carry out the tasks comprehensively by itself, leading to a potential risk of CK failing to perform the works according to the specified details and conditions.

The benefits and advantages between entering into the transaction with the connected person and the transaction with the third party are as follows:

- (1) CK carried out the procurement of 54 rolling stocks and management of CEM maintenance service for the MRT Blue Line Project and, therefore, is ready to promptly undertake and commence these new tasks.
- (2) The fact that CK is the Company's major shareholder demonstrates its strong commitment to work at its full capability and responsibility and without abandoning the job, in order to maintain value of its investment in the Company. On the contrary, if the transaction is executed with a third party, it may not pay full attention to the quality of work or may abandon the job with no concern about a longstanding relationship.
- (3) The coordination and operation will be flexible since CK and the Company have worked together on the MRT Blue Line Project and other previous projects and are well acquainted with one another.
- (4) The Company will indirectly benefit from CK's protection of confidential information regarding the technical information and other crucial information of the electric train projects, especially the metro system, which will substantially contribute to the Company's competitiveness.

The disadvantages between entering into the transaction with the connected person and the transaction with the third party are as follows:

- (1) The Company has to rely more on CK as CK has been the sole main contractor of the Company for the procurement of rolling stocks and installation of M&E equipment of the MRT Blue Line Project (54 rolling stocks), the MRT Purple Line Project (21 rolling stocks), and the MRT Orange Line Project (32 stocks). It has also been engaged by the Company to undertake the management, design and

construction of civil infrastructure, and management of CEM maintenance service. Therefore, the Company will incur the risk in the future if CK does not work for the Company for any reason.

- (2) The Company will be required to disclose detailed information, leading its competitors to gain access to information regarding costs and details of the M&E Upgrade since the engagement of CK is considered as the entering into a large transaction according to the connected transaction criteria. The Company is required to seek an approval for the connected transaction from its shareholders' meeting and appoint an independent financial advisor to provide opinion to its shareholders, thus incurring extra costs and requiring disclosure of detailed information on the M&E Upgrade to ensure that the shareholders have sufficient information for their decision-making.

After considering the conditions of the Draft Engagement Agreement with CK, the Independent Financial Advisor is of the opinion that conditions of the relevant agreements are appropriate and in the normal course of business. Such conditions are in line with the scope of work in terms of the contractor's responsibility, agreement term, delivery period, payment condition, security and bonds, variation order, and penalty. The Independent Financial Advisor considered and compared such conditions with those of the general turnkey contracts and the Concession Agreement between the Company and the MRT, which is a contract between the public and private sectors and is a standard contract that the government applies to various MRT projects.

The scope of work and responsibility specified therein can support efficient train service operation in accordance with the Concession Agreements between the Company and the MRTA.

After considering objectives and necessities of the transactions as well as advantages, disadvantages, benefits, risks, and the potential impacts, the Independent Financial Advisor is of the opinion that the entering into the connected transaction shall contribute to ongoing growth and, thus, be beneficial to the Company. In addition, it will enable the Company to focus on provision of electric train services with highest efficiency, without any concern or burden of train and related MRT system procurement. Meanwhile, the disadvantages and risks are limited. Therefore, **the entering into the Connected Transaction is considered reasonable.**

Part 3: Opinion of the Independent Financial Advisor on the Appropriateness of the Price and Conditions of the Connected Transaction

The Board of Directors' Meeting No. 4/2024 dated September 13, 2024 has resolved to propose to the Extraordinary General Meeting of Shareholders of the Company concerning the execution of an agreement to engage CK to responsible for the procurement of additional rolling stocks (21 three-car rolling stocks) and M&E Upgrade of the MRT Blue Line Project in a total amount of **Baht 6,800.00 million** (exclusive of VAT), which will increase the number of rolling stocks from the existing of 54 rolling stocks to 75 rolling stocks in 2028.

The Independent Financial Advisor has considered the appropriateness of price and conditions of the connected transaction based on the information and assumptions provided by the Company and CK, interviews of executives and related staffs of the Company, Draft Engagement Agreement with CK, Cost Estimate Report for Blue Line Upgrade Project prepared by Infra Asia (Thailand) Company Limited ("Independent Expert" or "InfraAsia") in June 2024, as well as the information disclosed to the public, the information disclosed on the websites of the SEC (www.sec.or.th) and the SET (www.set.or.th). Since the cost estimation prepared by InfraAsia is the value of the work excluding VAT, thus, the Independent Financial Advisor compared such cost estimate with the contract price with CK without taking VAT into consideration.

The Independent Financial Advisor is of the opinion that InfraAsia is a reliable independent expert in appraising rail transport projects. InfraAsia is a company in the Infra Asia Group with offices in Hong Kong and Thailand and a team with experience and expertise in valuing rail transport projects recognized by government and corporates in Thailand and abroad. InfraAsia has experiences in estimating projects with the total value of more than USD 25 billion and in estimating operating expenses (OPEX) with the total value of more than USD 10 billion. InfraAsia has been a project advisor for the Mass Rapid Transit Authority of Thailand (MRTA), State Railway of Thailand (SRT), and BTS Rail Mass Transit Growth Infrastructure Fund (BTSGIF) (*Please refer to InfraAsia's credentials in Thailand and overseas in Attachment 1 of this report*).

However, the opinion of the Independent Financial Advisor is based on the assumption that all of the aforesaid information and documents are complete and accurate. The consideration is based on current situation and information as of the date of the Board of Directors' Meeting No. 4/2024 on September 13, 2024 that approved to propose the shareholders' meeting to consider and approve the Company to enter into the connected transaction concerning the execution of the Engagement Agreement with CK. Any changes after such date may have significant impact on the assessment of the appropriateness of the price and conditions of this transaction, the opinion of the Independent Financial Advisor, and the decision of the shareholders to consider the appropriateness of the connected transaction.

Subsequent to the study of information and document of the Company and CK as well as other related information, the Independent Financial Advisor summarizes the opinion on the appropriateness of the price and condition of the connected transaction as follows:

1. Appropriateness of the Price of the Connected Transaction (Contract Price with CK)**1.1 Scope of Work and the Contract Price according to the Draft Engagement Agreement with CK**

The engagement of CK to responsible for the procurement of additional 21 three-car rolling stocks and improvements to the related MRT systems ("M&E Upgrade") of the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line), with a total value of Baht 6,800.00 million (exclusive of VAT), by paying the contact price in line with interim payment schedule, which is related to the progress of the procurement and M&E Upgrade work. The scope of work and main duties of CK are as follows:

- (1) Procurement of 21 additional rolling stocks, together with installation of signaling and communication systems on the rolling stock.
- (2) Improvement to central signaling system and supporting equipment installed between stations to increase the frequency of rolling stocks operations and support the increasing number of rolling stocks.
- (3) Improvement of the central communication system to support communication with the new rolling stocks.
- (4) Improvement to the remote-control system to enable the rolling-stock operation control center to appropriately control the ventilation system in the tunnel and cover all possible incidents.

