

# Annual Registration Statement (Form 56-1) For the Year Ended 31 December 2020

Bangkok Expressway and Metro Public Company Limited





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#### **Part 1 Business Operations**

#### 1. Business Policy and Overview

Bangkok Expressway and Metro Public Company Limited (the "Company") was incorporated from the amalgamation, pursuant to the Public Limited Company Act, between Bangkok Expressway Public Company Limited ("BECL") and Bangkok Metro Public Company Limited ("BMCL") on December 30, 2015, and the Company has assumed all assets, rights, duties and responsibilities of both companies by operation of law. As of December 31, 2020, the Company's registered and paid-up capital amounted to Baht 15,285,000,000 divided into a total of 15,285,000,000 ordinary shares, at the par value of Baht 1 per share.

The Company's main businesses are the provision of the expressway and metro services, including commercial development relating to the expressway and metro systems, which will lay a foundation for business expansion through future extension of the routes and the service network, both in the expressway and metro systems, thereby enabling the Company to be a leading mass rapid transit and transportation service operator in Thailand and in the region. Moreover, the Company may extend its businesses to other fast-growing businesses with good returns, such as other infrastructure projects, commercial development or real estate development, both at home and abroad, etc.

#### 1.1 Vision, Mission, Goals, Business Strategies and Business Overview

#### Vision

The Company's vision is to become a leading, fully-integrated transportation service provider in Thailand and ASEAN.

#### Mission

The Company is committed to:

- 1. Providing services of the expressway and metro systems with safety, convenience, rapidity, reliability, punctuality, and efficiency, in order to improve the quality of people's lives;
- 2. Improving the quality and efficiency of the modern and full-service transportation network in order to alleviate traffic problems, preserve the environment, and improve society and the country;
- 3. Creating value-added and utmost benefit to shareholders based on fairness to all stakeholders.

#### **Goals and Business Strategies**

To achieve the Company's objectives and mission, the Company has formulated major strategies in its business operations, as follows:

- To invest in the transportation system projects, expressway and connecting road projects, metro
  system projects, and related projects under the government policy for public-private partnership
  (PPP) in respect of infrastructure, including related business, such as, various commercial
  development, taking into consideration the projects which are beneficial to society and the country,
  with reasonable business yields;
- 2. To strengthen the businesses by generating revenues for continued growth, and managing costs and expenses efficiently, in order to maintain good financial standing;
- 3. To build relationships with stakeholders through the corporate social responsibility process and communicate with internal and external personnel about it;
- 4. To develop personnel ready for the provision of quality services of the expressway and metro systems;
- 5. To build social recognition of the corporate good image.



#### **Business Overview of the Company**

The Company is committed to being a leading, fully-integrated transportation service provider, which builds up a good journey for a better living. The Company's businesses comprise the provision of the expressway and metro services, including commercial development directly related to the main businesses. The Company's business overview is as follows:

#### 1.1.1 Expressway Business

The Company and one of its subsidiaries, namely, Northern Bangkok Expressway Company Limited ("NECL"), have obtained concessions from the Expressway Authority of Thailand ("EXAT") for construction and operation of a total of three expressways, namely:

#### 1) The Si Rat Expressway (Sectors AB, C, and D)

The Si Rat Expressway (Second Stage Expressway) is the first large-scale construction project in Thailand on the basis of public private partnership. This project is implemented on a BTO (Build Transfer Operate) basis, namely, the Company (formerly BECL) invested in the design, construction and operation of the Si Rat Expressway. In this regard, the title to various permanent constructions pertaining to or use of the Si Rat Expressway shall be vested in EXAT. The Company has the right to receive toll revenues as specified in the Agreement, with the Second Stage Expressway Agreement (Amendment) being signed on February 20, 2020 for an extension of the concession period until October 31, 2035.

The Si Rat Expressway is comprised of three Sectors, covering a total distance of 38.5 kilometers, as follows:

- Sector AB (starts from Ratchadapisek Road southward to Payathai Interchange eastward to Rama 9 Road and from Phayathai Interchange heading southward to Bangkhlo Interchange;
- Sector C (starts from Ratchadapisek Road northward up to Chaeng Watthana Road);
   and
- Sector D (starts from Rama 9 Road eastward to end at Srinakharindra Road).

#### 2) The Si Rat - Outer Ring Road Expressway

The Si Rat - Outer Ring Road Expressway under the Concession Agreement for Investment, Design, Construction, Operation, Service, and Maintenance of the Si Rat - Outer Ring Road Expressway Project is implemented on a BTO basis. The route starts from the Outer Ring Road (Kanjanapisek Road around Mahasawat Water Treatment Plant) heading eastbound along the right of way of the existing Southern railway, crossing the Chao Phraya River around the Rama VII Bridge, ending around Bang Sue Grand Station (Chatuchak), connecting with the Si Rat Expressway around the Bus Terminal (Mo Chit 2), running down to at-grade level around Kamphaeng Phet 2 Road, and connecting northward heading to Chaeng Watthana, covering a total distance of 16.7 kilometers. The concession period is 30 years and ends on December 14, 2042.

#### 3) The Udon Ratthaya Expressway

The Udon Ratthaya Expressway (Bang Pa-in - Pak Kret Expressway), operated by NECL under the Bang Pa-in - Pak Kret Expressway Agreement is implemented on a BTO basis, with its Amendment being signed on February 20, 2020 for an extension of the concession period until October 31, 2035. The Udon Ratthaya Expressway is comprised of 2 Stages, namely, Stage 1, Chaeng Watthana - Chiang Rak, and Stage 2, Chiang Rak - Bang Sai, connecting to the Si Rat Expressway around Chaeng Watthana Road northward heading to Bang Pa-in around Kanjanapisek Road (Western Outer Ring Road), covering a total distance of 32 kilometers.

#### 1.1.2 Rail Business

The Company has obtained concessions for the operation of two mass rapid transit rail system projects from the Mass Rapid Transit Authority of Thailand ("MRTA"), namely:

1) The M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line), by investment on a PPP Net Cost basis, whereby MRTA invests in all civil works and the Company shall supply, install the M&E Equipment, and provide the operation and maintenance services. The Company is entitled to farebox revenue and undertaking activities and commercial development, including advertising, leasing space and telecommunications services in the metro stations and in the trains of the MRT Blue Line. The MRT Blue Line Project is comprised of the following:



- Hua Lamphong Bang Sue Section, which is the first underground metro project of Thailand, covering a total distance of 20 kilometers, with 18 underground stations, opened for train operation service on July 3, 2004;
- Hua Lamphong Bang Khae Section, which is the underground and elevated route, covering a total distance of 16 kilometers, with 11 stations; and Bang Sue Tha Phra Section, which is the entire elevated route, covering a total distance of 12 kilometers, with 9 stations, divided into 3 phases during the installation of the M&E Equipment for service opening, namely, Phase 1: Bang Sue Station Tao Poon Station, opened for service on August 11, 2017; Phase 2: Hua Lamphong Station Lak Song Station, opened for service on September 29, 2019; and Phase 3: Tao Poon Station Tha Phra Station, opened for service on March 30, 2020, for the concession period of 30 years from the date of service opening of the entire route.

The M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) has connected to the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line) at Tao Poon Station.

2) The M.R.T. Chalong Ratchadham Line Project or the MRT Purple Line Project, Bang Yai - Rat Burana, Bang Yai - Bang Sue Section (Khlong Bang Phai Station - Tao Poon Station), Contract 4: Concession for Supply of M&E Systems and O&M Services, on a PPP Gross Cost basis, whereby MRTA invests in all civil works and the Company invests in the M&E Systems and the rolling stocks, as well as provides the operation and maintenance services in accordance with the specified service standards. MRTA is entitled to all farebox revenue and commercial development revenue from the utilization of the civil infrastructure and the railway systems and MRTA shall make a gradual repayment of the M&E Equipment to the Company on a monthly basis for a period of 10 years, and shall engage the Company for the O&M Services throughout the concession period of 30 years from September 4, 2013.

The M.R.T. Chalong Ratchadham Line Project (MRT Purple Line) is an elevated metro project, for a distance of 23 kilometers, with 16 stations and a connection to the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) at Tao Poon Station, whereby the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line), was opened for service on August 6, 2016.

#### 1.1.3 Commercial Development Business

The Company and one of its subsidiaries, namely, Bangkok Metro Networks Limited ("BMN"), operate the commercial development business of the MRT Blue Line Project, as follows:

- 1) Procurement and/or production of advertising media of various forms in the trains and metro stations;
- Lease of retail spaces in the MRT Blue Line stations and spaces in the basement level of the Lat Phrao park and ride facility;
- Provision of service and maintenance of telecommunications system equipment inside the metro stations.

In addition, as for the expressways, the Company and NECL have allowed private entities and individuals to use spaces for commercial operation for installation of Intelligent Traffic Signs and various advertising boards, including retail spaces around toll plazas, and other business activities, such as the use of the expressway areas for the installation of the 3G signal distribution system, etc.

#### 1.2 Significant Changes and Developments of the Company in 2020

February 15, 2020 The Company extended the period of time for the public's free travel during the trial run of the MRT Blue Line Extension, Tao Poon - Tha Phra Section (Bang Pho Station - Charan 13 Station) from 10:00 hrs. - 16:00 hrs. to 06:00 hrs. - 24:00 hrs.

February 20, 2020 The Company/the subsidiary and EXAT signed the Second Stage Expressway Agreement (Amendment) and the Bang Pa-in - Pak Kret Expressway Agreement (Amendment) for settlement of the disputes and extension of the respective concession periods until October 31, 2035.



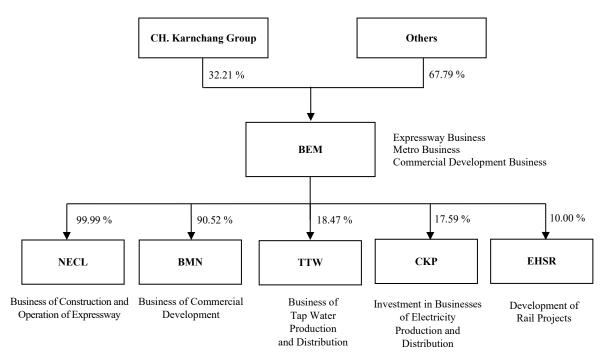
March 10, 2020 As a result of the situation of the pandemic of Coronavirus Disease 2019 (COVID-19) in Thailand, the Company has heightened the anti-pandemic measures and has placed the emphasis firmly on keeping clean inside of the MRT stations, trains, and the MRT system until present in order to prevent the spread of such disease until the situation of the pandemic would have been ameliorated. March 30, 2020 The Company opened the full service of the MRT Blue Line Extension Project (Hua Lamphong - Bang Khae Section and Bang Sue - Tha Phra Section) and charged fares. The project's connected alignment features a Circle Line covering the central area of Bangkok, including a connection of travelling between Bangkok and Thonburi sides and the rolling stocks have been adding to the service from 19 to 54, as well as providing connections to other lines, namely, the MRT Green Line, the MRT Purple Line, the MRT Orange Line, the MRT Red Line, and the Airport Rail Link, thereby making the people's journeys more convenient and rapid. May 28, 2020 TRIS Rating Co., Ltd. affirmed the Company's credit rating at "A", with a "Negative" outlook. June 10, 2020 The Company issued and offered for sale debentures No. 1/2020, with a 4-12-year maturity, in the total amount of Baht 3,000 Million, at the fixed interest rates ranging from 2.88 percent to 3.78 percent per annum, for the existing debt repayment of the Company. July 1, 2020 The Company has provided a discount on toll fees at "At Narong 1 Toll Plaza", from the Chalong Rat Expressway access to the First Stage Expressway to Bang Na, at the rate of Baht 25 per trip for all types of vehicles for one year, effective from July 1, 2020 to June 30, 2021. The Company maintained the fares for the MRT "Blue Line" at the same rates, July 2, 2020 namely, starting from Baht 16 up to Baht 42, until December 31, 2020, despite the revision of the fares scheduled for July 2, 2020 in accordance with the MRT Blue Line Concession Agreement. September 1, 2020 The U-turn bridge on the road along the railway around the intersection of Ratchaphruek Road was opened for service, in which the Company invested for design and construction on the area licensed by the State Railway of Thailand to facilitate the general public and users of the Si Rat - Outer Ring Road Expressway. The Company was awarded a White Factory Project certificate by September 21, 2020 the Department of Labor Protection and Welfare in Nonthaburi Province, for the reason that the Company attached importance to drug problems in the business premises to be free from drugs of all types. November 14, 2020 His Majesty King Maha Vajiralongkorn Phra Vajiraklaochaoyuhua and Her Majesty Queen Suthida Bajrasudhabimalalakshana graciously presided over the official opening ceremony of the M.R.T. Chaloem Ratchamongkhon Line Extension Project (MRT Blue Line) at the MRT Sanam Chai Station. The Company was awarded Thailand's Top Corporate Brand 2020 as one of November 27, 2020 the organizations realized the significance of development of its corporate brand to ensure greater strength for the country's social and economic sustainability, with the highest brand value in the transportation and logistics sector in 2020, by the Faculty of Commerce and Accountancy Chulalongkorn University. The Company opened the Underground Museum or so-called Site Museum, November 27, 2020 the first new-model museum in the public space inside the electric train station of Thailand, i.e., which was located inside the MRT Sanam Chai station, and served a point of exhibitions and displays of objects which were found during

the construction of the MRT station.



#### 1.3 Shareholding Structure of Company Group

#### Chart of Shareholding Structure and the Company's Shareholding Percentage as of December 31, 2020



Remark : CH. Karnchang Group comprises

- 1) CH. Karnchang Public Company Limited; and
- 2) CH. Karnchang-Tokyu Construction Company Limited.

#### > Investment in Subsidiaries and Other Companies

The Company has a policy on investment in infrastructure businesses or supporting businesses conducive to the Company's operations and creating opportunities and long-term yields for the Company, as well as providing the sources of investment for future projects. The Company's investment as of December 31, 2020 was as follows:

#### 1) Names of Companies invested in by the Company and its Shareholding Percentage

Shareholding Nature of Business Registered Names of Companies Paid-up Investment Capital Capital Percentage Value at Cost **Subsidiaries** Northern Bangkok Expressway Construction and 6,000 5,250 99.99% 2,604 Company Limited operation of (NECL) the Udon Ratthaya Expressway Bangkok Metro Networks 254 254 90.52% 507 Operation of the commercial Limited (BMN) development business Other Companies CK Power Public Company Investment by holding 9,240 8.129 17.59% 3,340 Limited shares in other (CKP) companies (Holding Company) operating business of electricity production and distribution TTW Public Company Tap water production 3,990 3,990 18.47% 4,061 Limited and distribution (TTW) Eastern High-Speed Rail Development of rail 4,000 4,000 10.00% 400 Linking Three Airports projects Company Limited (EHSR)



#### 2) Details of Companies Invested in by the Company

#### **Expressway Business**

#### Northern Bangkok Expressway Company Limited ("NECL")

NECL's registered capital amounts to Baht 6,000 Million, divided into 294 million ordinary shares and 306 million preferred shares, at the par value of Baht 10 per share, with the paid-up capital of Baht 5,250 Million. As of December 31, 2020, the Company's shareholding was 99.99 percent of its registered capital. NECL entered into the Bang Pa-in - Pak Kret Expressway Agreement with EXAT for construction and operation of the Udon Ratthaya Expressway, with its alignment running northbound continuing from the Si Rat Expressway around Chaeng Watthana Road and passing Bang Phun, Chiang Rak and ending at Bang Pa-in around Kanjanapisek Road (Western Outer Ring Road). Subsequently on February 20, 2020, NECL and EXAT signed the Bang Pa-in - Pak Kret Expressway Agreement (Amendment) under which the concession period was extended until October 31, 2035.

#### **Commercial Development Business**

#### • Bangkok Metro Networks Limited ("BMN")

BMN has a total registered capital of Baht 254 Million, divided into 25.4 million ordinary shares, at the par value of Baht 10 per share, with the paid-up capital of Baht 254 Million. As of December 31, 2020, the Company's shareholding in BMN was 90.52 percent of its registered capital.

The Company currently engages BMN to serve as its sole management representative for commercial development in the MRT Blue Line Project as operated by the Company and also entitles BMN to be its management representative for commercial development, namely, procurement and production of advertising media of various forms in the metro stations and trains, lease of retail spaces in stations of the M.R.T. Chaloem Ratchamongkhon Line Project and at the basement level of the park and ride facility at the Lat Phrao Station, as well as providing service and maintenance of telecommunications system equipment in the stations and tunnels.

#### **Other Infrastructure Businesses**

#### 1. CK Power Public Company Limited ("CKP")

CKP is a listed company on the Stock Exchange, operating its main business by investing in other companies (Holding Company) which operate the business of electricity production and distribution. CKP has a total registered capital of Baht 9,240 Million, divided into 8,129,382,729 ordinary shares, at the par value of Baht 1 per share, with the paid-up capital of Baht 8,129,382,729. As of December 31, 2020, the Company's shareholding was 17.59 percent of its paid-up capital. CKP invests in companies operating the business of electricity production and distribution from three types of energy, namely, hydropower business, by investing in SouthEast Asia Energy Limited and Xayaburi Power Company Limited; thermal power business (cogeneration system), by investing in Bangpa-in Cogeneration Limited; and solar power business, by investing in Bangkhenchai Company Limited, Nakhon Ratchasima Solar Limited, and Chiangrai Solar Limited.

#### 2. TTW Public Company Limited ("TTW")

TTW is a listed company on the Stock Exchange, having a total registered capital of Baht 3,990 Million, divided into 3,990 million ordinary shares, at the par value of Baht 1 per share, with the paid-up capital of Baht 3,990 Million. As of December 31, 2020, the Company's shareholding was 18.47 percent of its registered capital. TTW operates the business of production and distribution of tap water to the Provincial Waterworks Authority in the areas of Nakhon Pathom Province and Samut Sakhon Province, under the Water Purchase and Sale Agreement with the Provincial Waterworks Authority for a period of 30 years from July 21, 2004. In addition, TTW invests in Pathum Thani Water Co., Ltd., representing 98 percent of its registered capital,



which operates the business of tap water production and distribution in the areas of Pathum Thani and Rangsit, under the Water Purchase and Sale Agreement with the Provincial Waterworks Authority for a period of 25 years from October 15, 1998, and also invests in Thai Water Operations Company Limited, which operates the business of management and operation of tap water production and distribution systems and water treatment system, as well as invests in the energy business by holding shares in CKP representing approximately 25 percent of its registered capital.

#### 3. Eastern High-Speed Rail Linking Three Airports Company Limited ("EHSR")

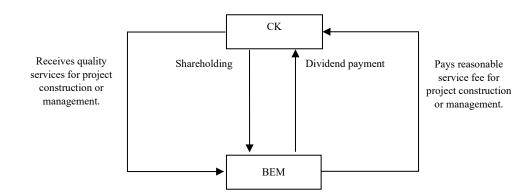
EHSR is a company established by CPH Group, with its registered capital of Baht 4,000 Million, divided into 40 million ordinary shares, at the par value of Baht 100 per share. As of December 31, 2020, the Company's shareholding was 10 percent of its registered capital. EHSR carries out development of rail projects, design and construction works, civil work, in association with other projects, supply of the M&E Systems and rolling stocks, including provision of train operation and maintenance services, and development of areas supporting the rail services of the project for a period of 50 years (with the construction period of 5 years and operation period of 45 years).

#### 1.4 Relationship with Business Alliance of Major Shareholder

The Company's major shareholder was CH. Karnchang Public Company Limited ("CK"), as of December 31, 2020, whereby CK was holding 4,787,121,829 shares in the Company, representing 31.32 percent of the Company's paid-up capital. From the past until the present, the Company has engaged CK to conduct construction and operation of various projects, as CK is a large construction company in Thailand, which has potential, knowledge, and expertise, and is thoroughly familiar with the civil infrastructure of the expressway and metro projects, including M&E Equipment. In addition, CK is experienced in the contractual operations on a Lump Sum Turnkey basis, and can deliver quality works on schedules, and is also the Company's strategic investment partner. As a result, CK has taken on responsibility for and commitment to great success in the projects.

Therefore, in the future, it is possible that the Company will further engage CK to conduct project construction or management. However, in execution of transactions with CK, which is considered a person which may have a conflict of interest with the Company, the Company will have complied with its policy on execution of connected transactions per details as disclosed in Item 12: Connected Transactions.

#### Chart of Relationship with Business Alliance of Major Shareholder





#### 2. Nature of Business Operations

The Company and its subsidiaries have operated the businesses as concessionaires awarded by the government sector, as follows: 1) concessionaires for the expressway construction and operation, namely, the Si Rat Expressway (Sectors AB, C and D), the Si Rat - Outer Ring Road Expressway and the Udon Ratthaya Expressway; 2) concessionaires for operation of the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) and the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line). Other than serving as the concessionaire, the Company has also operated the commercial development business pursuant to the relevant Concession Agreements. Currently, the revenue structure of the Company and its subsidiaries is set forth below.

(Unit: Million Baht)

Total Revenue Structure	Operated	Shareholding		Conse	olidated Financ	cial Inform	nation	
	by Percentage of the Company		For Year Ended December 31, 2020		For Year Ended December 31, 2019		For Year Ended December 31, 2018	
		the Company	Million Baht	%	Million Baht	%	Million Baht	%
Revenue from expressway business			8,145	56.9 %	10,302	60.6 %	10,174	61.3 %
Toll revenue	Company		6,942	48.5 %	8,852	52.1 %	8,718	52.5 %
Toll revenue	Subsidiary	99.99	1,203	8.4 %	1,450	8.5 %	1,456	8.8 %
Revenue from rail business			4,520	31.5 %	5,022	29.5 %	4,736	28.6 %
Farebox revenue and metro operation service charges	Company		4,520	31.5 %	5,022	29.5 %	4,736	28.6 %
Revenue from commercial development business			825	5.8 %	783	4.6 %	705	4.2 %
Commercial development revenue	Company		724	5.1 %	720	4.2 %	240	1.4 %
Commercial development revenue	Subsidiary	90.52	101	0.7 %	63	0.4 %	465	2.8 %
Gains on sale of investments			4	0.0 %	181	1.1 %	499	3.0 %
Other income (2)			829	5.8 %	707	4.2 %	477	2.9 %
Total revenues (3)			14,323	100 %	16,995	100 %	16,591	100 %

Remarks: (1) Gains on sale of investments are gains on sales of other current investments, and only in 2019 and 2018, gains on sale of investments in CKP, XPCL, and TTW are included.