In this regard, the procurement of additional rolling stocks and the related system upgrade must be fully connected to the existing MRT Blue Line Project. CK must also provide training, testing, and trial run of the entire system. According to the Engagement Agreement, the agreement term is 1,260 days or approximately 3 years and 6 months from the date of the Notice to Proceed (NTP).

The detailed scope of work for each section according to the Draft Engagement Agreement with CK, is as follows:

No.	Scope of Work
1	Rolling stock <ul style="list-style-type: none"> - Engineering design and documentation - 21 three-car rolling stocks^{1/} - Training equipment - Factory testing, shipping and delivery - Installation acceptance testing - Integrated testing and commission of the system - O&M manuals - Overall system integration and system assurance
2	Signaling system <ul style="list-style-type: none"> - Engineering design and documentation - Central Traffic Control (CTC) system - Automatic Train Protection (ATP) and Automatic Train Operation (ATO) system - Training equipment - Factory testing, shipping and delivery - Installation acceptance testing - Integrated testing and commission of the system - O&M manuals - Overall system integration and system assurance
3	Communication system <ul style="list-style-type: none"> - Engineering design and documentation - TETRA digital radio system - Train radio and accessories - Train Passenger Information Display (PID) - Operations Control Center (OCC) Passenger Information Display System (PIDS) complete and accessories - Onboard train surveillance system for train cars - Broad Band Radio Systems (BBRS) - Training equipment - Factory testing, shipping and delivery - Installation acceptance testing - Integrated testing and commission of the system - O&M manuals - Overall system integration and system assurance - Supervisory Control and Data Acquisition (SCADA) System^{2/}
4	Expenses of general requirements <ul style="list-style-type: none"> - Project management and overhead^{3/} - Utilities consumption & relocation - Insurance and bond - All training costs and transfer of mechanical and electrical (M&E) technology - Installation/replacement of signs and station graphics in the expansion area and existing stations

Remark:

- 1/ Consisting of 21 three-car rolling stocks for the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line), which was approved by the Board of Directors Meeting No. 4/2024 of the Company on September 13, 2024.
- 2/ According to this Draft Engagement Agreement with CK, the Supervisory Control and Data Acquisition (SCADA) System is categorized as the communication system, whereby the SCADA work is separated as a section in InfraAsia's report.
- 3/ Customs and Import Duties are part of the project management and overhead costs.

The Independent Financial Advisor has examined the scope of work on the Draft Engagement Agreement with CK and the Cost Estimate Report prepared by InfraAsia, and found that the equipment list and scope of work performed are mostly consistent.

This transaction is to procure additional rolling stocks to increase the overall efficiency of passenger transportation for the entire MRT Blue Line Project with the project value of Baht 6,800.00 million. Most of the value is related to the procurement of rolling stocks. Other work values are the operations to ensure the additional rolling stocks working together with the existing MRT Blue Line Project efficiently and safely according to service standards.

In this regard, the terms of engagement of CK will be on a lump sum turnkey basis that guarantees the work and assumes all risks that may occur if the project is not completed within the specified time frame, thus limiting the Company's risks that may occur from the project implementation.

For the evaluation of the contract price under the Draft Engagement Agreement with CK (where CK is responsible for procurement, installation, and testing of the equipment of the MRT Blue Line Project), technical service data must be used, which requires engineering knowledge and specialized expertise. The Independent Financial Advisor has therefore considered comparing the contract price of CK with the cost estimation determined by InfraAsia, an independent expert with experiences and expertise in estimating the value of rail projects, which has been recognized by government and corporates in Thailand and abroad. *(Please refer to InfraAsia's credentials as an independent expert in the rail projects in Attachment 1 of this report)*

1.2 Cost Estimation for the M&E Upgrade for the MRT Blue Line Project by the Independent Expert (InfraAsia)

The Company has appointed InfraAsia, an independent expert, to evaluate the cost estimation of the M&E Upgrade for the MRT Blue Line Project. This involves the procurement of additional 21 three-car rolling stocks of the same type and specifications as the rolling stocks of the existing MRT Blue Line, including the same equipment, communication system, and signaling system. The signaling system software will be upgraded to be compatible with the additional rolling stocks. In addition, to improve the electric train service and improve the capability to support passengers, the central signaling system and supporting equipment installed between stations will be improved to increase the frequency of operations and support new rolling stocks, as well as improve the remote control system so that the rolling-stock control center can control the ventilation system inside the tunnel appropriately and cover all possible incidents.

1.2.1 Assumptions and Scope of Work of InfraAsia

InfraAsia has the scope of the cost estimation in the following key items:

No.	Details
-	<p><u>General assumptions</u></p> <ul style="list-style-type: none"> - VAT is not applied to the estimation. - All costs are based on a cost reference of June 2024. - Certain items of equipment and engineering service are from abroad, the exchange rate for the estimation was assumed at EUR/Baht 39.50, which was the exchange rate at the time of estimation. In addition, the cost estimation was determined by performing a sensitivity analysis at an exchange rate of EUR/Baht 37.00. - The systems and equipment that are additionally installed are mostly the same as those of the MRT Blue Line Extension Project, but there may be additional improvements to support the increasing number of rolling stocks and to ensure consistent operation of the entire MRT Blue Line Project. - The procurement of additional 21 rolling stocks and the M&E Upgrade for the MRT Blue Line Project is not promoted by the Board of Investment (BOI), therefore, it does not receive any special BOI privileges and must pay customs and import taxes for machinery <i>(while the existing project, the MRT Initial Blue Line Project and the MRT Blue Line Extension Project, received BOI privileges, therefore, machinery and equipment was exempted from customs and import duties).</i>
1	<p><u>Rolling stock^{1/}</u> No. of Rolling Stocks: 21 three-car rolling stocks</p> <p>InfraAsia has considered rolling stocks of the same design and specification as those procured for the MRT Blue Line Extension Project, including in-train communication system and associated train communication system. The scope of work will include the manufacture, delivery, assembly of the rolling stocks, and static & dynamic testing both on the test tracks and throughout the MRT Blue Line network. In addition, the new rolling stocks will be equipped with a signaling system, train communication system, TETRA radio systems and wide frequency radios, similar to the MRT Blue Line Extension Project, to have full functionality and interoperability with the existing MRT Blue Line system.</p>
2	<p><u>Signaling system^{1/}</u> Improving the existing signaling system for the entire MRT Blue Line system to support additional rolling stocks and improving the service in the rolling stocks as follows:</p> <ol style="list-style-type: none"> a) Procurement of additional onboard train signaling equipment for new rolling stocks b) Improvement of the existing signaling system for the entire MRT Blue Line to support the operation of additional rolling stocks and increase rolling-stock frequency (reduced headway) c) CTC (Central Traffic Control) software upgrade / configuration for additional rolling stocks for 2 rolling stocks between stations or between intervention shafts (IVS)^{2/} d) ATS (Automatic Train Supervision) software upgrade / configuration for additional rolling stocks for 2 rolling stocks between stations or between intervention shafts (IVS)^{2/} e) Upgrade of the automatic train supervision simulation program f) Static and dynamic testing of the upgraded signaling system and systems on rolling stocks
3	<p><u>Communication system^{1/}</u></p> <ol style="list-style-type: none"> a) Preparation of train communication system (TCS) for the additional rolling stocks such as CCTV cameras, audio communication, public information display, passenger communication system b) Software upgrade and configurations for wide-band radio system to assist in the communication of control rooms and various communication devices

No.	Details
	c) Software upgrade and configuration for TETRA radio system to facilitate communication between rolling stocks, railway operators, and operation control center d) Static and dynamic testing of railway systems
4	<u>Supervisory Control and Data Acquisition (SCADA)</u> ^{1/} a) Improvement of SCADA software of the MRT Blue Line for the tunnel ventilation system (TVS) function is the improvement of the ventilation system in the train tunnel during the period when there are 2 rolling stocks in service between stations at the same time b) Static and dynamic testing of railway systems
5	<u>Customs and import duties</u> An average of 10% of ,value of the system and equipment procured from abroad based on the assumption that this project is not promoted by the Board of Investment (BOI), therefore no special BOI privileges are awarded.
6	<u>System integration</u> Work on testing various systems to ensure they are complete for use, including the test of train operation system, signaling system, communication system used together as a whole system, as well as assembly of parts that are sent (separate for transportation), and the test of individual cars (or individual carriages) and combined cars, both static and dynamic testing. This work is estimated from the number of experts, personnel involved in each type of work, average wage rates, and estimated length of time for operations.
7	<u>Project management</u> Estimated from the number of experts, wage rates, and travel expenses, which is an estimate of the cost as necessary for the expected work (accounting for approximately 2.70% of the system and equipment cost for the project)
8	<u>Project overhead</u> Approximately 8% of the system and equipment costs for project ^{3/}
9	<u>Insurance & bonds</u> Approximately 2% of the system and equipment costs for project ^{3/}
10	<u>Mark up</u> Approximately 3% of the system and equipment costs for the project ^{3/}

Remark: InfraAsia has determined the total number of equipment required for each major task based on the project design and requirements and multiplied by the estimated cost of such equipment from InfraAsia's database and equipment prices that InfraAsia obtained from various equipment manufacturers.

- 1/ Item 1 – 4: InfraAsia has included engineering costs such as engineering documentation, manufacture / fabrication of system, shipping & delivery, installation and acceptance testing, integrated testing and commissioning, O&M manuals, training costs, as well as expenses for spare parts, special tools and test equipment into the costs of each of the 4 main business units.
- 2/ In case the distance between stations is more than 1 kilometer, there will be an intervention shaft (IVS) building. The above-ground part will look like a normal building while the underground part will connect to the train tunnel. In addition to the ventilation system, IVS also has fire escape and elevator for emergency evacuation.
- 3/ The percentage of system and equipment costs shown in the table is calculated from the average of other similar large-scale electric rail projects from InfraAsia's database.

1.2.2 Cost Estimation by InfraAsia

InfraAsia mainly provides cost estimation based on actual costs of completed MRT projects, including the MRT Purple Line Project, the MRT Blue Line Extension Project, and the MRT Orange Line Project. InfraAsia applies sample data from MRT projects in Thailand, in which it participated in cost estimation for over the past 13 years, and used as a reference for price and inspection, namely:

- The MRT Purple Line Project (2011 - 2016): Independent cost estimation, bidding/contract price consultation service, and project implementation
- The MRT Blue Line Extension Project (2016): Independent cost estimation
- The BTS Skytrain Green Line Extension Project (2017 - 2021): Independent cost estimation for Bearing Station - Samut Prakan Station section and Mo Chit Station - Khu Khot Station section
- The BTS Skytrain Green Line Project (2012 - 2024): Independent cost estimation for the main system operation (Mo Chit Station - On Nut Station and National Stadium Station - Saphan Taksin Station), including the procurement of additional rolling stocks in 2018
- The MRT Orange Line Project (2022): Independent cost estimation for M&E System

In addition, reference prices can also be obtained from a number of sources, such as publicly available equipment price lists, companies in the industry, rolling stocks operators, websites, and other internet resources.

The cost estimation for the M&E Upgrade for the MRT Blue Line Project by InfraAsia is summarized as follows:

Group	Details of M&E Upgrade of the MRT Blue Line Project	Value (Baht million)	Average Value (Baht million/rolling stock)
Costs of rolling stocks and equipment			
1.	21 rolling stocks ^{1/}	6,657.48	317.02
2.	Signaling system ^{2/}	351.79	16.75
3.	Communication system ^{3/}	255.73	12.18
4.	SCADA system ^{4/}	30.84	1.47
Operating costs (other costs and expenses) ^{5/}			
5.	Customs and import duties	Pro-rated to cost of Group 1 - 4	Pro-rated to cost of Group 1 - 4
6.	System integration		
7.	Project management		
8.	Project overhead		
9.	Insurance & bonds		
10.	Mark up		
	Estimated total value of work (exclusive of VAT)	7,295.84^{6/}	347.42

Remark: Based on an exchange rate of EUR/Baht 39.50.

1/ Consisting of 21 three-car rolling stocks for the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line), which was approved by the Board of Directors Meeting No. 4/2024 of the Company on September 13, 2024.

It consists of the work in Group 1 and pro-rated costs and expenses in Groups 5 - 10 from the descriptions in the table on Pages 32 of this report.