- (2) Other income comprises interest income, dividend income, and gain on fair value adjustment of current investments.
- (3) Exclusive of gains on reclassification of investments in TTW and CKP in 2019 and 2018, respectively.

#### 2.1 Nature of Business Operations of the Company

The Company is committed to becoming a leading, fully-integrated transportation service provider, which builds up convenient, rapid, reliable and safe journeys for a better living. The Company's businesses are composed of the expressway and metro system services, including commercial development business directly related to the main businesses. The Company's overall businesses are divided into three main sectors, as follows:

#### 2.1.1 Expressway Business

#### 1) Nature of Services

The Company and one of its subsidiaries, i.e., Northern Bangkok Expressway Company Limited ("NECL"), have been granted concessions for construction and operation of a total of three expressways, namely, the Si Rat Expressway (Sectors AB, C and D), the Si Rat - Outer Ring Road Expressway, and the Udon Ratthaya Expressway, as per the following details:



#### 1) The Si Rat Expressway (Sectors AB, C and D)

The Si Rat Expressway (Second Stage Expressway) is under the Second Stage Expressway Agreement (Amendment) with the Expressway Authority of Thailand ("EXAT"), with the expiration of the concession period on October 31, 2035, while the Si Rat Expressway (Sector D) may extended for another 11 years and six months from the expiration date of the existing Agreement, namely, April 22, 2027.

The Si Rat Expressway is the first large-scale construction project in Thailand on the basis of public private partnership. This project is implemented on a BTO (Build Transfer Operate) basis, namely, the Company (formerly BECL) invested in the design, construction and operation of the Si Rat Expressway. In this regard, the title to various permanent constructions pertaining to or use of the Si Rat Expressway shall be vested in EXAT. The Si Rat Expressway is comprised of three Sectors, covering a total distance of 38.5 kilometers, namely:

- Sector AB (from Ratchadapisek Road southward to Payathai Interchange eastward to Rama 9 Road and from Phayathai Interchange heading southward to Bangkhlo Interchange;
- Sector C (from Ratchadapisek Road northward up to Chaeng Watthana Road); and
- Sector D (from Rama 9 Road eastward to end at Srinakharindra Road).

As for tolls, EXAT has authorized the Company to collect tolls for the Si Rat Expressway, with the Company having the right to receive toll revenue sharing of the Chalerm Mahanakorn Expressway and the Si Rat Expressway (Sector AB) and receive all toll revenues of the Si Rat Expressway (Sectors C and D). The revenue sharing between the Company and EXAT shall be specified in the Agreement, i.e., the Company and EXAT shall receive the revenue sharing from the Chalerm Mahanakom Expressway and the Si Rat Expressway (Sector AB) at 40 percent and 60 percent, respectively, and meanwhile, all toll revenues of the Si Rat Expressway (Sectors C and D) shall belong to the Company.

#### 2) The Si Rat-Outer Ring Road Expressway Project

The Si Rat-Outer Ring Road Expressway is under the Concession Agreement for Investment, Design, Construction, Operation, Service, and Maintenance of the Si Rat-Outer Ring Road Expressway Project, with EXAT, with its concession period ending on December 14, 2042.

The Company has the duties to carry out design and construction, supply and installation of various relevant equipment and systems, together with operation and maintenance of the expressway, including toll collection, in consideration of the right to receive toll revenue and other revenues (if any). The project is an elevated six-traffic lane expressway, for a distance of 16.7 kilometers, with 9 toll plazas. The project's route starts from the Outer Ring Road (Kanjanapisek Road around Mahasawat Water Treatment Plant) heading eastbound along the right of way of the existing Southern railway, crossing the Chao Phraya River around the Rama VII Bridge, ending around Bang Sue Grand Station (Chatuchak), connecting with the Si Rat Expressway to the north of the Mo Chit 2 Bus Terminal, and running down to at-grade level around Kamphaeng Phet 2 Road. Moreover, the Company opened the connection of the Si Rat - Outer Ring Road Expressway with the northern part of the Si Rat Expressway (heading to Chaeng Watthana) for service on September 30, 2018, in order to ensure the greater convenience in travelling to Chaeng Watthana and continuing along the Udon Ratthaya Expressway. In this regard, the Company is responsible for investment and all operating expenses, as well as sharing returns with or providing benefits to EXAT as specified in the Agreement.

In management of this project, the Company is responsible for collecting tolls and shall have the right to receive all toll revenue and other revenues (if any) throughout the concession period, whereby the toll rates and revisions shall be agreed upon in the Agreement.



#### 3) The Udon Ratthaya Expressway

The Udon Ratthaya Expressway (Bang Pa-in - Pak Kret Expressway) is operated by NECL under the Bang Pa-in - Pak Kret Expressway Agreement (Amendment) with EXAT, with its concession period ending on October 31, 2035, whereby such Agreement may be extended for another 10 years and 11 months from the expiration date of the existing Agreement, namely, September 27, 2026.

The Udon Ratthaya Expressway is implemented on a BTO (Build Transfer Operate) basis like the Si Rat Expressway, namely, NECL invested in the design, construction, and operation of the Udon Ratthaya Expressway, whereby the title to various permanent constructions pertaining to or use of the expressway shall be vested in EXAT, and EXAT is responsible for collecting and delivering all tolls to NECL as specified in the Agreement. The Udon Ratthaya Expressway comprises 2 Stages, namely, Stage 1, Chaeng Watthana - Chiang Rak, and Stage 2, Chiang Rak - Bang Sai, connecting to the Si Rat Expressway around Chaeng Watthana Road, covering a total distance of 32 kilometers. As for the inbound route, expressway users shall pay tolls at the booths around the on-ramps of the expressway while in respect of the outbound route, expressway users shall pay tolls at the off-ramps of the expressway. EXAT is responsible for collecting and delivering all tolls to NECL. All toll revenues in respect of the Udon Ratthaya Expressway shall belong to NECL.

#### 2) The details of the expressway linking networks are as follows:

Expressway Systems	Length (km.)	Constructed and Operated by
Chalerm Mahanakorn Expressway (First Stage Expressway)     (Bang Na - Din Daeng - Dao Khanong)	27.1	EXAT
(Bang Na - Din Daeng - Dao Khanong)  2. Si Rat Expressway (Second Stage Expressway) 2.1 Urban Network (Sector AB) (Prachachuen - Phayathai - Bangkhlo - Asoke) 2.2 Suburban Network (Sector C) (Prachachuen - Chaeng Watthana) 2.3 Suburban Network (Sector D) (Rama - Srinagarindra)		
3. Udon Ratthaya Expressway (Bang Pa-in - Pak Kret)	32.0	NECL
4. Si Rat - Outer Ring Road Expressway	16.7	Company
5. Uttaraphimuk Elevated Way (Don Muang Tollway)		Don Muang Tollway Public Company Limited
6. Chalong Rat Expressway including its Extension (Ramindra - At Narong and Ramindra - Outer Ring Road)	32.9	EXAT
7. Burapha Withi Expressway (Bang Na - Chonburi)	55.0	EXAT
8. Kanjanapisek Expressway (Bang Pli - Suksawad) and Highway No. 37 (Suksawad - Bang Khun Thien Section) including a connecting road to Bhumibol Bridge 1 and Bhumibol Bridge 2	37.8	EXAT
Total Length	268.0	



#### 3) <u>Toll Revenue Sharing</u>

The Company and EXAT have received the toll revenue sharing in respect of the urban expressways (the Chalerm Mahanakorn Expressway and the Si Rat Expressway (Sector AB)) at 40 percent and 60 percent, respectively.

While the Company has received all toll revenues for the suburban expressways (the Si Rat Expressway (Sectors C and D), the Si Rat - Outer Ring Road Expressway, and the Udon Ratthaya Expressway), in accordance with the terms of the respective Agreements.

Expressway	Length (km.)	Revenue	Revenue Sharing Company: EXAT
Chalerm Mahanakorn Expressway	(11111)		company ( Erm ri
Din Daeng - Port	8.9	Company and EXAT	40 : 60
Bang Na - Port	7.9		
Port - Dao Khanong	10.3		
Si Rat Expressway			
Sector AB:  (Rama 9 - Ratchadapisek)  (Phayathai - Bangkhlo)	21.8	Company and EXAT	40 : 60
Sector C: (Ratchadapisek - Chaeng Watthana)	8.0	Company	100:0
Sector D: (Rama 9 - Srinagarindra)	8.7	Company	100:0
Si Rat - Outer Ring Road Expressway	16.7	Company	100:0
Udon Ratthaya Expressway			
Chaeng Watthana - Chiang Rak	22.0	NECL	100:0
Chiang Rak - Bang Sai	10.0		

#### 4) <u>Toll Rates</u>

	Toll Rates (Baht/Trip)			
Expressway/Toll Plaza	4 wheels	6-10 wheels	More than 10 wheels	
Chalerm Mahanakorn Expressway (First Stage Expressway)	50	75	110	
Except:				
At Narong 1 Toll Plaza (to Bang Na)	25 (1)	50 (1)	85 (1)	
Si Rat Expressway (Sector AB)	50	75	110	
(Second Stage Expressway)				
Except:				
Prachachuen Toll Plaza (inbound)	60 (2)	90 (2)	140 (2)	
Prachachuen Toll Plaza (outbound)	10 (2)	15 <sup>(2)</sup>	30 (2)	
Si Rat Expressway (Sector C) (Second Stage Expressway)	15	20	35	
Prachachuen 1 Toll Plaza (from Prachachuen Road)				
Prachachuen 2 Toll Plaza (to Prachachuen Road)	15	20	35	
Ngam Wong Wan 1 Toll Plaza (outbound)				
Ngam Wong Wan 2 Toll Plaza (inbound)				
Si Rat Expressway (Sector D)	25	55	75	
Si Rat - Outer Ring Road Expressway	50	80	115	
Udon Ratthaya Expressway	45	100	150	
Except:				
Muang Thong Thani Toll Plaza	35 (3)	90 (3)	140 (3)	
Bang Pa-in Toll Plaza	55	120	180	

Remarks: (1) These rates are after deduction of Baht 25 discount for all types of vehicles (from July 1, 2020 to June 30, 2021).

- (2) In case of the motorists' service use of the Second Stage Expressway continuing from Sector AB to Sector C at Prachachuen Toll Plaza (outbound) or from Sector C to Sector AB at Prachachuen Toll Plaza (inbound), the tolls of the Second Stage Expressway for all types of vehicles will be at a discount of Baht 5 throughout the contract period.
- (3) These rates are after deduction of Baht 10 discount for all types of vehicles.

#### **Revisions to Toll Rates under the Agreements**

- The Chalerm Mahanakorn Expressway and the Si Rat Expressway are subject to a revision to their respective toll rates every 10 years, with their next revision taking place on September 1, 2028;
- The Si Rat Outer Ring Road Expressway is subject to a revision to its toll rates every 5 years from the date of service operation of the project at the rates of Baht 15, Baht 25 and Baht 35 for four-wheeled vehicles, six-wheeled to ten-wheeled vehicles; and more than ten-wheeled vehicles, respectively, as specified in the Agreement, with the first revision taking place on December 15, 2021; and
- The Udon Ratthaya Expressway is subject to a revision to its toll rates on the 1<sup>st</sup> day of November every 10 years, with the next revision taking place on November 1, 2028.

#### 5) Marketing and Competition of Expressway Business

#### • Customer Characteristics and Target Customers of Expressway Business

Target customers of the expressway users refer to those motorists who desire a convenient and rapid transportation or who desire to shorten the travelling distance to their destinations as well as to avoid the traffic congestion along the congested normal roads in Bangkok and its vicinity. The customers by the types of vehicles using the expressways may be divided into four-wheeled vehicles; six-wheeled to ten-wheeled vehicles; and more than ten-wheeled vehicles, which in 2020, accounted for 98.21 percent, 1.49 percent, and 0.30 percent, respectively. The traffic volume from January 1 to December 31, 2020, using the expressways can be described by areas as follows:

Expressway System	Average Traffic	%
	Volume	
	(trips/day)	
Chalerm Mahanakorn Expressway (First Stage	318,697	30.35
Expressway) (Bang Na - Din Daeng - Dao		
Khanong)		
2. Si Rat Expressway (Second Stage Expressway)	266,545	25.39
<ul><li>Sector AB (Prachachuen - Phayathai -</li></ul>		
Bangkhlo - Asoke)		
<ul><li>Sector C (Prachachuen - Chaeng Watthana)</li></ul>	165,163	15.73
<ul> <li>Sector D (Asoke - Srinagarindra)</li> </ul>	161,668	15.40
3. Udon Ratthaya Expressway (Bang Pa-in - Pak	78,956	7.52
Kret)		
4. Si Rat - Outer Ring Road Expressway	58,898	5.61
Total Average Traffic Volume	1,049,927	100.00

Given the fact that the expressway service is considered a form of provision of public utilities service to motorists who desire a convenient, rapid and safe travelling, which are regarded as target customers of the expressway systems, the group of consumers are then broad depending on their destinations, residences, and workplaces. Therefore, the revenues of the expressway systems will not depend on any particular group of customers.



#### 6) Marketing Policy and Strategies of Expressway Business

#### • Marketing Strategies of Expressway Business

The marketing highlight is that the Si Rat Expressway is designed to respond to the transportation needs through the expressway network which connects to and covers major areas in Bangkok, whether from the Chalerm Mahanakorn Expressway and the Si Rat Expressway, as well as the Chalong Rat Expressway (Ramindra-At Narong) which cover the areas from the North to the South and from the West to the East of Bangkok. Motorists may use the expressway to connect to the Burapha Withi Expressway (Bang Na-Chonburi), and the Chalerm Mahanakorn Expressway and the Chalong Rat Expressway, thereby rendering the service of the expressway systems to become more complete for users to reach their destinations more conveniently and rapidly than using at-grade roads.

The Si Rat - Outer Ring Road Expressway, a route connecting between the Bangkok-Thonburi sides, has its route crossing the Chao Phraya River at the Rama VII Bridge, continuing along in parallel to the Southern railway via the districts of Bang Phlat, Bang Bamru, Taling Chan, passing Ratchaphruek Road, and ending at the Outer Ring Road (the West), thereby enabling motorists to conveniently and rapidly commute from and to Bangkok-Thonburi sides. On the inbound side, there is a connection point from the Boromarajonani overpass in Taling Chan area to the Si Rat - Outer Ring Road Expressway, at Km.5 + 200, and a connection point with the Si Rat Expressway in Mo Chit area, Chatuchak, turning right southward to Phaya Thai - Silom and turning left to the northern part of the Si Rat Expressway, to ensure the greater convenience in the motorists' travelling to Ratchadaphisek, Prachachuen, Chaeng Watthana, and Bang Pa-in, by using the Udon Ratthaya Expressway.

The marketing disadvantage is the physical limitation which prevents the release of traffic around the expressway exits during the peak hours, which depends on the traffic on at-grade roads, representing an uncertain factor beyond the Company's control. However, the Company continuously coordinates with traffic police in police stations of such areas, including linking video signal from CCTVs on the expressways to police stations of such areas, to provide assistance in releasing and facilitating traffic flow in the expressway systems by improving various on- and off-ramps for motorists to save time and facilitate motorists with more convenience and better quality of living in their commute in the downtown. Motorists should then appreciate these benefits over the price factor.

In view of various marketing strategies, the Company has proceeded as follows:

#### Service and Product Strategies of Expressway Business

- The prime location and connections to major roads in the city allow the expressway network to respond to the transportation needs of motorists to reach their desired destinations. In this regard, the Company has improved the quality of the routes and its services and given priority to the customers' needs, which will be integrated as key strategies to efficiently accommodate the traffic volume flowing in the system.
- The feasibility study on improvement of the on- and off-ramps of the expressways serves as another measure to facilitate the travelling and to continually maintain the quality of the expressways in terms of engineering safety to meet international standards.
- The traffic volume statistics have been continuously monitored to enhance the efficiency of its Easy Pass service as appropriate in order to improve the service provision and accommodate the increased volume of expressway users. The Company has added Easy Pass lanes at various Toll Plazas on the Si Rat Expressway and the Si Rat Outer Ring Road Expressway to accommodate the increased volume of Easy Pass users. In addition, the Company has moved the Easy Pass lanes for more convenience and safety of the Easy Pass service users and to minimize the cross traffic between the cash lanes and the Easy Pass lanes, which will mitigate the traffic congestion at the front of the toll plazas.



- The study on new routes in response to the urbanization in the future, particularly in Bangkok, as well as the study on travelling behavior of motorists, are conducted to prepare for the expansion of the scope of the expressway services, and serve well as additional channels of services in response to needs of the motorists in the future.
- The communication channels on traffic information via Smart Traffic and Variable Message Signs (VMS) are added to keep motorists informed of the traffic conditions on expressways, as well as suggesting routes on expressways for more convenience and rapidity.
- The expressway guide signs on at-grade main roads and alleys in Bangkok and its vicinity have been continuously improved so as to facilitate motorists' travelling to destinations and boost their confidence to access and use the expressways. To this effect, the emphasis is given to provision of information relating to landmarks adjacent to the on- and off-ramps of the expressways via the websites, various public relations media, including social media to ensure greater convenience and rapidity in travelling of customers, as the expressway users.
- The public relations activities about the Si Rat Outer Ring Road Expressway are undertaken at the places located along the Si Rat Outer Ring Road Expressways and Chaeng Watthana in order to guide the expressway users on how to use the routes, and to accept needs and suggestions directly from the expressway users. Moreover, the Company has given directions to restaurants and tourist attractions via the Facebook fan page: Club Chim Tiew, with a great number of followers.
- Satisfaction surveys on toll collection services of the Si Rat-Outer Ring Road Expressway are conducted, with the result staying at the "Very Good" level.
- More Easy Pass lanes were added in response to the increased traffic volume in the Easy Pass lanes and after EXAT's policy on cancellation of the Easy Pass card deposit, the use of Easy Pass service then increased, thereby necessitating more Easy Pass lanes to accommodate the increased traffic volume, and as a result, motorists can save their commute time and fuels.
- Easy Pass lanes at Asoke 4 Toll Plaza, Prachachuen Toll Plazas (inbound) and (outbound), were relocated to the farthest right lane for motorists to have more efficient and rapid access to the Easy Pass lanes.
- Easy Pass guide signs were improved for expressway motorists' convenient and rapid passage through the Easy Pass lanes.
- All Easy Pass lanes on the Si Rat Expressway were improved as fast lanes to accommodate more rapid passage and minimize slow traffic in front of the Easy Pass lanes.
- The project to optimize efficiency of Easy Pass lanes was set up through the Company's installation of the second antennas at Easy Pass lanes to suit the convenience of the Easy Pass users in case the barrier at the toll gate is not opened despite the fact that the reserved money in the account is adequate for passing through, in which case, the system will then have the barrier gate opened without waiting staff to open it, making it possible to facilitate motorists' faster passage, save time waiting in a queue and mitigate traffic congestion in front of the toll plazas while minimizing air pollution.
- The project to top up reserve via Easy Pass account with credit card, debit card and Thai QR Payment was set up by the Company in collaboration with EXAT, and Krung Thai Bank to develop the top-up service, at the customer service center, the Si Rat Expressway Control Center Building, to accommodate top ups via credit, debit cards or Thailand QR Payment.
- The project to reduce the minimum top-up of Easy Pass account from Baht 500 to Baht 300 to promote the use of the Easy Pass was carried out by the Company in association with EXAT from June 16, 2020.
- The project for toll payment via EMV (Europay Master Visa) card at the toll lanes was set up by the Company in association with EXAT, and Krung Thai Bank, to develop the toll payment system with



contactless-enabled credit or debit cards under the EMV standard for the motorists' convenience, with its trial service starting on the Si Rat - Outer Ring Road Expressway from June 2020 and its official service opening in the Si Rat - Outer Ring Road Expressway and the Udon Ratthaya Expressway on January 26, 2021; and it was expected to open for service for the Si Rat Expressway by April 2021.

#### Price Strategies of Expressway Business

- Toll rates, including the calculation for revisions of the toll rates, are agreed upon and specified in the Agreements ahead of time. It is mutually agreed that the rates are considered reasonable and based on the feasibility study for the investment of each project. Under the Second Stage Expressway Agreement (Amendment), and the Bang Pa-in Pak Kret Agreement (Amendment), toll rates shall be revised every 10 years at the rates as specified in the respective Agreements. Furthermore, the revision of the toll rates of the Si Rat Outer Ring Road Expressway is in accordance with the Concession Agreement, which shall be made every five years from the date of service operation of the project at the rates specified therein.
- The Company continues to provide a discount on tolls on certain routes for a limited period of time to attract motorists to increasingly use the expressway services, especially such routes with connections between the expressway systems, e.g., At Narong 1 Toll Plaza (from the Chalong Rat Expressway to enter the Chalerm Mahanakorn Expressway around Bang Na), and Muang Thong Thani Toll Plaza of the Udon Ratthaya Expressway, which the Company, together with EXAT, continued to provide the discount.

#### o Distribution and Distribution Channel Strategies of Expressway Business

#### Payment of Tolls

The service users can pay tolls in three ways: by cash, pay through the Automatic Toll Collection System (Easy Pass) or pay by EMV card (starting by 2021).

- Users of the Chalerm Mahanakorn Expressway and the Si Rat Expressway may choose to use the expressway services from various on- and off-ramps covering major areas in Bangkok throughout the total distance of 65.6 kilometers. Expressway users shall pay tolls at the on-ramps of toll plazas, totaling 52 locations, 20 toll plazas of the Chalerm Mahanakorn Expressway (e.g., Din Daeng, Bang Na, Dao Khanong, Sukhumvit, Rama 4 Toll Plazas, etc.) and 32 toll plazas of the Si Rat Expressway (e.g., Asoke, Rama 9, Srinagarindra, Yommaraj, Surawong, Hua Lamphong, Khlong Prapa, Yan Phahon Yothin, Prachachuen, Rama 3, etc.
- Users of the Udon Ratthaya Expressway which connects to the expressway system towards the North of Bangkok has a total distance of 32 kilometers, with 10 toll plazas, shall pay tolls at the on-ramps for the inbound direction and at the off-ramps for the outbound direction. There are five on-ramps and five off-ramps.
- Users of the Si Rat Outer Ring Road Expressway which connects to the Si Rat Expressway System towards the West of Bangkok has a total distance of 16.7 kilometers, with 9 toll plazas, shall pay tolls at the on-ramps.