2/ Consists of the work in Group 2 and pro-rated costs and expenses in Groups 5 - 10 from the descriptions in the table on Page 32 of this report.

3/ Consists of the work in Group 3 and pro-rated costs and expenses in Groups 5 - 10 from the descriptions in the table on Page 32 of this report.

4/ Consists of the work in Group 4 and pro-rated costs and expenses in Groups 5 - 10 from the descriptions in the table on Page 33 of this report.

5/ Other costs and expenses are mainly customs and import duties and project overhead.

6/ Since the cost estimation prepared by InfraAsia is the value of the work excluding VAT, thus, the Independent Financial Advisor compared such cost estimate with the contract price with CK without taking VAT into consideration.

Costs are divided into 2 main parts: cost of rolling stocks and equipment and operating cost. The company has engaged CK to manage the project on a lump sum turnkey basis, by which CK is responsible for the procurement of rolling stocks and various equipment, coordination with relevant agencies or departments, and integration of rolling stocks and various equipment into a single system for the smooth operation. Thus, the allocation of operating cost (costs and other expenses) into the cost of work in Group 1 - 4 helps to clearly determine value of the main work in each group.

According to InfraAsia's evaluation, it is assumed that approximately 3% of all equipment is purchased in Thailand (Local Contents), which will not be affected by changes in exchange rates. The remaining 97% of all equipment must be imported from overseas (Imported Contents), which is mostly denominated in EUR currency. All customs and import duties, system integration fee (including equipment testing and actual use), project management fee, project overhead, insurance & bonds, and mark up are paid in Thai Baht. Thus, in overall, approximately 15% of the estimated value of the project is in Thai Baht and 85% of the estimated value of the project is in EUR.

1.2.3 Sensitivity Analysis of the Cost Estimation by InfraAsia

According to the Cost Estimate Report for the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project dated June 2024 prepared by InfraAsia (the Independent Expert of rail projects), the cost estimation is equal to Baht 7,295.84 million, calculated at the exchange rate of EUR/Baht 39.50 (the exchange rate of EUR/ Baht 39.50 is the approximate exchange rate in May 2024, which is the time when the Independent Expert (InfraAsia) prepared the cost estimation).

In addition, InfraAsia has done sensitivity analysis at the exchange rate of EUR/Baht 37.00 (the exchange rate of EUR/Baht 37.00 is the approximate exchange rate on the date prior to the date of the Board of Directors Meeting No. 4/2024 on September 13, 2024), resulting in the cost estimation of Baht 6,859.18 million.

1.2.4 Summary of the Opinion of the Independent Financial Advisor regarding the Cost Estimation by InfraAsia

The average exchange rate of Baht per Euro during the past 3 years until September 12, 2024 (the date before the date on which the Board of Director' Meeting No. 4/2024, held on September 13, 2024, resolved to propose the Extraordinary Shareholders' Meeting to consider and approve the connected transaction concerning the engagement of CK) is EUR/Baht 38.09.

The Independent Financial Advisor is of the opinion that **the appropriate value of the M&E Upgrade of the MRT Blue Line Project is in the range of Baht 6,859.18 – 7,295.84 million** according to the cost estimation by InfraAsia, based on the exchange rate of EUR/Baht 37.00 – EUR/Baht 39.50, which covers the average exchange rate during the past 3 years as mentioned in the previous paragraph.

Since the cost estimation prepared by InfraAsia is the value of the work excluding VAT, thus, the Independent Financial Advisor compared such cost estimate with the contract price with CK without taking VAT into consideration.

The comparison of cost estimation of the procurement of additional rolling stocks and the M&E Upgrade of the MRT Blue Line Project determined by InfraAsia and the contract price of CK, which is equal to Baht 6,800.00 million, is as follows:

	Detail of M&E Upgrade of the MRT Blue Line Project	Cost Estimation of M&E Upgrade by InfraAsia ^{1/}	Contract Price of M&E Upgrade according to the Engagement Agreement with CK	Contract Price of CK is (Lower) Higher than Cost Estimation of M&E Upgrade by InfraAsia	
		(Baht million)	(Baht million)	(Baht million)	(%)
		(1)	(2)	(3)=(2)-(1)	(3)/(1)
1	Rolling stocks ^{1/}	6,254.95 - 6,657.48 ^{2/3/} (Baht 297.85 – 317.02 million/rolling stock)			
2	Signaling system	332.20 - 351.79 ^{3/} (Baht 15.82 – 16.75 million/rolling stock)			
3	Communication system	241.14 - 255.73 ^{3/} (Baht 11.48 – 12.18 million/rolling stock)			
4	SCADA (Supervisory Control & Data Acquisition)	30.84 – 30.90 ^{3/} (Baht 1.47 million/rolling stock)			
	Total value of M&E Upgrade (exclusive of VAT)	6,859.18 – 7,295.84 (Baht 326.63 – 347.42 million/rolling stock)	6,800.00^{4/} (Baht 323.81 million/rolling stock)	(495.84) – (59.18)	(6.79) – (0.86)

Remark:

- 1/ Based on the exchange rate of EUR/Baht 37.00 – EUR/Baht 39.50 (the exchange rate of EUR/ Baht 39.50 is the approximate exchange rate in May 2024, which is the time when the Independent Expert (InfraAsia) prepared the cost estimation, while the exchange rate of EUR/Baht 37.00 is the approximate exchange rate on the date prior to the date of the Board of Directors Meeting No. 4/2024 on September 13, 2024).
- 2/ Comprise of 21 three-car rolling stocks for the MRT Blue Line Project, approved by the Board of Director Meeting of the Company No. 4/2024 on September 13, 2024.
- 3/ Each item comprises of related system as prepared by InfraAsia and the pro-rated of costs and expenses in Group 5 – 10 from the table on Page 34 of this report.
- 4/ The contract price for the engagement of CK is at a fixed price, in a form of the lump sum turnkey project.

The Independent Financial Advisor is of opinion that the cost estimation determined by InfraAsia is appropriate as InfraAsia has considered the characteristics and technical requirements of the project, applied data of other projects such as the MRT Orange Line Project, the MRT Blue Line Extension Project, as well as related data base of similar projects in the past, including prices from other equipment suppliers, as the basis for this estimation.

The Independent Financial Advisor is of opinion that contract price of the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project according to the Draft Engagement Agreement with CK, at the amount of Baht 6,800.00 million (exclusive of VAT) is **lower than** the cost estimation determined by InfraAsia (at Baht 6,859.18 – 7,295.84 million), by Baht (495.84) – (59.18) million or lower than (6.79%) – (0.86%). **Therefore, the contract price according to the Engagement Agreement with CK is appropriate.**

1.3 Review of the Cost Estimation on Rolling Stocks by the Independent Financial Advisor

This transaction is the procurement of additional 21 three-car rolling stocks and the improvements to the related MRT Systems of the MRT Blue Line Project, whereby the value of rolling stocks (including customs and import duties) accounts for as high as 91.25% of total value (based on the cost estimation by InfraAsia), which is considered the significant cost item.

1.3.1 Value of Rolling Stocks and Related Systems Procured by the Company in the Past

The Company has consistently engaged CK to procure rolling stocks for the MRT Initial Blue Line Project, the MRT Blue Line Extension Project, and the MRT Orange Line Project, thus, there are information of previous procurement of rolling stocks and related systems for the projects disclosed in the public and on the SET as follows:

- (a) The design, procurement, installation, testing of M&E system equipment of the MRT Orange Line Project for 32 three-car rolling stocks, which is approved by the Extraordinary General Meeting of Shareholders No. 1/2022 on November 28, **2022**. The cost estimation determined by InfraAsia (rolling stocks and signaling system) and pro-rated operating costs by the Independent Financial Advisor, is equal to **Baht 12,546.23 million** from the total project value of Baht 27,952.54 million.
- (b) The procurement, installation, and testing of the systems of the MRT Blue Line Project for 28 three-car rolling stocks for the MRT Blue Line Extension Project and 7 three-car rolling stocks for the MRT Initial Blue Line Project, which is approved by the Extraordinary General Meeting of Shareholders No. 1/2017 on June 12, **2017**. The cost estimation determined by InfraAsia (rolling stocks and signaling system) and pro-rated operating costs by the Independent Financial Advisor, is equal to **Baht 10,964.67 million** from the total project value of Baht 21,105.49 million.

1.3.2 The Adjustment of Customs and Import Duties to be on the Same Basis for Comparison Purpose

The MRT Orange Line Project under Clause 1.3.1 (a) and the MRT Blue Line Project under Clause 1.3.1 (b) were promoted by the Board of investment ("BOI") and obtained BOI privileges, by which the projects were exempted from customs and import duties. However, the procurement of additional rolling stocks and the improvements to the related MRT Systems of the MRT Blue Line Project does not obtain BOI privileges, the customs and import duties are then incurred.

In order for the value of rolling stocks to be on the same assumption, the Independent Financial Advisor has calculated value of rolling stocks under this transaction by excluding the customs and import duties (accounting for 10% of total imported value of equipment or equivalent to Baht 576.28 million, according to InfraAsia). There still be the allocation of cost for the system integration, project management, project overhead, insurance & bonds, and mark up. As a result, value of 21 three-car rolling stocks as formerly determined by InfraAsia of Baht 6,254.95 – 6,657.48 million or an average of Baht 297.85 – 317.02 per rolling stock (from Clause 1 in the table on Page 35 of the report) is adjusted to **Baht 5,756.06 – 6,124.96 million** or an average of **Baht 274.10 – 291.66 per rolling stock**. Such value is the value of rolling stocks excluding customs and import duties, which is on the same basis as that of the MRT Orange Line Project in Clause 1.3.1 (a) and the MRT Blue Line Project in Clause 1.3.1 (b).

The Independent Financial Advisor compared the cost estimation of rolling stocks by InfraAsia with the value of the MRT Orange Line Project in Clause 1.3.1 (a) and the MRT Blue Line Project in Clause 1.3.1 (b) with the key assumptions as follows:

- The rolling stocks consist of three cars and specifications of rolling stocks are not materially differ.
- There are the allocations of operating costs (costs and expenses) to value of rolling stocks, in order to be on the same basis.

Item	The Procurement of Additional Rolling Stocks in 2024 ^{1/}		The MRT Orange Line Project in Clause 1.3.1 (a) in 2022 ^{2/}		The MRT Blue Line Project in Clause 1.3.1 (b) in 2017 ^{3/}	
	Amount (Baht million)	Average Amount/ Rolling Stock (Baht million)	Amount (Baht million)	Average Amount/ Rolling Stock (Baht million)	Amount (Baht million)	Average Amount/ Rolling Stock (Baht million)
Value of rolling stocks ^{4/}	5,756.06 – 6,124.96 ^{5/}	274.10 – 291.66 ^{5/}	9,018.36	281.82	8,718.06	249.09

Remark:

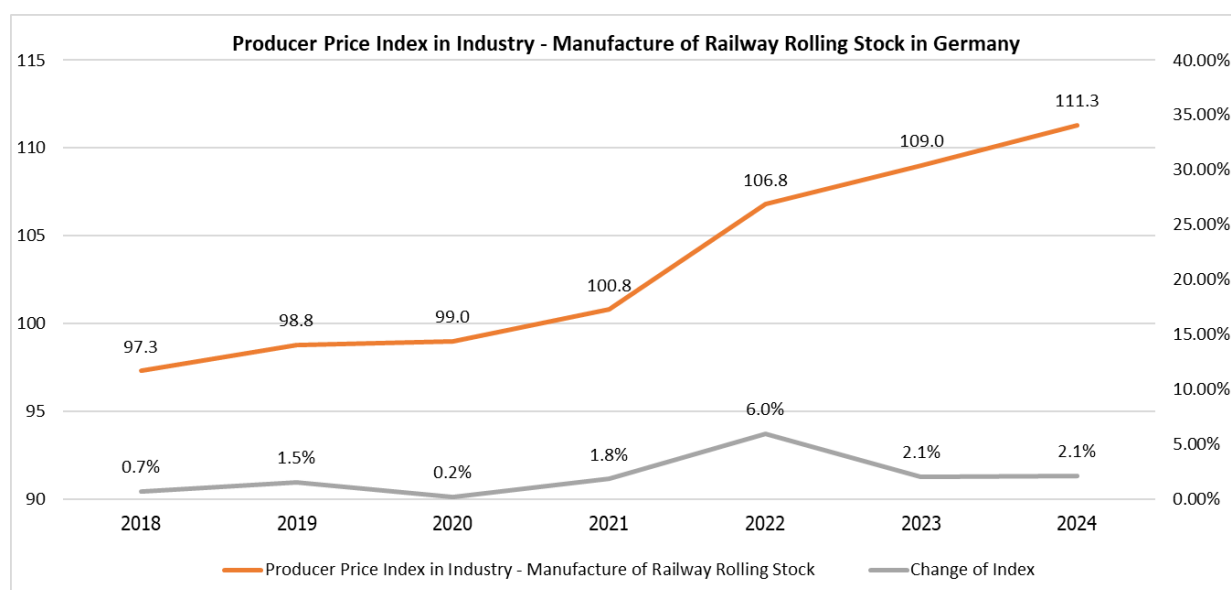
- 1/ Comprise of 21 three-car rolling stocks (the connected transaction to be considered in the Extraordinary General Meeting of Shareholders).
- 2/ Comprise of 32 three-car rolling stocks.
- 3/ Comprise of 35 three-car rolling stocks.
- 4/ The value of rolling stocks including the allocation of operating costs (costs and expenses) to be on the same basis (in line with the cost estimation by InfraAsia of each project and mentioned year in the table).
- 5/ Excluding customs and import duties, to be on the same basis for comparison.