#### Electronic Toll Collection System

The Company, in association with EXAT, introduces the Electronic Toll Collection system in the toll collection, in order to serve as an alternative channel for motorists and facilitate and speed up the toll payment at the front of the Toll Plazas during the peak hours, as well as accommodating the increasing traffic volume in the future. Currently, there are Easy Pass users representing approximately 46.10 percent.

In the interest of convenience to the Easy Pass users, the Company has



arranged for the Easy Pass Fast Service, including film cutting service for Easy Pass installation and testing, whereby the expressway users are able to bring their cars to use the services at the Easy Pass Fast Service, free of charge, at the Si Rat Expressway Control Center, Asoke - Dindaeng Road, every day during the office hours from 09.00 - 17.00 hrs., and at Prachachuen Toll Plaza (outbound) on business days from 07.30 - 22.00 hrs., on holidays from 09.00-22.00 hrs. Moreover, the Company, in collaboration with EXAT and the Department of Highways, carried out integration between the Easy Pass system and the M-Pass system to enable the service users to pay tolls with only one pass for seven expressway routes and two of the Intercity Motorways (Motorways) of the Department of Highways.

#### Marketing Promotion and Communication Strategies of Expressway Business

The Company has provided a discount on tolls on certain routes within a limited period of time, aimed at attracting target customers to continue to use the expressway services and eventually become regular customers. In 2020, the Company continued to provide a discount on tolls for the service users of the Udon Ratthaya Expressway, operated by the Company's subsidiary (NECL), at Muang Thong Thani Toll Plaza.

Furthermore, during the remarkable festivals, such as, New Year's days, the Company, in cooperation with EXAT, undertook activities to promote the use of the expressways for the motorists by distributing souvenirs as giveaways to motorists, as well as providing the service points for motorists in order to create a feeling of close bond with customers to ensure good relationship under the theme that we provide the best services to customers throughout the routes, on the occasion of the previous New Year's Eve celebrations.

The Company canceled the Easy Pass top-up service at the respective toll booths of the Chalerm Mahanakorn Expressway, the Si Rat Expressway, and the Chalong Rat Expressway, in a total of 149 Easy Pass lanes, from Tuesday, June 16, 2020 onwards, with EXAT reducing the Easy Pass application fee and minimum top up from Baht 500 to a minimum of Baht 300, in order to resolve traffic congestion in front of the expressway toll plazas. In this regard, Easy Pass card users still can fill in the reserved money at the toll plaza building (One Stop Service) and the Easy Pass Fast Service Center, as normal, and also can top up the reserved money for tolls through various channels, whether by online means, through a bank or at the counter service.

The Company, as a private company that provides the expressway services, implemented in response to the government policy by participating in the drive safety campaign known as "Driving Slowly, Daytime Headlight Switching on, Seat Belt Fastening", for the motorists' facility and safety during the New Year Festival, by setting up the expressway user screening points before accessing the service, with the Company's aim of being a part in preventing the spread of Coronavirus Disease 2019 ("COVID-19"). The Company also promoted the drive safety campaign via social media on the expressways and traffic radio station to the target customers to raise their awareness of safe journey, and to assure them of the quality service on the expressways and various service promotion activities of the Company.

Other than that, the Company also offered toll discounts; disseminated the expressway network maps, including connections of the expressways with various routes in order to facilitate the expressway users' travelling.

The channels of public relations used by the Company to disseminate information comprise documentary programs on radio and television, radio spot, leaflets, Variable Message Signs (VMS), and the Company's website: <a href="https://www.bemplc.co.th">www.bemplc.co.th</a>, as well as social media: the Company's Facebook (<a href="https://www.facebook.com/bangkokexpresswayandmetro">www.facebook.com/bangkokexpresswayandmetro</a>) and the Facebook fan page: Club Chim Tiew (<a href="https://www.facebook.com/clubchimtiew">www.facebook.com/clubchimtiew</a>); public relations for the use of the Si Rat - Outer Ring Road Expressway, including



the connection of the Si Rat Expressway heading to Chaeng Watthana, serving as a channel for publicizing information such as giving directions to restaurants and tourist attractions via the special routes; recommendations on how to use cars safely, how to maintain cars; direct acknowledgment of needs and suggestions from the expressway users, as well as undertaking activities to strengthen relationships with followers of the Company's fan page: Club Chim Tiew, including publication of the bimonthly BEM Magazine as a medium for sharing information and news between the Company and motorists, together with enhancement of knowledge, satisfaction and attraction of new customers to use the services more, as well as continuing the social contribution activities throughout the year to ensure the positive attitude of our services towards customers and society.

#### 7) Industrial Outlook and Competition of Expressway Business

The country's economy in 2020 was another year of its low growth, mainly due to the COVID-19 epidemic, droughts, the US-China trade war, including the delayed budget act and exports which failed to achieve the set targets, let alone the growing household debt problem, in which the government implemented various assistance measures to stimulate the economy but in a short-term. Upon the expiration of the measures, expenditures fell into a state of slowdown; people put off their spending and chose to spend money on necessary items and save money. All of these factors had an impact on the manufacturing, distribution, export, tourism and automobile industries. (Sources: BOT MACAZINE January 2021, GSB Research Center February 2021)

The automotive industry in 2020 faced challenges from the COVID-19 epidemic when volume of vehicles produced in April seemed to be at the lowest level over the past 30 years, due to 1) production shutdowns, 2) economic contraction, and 3) lockdown, a measure to contain the spread of such virus. These factors resulted in a decrease in automobile production by 86.4 percent year-on-year, coupled with a contraction in demand for new cars both at home and abroad since the beginning of 2020, reflecting the slowdown in unnecessary spending, along with the announcement of postponement of the Motor Show from the original schedule in April, thereby fading the demand for cars in the first four months of the year out (source: GSB Research Center February 2021). Moreover, the purchasing power was weakened by the business closure, droughts which affected consumers, and besides, various financial institutions intensified their credit facilities extension, not to mention car manufacturers' postponement of their new car launches, as such, marketing opportunities to stimulate consumers were then lost. (Sources: Business/ Industry Outlook 2020 - 2022: Automobile Industry, Bank of Ayudhya Public Company Limited, January 2021)

However, in the third and fourth quarters of 2020, the COVID-19 outbreak had eased and the government sector unlocked various measures while issuing various measures to help stimulate the economy, particularly in the tourism sector, which was considerably shrunk, resulting from the absence of foreign tourists, therefore, measures to promote tourism in the country were formulated. Such measures were given the positive feedbacks in the third quarter of the year onwards, resulting in a rising travel which caused an increase in vehicle use, as such, traffic congestion started returning to normal. According to the report of the Bureau of Transport and Traffic Policy and Planning (OTP), the survey results of the average speed of personal cars on various main roads in Bangkok, exclusive of the Inner Ring Road (Ratchadaphisek), in 2020, were found that the average speed during the morning peak hours was at 17.6 km./hr., while the average speed during the evening peak hours was at 21.8 km./hr., compared with the same period in 2019, it was found that the average speed during the morning peak hours increased by 1.9 km./hr. or representing a percentage of 11.8 km./hr., while the average speed during the evening peak hours increased by 0.2 km./hr. or representing 0.8 percent. (Source: Daily News, February 2, 2021) Despite the fact that the auto sales had been improving due to the postponement of the Motor Show to July 2020 and the organization of the 2020 Auto Expo from late November to early December 2020, together with the launch of new car models at such event, the auto sales could not return to normal, in line with the report on red-label new car registration statistics nationwide in 2020 from the Department of Land Transport that it declined by 14 percent (totaling 2.64 million vehicles). (Source: Department of Land Transport, January 2021)



With the automobile industry in a shrinking phase as well as the problem of traffic congestion from the construction of various utilities, working from home, the number of foreign tourists who were unable to travel to visit Thailand, the overall growth of traffic volume on the expressways was affected. Nonetheless, if the spread of COVID-19 situation had been defused, the traffic volume and economic conditions would improve and return to normal.

#### 8) Procurement of Products and Services of Expressway Business

#### Nature of Procurement of Products of Expressway Business

EXAT is an authority responsible for the construction of expressways to provide service for convenient, rapid and safe traffic, as well as to mitigate traffic problems. EXAT invited interested parties to submit investment proposals; the Company then conducted a feasibility study and submitted its proposals for investment in projects with appropriate returns and conditions.

The expressway projects under the Second Stage Expressway Agreement, the Bang Pa-in - Pak Kret Expressway Agreement, and the Concession Agreement for the Si Rat - Outer Ring Road Expressway Project are implemented on a BTO basis. According to the essence of the Agreements, EXAT shall have the duty to determine the characteristics of the expressways, expressway routes and areas to be used for construction and arrange for land expropriation for delivery to the Company for construction within the time specified in the Agreements. Thereafter, the Company would carry out construction in accordance with the designs approved by EXAT, subject to the supervision of the quality of construction work by EXAT's Consulting Engineer, Independent Certification Engineer, and Independent Design Checker. Upon completion of the construction, the Independent Certification Engineer shall inspect the work and issue Certificate of Completion to evidence that the construction work is completed in accordance with the specified standards and is ready for service, at which time, the Company shall be entitled to obtain toll revenue under the conditions of the Agreements. In the previous constructions, the Company engaged project managers to carry out construction and operate the Expressway Projects on a lump sum turnkey basis. This was due to the fact that the expressway projects are large-scale projects, which may sustain cost overrun issues and delayed completion of the construction. The lump sum turnkey engagement is intended to prevent such risk. In the engagement of project managers, the Company will select specialists with experience to act as project managers and construction contractor to ensure the accomplishment of quality work on time.

#### 9) Environmental Impact (Expressway Business)

The Company and NECL have always operated the construction and expressway business with environmental responsibility, by adhering to the business guidelines which can be summarized as follows:

In the construction phase of the expressways, the Company and NECL complied with the measures to prevent pollution in accordance with the regulations of the National Environment Committee and other relevant laws, which form an integral part of the Agreements. The Company and NECL implemented the measures and procedures as appropriate for the construction carried out in the urban areas with high populations. In so doing, the Company employed the Segmental Box Girder construction technique, which allowed it to complete the construction faster than other techniques in those days, so as to prevent any impact to nearby communities and affect the at-grade traffic at the least possible extent during the construction. Furthermore, the Company had no records of committing any environment-related offenses.

Even during the course of the operation of the expressway systems, the Company remained concerned about the eco-friendly business operations affecting the quality of life of staff, motorists and communities surrounding the expressways, including all groups of stakeholders. The Company improved and reviewed its internal procedures to conform to the environmental requirements for applying for the Certificate of ISO 14001 Environmental Management System. The Company has its commitment to ensuring environmental management in line with the following guidelines:



- To give priority to pollution prevention and control by managing and maintaining the expressways to meet international standards and keeping in mind the environmental impact on motorists, staff, and communities;
- To instill and encourage our staff with an awareness of efficient use of energy and natural resources;
- To comply with the environment-related laws and regulations;
- To review the purposes and goals for continued improvement of the environmental management system;
- To communicate our environmental policy to the public and all parties concerned.

Besides, the Company obtained certification from SGS (Thailand) Limited as follows:

- ISO 9001: 2015 Quality Management System; and
- ISO 14001: 2015 Environmental Management System.

In 2020, the Company continued to maintain the ISO 14001 Environmental Management System, by monitoring important environmental concerns, as well as optimizing the use of natural resources through its continued energy management measures, for example, change of the air conditioning systems of the Si Rat Expressway Control Center Building, on the 1<sup>st</sup> and 2<sup>nd</sup> Floors, from AHU (Air Handling Unit) and Split Type air conditioning systems to VRV (Variable Refrigerant Volume) type air conditioning system, thereby reducing the consumption of electricity from the Metropolitan Electricity Authority by approximately 15 percent from the existing air conditioning systems.

With respect to safety management, the Company had an engineering analysis agency comprising knowledgeable and skilled personnel in traffic engineering and safety on the expressways to conduct studies on impacts from various factors. A traffic simulation was made for study of the suitability in the improvement of physical characteristics at the front areas of toll plazas, as well as inspection of road safety; analysis of risk areas on expressways; study of features and patterns in the installation of safety equipment, in order to improve the expressways to ensure the maximum safety for motorists, as well as to minimize environmental impact. The Company then put such study results into practices, by means of improving the safety on expressways, inspecting and assessing the safety of the gore areas and installing safety equipment, e.g., crash cushions, cushion tanks, flexible guide posts, red-colored cold plastic road paint to alert for high accident risk areas.

The Company continued to provide training for staff and executives on know-how and techniques for environmental management in accordance with the ISO 14001 Environmental Management System, as well as undertaking various activities to raise an enterprise-wide awareness, and environmental conservation activities in association with the communities nearby.

#### 2.1.2 Rail Business

#### 1) Nature of Services

The Company has been granted concessions for two mass rapid transit rail system projects by the Mass Rapid Transit Authority of Thailand ("MRTA"), as per the following details:

(1) The M.R.T. Chaloem Ratchamongkhon Line Project ("MRT Blue Line Project"): the Company executed the Concession Agreement with MRTA on March 31, 2017, for a concession period of 33 years from MRTA's Notice to Proceed (NTP), under which the Company shall be responsible for supply, installation, testing and commissioning of M&E Equipment, provision of services to ensure a continuous operation as a single network (Through Operation), and the Company is entitled to farebox revenue as well as undertaking activities and commercial development, including advertising, leasing space and telecommunications services in the metro stations and trains throughout the concession period of 30 years from the date of the service opening of the entire route. In this regard, the M.R.T. Chaloem Ratchamongkhon Line Project is consisted of Hua Lamphong-Bang Sue Section (the existing MRT Blue Line), and Hua Lamphong-Bang Khae Section, Bang Sue-Tha Phra Section (the MRT Blue Line Extension), per the details below:



- O Hua Lamphong Bang Sue Section (the existing MRT Blue Line), the first underground metro system of Thailand, covering the distance of 20 kilometers, with 18 stations, which was opened for service on July 3, 2004. The Company is entitled to farebox revenue as well as undertaking activities and commercial development, including advertising, leasing space and telecommunications services in the metro stations and trains.
- Hua Lamphong Bang Khae Section and Bang Sue Tha Phra Section (the MRT Blue Line Extension), the underground and elevated route, with a total of 20 stations, divided into 4 underground stations and 16 elevated stations, having a connection with the M.R.T. Chaloem Ratchamongkhon Line Project (the existing MRT Blue Line) at Hua Lamphong Station and Bang Sue Station, as well as connecting with the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line) at Tao Poon Station. The Company is responsible for investment, supply, installation, testing and commissioning of the M&E Equipment, and trial running, including the O&M Services by ensuring the continuous train operation (Through Operation). The supply and installation of the M&E Equipment for opening for service are divided into three sections, namely:
  - Section 1: Bang Sue Station Tao Poon Station, opened for service on August 11, 2017;
  - Section 2: Hua Lamphong Station Lak Song Station, opened for service on September 29, 2019;
  - Section 3: Tao Poon Station Tha Phra Station, opened for service on March 30, 2020 thereby ensuring the train operation in the MRT Blue Line Project as a single network (Through Operation), by having Tha Phra Station as the main common and interchange station, which would enable the passengers to change their destinations from Tha Phra Station to travel to the suburban area westward via Bang Phai Station to Lak Song Station or travel to the urban area via Itsaraphap Station to Hua Lamphong Station, as well as travelling to Tao Poon Station connecting with the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line).

In this regard, the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) was opened for full service, covering the total distance of 48 kilometers, with 38 stations and a total of 54 trains available for service every day from 06.00 - 24.00 hours.

(2) The M.R.T. Chalong Ratchadham Line Project ("MRT Purple Line Project"), Bang Yai - Bang Sue Section (Khlong Bang Phai Station - Tao Poon Station), covering a distance of 23 kilometers, with a total of 16 elevated stations, where Tao Poon Station is located as an interchange station with Bang Sue Station of the M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line), which would make it possible for passengers' interchange from the MRT Purple Line to the MRT Blue Line at Tao Poon Station, which in the future, would be connected with the MRT Purple Line (Tao Poon - Rat Burana Section).

The Company has been granted the concession for investment, the supply of M&E Systems and O&M Services, on a PPP Gross Cost basis. That is, MRTA invests in all civil works and the Company invests in the M&E Systems and the rolling stocks, including provision of the O&M Services in accordance with the service standards defined in the conditions of the Agreement. MRTA is entitled to all farebox revenue and commercial development revenue from the utilization of the civil infrastructure and the railway systems and MRTA shall make gradual repayment for the M&E Systems to the Company on a monthly basis for a period of 10 years, and engage the Company to conduct the operation and maintenance throughout the concession period of 30 years from September 4, 2013.



There is a total of 21 trains available every day without holiday, from 5.30-24.00 hours on Mondays-Fridays, and from 6.00-24.00 hours on Saturdays-Sundays and public holidays.

Projects	Chaloem Ratchamongkhon Line (MRT Blue Line)		Chalong Ratchadham Line (MRT Purple Line)
	(Hua Lamphong Station - Bang Sue Station)  Station - Lak Song Station - Lak Song Station and Bang Sue Station - Tha Phra Station)		(Khlong Bang Phai Station - Tao Poon Station)
Concession Type	PPP Net Cost	PPP Net Cost	PPP Gross Cost
Concession 33 years (2 Period		(2017-2050)	30 years (2013-2043)
Number of Stations	18 stations	20 stations	16 stations
Distance 20 kilometers		28 kilometers	23 kilometers

#### 2) Revenue

The Company's revenues from the rail business can be divided into two categories, comprising farebox revenue and revenue from O&M services.

#### Farebox revenue

Pursuant to the Concession Agreement for the MRT Blue Line Project between the Company and MRTA, the Company has the right to operate the train and collect farebox revenue and undertake commercial development throughout the concession period. The Company is obliged to make payment of remuneration from fares and commercial development to MRTA at the rates as mentioned in the Concession Agreement.

The fare rates of the metro as of the commencement date would be in accordance with the basic reference fare rates in force at the time of the revenue service commencement date. Under the Concession Agreement, the reference fare rates would be adjusted every 24 months based on the actual changes of the Bangkok Non-Food Consumer Price Index compared to the basic reference fare rates.

#### • Revenue from O&M Services

The Company receives service fees for train operation and maintenance from the MRT Purple Line Project Concession Agreement, Contract 4, Concession for Supply of M&E Systems and O&M Services (Khlong Bang Yai Station-Tao Poon Station), Phase 2 (for a period of approximately 27 years). The service opening commenced on August 6, 2016.

#### 3) <u>Marketing and Competition of Rail Business</u>

#### • Customer Characteristics and Target Customers

The Company's target customers can be divided into two groups, namely, residents nearby the metro routes and those who need to pass or head for other destinations along the metro routes, and categorized by purposes of journeys as follows:

- 1. Commute for work;
- 2. Commute to schools/educational institutes;
- 3. Commute for tourism/ leisure;
- 4. Commute for special activities, e.g., seminars or conferences; and
- 5. Commute for other purposes, e.g., business dealings.



#### 4) Marketing Policy and Strategies of Rail Business

#### • Service and Product Strategies of Rail Business

o Creativity and Development of Convenient Services for MRT Passengers

The M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line) has the service route passing through central business districts (CBD), residential areas, and connecting with other significant mass rapid transit systems which would result in an increase in the number of passengers, for example:

- A connecting point for the M.R.T. Chalong Ratchadham Line (MRT Purple Line) at Tao Poon Station;
- A connecting point for the BTS Skytrain (Green Line) at Chatuchak Park Station, Phahon Yothin Station, Sukhumvit Station, Silom Station, and Bang Wa Station;
- A connecting point for ARL (Airport Rail Link) (Red Line) at Phetchaburi Station, as a connection with Suvarnabhumi Airport;
- A connecting point with Thai Railway Station at Hua Lamphong Station, Phetchaburi Station, Bang Sue Station, and Bang Khun Non Station;
- A connecting point with the Port at Bang Pho Station, Phetchaburi Station, Bang Wa Station, and Sanam Chai Station.

As for transit connections between the metro stations and buildings, there are currently seven points, namely:

- Sam Yan Station connected to Chamchuri Square and Samyan Mitrtown (residential buildings, office buildings, and entertainment and education centers);
- Phahon Yothin Station connected to Union Mall Shopping Center;
- Sukhumvit Station connected to Terminal 21 Tower (shopping center, hotel, office building, and residential building) and Interchange 21 Tower (office building);
- Phra Rama 9 Station connected to Central Plaza Grand Rama 9 and G Tower (office building);
- Phasi Charoen Station connected to Seacon Bangkae Department Store;
- Lak Song Station connected to The Mall Bangkhae Shopping Center;
- Phetchaburi Station connected to Singha Complex.

Most of the travel behaviors of the service users were for work purpose, followed by for education purpose, while in respect of travel for tourism purpose, the rising number of service users could still be accommodated. The Company thus strategically established a travel promotion strategy for tourism, by signing a cooperation agreement with the Tourism Authority of Thailand (TAT) together with the Mass Rapid Transit Authority of Thailand (MRTA) in the project "Happy Journey with MRT" to promote and support extensive travel by the MRT.

And due to the ongoing COVID-19 situation, the Company added a strategy to build confidence among passengers in the use of the MRT services under the "Healthy Journey with BEM" project, such as, tightening up measures for cleanliness, spraying disinfectants, campaign for wearing cloth face masks, ensuring social distancing, providing disaster relief assistance to those who were affected by such situation, both the entrepreneur sector and the people sector, by providing for cloth mask sale areas without charges, together with hiring of part-time staff and giving away one million cloth face masks to passengers.

In addition, the Company strategically increased the number of the service users travelling with metro cards to ensure the convenience of their travelling, save time the service users take within the stations, and to increase revenues for the Company, by way of provision of additional privileges in the metro cards, making cooperation with business alliances to give a discount on fees for a metro card issuance or top up, or provision of special benefits for the metro cardholders.