1.3.3 The adjustment of Value of Rolling Stocks as Present Value for Comparison Purpose

As value of the MRT Orange Line Project in Clause 1.3.1 (a) was determined by InfraAsia in 2022 and value of the MRT Blue Line Project in Clause 1.3.1 (b) was determined by InfraAsia in 2017, the Independent Financial Advisor adjusted the said value of rolling stocks by InfraAsia to current value in 2024 for comparison purpose. The adjustment will be based on the change in Producer Price Index in manufacture of railway locomotive and rolling stock of Germany, the manufacturer of rolling stocks for the Company (information of index is collected by the Statistical Office of the European Union ("EuroStat")).

The Independent Financial Advisor has made adjustment as follows:

- (a) The value of the MRT Orange Line Project in Clause 1.3.1 (a) determined by InfraAsia in 2022 was calculated to be the present value in 2024 by applying the change of average 2-year Producer Price Index (2023 - 2024), which is equal to 2.09% per year; and
- (b) The value of the MRT Blue Line Project in Clause 1.3.1 (b) determined by InfraAsia in 2017 was calculated to be the present value in 2024 by applying the change of average 7-year Producer Price Index (2018 - 2024), which is equal to 2.06% per year.



Source: ec.europa.eu/Eurostat and <https://cdn.tradingeconomics.com/germany/producer-prices-in-industry-manufacture-of-railway-locomotives-rolling-stock-eurostat-data.html>

Remark: The index for 2024 is the index as of July, which is the latest data available at the time of this report. The rate of change in the index is calculated based on the change in the Producer Price Index in Manufacture of Railway Locomotive and Rolling Stock of Germany. Eurostat is the statistical office of the European Union and is responsible for compiling European statistics in collaboration with national statistical institutes and other national authorities in the EU member states. This cooperation is called the European Statistical System (ESS), and also includes the statistical offices of the countries of the European Economic Area (EEA) and Switzerland. In addition, Eurostat responsible for publishing key and effective statistics and indicators across Europe, enabling comparisons between countries and regions.

The Independent Financial Advisor has adjusted value of the rolling stocks to be present value (2024) as follows:

Project	No. of Years to Current Year	Average Change of Producer Price Index of Rolling Stock Subject to Years to Date ^{1/} (p% p.a.)	Value of Rolling Stocks by InfraAsia ^{2/} (Baht million/rolling stock)	
			Value in the Project Year	Present Value (Year 2024)
			(c)	(c) * [1+(b)] ^(a)
1 The procurement of additional rolling stocks in 2024 ^{3/}	0 year	-	274.10 – 291.66	274.10 – 291.66
2 The MRT Orange Line Project in Clause 1.3.1 (a) in 2022	2 years	2.09%	281.82	293.70
3 The MRT Blue Line Project in Clause 1.3.1 (b) in 2017	7 years	2.06%	249.09	287.27

Remark:

1/ The calculation is made by the change in Producer Price Index in manufacture of railway locomotive and rolling stock of Germany), with the data base from website of Eurostat.

- 2/ The value of rolling stocks including the allocation of costs and expenses, in order to be (in line with the cost estimation by InfraAsia of each project and mentioned year in the table, and excluding the customs and import duties in order to be on the same basis for comparison purpose.
- 3/ The connected transaction to be considered in the Extraordinary General Meeting of shareholders.

1.3.4 Summary of the Review of Cost Estimation of Rolling Stocks by the Independent Financial Advisor

According to the review of cost estimation of rolling stocks by the Independent Financial Advisor, the cost estimation of additional rolling stocks determined by InfraAsia in 2024 is in the range of Baht 274.10 – 291.66 million per rolling stock, **close to** the value of rolling stocks of the MRT Orange Line Project in Clause 1.3.1 (a) which is adjusted to present value (Baht 293.70 million per rolling stock) and the value rolling stocks of the MRT Blue Line Project in Clause 1.3.1 (b) which is adjusted to present value (Baht 287.27 million per rolling stock).

Therefore, the Independent Financial Advisor is of the opinion that the cost estimation of the procurement of additional 21 three-car rolling stocks and the improvements to the related MRT Systems of the MRT Blue Line Project determined by InfraAsia is appropriate and reliable.

2. The Appropriateness of the Payment Condition of the Connected Transaction

According to the agreement with CK, who will be responsible for the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project in a total amount of Baht 6,800 Million (exclusive of VAT), the instalments will be payable on a monthly basis in Baht currency, according to the interim payment schedule which is in line with the work progress, based on the conditions of the Engagement Agreement with CK. The Company will make payment within 30 days after receiving the invoice.

The Independent Financial Advisor is of opinion that the payment to the contractor in accordance with the work progress is in the normal course of business of the lump sum turnkey project, by which the payment will be made in installments according to the work progress. Therefore, **the payment condition is considered appropriate.**

3. Summary of the Opinion of the Independent Financial Advisor regarding the Appropriateness of Value and the Payment Condition of the Connected Transaction

The Independent Financial Advisor is of opinion that the cost estimation of the procurement of additional rolling stocks and improvements to the related MRT systems of the MRT Blue Line Project prepared by InfraAsia is appropriate and can be applied in the comparison of the transaction as InfraAsia is the professional with extensive experiences in the cost estimation of several rail projects.

Since the cost estimation prepared by InfraAsia is the value of the work excluding VAT, thus, the Independent Financial Advisor compared such cost estimate with the contract price with CK without taking VAT into consideration.

The comparison of cost estimation of the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project prepared by InfraAsia and the contract price of CK (Baht 6,800.00 million) is as follows:

	Detail of M&E Upgrade of the MRT Blue Line Project	Cost Estimation of M&E Upgrade by InfraAsia ^{1/}	Contract Price of M&E Upgrade according to the Engagement Agreement with CK	Contract Price of CK is (Lower) Higher than Cost Estimation of M&E Upgrade by InfraAsia	
		(Baht million)	(Baht million)	(Baht million)	(%)
		(1)	(2)	(3)=(2)-(1)	(3)/(1)
1	Rolling stocks ^{1/}	6,254.95 - 6,657.48 ^{2/3/} (Baht 297.85 – 317.02 million/rolling stock)			
2	Signaling system	332.20 - 351.79 ^{3/} (Baht 15.82 – 16.75 million/rolling stock)			
3	Communication system	241.14 - 255.73 ^{3/} (Baht 11.48 – 12.18 million/rolling stock)			
4	SCADA (Supervisory Control & Data Acquisition)	30.84 – 30.90 ^{3/} (Baht 1.47 million/rolling stock)			
	Total value of M&E Upgrade (exclusive of VAT)	6,859.18 – 7,295.84 (Baht 326.63 – 347.42 million/rolling stock)	6,800.00^{4/} (Baht 323.81 million/rolling stock)	(495.84) – (59.18)	(6.79) – (0.86)

Remark:

- 1/ Based on the exchange rate of EUR/Baht 37.00 – EUR/39.50 (the exchange rate of EUR/ Baht 39.50 is the approximate exchange rate in May 2024, which is the time when the Independent Expert (InfraAsia) prepared the cost estimation, while the approximate exchange rate of EUR/Baht 37.00 is the exchange rate on the date prior to the date of the Board of Directors Meeting No. 4/2024 on September 13, 2024).
- 2/ Comprise of 21 three-car rolling stocks for the MRT Blue Line Project, approved by the Board of Director Meeting No. 4/2024 of the Company on September 13, 2024.
- 3/ Each item comprises of related system work as determined by InfraAsia and the pro-rated of operating costs in Group 5 – 10 from the table on Page 35 of this report.
- 4/ The contract price according to the Engagement Agreement with CK is fixed price on the lump sum turnkey basis.

In conclusion, the Independent Financial Advisor is of opinion that contact price of the procurement of additional rolling stocks and M&E Upgrade of the MRT Blue Line Project in the Draft Engagement Agreement with CK, at the amount of Baht 6,800.00 million (exclusive of VAT) is **lower than** the cost estimation determined by InfraAsia (Baht 6,859.18 – 7,295.84 million), by Baht (495.84) – (59.18) million or lower by (6.79%) – (0.86%). **Therefore, the contract price according to the Engagement Agreement with CK is appropriate.**

Regarding the payment condition, the Independent Financial Advisor is of opinion that the payment to the contractor (CK) according to the interim payment schedule, which is set to be in line with the work progress, is in the normal course of business of the lump sum turnkey project where the payment will be made in installment in accordance with the work progress. Therefore, **the payment condition is appropriate.**

Part 4: Summary of Opinion of the Independent Financial Advisor on Connected Transaction

Please refer to the summary of opinion of the Independent Financial Advisor in “**Executive Summary**” section on Page 6 of this report.

However, shareholders should carefully study all documents and information attached to the notice to this shareholders’ meeting, for the sake of their own decision making. Decision whether to approve the connected transaction rests primarily and is the sole discretion of the shareholders.

CapAd, as the Independent Financial Advisor, hereby certifies that it has cautiously provided the above opinion in accordance with professional standard for the benefit of the shareholders.

Sincerely Yours,

The Independent Financial Advisor
Capital Advantage Company Limited

- Patchara Netsuwan -

(Mr. Patchara Netsuwan)
Chief Executive Officer

- Patchara Netsuwan -

(Mr. Patchara Netsuwan)
Supervisor

Attachment 1

Information and Credentials of Infra Asia (Thailand) Company Limited, An Independent Expert

Infra Asia (Thailand) Company Limited is a company under Infra Asia Group, with offices in Hong Kong and Thailand, (collectively referred to as "**InfraAsia**"). It has a team with extensive experience in cost estimation for rail projects and is widely-accepted by government agencies and corporates in Thailand and overseas. InfraAsia provides a comprehensive range of engineering, project management, technical services covering all railway core systems and infrastructure in various countries in Asia from new projects, upgrade of the existing system, to provision of consulting service for the existing projects to the client including government, operator, and contractors. The scope of service is as follows:

- Support of railway core systems, covering planning, design, implementation, test and commissioning, and system assurance
- System integration by planning, managing, and integrating all systems and communication
- Signaling and train control systems
- Communications system
- Cyber security system
- Automatic fare collection system
- Platform screen doors system
- Traction and building / auxiliaries power supply system
- Rolling stock maintenance depot
- Cost estimation and budgetary advisory services

InfraAsia has extensive experience in cost estimation of rail projects and is widely recognized by government agencies and corporates in Thailand and overseas. InfraAsia has experience in cost estimation of the projects with an aggregate consideration of more than USD 25 billion and has experience in operating expense estimation for an aggregate value of over USD 10 billion.

InfraAsia's works in Thailand include

- 1) Preparation of the Tender Proposal for the Project Management and Works Supervision for the Mid-Life Refurbishment EMU-A1 Fleet (Siemens Brand) for Bangkok Mass Transit System Public Company Limited in July 2024
- 2) Provision of technical and engineering consulting service for the Intelligent Transportation Systems (ITS) and communication system for the M06 and M81 Motorway projects (2023 - present)
- 3) Cost estimation of civil infrastructure and electrical and mechanical systems maintenance of the MRT Chalong Ratchadham Line Project (MRT Purple Line) from Khong Bang Phai Station to Tao Poon Station and the MRT Chaloe Ratchamongkhon Line Project (MRT Blue Line) for the Company in February 2023
- 4) Cost estimation for the procurement of the electric train system and installation of mechanical and electrical (M&E) equipment for the MRT Orange Line Project, Bang Khun Non – Min Buri (Suwinthawong) section, for the Company in October 2022
- 5) Independent engineer for the inspection of signaling and telecommunications systems for the Lopburi – Pak Nam Pho double-track railway construction project for the State Railway of Thailand (2020 - present)
- 6) System assurance support on the Airport Rail Link rolling stock and signalling recondition contracts, including preparation of the respective verification and validation reports
- 7) Provision of technical and engineering consulting service for the preparation of the electric train system and operations for the Pink Line and Yellow Line (monorail) projects
- 8) Update of the operating expense estimation for the BTS Green Line (Mo Chit - On Nut and National Stadium - Saphan Taksin) for BTS Rail Mass Transit Growth Infrastructure Fund (BTSGIF) in 2014, 2016, 2017, 2020, 2021, 2022 and 2024 (including the procurement of an additional 22 Siemens electric train sets in 2018)
- 9) Provision of technical and engineering management consulting service for the construction of Saint Louis Station (S4) of the BTS Green Line Project and its integration with the existing BTS system
- 10) Provision of technical and engineering management consulting service for the BTS Green Line Project from Bearing Station to Samut Prakarn Station and Mo Chit Station to Khu Khot Station, and its integration with the existing BTS system