#### Quality Services

The Company focuses on quality services on the motto "Service above all else" so that the MRT service becomes "lifestyle of Bangkok residents" under the Company's professional operations. Various activities have been undertaken to promote the image of the current MRT services and create value added to Bangkok residents' lifestyle. Based on this policy, the Company sets out the following signs for quality services:

- Safety: The MRT passengers' life and property safety is the Company's top priority. All staff must be well aware of and expected to strictly follow the Company's safety requirements. In the past, the Company conducted regular training on safety and supervised to ensure that the Company's services meet Thailand's safety standard requirements and comparable to those of the world's leading mass rapid transit operators.
- Convenience: The Company takes care of all equipment and facilities in the MRT system to function properly, and proactively facilitates the passengers' convenient commute during high seasons, such as festival events and activities or exhibitions along the routes, by arranging for more ticketing points to best serve the passengers.
- Fast: The Company keeps the average train speed aligned with the timetable in response to passengers' needs during different periods.
- Reliability: The Company maintains the trains and signaling systems in good conditions without any impact on its services.
- Punctuality: The Company keeps the timetable and stops time at every station punctual with the least possible deviations.

#### Metro Cards for Everyone

The Company analyzes the customer characteristics and target customers, both regular and non-regular passengers, and then plans for and produces various styles of metro cards to suit every group of customers and to attract non-regular passengers to increasingly use the MRT cards in travelling. These arrangements comprise keeping styles of metro cards modern to ensure conformity with technology and increase in efficiency of metro cards to ensure that metro cards can be commonly used with the MRT Blue Line and the MRT Purple Line; cooperation with financial institutions in issuing co-branded cards for financial transactions and travelling on the MRT system, namely, in alliance with KASIKORNBANK Public Company Limited to make cards for Chulalongkorn University and Chulalongkorn Hospital; to make co-branded cards with other institutions or agencies. Moreover, there was the launch of a product in a form of top up voucher for interested organizations, for instance, Ananda Development Public Company Limited to distribute as welfare for its staff to top up their metro cards.

#### Price Strategy of Rail Business

The Company collects distance-related fares in fairness to passengers according to different distance of their journeys and provides discounts to school/college students, and children/elderly, by taking into account the fare rate collection of other mass rapid transit systems. The fare rates are adjusted in accordance with the relevant Concession Agreements.

#### • Marketing Promotion Strategies of Rail Business

The Company's classification of target customers is intended to draw up a strategy on sales promotion to effectively cover all target customer groups. As such, the Company's sales promotion and marketing plans based on target customers' lifestyle and settings are described as follows:

To promote the park and ride facilities to encourage more passengers to park their personal cars at the service locations and use the MRT service to commute to such business districts as Sukhumvit Road, Silom Road, Ratchadaphisek Road, in order to help alleviate traffic congestion and minimize global warming.



- O To organize sales promotion programs in association with leading companies and banks to create value added to the MRT services and offer privileges to metro card holders, with the underlying aim of encouraging passengers to change their behavior from using tokens to using more metro cards, by which customers would receive more convenient and rapid services with various privileges as follows:
  - Offering top-up discounts on the metro cards in association with Advanced Wireless Network Public Company Limited, Muang Thai Life Assurance Public Company Limited, FWD Life Insurance Public Company Limited, Ocean Life Insurance Public Company Limited, and Boon Rawd Trading Co., Ltd.;
  - Offering cash back, including redemption of credit card points in association with Krungthai Card Public Company Limited, Citibank, UOB Bank Public Company Limited, and Krungsriayudhya Card Company Limited;
  - Offering privileges in the form of offering discounts at shops, restaurants, theaters or events around the MRT routes.
- To increase the number of passengers or trips in the system through information services on highlighted events along the MRT routes, and offer various types of customized metro cards bearing specific logos or signs of agencies, organizations, office buildings or hotels both along and beyond the routes, for public relations and sales promotion, in order to distribute the metro cards to both current and new target customers.
- O To create and manage customer relationships (Customer Relation Management), as a building of good relationships and constant interactions with customers, to customers' satisfaction and to ensure brand loyalty, as well as to maintain the existing customer base, such as, managing the passenger information system in the form of the MRT Club membership system, creating a good network and relationship with general service users through social medial channels and public relations within the stations, including booth activities, both inside and outside the MRT routes.
- To develop the electronic payment system for online top-up via mobile phones with TrueMoney Wallet Application and Krungthai Bank Application, with a plan to develop the electronic payment system for retail shops within Metro Mall to make it more convenient and rapid for the MRT passengers.
- To encourage people to use government welfare smart cards in travelling with the MRT system, by improving the automatic fare collection systems (AFC) of the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) and the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line) to accommodate usage of their government welfare smart cards.

#### Marketing Communication Strategies of Rail Business

- To select effective channels of communication and public relations which are accessible to target groups of different marketing events through management of space and flows in the MRT system, e.g., standees within the stations, visual display on the token machines, visual display within the stations and trains, online social network media, including external public relations media from business alliances to provide the MRT service users with journey information. The Company also has emphasized development of the Mobile Application system titled Bangkok MRT Application to accommodate travelling plans of the passengers.
- O To focus on publicizing news and information to current service users, including new customers, via booths presenting the use of the service, both inside and outside the routes, with provision of useful advice and information, such as, information on privileges of the metro cards, application for the MRT club system membership, follow-up channels via social media and Bangkok MRT Application, with the aim of stimulating provision of information on services and



privileges to the service users, by emphasizing the punctuality, convenience, rapidity in journeys with the MRT system, making it possible to spend more time with families from using the services and to set a definite travelling timetable.

- To create destinations via regular communication, public relations and journey information along the MRT routes via preparation of event calendar, route maps with attractive destinations, e.g., office buildings, schools, hotels, shopping centers, tourist attractions and other landmarks, information relating to convenient and rapid links to other mass rapid transit systems, which can be searched via the website, Bangkok MRT Application and BEM Magazine.
- O To assure the passengers and people of the safety in travelling and service provision through public rations via television, radio and other media, and organize activities for public relations of service provision and safety-related activities at various venues, e.g., educational institutions, office buildings, to present the safety of the MRT system to the passengers and people for their understanding and confidence in the services.

#### • Development Strategy of Rail Business

The Company adopts a strategy for regular development of quality and its services to ensure service users' utmost satisfaction with convenience, rapidity, and safety, which would attract more service users of the MRT system. At present, the Company collaborates with financial institutions to make it possible to hold a single co-branded card for entering into multi-transactions.

#### • Distribution Strategies and Channels of Rail Business

The Company provides more sales outlets in addition to the ticket vending machines and ticket offices in the stations, for example, by presenting to various agencies such as organizations, banks, educational institutions, hotels, private companies, special metro card pages so that they would be used by such organizations on various occasions, for instance, as gifts for staff to build their morale, for customers to express the Company's appreciation of their support, or even for brand promotion, and as public relations materials, thereby making the MRT cards more precious than being used as a travelling ticket.

#### 5) Industrial Outlook and Competition of Rail Business

#### Mass Rapid Transit Systems in Bangkok and its Vicinity

Bangkok is a large capital city with a dense population, and is the economic center, giving rise to a rate of rapid growth and expansion. As a result, Bangkok today has been extremely facing traffic problems, which have accumulated over many years, along with an ongoing increase in population, number of cars, motorcycles and other vehicles in Bangkok every year, without any declining tendency, not to mention the demand for travel of the people which was rising, while the traffic areas and public transport systems could not adequately accommodate such rising demand, which was considered the main problem occurring in other densely populated capital cities worldwide. From such problems, the government has therefore implemented a policy to emphasize the development of various public transport networks to resolve the traffic problems in order to accommodate an increase in the population, including the economic growth of the country.

In this regard, travelling by residents in Bangkok can be divided into two modes of transport systems, namely, personal transport system and public transport system.

#### Personal Transport System

As a result of the people's residences in Bangkok and its vicinity which are spread all over, travelling, including the growing number of highly-paid population, coupled with the inadequacy of the existing mass transit systems, travelling by personal cars then remains popular, if comparing the expenses spent on travelling with personal cars, together with service quality and safety, as a result, the use of a personal car is still necessary and comfortable to travel. On the contrary, the expansion of traffic areas in Bangkok still remains limited and inadequate to accommodate the increasing number of vehicles.



#### Public Transport System

As a result of the traffic congestion problem, particularly during peak hours, and the growth of the real estate projects, particularly the real estate surrounding the electric train routes, consumers' demand for the public transportation system of certain types was considerably high, especially for the electric train system which was significantly expanding by reason of change in the urban people's behaviors of selection of residences and travelling by significantly focusing attention to convenience, rapidity, punctuality and shortened time in travelling.

#### Public Bus Service

At present, there are various types of public buses for service at different service rates, but the number of public buses in service in Bangkok and its vicinity remained inadequate, owing to the fact that a certain number of buses were undergoing improvement and rearrangement of bus routes was made, even if there was currently a total of 18,914 buses in service, let alone more than 2,836 passenger vans which became enormously popular among the people because of provision of its convenient and rapid service in travelling. Furthermore, the Bangkok Mass Transit Authority (BMTA) has also applied technologies, i.e., E-Ticket system or payment via QR-Code Mobile Banking, to improve its service quality to ensure conformity to the current situations affected by the outbreak of COVID-19, in which people have to use the bus service in new normal, therefore, adjusted the operating guidelines under the concept of "New BMTA New Normal" which passengers have to always wear medical face masks while on board, clean their hands with gel hand sanitizers, ensure a social distancing, and scan QR Code via Thai Chana Application, for the greater safety in the services. But due to the continuing traffic congestion problems on roads as whole, especially during the morning peak hours from 6.30-8.30 hrs. and the evening peaks hours from 16.30-18.30 hrs. and during the rainy season, travelling is then time-consuming. (Source: Bangkok Mass Transit Authority, information as at November 2020)

#### o Trains

Over the past years, the government sector has implemented a policy to provide relief assistance to the low-income earners to enable them to spend through the government welfare smart cards, whereby the cardholders can use the service for both public service buses (bus), passenger vehicles served by The Transport Co., Ltd., trains and electric trains, free of charge in the amount not exceeding Baht 500 baht per system per month. However, the train system service still lacks the facilities and the safety for the service users, due to the fact that the conditions of the trains in use are currently not comfortable, not to the service users' satisfaction, and it takes quite a long time to travel, let alone the limited routes not covering the entire city. As a result, the State Railway of Thailand (SRT) expedited additional dual track rail system construction projects on many routes, together with the new depot construction project, in order to enhance the capacity and accommodate the maintenance of the rising number of trains and to develop the Thai railway system in accordance with Thailand's transportation infrastructure development strategy. In this regard, the SRT's train service is not considered the Company's direct competitor owing to different service routes, namely, the SRT mainly aims to provide the service to suburban areas.

#### o BTS

BTS Skytrain is Thailand's first mass rapid transit rail system on the elevated dual tracks in separate directions, with its first service opening on December 5, 1999 on 2 lines, namely, Sukhumvit Line and Silom Line; and in 2020, the line extension project of Mo Chit - Saphan Mai - Khu Khot Section was gradually opened for the people's trial, covering a total service distance of 68 km., with 59 stations. As such, travelling by BTS Skytrain is another option which facilitates commuters' travelling, and with the BTS Skytrain's route running to the heart of the city, it then becomes massively popular among people, and it also contributes to a factor in continuously increasing the service users.



#### o ARL

The Suvarnabhumi Airport Rail Link or Airport Rail Link is a special mass rapid transit rail system project, as part of the projects for construction of suburban rail system, carried out and operated by the State Railway of Thailand (SRT). The Suvarnabhumi Airport Rail Link is the electric train system which has both underground and elevated structures, with the alignment running to accommodate journeys from the eastern and northern outskirts, and passengers from the Suvarnabhumi Airport, to the center of Bangkok at Phaya Thai Station, covering a total of 8 stations, with a distance of 28.6 kilometers. Airport Link was opened for service on August 23, 2010. For the current service provision, a plan was set up to develop, improve the service, and enhance the service capacity of a total of 9 Airport Rail Link trains to ensure the service stability, thereby satisfying the growing needs of the passengers.

As a result of an ongoing increase in a number of the public transport system service users, it reflected the change in travel behavior of residents in Bangkok and its surrounding provinces from using personal car to use the public transport system. This indicated the development in terms of convenience, rapidity, safety and the extended coverage areas of travelling to ensure transit in the through operation system at present. However, owing to the traffic congestion, air and noise pollution, and potential accidents, the transit rail system is then regarded as a significant milestone for change and development of the mass rapid transit systems in Bangkok and its vicinity, which will help alleviate traffic problems, ensure safe, convenient, rapid and shortened journeys of service users, and result in a positive effect on the economy and environment. Therefore, the mass rapid transit system becomes an important variable of a travelling mode which helps improve the quality of travelling life of urban people and minimize the usage of fuels and national resources.

#### 6) Industrial Outlook and Government Policy of Rail Business

Thailand's overall economic outlook in 2020 declined by 6.1 percent as compared to that during the same period in the previous year, mainly due to the situation of the outbreak of the COVID-19 which had occurred since the end of 2019 and in the second quarter of 2020, it was then severely affected by the stringent measures to contain the spread of the COVID-19, both at home and abroad, including an occurrence of a new wave of the spread of COVID-19 in late 2020, which was a factor in putting pressure on and affecting all sectors. But when compared with the third quarter of 2020, Thailand's overall economy had improved, mainly resulting from the relaxation of lockdown measures and various remedial measures of the government sector which helped stimulate the economy from the situation which began to ease and be able to cope with the first wave of the outbreak of the disease, before its new wave has occurred all over the country in late 2020 until present, thereby possibly causing a slowdown in the economy once again. (Source: Office of the National Economic and Social Development Board: The Bank of Thailand)

**In terms of transportation system development**, the Ministry of Transport has strived to develop the transportation systems of Thailand to serve as a mechanism to drive the country's economy to achieve balanced and stable growth. The infrastructure development for transportation would cover areas across the country, accommodate constant transportation and travelling which are connected together in a variety of modes, whether it be primary, secondary, and sub-tours, within the area, especially the mass transit system by electric train, one of the strategic plans for transportation development and as another important instrumental in driving the economy and reviving the country. In this regard, the M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line Extension), Hua Lamphong - Bang Khae Section (Lak Song Station), and Bang Sue - Tha Phra Section, one of the projects to which the government had given priority in the implementation of each project, could be opened for service within the respective specified timeframes, namely, the M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line Extension), Hua Lamphong - Bang Khae Section (Lak Song Station), and the M.R.T. Chaloem Ratchamongkhon Line, Bang Sue - Tha Phra Section, were officially opened for service on September 29, 2019 and on March 30, 2020, respectively, as a result, the entire route of the MRT Blue Line Project was opened for full service as a single network (Through Operation), thereby alleviating traffic problems in Bangkok from where is the center of all activities to the center of transport and travelling network. Moreover, the BTS Gold Line Project, Phase 1, was opened for the people's trial on December 16, 2020, as well as the MRT Green Line Extension Project, Mo Chit - Saphan Mai - Khu Khot Section, which was gradually opened for the people's trial in 2020. In addition,



the government sector has expedited the construction of a variety of metro projects, including the MRT Orange Line, Thailand Cultural Centre - Min Buri Section (Suwinthawong), which was planned to open for service in 2024; and the Bang Khun Non - Thailand Cultural Centre to open for service in 2026; the MRT Yellow Line, Lat Phrao - Samrong to open for service in 2022; MRT Pink Line, Khae Rai - Min Buri to open for service in 2022. Moreover, many other major metro projects are pushed forward, namely, the MRT Purple Line (South), Tao Poon - Rat Burana (Kanchanaphisek Outer Ring Road); the MRT Yellow Line Extension, Yaek Ratchada - Lat Phrao - Yaek Ratchayothin; the MRT Pink Line Extension, Si Rat -Mueang Thong Thani; and the MRT Brown Line, Khae Rai - Lam Sali (Bueng Kum); the MRT Grey Line, Section 1: Watcharaphon - Thong Lor; the MRT Grey Line, Section 2: Phra Ram 3 - Tha Phra; and the Bangna-Suvarnabhumi Line Project. Currently, they are in the process of proposing a budget for study and review of project details, including investment format, all the projects have been accelerated by the government sector to ensure compliance with the strategic plans for infrastructure development for transportation of the country, in order to build a metro network which covers more areas, and to be another option for travelling which can schedule easily, rapidly and safely, as well as to help diminish environmental problems, improve the quality of life of the people in the pursuit of the country's continual development and sustainability.

#### Real estate development around the metro routes

The economic recession which had continued from the beginning of 2020 due to the outbreak of the COVID-19 made the real estate market during the first half of the year undesirable to investors, thereby directly affecting Thai people's purchasing power in that their purchasing power was weakened and they chose to spend less, therefore, it might not be the right time to purchase residences. However, in the second half of 2020, the real estate development had continued but at a lower rate than the previous year. After the country began to loosen the lockdown measures from the situation of the first wave of the COVID-19 epidemic which had been defused, entrepreneurs adjusted themselves by implementing the marketing strategies to stimulate purchasing power of consumers and investors, offering the goods price reduction to meet the purchasing power available in the market, affecting the decisions of consumers and investors with the purchasing power to start spending continuously, together with the demand for real estate, in particular the real estate market surrounding the metro routes which still remained in great demand from consumers and investors, and it was one of the main factors in selection of residences, including the full service opening of the MRT Blue Line Project (M.R.T. Chaloem Ratchamongkhon Line); the service opening of the MRT Green Line Extension Project; and the plan for the service opening of other metro projects.

Moreover, a real estate development new trend, the "Mixed Use Projects", under which the real estate developer has the concept in urban development in another format, focuses on mixed use of real estate of different types for the maximum benefits. This was due to the restrictions on land use in Bangkok which allowed for real estate development for a single use or project development only for residential or commercial purpose may no longer ensure the optimum use of land. For that reason, the mixed use projects started to play a role and become enormously popular among the big real estate entrepreneurs and are also spread along the route alignment of the MRT Blue Line (M.R.T. Chaloem Ratchamongkhon Line), for example, Singha Complex, the Luxury Mixed Use Complex, on Asoke-Phetchaburi Road, connecting to MRT Phetchaburi Station, regarded as the potential landmark and major business center, launched on December 13, 2018; Samyan Mitrtown, the mixed use project launched on September 20, 2019 connecting to the BTS Sam Yan Station; and The PARK Life Project, a new retail lifestyle of urban people, located in the intersection area of Rama IV and Ratchadaphisek Road, adjacent to the Queen Sirikit National Convention Centre Station, which was launched on August 28, 2020. These mixed use projects become the destinations in demand among entrepreneurs, investors, tourists, and residents. Therefore, the development of the rail system provides the network which covers the wide-areas of Bangkok and its vicinity and becomes a key factor in real estate development in various forms, such as, condominiums, office buildings, shopping centers, flea markets, famous tourist attractions, hotels, apartments, restaurants and supermarkets, to ensure that they are rapidly growing together.



## 7) <u>Progress of Development of the Mass Rapid Transit Systems under the Government Policy</u>

Project	Current Status of Project
SRT Red Line, suburban railway system:	Bang Sue-Rang Sit, with a distance of 26.30 km.
<ul> <li>North: Bang Sue-Rangsit</li> <li>South: Bang Sue-Hua Lamphong-Mahachai</li> <li>East: Bang Sue-Makkasan-Chachoengsao</li> <li>West: Bang Sue-Taling Chan-Salaya,</li> </ul>	Contract 1: Civil Work for Bang Sue Station and Depot, SRT executed the agreement for engagement of SU Joint Venture (Sino-Thai Engineering & Construction Public Company Limited and Unique Engineering and Construction Public Company Limited) on January 18, 2013.
All of the routes start at the Bang Sue Grand Station.	Contract 2: Civil Work for Bang Sue - Rang Sit Section, SRT executed the agreement for engagement of Italian-Thai Development Public Company Limited on January 31, 2013.
	Contract 3: M&E System, including the supply of carriages, SRT executed the agreement for engagement of MHSC Joint Venture (MITSUBISHI Heavy Industrial Ltd., Hitachi and Sumitomo Corporation) on March 29, 2016.
	- It was expected to open for service in and around 2023.
	Taling Chan-Salaya, with a distance of 14.8 km.
	- The project was already approved on February 26, 2019.
	Currently, it is in the process of bid preparation.
	Taling Chan-Siriraj, with a distance of 5.7 km.
	- The project was already approved by the Council of Ministers on March 5, 2019.
	- Currently, it is under construction, which was expected to be completed in 2022.
	Hua Lamphong-Mahachai, with a distance of 37 km.
	- SRT reviewed the detailed design.
	Rangsit-Thammasat University (Rangsit Campus), with a distance of 8.84 km.
	- The project was already approved on February 26, 2019.
	- Currently, it is in the process of preparing a Royal Decree on Land Expropriation.
	Bang Sue-Taling Chan, with a distance of 15 km.
	- SRT engaged Unique - Chun Wo Joint Venture to carry out the construction. The construction was 100% completed.
	It is in the process of trial run and it was expected to open for service in late 2021.
MRT Blue Line	Bang Sue-Tha Phra and Hua Lamphong-Bang Khae, with a distance of 27 km.
	- Section 1: Bang Sue-Tha Phra was officially opened for service on August 11, 2017.
	- Section 2: Hua Lamphong-Bang Khae (Lak Song Station):
	<ul> <li>Opened for the people's trials from Hua Lamphong Station - Tha Phra Station on July 29, 2019.</li> <li>Opened for the people's trials from Hua Lamphong Station - Bang Wa Station on August 24, 2019.</li> <li>Opened for the people's trials from Hua Lamphong - Bang Wa Station, without any interchange at Hua Lamphong Station on September 7, 2019.</li> </ul>



Project	Current Status of Project
	<ul> <li>Opened for the people's trials from Hua Lamphong Station - Lak Song Station on September 21, 2019.</li> <li>Officially opened for service on September 29, 2019.</li> </ul>
	- Section 3: Bang Sue-Tha Phra, with its official service and entire network opening on March 30, 2020.
	Bang Khae - Phutthamonthon Sai 4 (with a distance of 8 km.)
	It is in the process of consideration and review of passenger volume and justification of the project by the Ministry of Transport.
MRT Green Line	Mo Chit-Saphan Mai-Khu Kot, with a distance of 19 km.
Mo Chit-Saphan Mai-Khu Kot and Bearing- Samut Prakan, with a total	- MRTA executed the civil work contracts, Contracts 1-4, on April 3, 2015, as follows:
distance of approximately 25 km.	Contract 1: (Civil Works), Mo Chit - Saphan Mai, with a distance of 12 kilometers, operated by Italian-Thai Development Public Company Limited;
	Contract 2: (Civil Work), Saphan Mai - Khu Kot, with a distance of 7.5 kilometers, operated by UN-SH-CH Joint Venture (Unique Engineering and Construction Public Company Limited, Sinohydro Corporation Limited, and China Habour Engineering Company Limited);
	Contract 3: (Depot and Park & Ride Facilities) operated by STEC-AS-3 Joint Venture (SINO-Thai Engineering and Construction Public Company Limited, A.S. Associated Engineering (1964) Co., Ltd.);
	Contract 4: (Design and Construction of Trackwork) operated by STEC-AS-3 Joint Venture (SINO-Thai Engineering and Construction Public Company Limited, A.S. Associated Engineering (1964) Co., Ltd.).
	- On August 9, 2019, one station, namely, Ha Yaek Lat Phrao Station, was opened for service.
	- On December 4, 2019, another four stations were opened for service, namely, Phahonyothin 24 Station, Ratchayothin Station, Sena Nikhom Station, and Kasetsart University Station.
	- On June 5, 2020, another four stations were opened for the people's trials, namely, Royal Forest Department Station, Bang Bua Station, 11 <sup>th</sup> Infantry Regiment Station, and Wat Phra Si Mahathat Station.
	<ul> <li>On December 16, 2020, another seven stations were opened for service, namely, Wat Phra Si Mahathat Station, Phahonyothin 59 Station, Sai Yud Station, Saphan Mai Station, Bhumibol Adulyadej Hospital Station, Royal Thai Air Force Museum Station, Yaek Kor Por Aor Station, and Khu Khot Station.</li> </ul>
	Bearing-Samut Prakan, with a distance of 13 km.
	- On April 3, 2017, one station, namely, Samrong Station, was opened for service.
	- On December 6, 2018, another nine stations were opened for the people's trials from Samrong Station to Kheha Samut Prakan Station.