- 11) Consultant to the State Railway of Thailand (SRT) for the cost estimation of the double-track railway (Nakhon Ratchasima Section), modifying the design from an on-ground structure to an elevated structure
- 12) Preparation of cost estimation (as part of the feasibility study) and provision of consulting service for the preliminary design of the railway project from Chumphon to Ranong Deep Sea Port for the Office of Transport and Traffic Policy and Planning and the State Railway of Thailand (SRT)
- 13) Cost estimation for the procurement and installation of M&E system of the MRT Blue Line Extension Project (Hua Lamphong Station – Lak Song Station and Tao Poon Station – Tha Phra Station) for the Company
- 14) Cost estimation for the procurement and installation of the M&E system of the MRT Purple Line Project for the Company
- 15) Cost estimation of the civil infrastructure and electrical and mechanical systems maintenance for the MRT Blue Line Extension Project, including preparatory works and maintenance of equipment during trial run of stations that open for service prior to the full operational launch (Mobilization Period) for the Company
- 16) Cost estimation for the extension of the Agreement for the Maintenance of Civil & Architecture and Electrical & Mechanical Systems for the MRT Chaloem Ratchamongkhon Line Project (MRT Initial Blue Line) (Bang Sue Station – Hua Lamphong Station) for the Company
- 17) Cost estimation for the refurbishment and replacement of the electromechanical system equipment for the MRT Initial Blue Line Project that has reached the end of its service for the Company
- 18) Procurement and installation of equipment for the improvement of the communication system for the MRT Blue Line Project for the Company
- 19) Estimation of operating expenses (OPEX) for the BTS Green Line Project (Mo Chit - On Nut and National Stadium - Saphan Taksin) for the issuance and offering of the BTS Rail Mass Transit Growth Infrastructure Fund (BTSGIF) in 2013
- 20) Advisor to the Mass Rapid Transit Authority of Thailand (MRTA) for the bidding process of the MRT Purple Line Project
- 21) Advisor for the technical and feasibility study for the relocation of 3 maintenance depots from SRT Makkasan to Kaeng Khoi District for the Double-track Railway Project Phase 4 and 5, the SRT Red Line Project, and the Erawan Line Extension Project (Airport Rail Link) for the State Railway of Thailand (SRT)

InfraAsia's overseas works include

- 1) Study of the public-private partnership project for the improvement and expansion of the Manila Line 2, Department of Transportation (DOTr), Philippines, with the private sector as the concessionaire (2024 - present)
- 2) Advisor for the Cairo L4 Metro Project (Egypt), covering the automatic fare collection (AFC) system, physical security (PSY) system, and cyber security system (2024 - present)
- 3) Preliminary feasibility study, including cost estimation for the railway system of the San Mateo Railway project of the Department of Transportation (DOTr), Philippines (2024)
- 4) Review and advice to a Japanese corporation on the cost estimation and technical compliance for the bidding for the depot workshop facilities and equipment for the Jakarta Metro Project, Indonesia
- 5) Review and advice on the cost estimation of Ho Chi Minh Line 2 Metro Project, as a part of the project management consultant group to Management Authority for Urban Railways (MAUR) of the government of Vietnam
- 6) Cost estimation for Gold Coast LRT Project in Australia, as a representative of lending banks in the due diligence of bidding consortiums for rails system
- 7) Independent appraiser for Asian Development Bank (ADB) on the review of the project cost for the Indian Pune-BGVN-WADI-GR Double Tracking / Electrification Project
- 8) Cost estimation for communication system package for Bangalore Line 1 Tender Bid S&T
- 9) Technical advisor providing engineering support for the automatic fare collection (AFC) system to Thales Singapore for the Downtown Line project
- 10) Preparation of tender documents and technical proposals for the Dubai Metro Purple Line Project for the Roads and Transport Authority (RTA)

Source: InfraAsia and <https://infraasia.com/>

Attachment 2

Stations of the MRT Blue Line Project that have Connections with Other Mass Rapid Transit Systems

MRT Stations on the MRT Chaloem Ratchamongkhon Line Project (MRT Blue Line)			
Total 38 stations, comprising of 22 underground stations and 16 elevated stations. Total distance: 48 km.			
Station Code	Station Name	Type	Connection Point with Other Mass Rapid Transit Systems
BL04	Bang Khun Non	Elevated	Interchange station with the Nakhon Withi Line (SRT Light Red Line), Taling Chan – Siriraj Section, and the MRT Orange Line at Bang Khun Non Station (OR02) in the future
BL10	Tao Poon	Elevated	Interchange station with the terminal station of the MRT Chalong Ratchadham Line Project (MRT Purple Line) at Tao Poon Station (PP16), and the future Purple Line Project: Tao Poon - Rat Burana Section (around 2027)
BL13	Chatuchak Park	Underground	Connection Point to the BTS Green Line Project at Mo Chit Station
BL15	Lat Phrao	Underground	Interchange station with the terminal station of the MRT Yellow Line Project at Lad Phrao Station
BL19	Thailand Cultural Centre	Underground	Interchange station with Central Station of the MRT Orange Line Project at Thailand Cultural Centre Station (OR13)
BL21	Phetchaburi	Underground	Skywalk connection between the subway and the Erawan City Line Project (formerly known as the Airport Rail Link) at Makkasan Station
BL22	Sukhumvit	Underground	Interchange station with the BTS Green Line Project at Asok Station
BL26	Silom	Underground	Connection Point to the BTS Green Line Project at Sala Daeng Station (skywalk)
BL30	Sam Yot	Underground	Interchange station with the future MRT South Purple Line Project
BL34	Bang Wa	Elevated	Interchange station with the BTS Green Line Project at Bang Wa Station