MRT Orange Line Bang Khun Non-Min Buri (Swwinthawong). with the total distance of 35.9 km.  The West Section: Taling Chan-Thailand Cultural Centre-Min Buri (Stowinthawong). with the total distance of 35.9 km.  The Council of Ministers' resolution to carry out the construction of the MRT Orange Line Project, Thailand Cultural Centre-Min Buri (Suwinthawong).  The Council of Ministers' resolution to carry out the construction of the MRT Orange Line Project the construction of the MRT Orange Line Project between MRTA and contractors as winning bidders in Contracts 1, 2, 3, 4, 5 and 6, as follows:  Contract 1: (Civil Work), Thailand Cultural Centre - Soi Ramkhamhaeng 12, operated by CKST Joint Venture (CH. Karnchang Public Company Limited);  Contract 2: (Civil Work), Soi Ramkhamhaeng 12 - Hua Mak, operated by CKST Joint Venture (CH. Karnchang Public Company Limited);  Contract 3: (Civil Work), Soi Ramkhamhaeng Public Company Limited;  Contract 3: (Civil Work), Soi Ramkhamhaeng Public Company Limited;  Contract 4: (Civil Work), Si Yack Banna - Suwinthawong, operated by Unique Engineering and Construction Public Company Limited;  Contract 5: (Civil Work), Depot and Park & Ride Facilities, in the area of MRTA's soffice, Phra Ram 9 Road, operated by CKST Joint Venture (CH. Karnchang Public Company Limited);  Contract 5: (Civil Work), Depot and Park & Ride Facilities, in the area of MRTA's soffice, Phra Ram 9 Road, operated by CKST Joint Venture (CH. Karnchang Public Company Limited);  Contract 6: Design and Construction Public Company Limited;  Contract 6: Design and Construction Public Company Limite	Project	Cı	urrent Status of Project
by the Council of Ministers' resolution to carry out the construction of the MRT Orange Line Project, Thailand Cultural Centre-Min Buri (Suwinthawong).  - On February 9, 2017, the contract signing ceremony was held for the evid work construction of the MRT Orange Line Project between MRTA and contractors as winning bidders in Contracts 1, 2, 3, 4, 5 and 6, as follows:  Contract 1: (Civil Work), Thailand Cultural Centre - Soi Ramkhamhaneng 12, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited, Contract 2: (Civil Work), Soi Ramkhamhaneng 12 - Hua Mak, operated by CKST Joint Venture (CH. Karnchang Public Company Limited);  Contract 3: (Civil Work), Soi Ramkhamhaneng 12 - Hua Mak, operated by CKST Joint Venture (CH. Karnchang Public Company Limited);  Contract 3: (Civil Work), Hua Mak - Khlong Bamma, operated by Inalian-Thai Development Public Company Limited;  Contract 4: (Civil Work), Si Yaek Bamma - Suwinthawong, operated by Unique Engineering and Construction Public Company Limited;  Contract 5: (Civil Work), Depot and Park & Ride Facilities, in the area of MRTA's office, Phra Ram 9 Road, operated by CKST Joint Venture (CH. Karnchang Public Company Limited);  Contract 6: Design and Construction of Trackwork, operated by Unique Engineering and Construction of Trackwork, operated by Unique Engineering and Construction of Trackwork, operated by Unique Engineering and Construction Public Company Limited;  Contract 6: Design and Construction of Trackwork, operated by Unique Engineering and Construction Public Company Limited;  Contract 6: Design and Construction of Trackwork public Company Limited;  Contract 6: Design and Construction	Bang Khun Non-Min Buri (Suwinthawong),	Centre, with a Section: Thail	distance of 27 km., and the East land Cultural Centre-Min Buri
was held for the civil work construction of the MRT Orange Line Project between MRTA and contracts as winning bidders in Contracts 1, 2, 3, 4, 5 and 6, as follows:  Contract 1:  (Civil Work), Thailand Cultural Centre - Soi Ramkhamhaeng 12, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited;  Contract 2:  (Civil Work), Soi Ramkhamhaeng 12 - Hua Mak, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited;  Contract 3:  (Civil Work), Hua Mak - Khlong Banma, operated by Italian-Thai Development Public Company Limited;  Contract 4:  (Civil Work), Si Yack Banma - Suwinthawong, operated by Unique Engineering and Construction Public Company Limited;  Contract 5:  (Civil Work), Depot and Park & Ride Facilities, in the area of MRTA's office, Phra Ram 9 Road, operated by CKST Joint Venture (CH. Karnchang Public Company Limited;  Contract 5:  Contract 5:  Contract 6:  Design and Construction Public Company Limited;  Contract 6:  Design and Construction		by the Council construction	of Ministers' resolution to carry out the of the MRT Orange Line Project,
Centre - Soi Ramkhamhaeng 12, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited);  Contract 2:  Civil Work), Soi Ramkhamhaeng 12 - Hua Mak, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited;  Contract 3:  Contract 3:  Contract 4:  Contract 4:  Contract 5:  Contract 5:  Contract 5:  Contract 5:  Contract 5:  Contract 6:  Contract 6:		was held for the Orange Line Pas winning bid	he civil work construction of the MRT Project between MRTA and contractors
- Hua Mak, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited);  Contract 3: (Civil Work), Hua Mak - Khlong Banma, operated by Italian-Thai Development Public Company Limited;  Contract 4: (Civil Work), Si Yaek Banma - Suwinthawong, operated by Unique Engineering and Construction Public Company Limited;  Contract 5: (Civil Work), Depot and Park & Ride Facilities, in the area of MRTA's office, Phra Ram 9 Road, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino- Thai Engineering & Construction Public Company Limited;  Contract 6: Design and Construction of Trackwork, operated by Unique Engineering and Construction Public Company Limited.  On January 28, 2020, the Council Ministers passed a resolution approving the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong) on a PPP Net Cost basis, for a period of 30 years from the commencement of service for the MRT Orange Line Project.  On July 10-24, 2020, MRTA issued an announcement inviting interested private entities to purchase a request for proposal for investment in the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong).  On November 9, 2020, MRTA opened for the private entities to submit their requests for quotation for the MRT Orange Line Project, Bang Khun Non-Min Buri		Contract 1:	Centre - Soi Ramkhamhaeng 12, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company
Banma, operated by Italian-Thai Development Public Company Limited;  Contract 4: (Civil Work), Si Yaek Banma - Suwinthawong, operated by Unique Engineering and Construction Public Company Limited;  Contract 5: (Civil Work), Depot and Park & Ride Facilities, in the area of MRTA's office, Phra Ram 9 Road, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited);  Contract 6: Design and Construction of Trackwork, operated by Unique Engineering and Construction Public Company Limited.  - On January 28, 2020, the Council Ministers passed a resolution approving the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong) on a PPP Net Cost basis, for a period of 30 years from the commencement of service for the MRT Orange Line Project.  - On July 10-24, 2020, MRTA issued an announcement inviting interested private entities to purchase a request for proposal for investment in the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong).  - On November 9, 2020, MRTA opened for the private entities to submit their requests for quotation for the MRT Orange Line Project, Bang Khun Non-Min Buri		Contract 2:	- Hua Mak, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public
Suwinthawong, operated by Unique Engineering and Construction Public Company Limited;  Contract 5: (Civil Work), Depot and Park & Ride Facilities, in the area of MRTA's office, Phra Ram 9 Road, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited);  Contract 6: Design and Construction of Trackwork, operated by Unique Engineering and Construction Public Company Limited.  On January 28, 2020, the Council Ministers passed a resolution approving the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong) on a PPP Net Cost basis, for a period of 30 years from the commencement of service for the MRT Orange Line Project.  On July 10-24, 2020, MRTA issued an announcement inviting interested private entities to purchase a request for proposal for investment in the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong).  On November 9, 2020, MRTA opened for the private entities to submit their requests for quotation for the MRT Orange Line Project, Bang Khun Non-Min Buri		Contract 3:	Banma, operated by Italian-Thai Development Public Company
Facilities, in the area of MRTA's office, Phra Ram 9 Road, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited);  Contract 6: Design and Construction of Trackwork, operated by Unique Engineering and Construction Public Company Limited.  On January 28, 2020, the Council Ministers passed a resolution approving the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong) on a PPP Net Cost basis, for a period of 30 years from the commencement of service for the MRT Orange Line Project.  On July 10-24, 2020, MRTA issued an announcement inviting interested private entities to purchase a request for proposal for investment in the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong).  On November 9, 2020, MRTA opened for the private entities to submit their requests for quotation for the MRT Orange Line Project, Bang Khun Non-Min Buri		Contract 4:	Suwinthawong, operated by Unique Engineering and Construction Public
Trackwork, operated by Unique Engineering and Construction Public Company Limited.  - On January 28, 2020, the Council Ministers passed a resolution approving the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong) on a PPP Net Cost basis, for a period of 30 years from the commencement of service for the MRT Orange Line Project.  - On July 10-24, 2020, MRTA issued an announcement inviting interested private entities to purchase a request for proposal for investment in the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong).  - On November 9, 2020, MRTA opened for the private entities to submit their requests for quotation for the MRT Orange Line Project, Bang Khun Non-Min Buri		Contract 5:	Facilities, in the area of MRTA's office, Phra Ram 9 Road, operated by CKST Joint Venture (CH. Karnchang Public Company Limited and Sino-Thai Engineering & Construction
a resolution approving the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong) on a PPP Net Cost basis, for a period of 30 years from the commencement of service for the MRT Orange Line Project.  - On July 10-24, 2020, MRTA issued an announcement inviting interested private entities to purchase a request for proposal for investment in the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong).  - On November 9, 2020, MRTA opened for the private entities to submit their requests for quotation for the MRT Orange Line Project, Bang Khun Non-Min Buri		Contract 6:	Trackwork, operated by Unique Engineering and Construction Public
inviting interested private entities to purchase a request for proposal for investment in the MRT Orange Line Project, Bang Khun Non-Min Buri (Suwinthawong).  - On November 9, 2020, MRTA opened for the private entities to submit their requests for quotation for the MRT Orange Line Project, Bang Khun Non-Min Buri		a resolution ap Bang Khun No Net Cost basi commencemen	proving the MRT Orange Line Project, on-Min Buri (Suwinthawong) on a PPP s, for a period of 30 years from the
entities to submit their requests for quotation for the MRT Orange Line Project, Bang Khun Non-Min Buri		inviting interest request for poor orange Line	ested private entities to purchase a roposal for investment in the MRT Project, Bang Khun Non-Min Buri
		entities to subs MRT Orange I	mit their requests for quotation for the Line Project, Bang Khun Non-Min Buri



Project	Current Status of Project
MRT Yellow Line	Lat Phrao-Samrong, with a distance of 30.4 km.
	- On May 30, 2017, the Council of Ministers resolved to approve the results of selection of the private entity and draft Concession Agreement for the MRT Yellow Line Project, in collaboration with BSR Joint Venture (comprising BTS Group Holdings Public Company Limited, Ratchaburi Electricity Generating Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited).
	- On June 16, 2017, MRTA signed the Concession Agreement with Eastern Bangkok Monorail Company Limited (EBM).
	- On August 27, 2018, the construction of the project officially commenced, which would take a period of 39 months (3 years and 3 months). It was expected to be completed and ready for service in 2022.
	MRT Yellow Line Extension: Ratchada-Lat Phrao Intersection to Ratchayothin Intersection, with a distance of 2.6 km., with 2 stations:
	- On October 17, 2018, the Commission for the Management of Land Traffic System Management Committee (CMLT) resolved to approve that the project be incorporated in the Mass Rapid Transit Master Plan in Bangkok Metropolitan and its vicinity. Currently, MRTA is in the process of complying with procedures and laws in relation to amendment of the Joint Venture Agreement.
MRT Pink Line	Khae Rai-Min Buri, with a distance of 34.5 km.
	- On May 30, 2017, the Council of Ministers resolved to approve the results of selection of the private entity and draft Concession Agreement for the MRT Pink Line Project, in collaboration with BSR Joint Venture (comprising BTS Group Holdings Public Company Limited, Ratchaburi Electricity Generating Public Company Limited and Sino-Thai Engineering & Construction Public Company Limited).
	- On June 16, 2017, MRTA signed the Concession Agreement with Northern Bangkok Monorail Company Limited (NBM).
	- On August 27, 2018, the construction of the project official commenced, which would take a period of 39 months (3 years and 3 months). But there was a problem lying in moving the station in the front area of Nonthaburi Government Center and Nopparat Station, with the environmental impact analysis report (EIA) requiring to be revised, as such, the service opening was then postponed from the original target to occur at the end of 2021 for another one year, i.e., in and around 2022.
	MRT Pink Line Extension, Si Rat Station-Mueang Thong Thani:
	- On October 17, 2018, the Commission for the Management of Land Traffic System Management Committee (CMLT) resolved to approve that the project be incorporated in the Mass Rapid Transit Master Plan in Bangkok Metropolitan and its vicinity. Currently, MRTA is in the process of complying with procedures and laws in relation to amendment of the Joint Venture Agreement.



Project	Current Status of Project
MRT Brown Line	Khae Rai - Lam Sali (Bueng Kum), with a distance of 22.1 km.
	- January 3, 2019, the Commission for the Management of Land Traffic System Management Committee (CMLT) resolved to assign the OTP to incorporate the development plan for the MRT Brown Line Project, Khae Rai-Lam Sali (Bueng Kum) into the Mass Rapid Transit Master Plan in Bangkok Metropolitan and its vicinity, Phase 1.
	- Currently, MRTA is in the process of designing a foundation for the project located on Prasert Manukit Road overlapping the Third Stage Expressway, Northern Section (N2), before delivery of the same to ETA for a simultaneous use in bidding and construction.
MRT Purple Line	Tao Poon-Rat Burana (Kanchanaphisek Outer Ring Road), with a distance of 23.6 km.
	- On July 25, 2017, the Council of Ministers passed a resolution granting approval for MRTA to carry out the construction of civil works for the MRT Purple Line Project, Tao Poon-Rat Burana Section (Kanchanaphisek Outer Ring Road).
	- Currently, the project is in the process of preparing for land expropriation survey and assessing remuneration for land expropriation, which would be carried out by MRTA simultaneously with the process of price estimation to make a bid preparation for seeking a private partnership.

Sources: www.railway.co.th, www.mrta.co.th, www.otp.go.th, www.bts.co.th, www.bkkmrt.com, www.mrta-orangelineeast.com, www.mrta-yellowline.com, and information collected by the Company.

#### 8) Procurement of Products or Services of Rail Business

#### • Nature of Procurement of Products

The mass rapid transit system projects were awarded to the Company by the way of concessions from MRTA, a state agency established and existing under the "Mass Rapid Transit Authority of Thailand Act B.E. 2543 (2000)" to operate the mass rapid transit systems in Bangkok and its vicinity, including other designated provinces, with safety and efficiency. MRTA is a state enterprise under the supervision of the Minister of Transport. The Company specializes in the metro business, conducts the project feasibility studies, and submits its investment proposals for such projects with appropriate returns and conditions. The existing concession projects were awarded for investment, supply of rolling stocks, operation and maintenance, whereby the government sector invests in all civil infrastructure, namely, stations and facilities, tunnels, ventilation systems and trackwork, etc., while the Company invests in the railway systems, namely, rolling stocks, signaling and operation systems, communications and SCADA systems, power supply, automatic fare collection, platform screen door, and depot workshop systems, etc.

#### The M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line)

The Company engaged Joint Venture CKET as the MRT project manager (Project Manager) for the MRT Blue Line, Bang Sue - Hua Lamphong Section (from August 2000 to July 2009) to manage technical operations, such as procurement of the M&E Equipment as ordered from manufacturers and liaison with contractors and relevant authorities regarding the installation of the M&E Equipment. Upon expiration of the engagement agreement of CKET for project management, the Company was able to efficiently administer and manage the MRT Project, as well as improve and develop the efficient service provision on its own. In regard to the supply and maintenance of the M&E Equipment, the Company engaged Lincas and Siemens to manufacture the M&E



Equipment. Lincas and Siemens are responsible for the design, manufacture, supply, installation, testing, and commissioning of the M&E Equipment. The Company also engaged Siemens as a contractor for maintaining the M&E Equipment. In respect of the MRT Blue Line Extension Project, Hua Lamphong - Bang Khae Section and Bang Sue - Tha Phra Section, the Company engaged CH. Karnchang Public Company Limited as Project Manager, with Siemens having the duty to supply rolling stocks, power supply equipment, signaling system, control, and communications system. Moreover, the Company engaged Siemens as a contractor for maintaining the M&E Equipment of the MRT Blue Line Project for the whole route.

## The M.R.T. Chalong Ratchadham Line Project (MRT Purple Line), Bang Yai - Rat Burana, Bang Yai - Bang Sue Section, (Khlong Bang Phai Station - Tao Poon Station)

The Company executed the Concession Agreement for the MRT Purple Line Project, Bang Yai - Rat Burana, Bang Yai - Bang Sue Section, (Khlong Bang Phai Station - Tao Poon Station), with MRTA, on a PPP Gross Cost basis, namely, the government sector invests in all civil works and the Company invests in the M&E Systems and the rolling stocks, including the O&M Services in accordance with the service standards as defined in the conditions of the Agreement. The government sector shall make repayment in installments to the Company for the costs of the M&E Systems after the delivery of the ownership. In this regard, the Company will provide the O&M Services in accordance with the service standards as defined in the Agreement. In addition, the government sector is entitled to all farebox revenue and commercial development revenue from the utilization of the civil infrastructure and the railway systems and the government sector shall make repayment to the Company in the form of service fee for the O&M Services, for a contractual period of 30 years, divided into two phases, namely, Works under Phase 1: Design, supply, installation, testing of the M&E Systems and other related systems, including trial run to ensure its readiness for public service until the commencement of the Operation Service; and Phase 2: O&M Services. The Company

CH. Karnchang Public Company Limited as Project Manager for the implementation of Works under Phase 1 of the Concession Agreement. The Company and CH. Karnchang Public Company Limited engaged MTJV (Marubeni-Toshiba Joint Venture) for the supply of rolling stocks, power supply equipment, signaling system, control, and communications systems, as well as maintenance service.

#### 9) Environmental Impact of Rail Business

According to the Company's energy conservation policy, the Company will regularly devise new guidelines for improving, changing and implementing energy-saving projects every year to ensure the efficient use of energy while minimizing environmental pollutions, as well as reducing the electricity cost for the Company. The electricity consumption of the business in management of the mass rapid transit system projects constitutes the majority of costs of the Company; therefore, the Company formulated measures for energy saving management in 2020 to reduce energy consumption and to conserve the environment by reducing Carbon dioxide (CO<sub>2</sub>) emissions.

The Company attaches importance to reduction of energy consumption for the purpose of environmental conservation because the environment is everything around us, comprising water, air, sunlight, including assorted resources, e.g., forests, soils and minerals, etc., all of which have an influence on human life. The Company then realizes the significance of and the engagement with nature conservation to ensure the availability of the country's nature. To that end, the sustainable and continuous guidelines have been implemented by the Company, as follows:

- Reasonably reaping the benefits from the nature, such as, planting trees around buildings to reduce the heat temperature of natural light shining off buildings, thereby functioning the air conditioners in a more economical way;
- Sparingly using energy generated from natural resources, such as, helping save electricity by turning it on when it is needed only and focusing on use of natural daylight, saving oil fuel, using tap water wisely by watering the plants with the used water, and campaigning for turning faucets off when not in use, etc.



- Helping preserve the air environment by reducing air pollution, such as, not burning garbage or not taking any other action causing air pollution, and inspecting the engine condition of the Company's vehicles to make sure they are in a normal condition so as not to release toxic fumes into the air, etc.
- Helping conserve natural resources because natural resources are all beneficial to human beings in terms of consumption and utilization, therefore, helping conserve our nature by using other materials in place of using natural resources, such as, reducing the use of foam as much as possible, the use of cloth bags instead of plastic bags and not littering and not discharging wastewater into natural canals, etc.

The Company also prioritizes and has implemented various measures on the organization, for example, promotion and public relations measures, control measure, and technical change measures, etc. In addition, the Company has continuously studied and developed for the purpose of efficient energy use. Over the past years, the Company had replaced the existing light bulbs with efficient light bulbs inside the MRT train stations and the Phra Ram 9 Depot, thereby having a profound effect on the Company and reducing Carbon dioxide (CO<sub>2</sub>) emissions. In 2020, the Company organized the energy saving projects relating to the use of more efficient light bulbs, including expansion of the scope of operations in the parts of the stations and Kanlapaphruek Depot, the MRT Blue Line Extension, to cover all areas of the Company.

#### Here are the activities and measures implemented in 2020:

- Measure for replacing the existing light bulbs with efficient light bulbs (LED bulbs) in the Phra Ram 9 Depot, the M.R.T. Chaloem Ratchamongkhon Line Project (the original MRT Blue Line);
- Measure for controlling turning on and off the lighting system, the seasonal air conditioning system so that the use of electric power is according to the actual use and the seasons, to ensure the efficient energy use on the parts of the M.R.T. Chaloem Ratchamongkhon Line Project (the original MRT Blue Line and the MRT Blue Line Extension) and the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line) and to facilitate the services to the rising number of passengers.
- Study on solar power generation project in the areas of the M.R.T. Chaloem Ratchamongkhon Line Project (the original MRT Blue Line), one of the projects on that the Company has conducted a study for a while, not to mention the fact that the global trend has been toward the greater utilization of renewable energy because the production of electricity from natural resources will have no impact on the environment, reducing both Carbon dioxide (CO<sub>2</sub>) emissions and global warming. According to the NOVA's information, the rail service providers in other countries have started switching to solar power.
- Study on application of highly efficient technologies in the systems including the guidelines for properly improving and changing the working processes of the systems, to control the functions of equipment, so that the study results will be used for reference in operations in the next year for the purpose of energy saving on the parts of the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line Extension) and the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line).

## Here are the ongoing activities:

- Continual review of the work process in terms of policies, goals, operational plans and internal and external audits, to achieve efficiency in the work process.
- Improvement of the train service timetables to make them commensurate with the increasing number of passengers during the period of public relations in order to encourage everyone to save energy in the pursuit of sustainable development.
- Water is one of the resources which the Company greatly values and appreciates; the
  Company has then chosen to install the electric train cleaning systems which are capable
  of recycling used water, that is, such systems can recycle used water by up to 3 cubic
  meters, and the Company has also applied the aforesaid cleaning systems from the
  commencement of the metro service until now.
- One of the Company's strengths lies in selection of eco-friendly technologies which still
  remains unchanged, for example, repair and maintenance service vehicles used within
  the Depot areas have engines which meet the EURO IV standards, the exhaust emission
  standards for vehicles, which can rest assured that the use of the repair and maintenance
  service vehicles will in no way give rise to toxic pollution, etc.



With regard to the Company's work operations in the field of energy and environmental conservation, the Company has strictly complied with relevant government laws, e.g., laws governing energy conservation and environment, and has also adopted the (ISO 50001) Energy Management System standard, including the (ISO 14001) International Environmental Management System standard, from the opening of the MRT service, while simultaneously undertaking activities to control and improve, remedy risks or things which may threaten the safety through risk assessment, engagement and listening to opinions of all related parties, in order to create correct knowledge and understanding, as well as to alleviate traffic problems, help conserve environment and improve the quality of life of the people. To that end, the Company has further improved its operations in respect of management to strive for the sustainable development, and has been therefore provided standard certifications as follows:

- ISO 9001:2015 Quality Management System;
- ISO 14001:2015 Environmental Management System;
- ISO 45001:2018, OHSAS 18001:2007 and TIS 18001:2001 Occupational Health and Safety Management Systems;
- Safety Management System from Ricardo Rail Limited.

In 2020, the Company carried out the continuous and systematic energy management to achieve efficiency in the metro system through energy management suitable for the business and to ensure the environmental conservation in a concrete way in the pursuit of sustainable development under the energy conservation policy which must be pursued by everyone in the same direction, with the commitment to responsibility for energy conservation; therefore, developed the energy management system to ensure the optimum use of energy based on the following guidelines:

- Control of energy consumption in activities including purchasing of products and services
  of the Company to meet the energy conservation goals and plans to ensure the optimum
  use of energy in compliance with laws;
- Assuring that such energy control measures are continuously implemented and reviewed, including update and improvement; and
- Educating and raising awareness of staff and contractors, including related parties, as to their own roles, duties and responsibilities regarding impacts of energy use.

These policies are an integral part of the Company's business operations and it is the responsibility of all staff and contractors to put them into practice earnestly and regularly to ensure that the energy conservation has been conducted continuously and sustainably.

In 2021, the ongoing action plans for energy saving projects for the sustainable development of the energy management system are as follows:

- Appropriate electric energy use control in the areas of the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line Extension) and the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line);
- Implementation of the solar power projects in the area of the M.R.T. Chaloem Ratchamongkhon Line Project (the original MRT Blue Line);
- Implementation of the projects for replacement of fluorescent bulbs with LED bulbs in the areas of the M.R.T. Chaloem Ratchamongkhon Line Project (the original MRT Blue Line and the MRT Blue Line Extension);
- Implementation of the projects for improvement of main equipment efficiency of the systems of the M.R.T. Chaloem Ratchamongkhon Line Project (the original MRT Blue Line and the MRT Blue Line Extension);
- Implementation of the projects for installation of LED bulbs in place of fluorescent bulbs of the areas of the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line);
- Implementation of the projects for energy conservation activities for all employees or staff.

In addition, the Company has paid attention to the potential environmental impact from the MRT services so as not to be harmful to the environment, quality of life, and livelihood of the people and communities nearby, by strictly monitoring, preventing and mitigating the environmental impacts in accordance with the Environmental Impact Mitigation Measures and Monitoring Program (EMP), during the implementation of the MRT projects in service, namely, the M.R.T. Chaloem Ratchamongkhon Line Project and the M.R.T. Chalong Ratchadham Line Project, for report to the Office of Natural Resources and Environmental Policy and Planning (ONEP) to inspect and monitor the environmental qualities in key environmental issues as follows:



## (1) Air Quality

The results of air quality measurement in the atmosphere around the projects showed that the total suspended particulate (TSP), particulate matter (PM10) and carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and the total hydrocarbons (THC) did not exceed normal level.

#### (2) Air Quality in MRT Stations and Trains

The results of air quality measurement in the MRT stations and trains, during both peak and off-peak hours, showed that the total bacterial and fungal volume, ventilation rate, temperature, and relative humidity did not exceed normal level.

#### (3) General Noise Level

The results of general noise level measurement showed that the average noise did not exceed 70 dB(A), with the maximum level not exceeding 115 dB(A), which met the standard requirements.

#### (4) Vibration Level

The results of vibration level measurement did not exceed normal levels.

#### (5) Effluent Quality

The results of effluent quality measurement in stations, depot and administration building did not exceed normal levels. The wastewater treatment system could work efficiently according to its design.

#### (6) Waste Management

The results of waste management were found that segregation, collection and transport of waste for disposal were made efficiently in accordance with the management plan and applicable laws.

## 2.1.3 Commercial Development Business

The Company has carried out commercial development in relation to the expressway system by allowing the private entities and individuals to use the space for commercial operations in the vicinity of the expressway system for installing Intelligent Traffic Signs and advertising boards in various forms and for installing shops in the areas of toll plazas and engaging in other business, such as, use of the areas in the expressway system for installing 3G signal distribution devices, etc. In respect of commercial development of the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line), the Company also has operated and appointed its subsidiary, namely, Bangkok Metro Networks Limited ("BMN"), as the management representative in the commercial development of such MRT project, per the following details:

## 1) Nature of Services

#### Commercial Development Relating to Expressway System

As for the commercial development in the area of the expressway system, the Company and one of its subsidiaries, namely, NECL, allowed private entities and individuals to take on the lease of spaces for commercial operation, as follows:

o Installation of Intelligent Traffic Signs and Advertising Boards

Private entities were allowed to install Intelligent Traffic Signs on the main routes and in front of toll plazas, and install advertising boards in various areas, such as, in front of toll plazas, toll booths, expressway columns, and expressway barriers, etc.

#### o Retail Areas around Toll Plazas

Private entities and individuals were allowed to take on the lease of retail areas for providing service to expressway service users around Prachachuen, Srinagarindra, and Bang Pa-in Toll Plazas.

# Other Business Operations

Private entities were allowed to use the expressway areas for installation of 3G signal distribution devices, etc.



## • Commercial Development Relating to Metro System

The Company has appointed its subsidiary, namely, BMN, as the sole management representative in the commercial development of the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line), per the following details:

## o Procurement and/or Production of Advertising Boards

BMN, as the Company's representative, will conduct studies and analyses on the areas in the MRT stations in order to set up and develop advertising media which suit the passengers' behavior in use of the services to maximize the effectiveness of communication. To that effect, BMN will work in association with agencies or brand owners, to launch innovations in use of technologies for replacing static media with dynamic media, developing more creativity to create image, awareness, as well as strengthening the engagement between consumers and goods and services.

With the nature of the areas within the MRT stations which are composed of undergrounded structures covering the large areas in a closed environment, with a timing of Captive Environment Capture Attention of the advertising media before downing to the platform levels, including the media integration in the areas nearby, such nature of this type is then conducive to the creation of advertising media with the storytelling trends of the brand owners which will help encourage and improve engagement, as well as helping consumers recognize those products and services, which are the prime goals or measurement of the effectiveness of the budget spending for advertisement and public relations among the customer groups. Other than the integration of advertising media inside the MRT stations, BMN has adopted the concepts of the integration, creativity, storytelling trend, to the areas on the MRT stations through areas of ventilation chimneys, roof structures of the train stations, passenger elevators, thereby resulting in a perfect advertising and promotion.

However, the Company has been facing challenges, technological changes, perception of information, together with behavior, lifestyle of consumers which are rapidly evolving, as a result, the development of advertising media in the MRT trains will be constantly conducted to ensure that it has fulfilled the needs of customers, to their satisfaction, and to assure customers that the advertising media in the MRT trains has proved valuable and brought the maximum benefits for them.

#### o Lease of Retail Areas in MRT Stations

The retail space in the MRT stations is arranged for the service provisions both inside and outside the areas of Metro Mall. Currently, the rental and service areas in the Metro Mall which are in service, including, Kamphaeng Phet Station, Chatuchak Park Station, Phahon Yothin Station, Lat Phrao Station, Thailand Cultural Centre, Phra Ram 9 Station, Phetchaburi Station, Sukhumvit Station, and Khlong Toei Station. The Company continues to supply products and services which are in demand and suitable for the MRT passengers' styles of the use of services. Each area will be zoned appropriately, and in the meanwhile, the Company has come up with an idea to develop the Metro Mall area as a stopover or meeting point for service users, therefore, the common area has been improved to be larger in order to accommodate the needs of the service users, thereby making the services in the MRT trains a part of their livelihoods in the new normal.

In addition to the spaces for lease and services inside the Metro Mall, the Company has also provided the spaces for lease and services outside the Metro Mall in order to satisfy the small-sized enterprises' needs for their space or to serve as an area to increase sales channels of the space tenants and the services in the Metro Mall area, as another option. The services will be provided in a short-term event area designated by the Company in compliance with regulations on safety in metro stations, covering a total of 38 elevated and underground stations. This year, the enterprises took an interest in the use of the services of the MRT Blue Line Extension, such as, Tao Poon Station, Wat Mangkon Station, Itsaraphap Station, Tha Phra Station, Bang Wa Station, Phasi Charoen Station, Bang Khae Station, and Lak Song Station, etc.



## Provision of Service and Maintenance of Telecommunications System Equipment

Nowadays, the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) has a total of 22 underground stations, divided into Bang Sue - Hua Lamphong Section, with 18 underground stations, and Hua Lamphong - Lak Song Section, with another four underground stations, namely, Wat Mangkon Station, Sam Yot Station, Sanam Chai Station, and Itsaraphap Station, where telecommunications equipment has been installed by the Company to receive and transmit mobile phone signals, which is in consistency with the government sector's issuance of the licenses to the private entities at present, and to reflect the technological changes and fulfill the service users' desire for optimum efficiency, the Company is in the process of enhancing efficiency in equipment receiving and transmitting signals in Bang Sue - Hua Lamphong Section to provide the efficient services to the people whenever they use the MRT services.

## 2) <u>Marketing and Competition of Commercial Development Business</u>

## • Customer Characteristics and Target Customers

The main commercial development business in the MRT system consists of the installation of advertising media, lease of spaces and services, and service and maintenance of telecommunications equipment, as a result, the customer characteristics and target groups vary according to service types. Therefore, the Company has classified its customer characteristics and target groups under service types as follows.

#### Advertising and Public Relations Media

Most of the advertising media customers include the Company's customer groups, comprising advertising agencies which represent the brand owners to serve as planning operators, purchase advertising media in accordance with objectives of the brand owners; and another group of customers is brand owners who have a desire to directly purchase advertising media with the Company. The main proportion of the Company's customers is relative to advertising media purchase from the agency customer group. This year, the Company's customer proportion of agencies to brand owners increased from the previous year to 80:20, due to the economic slowdown and the impact of the COVID-19 epidemic; ongoing intensely-prone competition in the industry; industrial structure and changing consumer behavior; small to large brand owners' reduction of their budgets to purchase advertising media. On the other hand, the Company worked more with agencies during the 3th-4th quarters of the year to create campaigns for the goods and services which still need the budgets for purchase of advertising media in order to boost sales in the last quarter of the year. The top five product and service groups which use advertising media in the MRT system are comprised of communication equipment group (mobile phones), followed by beverage, consumable goods, insurance, and website groups.

#### o Lease of Retail Areas in MRT Stations

In 2020, lease of spaces and services of the retail shops in the MRT stations were affected by the COVID-19 epidemic situation, with the government announcing the closure of certain types of retail shop services from the beginning of 2020, including a request for cooperation from the private sector to allow employees to work from home, resulting in a dramatic decline in the number of the MRT users which had an impact on the sales of the space tenants and services in the MRT stations. Nonetheless, the Company implemented relief measures in aid of the customer groups, including an exemption of rental and service fees during the service shutdown or a 50-percent discount on rental fees in case of stores which remained open for service, or extension of rental-service fee payment period, as a result, they are still the Company's business alliances which have continued business and taking a lease on retail spaces in the MRT stations. Most of the customer groups for space rental and services have continued their business with the Company, for instance, customer groups in categories of food and beverage, convenience stores, supermarkets, bakery shops, foreign currency exchange shops, phone accessories stores, beauty and salon shops, eyeglass shops, etc.



# o Provision of Service and Maintenance of Telecommunications System Equipment

The Company's customer groups are those who have obtained licenses to operate the telecommunications business from the Office of the National Broadcasting and Telecommunications Commission (the Office of the NBTC) to provide mobile phone services, both public and private sectors, comprising AIS, DTAC, TRUE MOVE, TOT, and CAT, each of which would hold the license to provide the service under the frequency category. The frequency services provided in the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) include 850, 900, 1800, 2100, 2300 and 2600 MHz.

## 3) Marketing Policy and Strategies of Commercial Development Business

Service and Product Strategies of Commercial Development Business
 Commercial Development Relating to Expressway System

- O Intelligent Traffic Signs in the form of maps and text messages are provided to give traffic updates to expressway users, including advertising boards in front of toll plazas, barriers, expressway columns, and in front of toll booths.
- Shops and public restrooms are provided to expressway users in 4 toll plazas of the Si Rat Expressway and the Udon Ratthaya Expressway, namely, Srinagarindra Toll Plaza, Prachachuen Toll Plaza (inbound), Bang Pa-in Toll Plaza (inbound), and Bang Pa-in Toll Plaza (outbound).

#### **Commercial Development Relating to Metro System**

o The technological changes, digital disruption, including the situation of the COVID-19 epidemic have an impact on the advertising media industry structure in a manner that the media mix modeling, together with the ways the agencies work, planning and decision to spend budgets for advertising and public relations of the advertisers have resulted in a change in the business plans and new strategies have been established during the foregoing crisis, as such, the advertisers have been affected, both directly and indirectly, and then reduced their advertising budgets, by changing from a long-term plan to a short-term plan, exploring creative ideas to create motivation or engagement with consumers, making a declining use of offline media and switching to online media in order to rapidly reach consumers. These changes have forced the agencies and the Company, as the advertising media owner in the MRT system, not only to adjust oneself but the respective service plans in order to meet the needs of the agencies or advertisers.

BMN has worked with the advertisers (brand owners) and agencies in exploring creative ideas which suit the advertisers' products with the compelling storytelling through the advertising media in the MRT trains to ensure that the MRT users perceive and engage with the products and services. Other than that, BMN is also looking for business alliances to offer a variety of the use of the advertising media in the MRT trains, for example, the production of content for advertisement through the PIDS, the marketing activities inside the MRT stations in collaboration with the brand owners, the transition of advertising media platform from static media to dynamic media at the prominent points inside the MRT stations. Apart from the development of advertising media inside the MRT stations, BMN has also carried out development of advertising media for the areas above the MRT stations, for instance, ventilation chimneys or ventilation buildings, roof areas of the MRT stations, passenger elevators or free space on the MRT stations; the integration of such areas, creativity of advertising media which is capable of catching the public's eyes on the roads outside to become a Landmark Media which can efficiently send persuasive communications out to people on the areas out of the MRT stations.

The technological changes and the COVID-19 epidemic have not only affected the advertising media business, but also the space rental and service business, that is, the available retail space is beginning to take fewer leaseholders because their switching to online sales is increasing. By this reason, the retail shops in the future may only be a place for product showcase and may be needed in a smaller size. In addition, the situation of the COVID-19 epidemic has substantially changed consumers' spending habits in a manner that they have switched to doing online shopping and using delivery services more, thereby resulting in a decrease in the number of shop-goers at shopping centers, as compared with the previous years.

Nevertheless, the retail space inside the MRT stations will be the areas where meet



the needs of entrepreneurs and consumers because people's switching to mass rapid transit services is nowadays rising, therefore, the available retail space in the MRT stations will provide greater convenience in people's spending, thereby saving time in travelling to large shopping centers. Other than the availability of the retail space, the Company has also provided common areas as a meeting point or stopover to facilitate the MRT service users, which has a positive effect on the entrepreneurs in the rental space as it will increase the number of passengers accessing to the services and that for a longer period of time, thereby causing a rise in sales of the retail shops.

This year, 5G is considered the catalyst for momentous technological change in Thailand, the awakenings of 5G are increasing hastily because it is not only a mobile network, but it will also be used more widely, especially in communications. 5G networks have been developed to transmit multiple streaming data simultaneously with greater efficiency, stabilization, and rapidity. As a consequence of such transformation, the Company has improved and developed its devices to accommodate all frequency bands, including the 2600 MHz for 5G, together with the improvement of the efficiency of antenna transceivers from SISO to MIMO, which was already completed at the stations of the MRT Blue Line Extension, comprising, Wat Mangkon Station, Sam Yot Station, Sanam Chai Station and Itsaraphap Station. Currently, it is in the process of boosting the efficiency of devices in the phase of Bang Sue - Hua Lamphong Section in order to provide the MRT service users with the efficient services.

In addition to the primary commercial services as mentioned above, the Company has also provided service areas for selling products and services or organizing various marketing activities outside the area of the Metro Mall inside the MRT stations, covering a total of 38 MRT stations of the MRT Blue Line Project, with the varied sizes of the areas depending on each station structure.

#### • Corporate Image Promotion Strategies

O Giving back to the society, support of the government policies are regarded as an important mission which has been realized and prioritized by the Company through, such as, organizing activities to broaden knowledge of the youths, activities for reading promotion, provision of support to the government sector in public relations about its services, etc.

## • Distribution Strategies and Channels of Commercial Development Business

- The commercial services in the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) have varied according to the service types, distribution channels are then differentiated by the service types.
  - Public relations media have sale channels via business alliances as agencies together with direct presentation to the brand owners.
  - Spaces for lease and service and telecommunications service are presentation of the spaces direct to the brand owners or the service providers.

#### 4) Industrial Outlook and Competition of Business Development Business

## Advertising Media

The digital disruption, the economic slowdowns both at home and abroad, the ongoing situation of the COVID-19 epidemic at the beginning of the year until now, including the domestic political situation are factors behind the tremendous impact on the advertising media industry in Thailand.

As for the advertising media outlook from January to October 2020, its growth rate dropped by 15 percent, despite a sign of recovery in the advertising media industry in the end of the third quarter until the beginning of the fourth quarter of 2020, with all advertising media types being affected by such aforementioned situations. The top five most affected media include media in theaters, stores/outlets, newspapers, magazines and cable television media, with the growth rate declining by more than 30 percent compared to the previous year, which the growth rate of cinema media declined by more than 50 percent. Furthermore, the advertising media relative to the MRT advertising media, which is mobile media, has been affected significantly, with its contraction accounting for 25 percent compared to the same period of the previous year. Upon the analysis on the contracted media types, it would be found that such contraction has correlated with the situations which gave rise to the slowdown, particularly due to the COVID-19 epidemic, in which the government has taken various measures to contain the spread of



the virus, for instance, the closures of retail shops in shopping centers, the closures of crowed places such as movie theaters, entertainment spots; and the social distancing measures to allow employees to work from home.

In the third and fourth quarters before a new wave of the COVID-19 at the end of 2020, irrespective of signs of improvement that the brand owners started returning to use budgets for advertising in order to boost their sales in the last quarter of the year, during such length of time, the advertising industry had remained affected by the political demonstrations within the country. Such foregoing factors, let alone domestic and international economic conditions where their recovery capacity is still at low level, the ongoing COVID-19 epidemic, including the existing situations of the domestic political demonstrations and a new wave of the disease in late 2020, will still have the impacts until 2021 in which the brand owners continue postponing to spend the advertising budgets to see if there will be any changes in such situations or have revised their strategies to short-term instead of long-term budgeting.

## • Spaces for Lease and Service

During the first and second quarters of the year, the situation of the first wave of the COVID-19 epidemic had a direct impact on the space rental and service business, as a result of the government measures to reduce the spread of the COVID-19, thereby making it impossible to open the business for service. Yet, the retail space resumed in service in mid-May but it was an opening for services subject to the limitations, which were obstacles in the business operations. This included a change in consumers' spending behaviors in a manner of avoiding entering crowed areas, protecting themselves from the virus infection, switching to online shopping and delivery services in place of going out to do shopping at shopping centers. Thus, the retail space service business is still waiting for the economic recovery after the emergence of the current COVID-19 crisis. Moreover, the space tenants remain affected by a decline in sales of goods and services owing to a decrease in purchasing power of consumers; they have therefore sustained losses and are unable to expand their business as planned. Likewise, the spaces for lease and services in the MRT stations are also affected by such situation in spite of the fact that during the third and fourth quarters before the new wave of the disease outbreak, the number of MRT service users has started to gradually return to normal. However, the decrease in the purchasing power of consumers, their lifestyle modifications to spending more time at home, refraining from going outside as much as possible, and the new wave of the disease outbreak, have started to result in a slowdown or decline in the sales and number of tenants of the MRT spaces.

## 5) Procurement of Products and Services of Business Development Business

#### • Nature of Procurement of Products

The Company has obtained the concession from the Mass Rapid Transit Authority of Thailand (MRTA) for operation and commercial development in the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line), with the Company conducting commercial development in respect of 1) procurement and/or production of advertising media of various forms; 2) lease of retail areas in the MRT stations; 3) provision of service and maintenance of telecommunications system equipment; and 4) other commercial activities, by authorizing Bangkok Metro Networks Limited as the Company's representative to conduct the commercial development.

With respect to the expressways, the Company and one of its subsidiaries (NECL) has allowed private entities and individuals to take on lease of expressway areas for installation of Intelligent Traffic Signs and billboards of different types, including retail areas around toll plazas, and other business activities, such as, the use of the expressway areas for installation of 3G signal distribution devices, etc.

## 6) Environmental Impact of Commercial Development Business

The Company also cares for and takes into account the environmental impact on the retail shop floors in the MRT system in order to prevent any impact on the environment, quality of life, and livelihood of people and communities (details shown in Item 9: Environmental Impact of Rail Business).

## 2.2 Work Pending Delivery - None -



#### 3. Risk Factors

The Company realizes the significance of the management of risks from business operations under the changes of internal and external factors affecting its operational results. Risk management is considered a key instrument for business administration to ensure efficient and effective achievements and promote its competitiveness, as well as a key factor of the Good Governance. The Company thus arranges for the systematic risk management, monitoring, and measures to minimize risks continuously. The Board of Directors has appointed the Corporate Governance and Risk Management Committee for policy-level consideration on the sufficiency and appropriateness, with the Management to supervise the overall risk management process of the organization and perform daily routine work on behalf of the Corporate Governance and Risk Management Committee to monitor, evaluate and prepare a report on risk management to the Board of Directors for information.

In addition, the Company has also prepared an annual risk management plan, a risk management handbook as guidelines in the operations, and regularly monitors, evaluates, reviews risks every quarter to be in line with the ever-changing internal and external circumstances, including a backup plan in case of emergency, in order to ensure prompt action in solving problems and coordination with relevant units at all times. The risk management policy of the Company is as follows:

- 1. To adopt a risk management process in accordance with international standards or practices to ensure the efficiency of risk management, implementation and development in the same direction on an enterprise level in line with the business operation policy of the Company.
- 2. To treat the risk management as part of work, significant decision-making regarding management, and strategic plan to achieve the specified objectives, goals, missions and vision of the Company.
- 3. To carry out proactive risk management to manage risks which may result in the Company's loss of interests and opportunities.
- 4. To delegate risk management as the staff's responsibility at all levels and manage risks within their work units and the organization to contain risks at sufficiency and appropriate level.
- 5. To determine guidelines for prevention or reduction of risks at a level acceptable to the Company in order to formulate plans to manage and control risks in an acceptable level. All work units must consider the justification of expenses or costs to implement risk management measures in comparison with expected benefits.
- 6. To efficiently communicate the risk management within the Company for staff's effective learning, development, and compliance.
- 7. To prepare an annual risk management plan subject to consideration and approval of the Corporate Governance and Risk Management Committee in respect of sufficiency and appropriateness to the current business circumstances.
- 8. To regularly follow up and assess the results of risk management to make sure that risk management is duly and properly conducted.

Risk factors which may materially affect the Company's business operations are as follows:

## 3.1 Systematic Risk

# 3.1.1 Risk from Business Operations under Agreements with Government Sector and Government Policy

The Company has operated its businesses under the relevant Concession Agreements subject to the supervision of the government sector, difference in the contractual parties' understanding of compliance with the terms and conditions of the respective Concession Agreements may then arise in various aspects, such as, revisions of expressway toll or MRT fare rates, responsibility for costs under the respective Agreements, and etc., about which the Company may require a certain period of time to conduct negotiations for corresponding understanding in order to avoid any impacts on the Company's business operations.

Moreover, there may be policy changes in the government administration by the political party in charge, which such changes possibly affect the existing practical guidelines or terms specified in the relevant Agreements, or may require the Company to proceed beyond those specified in the relevant Agreements or undertakings.



As a result of negotiations for resolution of the disputes of the Second Stage Expressway Project (the Si Rat Expressway, including Sector D) and the Bang Pa-in - Pak Kret Expressway Project (the Udon Ratthaya Expressway) until the settlement could be reached, the Council Ministers' Meeting on February 18, 2020 passed a resolution approving the amendments of the relevant Agreements to settle the disputes of the Second Stage Expressway Project (the Si Rat Expressway, including Sector D) and the Bang Pa-in - Pak Kret Expressway Project. In this regard, the Company and NECL signed the Second Stage Expressway Project (Amendment) and the Bang Pa-in - Pak Kret Expressway Project (Amendment) with EXAT on February 20, 2020.

Given the fact that the Company and NECL have been granted to extend the respective expiration periods of the existing Agreements, including the Second Stage Expressway Agreement (Sectors A, B and C), the Agreement for Extension of the Second Stage Expressway Project (Sector D), and the Bang Pa-in - Pak Kret Expressway Project Agreement, until October 31, 2035, there is no more risk of uncertainty in considering the renewal of the relevant Agreements with government agencies, but risks from the business operations pursuant to the relevant Agreements with government agencies and government policies in accordance with the Concession Agreements with EXAT and MRTA still remain. In this regard, the Company has established a joint operating system with the government sector, both at the administrative and operating levels, by sharing sufficient information with each other to ensure good understanding towards each other, as well as regularly and closely monitoring the political situations and policy changes, and reasonably reviewing the strategies and operational plans to suit the situations and ensure the mutual interest in the long run.

## 3.1.2 Risk Relating to Revenues less than Projections

The Company provides both expressway and metro services, therefore, the Company's core revenues are tolls and fares, which may be affected by several external factors beyond the Company's control, such as, expansions of electric train networks, other feeder system modes with greater convenience, alternative fare rates of other transit systems available for route users, road traffic congestion, oil prices, and urban growth, and businesses surrounding the expressway or metro routes which would change the people's destinations, etc., all of which will affect the volume of the Company's service users. Moreover, the Company generates commercial development revenue, which may vary depending on the local and overseas economic conditions, competition in advertising media and retail space lease business, as well as the progress in opening of retail shops in the stations, several factors of which are beyond the Company's control. Therefore, should the Company's revenues differ from study results or projections, it may affect the liquidity and serviceability management with respect to the existing obligations owed to the lending financial institutions or creditors according to the mutually agreed schedule, such as, interest expenses, scheduled repayment of loans, operating expenses under the Agreements, as well as remuneration payable to MRTA, etc.

To minimize such risk, the Company has established a unit to closely monitor any impact which may affect various factors and formulated appropriate strategies. In addition, the Company can limit potential impacts from risk factors, such as oil prices, road traffic congestions, and alternative fare rates of other transit systems available for passengers, due to the Company's full services of expressways and metro, both of which are considered substitute products. With respect to the commercial development, the Company has developed new advertisement media to increase its commercial development revenue, such as advertisement media management via the Passenger Information Display System (PIDs), platform billboard, and digital media, including further development of retail space.

In 2020, the Company had been affected by the situation of the outbreak of COVID-19 from late February and continued to July 2020, the government and private agencies had allowed their own personnel and staff to work from home wherever possible to reduce the risk of an infection with COVID-19, not to mention the fact that the government imposed various measures, for example, risky locations must remain closed, activities in crowded places are prohibited, including the imposition of a curfew under which no persons throughout the Kingdom were allowed to depart from their dwelling places during 22.00 - 04.00 hrs. from April 3, 2020, with the approved curfew relaxation in the second phase to start from 23.00 - 04.00 hrs. from May 17, 2020, and in the third phase to start from 23.00 - 03.00 hrs. from June 1, 2020 onwards. These were aimed to impose restrictions on the people's relocation to prevent and contain the spread of COVID-19, resulting in a decrease in the travelling volume, by which the Company's core revenues were affected accordingly.



The travelling volume of both expressway and metro services which had declined from February 2020 caused a decrease in the Company's revenues in the first quarter of the year. Nevertheless, after the government's relaxation on enforcement of its measures enabling the people to do activities of their daily living more conveniently, for example, cautious opening of some shops, restaurants, beauty salons, department stores, and etc., were allowed, the travelling volume was then rising. That was, the number of expressway users returned by more than 80 percent for the metro service, due to the ongoing social distancing measures, under which, during the peak hours, only 20 percent of the number of passengers required to travel could be accommodated. In this regard, if after the situation would have been defused by which the government has unlocked all of its measures, it was expected that the travelling volume and revenues of the Company would return to normal.

Notwithstanding, the Company remains cash and bank deposits and has the undrawn credit facilities extended by many financial institutions, no liquidity problem has confronted the Company.

## 3.1.3 Risk from Interest Rate and Foreign Exchange Rate Fluctuations

Given that the Company remains obliged to service interest-bearing liabilities to lenders, and the Company plans for future investment in many projects, therefore, it may require a large amount of long-term loans. Thus, interest expenses are considered the significant expenditures for the Company. The increased interest rates on loans may affect the Company's operational results due to the floating interest cost in respect of the certain credit facility, thereby putting the Company at risk by bearing an increase in expenses from interest rate fluctuation or increase in the money market. However, the Company has managed such risk from interest rate fluctuation, by arranging for the loan structure, divided into loans at floating interest rates and loans at fixed interest rates including plans to issue debt instruments or debentures as suitable to the economic conditions and the Company's view of the future interest rates.

The Company entered into a conversion contract for partial floating interest rates to fixed interest rates during the period which the interest rates in market had gradually declined, in order to reduce the potential risk from interest rate fluctuation in the future. However, the Company still maintained a partial loan bearing the floating interest rate to ensure consistency with the presently economic condition which has not yet given a signal of an increase in interest rate, thereby resulting in a decrease in financial cost. In this regard, the floating interest rate would be converted into fixed interest rate to minimize the risk in the future in due course.

In addition, the Company incurred expenses in foreign currencies, for example, the maintenance cost of the M&E Equipment, and insurance premiums, part of which had to be paid in foreign currencies. Thus, should the Baht value depreciate, the Company's expenses will increase accordingly. However, the proportion of its expenses in foreign currencies is low. The Company will still consider reducing risk from the exchange rate, such as negotiations for reduction of foreign currency expenses and buying forward, etc.

As a consequence of the outbreak of COVID-19 which has had a negative impact on financial markets in that investors therefore have faced some uncertainty as to their holding of financial instruments, as such, investments in newly-issued debt instruments were reduced in order to maintain liquidity, thereby causing a slowdown in investment demand, along which the fact that TRIS Rating Co., Ltd. revised the Company's credit rating from A with a "Stable" outlook to A with a "Negative" outlook, which may affect the Company's plan to issue new debentures.

Nonetheless, in 2020, the Company issued its debentures in the amount of Baht 3,000 Million, with a 4-12 year maturity, at the rates of 2.88 - 3.78 percent per annum. In addition, the Company has its credit facilities extended by many banks available in case of the Company's inability to issue debentures, therefore, the Company's repayment of due debts is in no way affected.

## 3.1.4 Risk from Serious Accidents, Public Unrest, or Natural Perils

The Company's businesses of both construction and management of the expressways and metro are exposed to an event or external factor which results in an emergency, for example, perils, serious accident, earthquake and such events which may be caused by terrorism, sabotage as bombing, riot, including gathering of insurgent groups, which may force the Company to suspend its services, thereby giving rise to loss of revenue, damaging assets, tarnishing image and destroying reliability of the Company. For this reason, the Company has set forth emergency plans in response to any such events which may suddenly occur, for example,



removing various significant and essential M&E equipment for management of the expressways for storage at the safe place, as well as arranging for staff training to ensure that the staff in charge will be able to take prompt actions to resolve such emergency, for instance, practicing emergency drills of all relevant units inside and outside the Company by the way of simulation of such various situations as emergency in the metro stations from bomb threat and bomb blast in the metro stations, train breakdown and stop inside the tunnel, fire in the rolling stock, metro stations or tunnel, etc., as well as establishes a unit for monitoring, alerting and coordinating with relevant agencies to prevent the occurrence of any serious accident and to be ready for rescue operations; installation of metal detectors, CCTVs, and provision of security staff in all areas.

The Company has taken out insurance against property all risks, business interruption, public liability, and terrorism in respect to the metro service business.

## 3.1.5 Risk in respect of Personnel

As the government realizes the significance for solving problems on traveling and traffic in Bangkok by using the mass rapid transit system, it thus expedited the expansion of the metro network and the connecting system to other transportation systems. Therefore, it would be highly possible that there would be governmental organizations or private agencies operating the mass rapid transit system business which require additional personnel with knowledge, expertise, and skills in the technical field in the rail business. As a result, it would be likely that the Company's main personnel would be enticed away from the Company.

The risk from a shortage of competent personnel is considered as one of the Company's main risks, as they are a key factor to drive our organization to success. The Company gives priority to the personnel risk management, starting from the nomination and selection of good and qualified personnel suitable for the Company; continuous staff training courses to improve knowledge, skills, and abilities in various fields necessary for the performance of work based on each staff's position and designated duties; encouragement of the staff morale; consideration of appropriate and fair remuneration and welfare; organizing outing activities to encourage staff to love, unite, feel connected with the organization; review and revisions of the operation process and work system to ensure readiness at all times, as well as preparation of the succession plan, whereby the Company has prepared the succession plan and appointment of a working group comprising high-level executives to set up guidelines in the selection of staff to ensure the availability of personnel, both in the executive and supervisor levels, in order to prevent the risk from a shortage of personnel having knowledge, expertise and technical skills for specific work. The Company has arranged for collection of the body of knowledge for specific work and extended the results to the knowledge management program, in order to continuously improve the work process.

## 3.1.6 Risk in respect of Information Technology Security

With the Company's commitment to providing the services of the expressway system and the mass rapid transit system with safety, convenience, rapidity, reliability, punctuality and efficiency, the Company then needs to employ the cutting-edge technology to support its operations, including the provision of the services with the highest efficiency in a constant manner, which there may be a risk from disruption of main work systems, such as the collection control system, traffic control system, electricity system, and equipment (electrical power system, signaling system, communications system, SCADA system, platform screen door system, automatic fare collection system, signage system) and the Company's internal computer system (Back Office). If there is an attempt to have unauthorized or unapproved access to the information technology system of the Company, from both internal and external persons, including computer virus attacks, there is a risk which the fare collection system may break down; the fare management system may be disrupted and out of service.

The Company sets up an emergency plan to deal with possible incidents which may have an impact on system equipment, comprising preventive and corrective plans for system equipment, on a regular basis, for prevention and arranging for staff in charge to ensure their access to tackling problems immediately in case of emergency in the work systems; there is a process of replaceable cards management in the case where the fare management system is not able to record entry-exit to and from the gates. The system is designed to enable all fare collection equipment to collect information in a stand-alone manner in the case where the server is not able to collect information on traveling of passengers. Manuals are prepared to specify procedures and methods for the safety of the information technology system. Furthermore, the Company formulates the policy to improve the toll collection system at



the control center level in accordance with the ISO/IEC 27001:2013 Information Security Management System standard in order to provide a higher degree of security to the information technology of the toll collection system at the control center level, and also defines a standard for critical information management to ensure the business continuity, enhancement of the trust in the organization on the global stage. The Company has obtained certification of the ISO/IEC 27001:2013 standard for development of the process and Information Security Management System (ISMS) in accordance with the ISO/IEC 27001:2013 international standard for the toll collection systems at the Si Rat Expressway Control Center (CCB 2) and the Si Rat - Outer Ring Road Expressway Control Center (CCB7), as well as developing personnel in the field of information technology security management to enable them to perform works under the work process / system so developed, including following up news on cyber threats for taking precautions and making preparedness to handle at all times.

#### 3.1.7 Operational Risks from the COVID-19 Outbreak Situation

There was recently the emerging infectious disease known as COVID-19 which was caused by a newly discovered and unknown strain of the Coronavirus, and which had widely spread in Wuhan of China. Currently, the large outbreak of the COVID-19 infection has occurred worldwide.

As a result of the situation of the outbreak of the COVID-19, the Company has continued to monitor the situation and heighten the precautionary measures in both the MRT Blue Line and the MRT Purple Line, with such measures being taken to cover passengers, staff, contractors, and visitors. The Company has implemented the following:

- 1) Adopting the work rules and regulations regarding prevention and containment of dangerous communicable diseases and the business continuity management plan to cope with the situation of the outbreak of the COVID-19;
- 2) Imposing precautionary measures against the spread of COVID-19 in accordance with the government measures, namely:
  - Providing face masks for staff;
  - Avoiding crowded activities;
  - Splitting the work teams to reduce their risk of exposure to the disease transmission;
  - Requiring all staff, contractors and visitors entering the Company' areas to always
    wear face masks and frequently wash their hands in case of a conversation or close
    contact with other persons;
  - Avoiding traveling to any other provinces at risk of the ongoing outbreak;
  - Providing alcohol or gel hand sanitizers for staff and passengers;
  - Disinfecting inside the trains at the Depots every day before the train service, and spraying disinfectants inside the trains at the terminal stations during the rush hours:
  - Disinfecting inside the metro stations, the office buildings in the common areas, and the frequently touched points or devices every hour, the Company's common vehicles every trip, and shared office equipment;
  - Providing screening points for staff, contractors and passengers by measuring body temperature before entering the area;
  - Prioritizing the passengers' access to the services at each station's entrances-exits, shop floor, platform floor, and ensuring seat distancing on board in accordance with social distancing measures;
- Adjusting the train service in accordance with the Emergency Decree on Public Administration in Emergency Situation B.E. 2548 (2005) (No. 3) prohibiting any person throughout the Kingdom from departing from his/her dwelling place between 23.00-04.00 hrs., and other government requirements;
  - Adjusting the service hours and making it known to the passengers for acknowledgement of the change of the last train timetables of the MRT Blue Line and the MRT Purple line to end at 22.30 hrs;
  - Increasing trains while increasing service frequencies during rush hours in the evening until the service closing of both the MRT Blue Line and the MRT Purple Line to ensure the passengers' convenience and relieved congestion;
  - Requiring the MRT service users to always wear medical face masks while using the services.



- 4) The Company ensures the implementation in the event that any staff is found infected with the disease in accordance with the work rules and regulations regarding prevention and containment of dangerous communicable diseases, and the business continuity management plan, as follows:
  - Notifying the Department of Disease Control and the regulatory body (MRTA) about the staff infected with the COVID-19;
  - Assessing a group of staff at risk of being further infected with the disease, and requiring the group of staff at risk to comply with the quarantine measures;
  - Assessing the areas where pathogen spread may occur; considering zoning the work areas for cleaning and spraying disinfectants;
  - Making passengers, mass media, and the public known about such implementation in order to build their confidence in the use of the services

In this regard, the Company has continued to strictly observe the precautionary measures against the spread of the COVID-19 throughout the years 2020 and 2021 in conformity with the government measures.

## 3.2 Corporate Specific Risk

## 3.2.1 Risk from Legal Disputes

Pursuant to the existing Concession Agreements, the Company and NECL had a total of 19 disputes with EXAT on a different interpretation of several matters, such as adjustment of toll rates and responsibility for costs under the Agreements. The disputes were referred to the Arbitral Tribunal in accordance with the dispute settlement procedures under the Agreements and in the Administrative Court.

On February 18, 2020, the Council of Ministers' Meeting resolved to approve the amendment of the Agreements to settle the disputes of the Second Stage Expressway Project (the Si Rat Expressway, including Sector D) and the Bang Pa-in - Pak Kret Expressway Project. The Company and EXAT signed the Second Stage Expressway Agreement (Amendment) while NECL and EXAT signed the Bang Pa-in - Pak Kret Expressway Agreement (Amendment) on February 20, 2020. In this regard, the Company, NECL and EXAT had already filed the withdrawals of their respective Plaints or execution of all the judgments, as a result, the Second Stage Expressway Agreement (Amendment) between the Company and EXAT, and the Bang Pa-in - Pak Kret Expressway Agreement (Amendment) between NECL and EXAT came into effect.

#### 3.2.2 Risk from Return on Investments in Companies less than Projections

The Company may be exposed to a risk from return on investments in companies less than projections in the event that the operational results of such companies whose shares were held by the Company do not meet the projections. To minimize such risk, the Company will take into account the proportion of investments in companies in line with the Company's investment policy whereby those investments can be converted into cash when there are appropriate business opportunities and occasions.

Since 2019, the Company has changed its policy on investment from investments in associates recognizing share of profit or loss according to the shareholding percentage to other long-term investments in available-for-sale securities, which a change in market capitalization would be recorded on the end date of the accounting period. The price difference is treated as unrealized gain or loss indicated in the shareholders' equity.

In this regard, the decrease in the shareholding percentage to be the investment in the available-for-sale securities shall be deemed to minimize a risk from return on investments in companies less than projections in the event that such company's operational results fail to meet the projections. However, the Company sent its representatives to be members of the board of directors of the companies invested by the Company to ensure the Company's participation in their management and acknowledge the operational results of the companies invested by the Company on a regular basis.

#### 3.2.3 Risk Relating to Fluctuation of Cost of Rail Business

Costs of rail business comprise the cost of farebox and cost of train service, which are deemed the main expenditure of the Company's business operations, comprising repairs and maintenance costs for the metro and civil infrastructure, public utility cost, personnel cost, and payment of remuneration from fare revenue.

As for the maintenance costs under the M&E contract, the Company's contract is in foreign and



Baht currencies, subject to adjustment based on the Consumer Price Index as specified in the contract. Given the long-term contract, the Company will be then exposed to risk due to changes in such indices.

The public utility cost mainly comprises the cost of electricity used at the metro stations and for train operations. The cost of electricity may be adjusted according to the electricity rates of the Metropolitan Electricity Authority, which may result in the Company's increased cost.

Therefore, the Company's costs of rail business in respect of the cost of farebox vary according to the aforesaid costs. However, in the past, the Company remained able to effectively control its cost of farebox. Besides, the cost of farebox is mostly fixed cost, not varying directly according to the increased volume of passengers, provided that there is no material change in the volume of passengers to the extent that the Company is required to add the number of trains for service to enhance the capacity to accommodate the passengers.

In the Concession Agreement for the MRT Purple Line Project, the service fees for the O&M Services payable by MRTA to the Company are calculated and based on the projections of operating expenses estimated by the Company, whereby such service fees may be adjusted only based on the actual inflation rate and electricity charge rate under the method specified in the Concession Agreement. Therefore, profits from the Operation Service will vary according to the Company's ability to manage the actual costs and expenses to mirror the specified projections. Should the actual costs and expenses be different from the projections, the Company's operational results may be affected since the Company is not able to request compensation or increase the service fees from MRTA.

However, with the expertise and experience in the management of the MRT Blue Line Project, the Company is confident in its ability to efficiently manage costs and expenses for operations to be close to the projections.

# 3.2.4 Risk from Engagement of Outsourced Experts as Main Contractors for Supply and Maintenance of the M&E Equipment

The Company has accepted the transfer of the agreement for the procurement of the M&E Equipment and an agreement for maintenance of the M&E Equipment with main contractors, namely, Siemens Limited, Thailand, and Japan Transportation Technology (Thailand). Thus, in the event that such outsourced expert group, as such main contractors, is unable to provide services under the agreements to the Company or there is any change in the maintenance agreement, the Company's business operation may be affected and in the event that the trains cannot be opened for service, the Company's image may be affected.

In this regard, the Company has managed the risk by study information from the members of the international federations of public transport operators, e.g., UITP, APTA, NOVA Group of Metros, including the advice from Lloyd's Register Rail, the highly experienced consultant, it is then possible for the Company to select and procure other manufacturers' M&E Equipment which is compatible with its existing system. The Company also formulates the strategic plan in developing the quality of its personnel to ensure they have sufficient capabilities for working with local and overseas equipment manufacturers and contractors in the maintenance and repair of the M&E Equipment and the rail system to ensure efficiency without reliance on the sole existing manufacturer.

## 3.2.5 Risk from Work Operations of Expressway Construction and Management Business

The Company takes into account the risk from operations of expressway construction and management business which may be resulted from primary factors, i.e., personnel, work system, operation system and external factors, which cause error or insufficiency of work procedures, employees, work system or information technology system, including employees' fraud and events or external factors, which may give rise to monetary and non-monetary damage, namely, damage to reputation or security of the Company. Therefore, it is greatly necessary to have a thorough supervision system with due care. The Company has then arranged for a specific unit having duties to monitor and maintain the routes and toll collection system in accordance with the operation standards, which can be assured by the experience and expertise of staffs in charge from all divisions, thereby leading to the quality and availability of efficient, complete and continued service.

In addition, the Company has also established the preventive measure for the significant structures of the expressway systems so as to be available for full-time service by way of drawing up a plan for inspection of the structures of the Si Rat Expressway, the Udon Ratthaya Expressway, and the Si Rat - Outer Ring Road Expressway to be in line with the inspection by



JMI Pacific Co., Ltd., a designing company with expertise in structural inspection. The monitoring, surveillance, and maintenance were conducted to ensure that there would be no impact on the use of the expressways. As for to the toll collection, communication and traffic control systems, which are important to its operations, the Company has provided the preventive maintenance as well as the data backup system, the power backup system and the management of purchase of spare materials.

Moreover, the Company may be exposed to the risk from non-functional toll collection equipment which may arise from various causes, such as, inoperative electrical system due to a power failure on the part of the Metropolitan Electricity Authority, error processing by the operating system, etc. In this regard, the Company gives high priority to such risk management by arranging for power backup system, a security system for prevention of access to significant work systems by any third parties, determination of authorization levels of access to information and equipment, and installation of virus scan software and data backup in the operating system to ensure instant substitution.

## 3.2.6 Risk from Delayed Construction and Operation of the Projects

The Company executed the Concession Agreement for the MRT Blue Line Extension Project with the Mass Rapid Transit Authority of Thailand (MRTA) on March 31, 2017, whereby the Company shall have duties in supply, installation, and test run and commissioning of the M&E Systems for the MRT Blue Line Extension Project, provided that such M&E Systems shall be connected with those of the M.R.T. Chaloem Ratchamongkhon Line Project in order to provide the train operation service in phases as planned. The Company managed such risk by entering into an agreement engaging CH. Karnchang Public Company Limited as Project Manager, as well as for supply, installation, and test run and commissioning of the M&E Systems for the Project. Such implementation went according to plan, as follows:

- Phase 1: Bang Sue Station Tao Poon Station, under the Agreement scheduled for service opening by August 15, 2017, was opened for service by the Company on August 11, 2017;
- Phase 2: Hua Lamphong Station Lak Song Station, under the Agreement scheduled for service opening within 30 months, was opened for service by the Company on September 29, 2019; and
- Phase 3: Tao Poon Station Tha Phra Station, with its service opening within 36 months (in March 2020), was opened for its commercial operation by the Company on March 30, 2020, thereby providing a single rail network (Through Operation) for the train operations of the MRT Blue Line and the MRT Blue Line Extension Projects, and such service generates income for the whole line as specified in the respective Concession Agreements.

The MRT Blue Line Extension Project had completed all of its 3 phases of service within the specified period of time under the Agreement; it was then deemed that there remained no risk from the delayed operation of the MRT Blue Line Project.



# 4. Property Used in Business Operations

#### 4.1 Main Assets

As of December 31, 2020, the Company and its subsidiaries had main assets used in business operations, as follows:

(Unit: Million Baht)

	Class of Assets	Net Book Value
1.	Building and equipment	379
2.	Rights to operate expressway sectors	31,702
3.	Rights to use sites for expressway construction	-
4.	Intangible assets under the Concession Agreement for the MRT Blue Line Project	44,684
	Total	76,765

The main assets of the Company and its subsidiaries as indicated above can be classified into class of assets and companies, as follows:

## 4.1.1 Building and Equipment

As of December 31, 2020, the book value of the building and equipment as per the consolidated financial statements of the Company and its subsidiaries was as follows:

(Unit: Million Baht)

Company	Net Book Value	Ownership	Encumbrance
BEM	347	Owner *	None
NECL	14	Owner **	None
BMN	18	Owner	None
Total	379		

## Remarks: \*

- This refers to the building, construction improvement, and certain structures of the Second Stage Expressway System. Despite the fact that the title to such building is owned by EXAT, the Company is granted the right to use such building to operate the Second Stage Expressway Project under the conditions as specified in the Agreement. The Company takes on the lease of a building space for use as its head office located at No. 587 Sutthisarn Road, Ratchadaphisek Subdistrict, Dindaeng District, Bangkok 10400, at the rental rate of Baht 10,000 per month.
- \*\* NECL does not own any property, plant, and equipment but NECL takes on the lease of a building space for use as its head office located at No. 587 Sutthisarn Road, Ratchadaphisek Subdistrict, Dindaeng District, Bangkok 10400, at the rental rate of Baht 10,000 per month. NECL uses the Bang Pa-in Pak Kret Expressway Control Center Building, which is part of the Bang Pa-in Pak Kret Expressway Project, to supervise the operations. Despite the fact that the title to such building is owned by EXAT, NECL is granted the right to use such building to operate the Bang Pa-in Pak Kret Expressway Project under the conditions as specified in the Agreement.

## 4.1.2 Rights to Operate Expressway Sectors

As of December 31, 2020, the book value of the rights to operate expressway sectors as per the consolidated financial statements of the Company and its subsidiary was as follows:

(Unit: Million Baht)

Company	Net Book Value
BEM	26,965
NECL	4,737
Total	31,702

The rights to operate expressway sectors are considered the costs of construction of the Si Rat Expressway, the Si Rat - Outer Ring Road Expressway, and the Udon Ratthaya Expressway, with the details as of December 31, 2020, comprising:

(Unit: Million Baht)

Class of Assets	Net Book Value	Ownership	Encumbrance
Si Rat Expressway	2,856	EXAT	None
(Sectors AB, C and D)			
Si Rat - Outer Ring Road Expressway	23,418	EXAT	None
Udon Ratthaya Expressway	4,737	EXAT	None
Project costs during construction	691	EXAT	None
Total Net Book Value	31,702		

Given that the Expressway Agreements above are on a BTO (Build, Transfer and Operate) basis, the title to all expressways, including various permanent constructions in relation to or used in connection with the expressway systems, shall be vested in EXAT immediately upon construction by the Company and NECL. Upon opening for service, the Company and NECL are entitled to utilize such property and shall have the duty to keep such property maintained throughout the term of the Agreements.

On February 18, 2020, the Council of Ministers resolved to approve the amendment to the Agreements for settlement of all of the disputes between the Company/NECL and EXAT; and on February 20, 2020, the Company/NECL and EXAT signed the Second Stage Expressway Agreement (Amendment) and signed the Pa-in - Pak Kret Expressway Project Agreement (Amendment), for the respective specified concession periods of 15 years and eight months from February 20, 2020, which are entitled to be extended under the remaining entitlement in the existing Agreements. In this regard, the Company and NECL are required by these Agreements to be responsible for expenses relating to toll collection, traffic management and rescue operation on the expressways, including costs of maintenance of the expressways under the relevant Agreements throughout the term of the Agreements. As for the Si Rat - Outer Ring Road Expressway Agreement, it has the specified concession period of 30 years from December 15, 2012.

The essence of revenue sharing and renewal of the concession periods under the respective Agreements (Amendments) is as follows:

Expressway	Revenue Sharing The Company/the Subsidiary: EXAT	Extended Period	Remaining Extension Entitlement *
Si Rat (Sectors AB, C and D)	First Stage and Second Stage Sector AB 40:60 Sector C 100:0	15 years and 8 months to October 2035	4 years and 4 months
	Sector D 100 : 0	8 years and 6 months to October 2035	11 years and 6 months
Udon Ratthaya (Bang Pa-in - Pak Kret)	100 : 0	9 years and 1 month to October 2035	10 years and 11 months

<sup>\*</sup> The remaining period under entitlement to full extension of the respective Agreements as specified in the existing Agreements.

Toll rates have been revised to increase at a fixed rate every 10 years from September 1, 2018 for the Second Stage Expressway Agreement and every 10 years from November 1, 2018 for the Bang Pa-in - Pak Kret Expressway Project Agreement at the rates specified therein.

# 4.1.3 Rights to Use Sites for Expressway Construction

The rights to use sites for expressway construction are considered as a part of the rights to operate completed expressway sectors. The Company recorded the initial costs of the rights to use sites for expressway construction at the costs equivalent to the present value of the encumbrance in payment of compensation for site acquisition cost to EXAT under the Second Stage Expressway Agreement after initial recognition of the rights to use sites for expressway construction which showed the value at costs, less accumulated amortization. The rights to use sites for expressway construction were totally amortized in the first quarter of 2020.

#### 4.1.4 Intangible Assets under the Concession Agreement for the MRT Blue Line Project

As of December 31, 2020, the book value of intangible assets under the Concession Agreement for the MRT Blue Line Project as per the consolidated financial statements of the Company and its subsidiary were as follows:

(Unit: Million Baht)

Company	Net Book Value
BEM	44,377
BMN	307
Total	44,684

The intangible assets under the Concession Agreement for the MRT Blue Line Project are considered the costs of construction of the MRT Blue Line Project, with the details as of December 31, 2020, comprising:

(Unit: Million Baht)

Company	Class of Assets	Net Book Value	Ownership	Encumbrance
BEM	M&E Equipment	41,741	Owner	None
BEM	M&E Equipment and leasehold improvements, telecommunications system equipment, and advertising system equipment in metro stations	1,125	Owner	None
BMN	M&E Equipment and leasehold improvements, telecommunications system equipment, and advertising system equipment in metro stations	306	Owner	None
BEM	Project costs during construction	1,511	Owner	None
BMN	BMN Project costs during construction		Owner	None
	Total Net Book Value	44,684		



## 4.2 Investments in Other Companies

## 4.2.1 Summary of Investments as per the Financial Statements

As of December 31, 2020, the book value of investments in other companies as per the Company's separate financial statements was as follows:

(Unit: Million Baht)

	Company	Book Value under Cost Method	Portion of Investment in each Company (percent)	Paid-up Capital	Type of Investments	Nature of Business Operations
1.	Northern Bangkok Expressway Company Limited	2,604	99.99	5,250	Subsidiary	- Construction and operation of the Bang Pa-in - Pak Kret
	<u>Less</u> : Provision for impairment of investments	(2,450)				Expressway Project
	Net investments	<u>154</u>				
2.	Bangkok Metro Networks Limited	507	90.52	254	Subsidiary	- Development of lease retail spaces in the metro stations and the
	<u>Less</u> : Provision for impairment of investments	(16)				basement level of the park and ride facility
	Net investments	<u>491</u>				- Procurement of advertising boards or media in the metro stations and inside the trains
						- Provision of service and maintenance of telecommunications system equipment in the metro stations
3.	TTW Public Company Limited	4,061	18.47	3,990	Other Company	- Production and distribution of tap water
4.	CK Power Public Company Limited	3,340	17.59	8,129	Other Company	- Investment in other companies (Holding Company) operating the energy business
5.	Eastern High-Speed Rail Linking Three Airports Company Limited	400	10.00	4,000	Other Company	- Development of electric railway projects

# 4.2.2 Policy on Investment and Management in the Subsidiaries

The Company has the policy to invest in businesses which are related, similar, or beneficial, and support the Company's business operations, in order to provide opportunities and long-term yields, and strengthen the Company's stability and operational results. The investment policy shall be as follows:

- 1. To invest in projects or acquire ordinary shares in project operators, in a manner of long-term investments;
- 2. To invest up to the minimum proportion to allow the Company to participate in setting out policies, monitoring and reviewing operations of such companies so invested;
- 3. Not to invest in any project giving rise to environmental impact or contrary to the good moral of the society.

As of December 31, 2020, the Company invested in the subsidiaries and other companies, as follows:

## 1) Northern Bangkok Expressway Company Limited ("NECL")

The Company established NECL in 1996, by holding 99.99 percent of its shares. The potential benefits to be derived by the Company would be in the form of dividend from the investment in shares of NECL. Due to the impact on NECL from the government policy for construction of the competing road, NECL's revenue did not meet its projection. In this regard, NECL's operational results continued to sustain a loss to the extent that the accumulated loss exceeded its equity, resulting in shareholders' deficit. In 2003, NECL, therefore, increased its registered capital by Baht 3,000 Million to become the registered capital of Baht 6,000 Million. At present, NECL called for share payment of 75 percent of the increased registered capital of Baht 3,000 Million. NECL has started to generate profits since 2013 onwards. The Company has assigned its five executives to be members of NECL's board of directors, from a total of six directors of NECL. In case NECL would take any actions which may significantly affect the Company, NECL would be required to seek prior approval from the Company's Board of Directors' Meeting. Furthermore, the Company is also the service provider for all operations of NECL.

As of December 31, 2020, NECL's registered and paid-up capital was Baht 5,250 Million. The Company's shareholding in NECL was 99.99 percent of its registered capital.

#### 2) Bangkok Metro Networks Limited ("BMN")

The Company established BMN on February 25, 2009, to operate the businesses of procurement and production of advertising media in various forms inside the metro stations and inside the trains, lease of retail spaces in the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) stations and spaces in the basement level of the Lat Phrao park and ride facility. In addition, BMN also provides service and maintains telecommunications system equipment inside the metro stations. Subsequently, in October 2018, the Company, who shall be exclusively entitled to commercial development in the M.R.T. Chaloem Ratchamongkhon Line Project in accordance with the Concession Agreement for the MRT Blue Line Project dated March 31, 2017, entered into an agreement engaging BMN as a management representative for all commercial development in lieu of granting of the commercial development right.

As of December 31, 2020, BMN's registered and paid-up capital was Baht 254 Million, whereby the Company held shares in BMN representing 90.52 percent of all BMN's shares sold.

In this regard, the Company has a control policy or participates in setting out the significant policies on the business operations by assigning its five representatives to be members of BMN's board of directors, from a total of seven directors of BMN.

# 3) TTW Public Company Limited ("TTW")

The Company has invested in TTW which operates the business of production and distribution of tap water to the Provincial Waterworks Authority for further distribution to water users in the vicinity of Nakhon Pathom Province and Samut Sakhon Province, under the Water Purchase and Sale Agreement with the Provincial Waterworks Authority, for a period of 30 years from July 21, 2004, on a Build-Own-Operate (BOO) basis, and TTW also acquired the rights to manage the tap water production and wastewater treatment systems in Bang Pa-In Industrial Estate from Bangpa-in Land Development Co., Ltd., for a period of 30 years from August 6, 2009.

TTW has invested in Pathum Thani Water Co., Ltd., representing 98 percent of its registered capital. Such company operates the business of production and distribution of tap water in the vicinity of Pathum Thani-Rangsit, Pathum Thani Province, under

the Water Production and Distribution License Agreement with the Provincial Waterworks Authority, for a period of 25 years from October 15, 1998. TTW has also invested in Thai Water Operations Company Limited which operates the business of operation and management of tap water production and distribution systems and wastewater treatment, in which TTW holds shares representing 68 percent of its registered capital. In addition, TTW has invested in the energy business through holding 24.98 percent of shares in CK Power Public Company Limited whose main business is holding company in other companies operating the business of production and distribution of electricity from various types of energy. The potential benefits to be derived by the Company would be in the form of dividend from the investment.

The Company, as a shareholder, assigned its representative to be a member of the board of directors of TTW. As of December 31, 2020, the Company held shares in TTW representing 18.47 percent of its registered capital.

# 4) CK Power Public Company Limited ("CKP")

The Company has invested in CKP, which operates core business by investing in other companies (Holding Company) operating the business of production and distribution of electricity from various types of energy. As of December 31, 2020, CKP invested by holding shares representing 61.33 percent in SouthEast Asia Energy Limited; 30 percent in Nakhon Ratchasima Solar Limited; 30 percent in Chiangrai Solar Limited; 100 percent in Bangkhenchai Company Limited; 65 percent in Bangpa-in Cogeneration Limited; 37.50 percent in Xayaburi Power Company Limited; and 42 percent in Luang Prabang Power Company Limited. The potential benefits to be derived by the Company would be in the form of dividend from the investment.

The Company, as a shareholder, assigned its representative to be a member of the board of directors of CKP. As of December 31, 2020, the Company held shares in CKP representing 17.59 percent of its registered capital.

# 5) Eastern High-Speed Rail Linking Three Airports Company Limited ("EHSR")

The Company invested in EHSR, which was established by CPH Group to carry out development of electric railway projects, design and construction works, civil work, in association with other projects, supply of M&E Systems and rolling stocks, including provision of train operation and maintenance services, and development of areas for supporting the electric railway services of the project, for a period of 50 years (with the construction period of 5 years and the operation period of 45 years). The potential benefits to be derived by the Company would be in the form of dividend from the investment.

The Company, as a shareholder, assigned its representative to be a member of the board of directors of EHSR. As of December 31, 2020, the Company held shares in EHSR representing 10 percent of its registered capital.



## 5. Legal Disputes

# 5.1 Disputes with the Expressway Authority of Thailand ("EXAT")

The Company/the subsidiary and the EXAT had reached the mutual agreement for settlement of a total of 19 disputes of the Second Stage Expressway Project (the Si Rat Expressway, including Sector D) and the Bang Pa-in - Pak Kret Expressway Agreement (the Udon Ratthaya Expressway), in the total amount of Baht 134,274.8 Million, which subsequently on February 18, 2020, the Council of Ministers had resolved to grant approval for the Company/the subsidiary and the EXAT to amend the relevant Agreements to settle the disputes; and on February 20, 2020, the Company/the subsidiary and the EXAT then signed the Second Stage Expressway Agreement (Amendment) and the Bang Pa-in - Pak Kret Expressway Agreement (Amendment).

Currently, the Company/the subsidiary and the EXAT have completely complied with the applicable laws for settlement of all of the disputes between each other.



#### 6. General Information and Other Significant Information

#### 6.1 General Information

## (1) General information of the Company

Company Issuing Securities : Bangkok Expressway and Metro Public Company Limited

("BEM")

Business Operation : Construction and management of the expressways and the rail

mass rapid transit system projects, including other related

businesses

Company Registration No. : 0107558000491

Registered Capital : Baht 15,285 Million, which is fully paid up.

Head Office : 587 Sutthisarn Road, Ratchadaphisek Subdistrict,

Dindaeng District, Bangkok 10400

Telephone : 0 2641 4611 and 0 2354 2000 Fax : 0 2641 4610 and 0 2354 2040

Website : www.bemplc.co.th

Branch Office (1) : 238/7 Asoke-Dindaeng Road, Bangkapi Subdistrict,

Huai Khwang District, Bangkok 10310

Telephone : 0 2641 4611 Fax : 0 2641 4610

Branch Office (2) : 189 Rama IX Road, Huai Khwang Subdistrict,

Huai Khwang District, Bangkok 10310

Branch Office (3) : 189/1 Rama IX Road, Huai Khwang Subdistrict,

Huai Khwang District, Bangkok 10310

Branch Office (4) : 189/2 Rama IX Road, Huai Khwang Subdistrict,

Huai Khwang District, Bangkok 10310

Telephone : 0 2354 2000 Fax : 0 2354 2040

## (2) Legal entities in which the Company holds 10 percent of shares or more

Company Issuing Securities : Northern Bangkok Expressway Company Limited

("NECL")

Business Operation : Construction and management of the Udon Ratthaya

Expressway

Head Office : 587 Sutthisarn Road, Ratchadaphisek Subdistrict,

Dindaeng District, Bangkok 10400

Registered Capital : Baht 6,000 Million, Baht 5,250 Million of which is paid up.

Shareholding Percentage : 99.99 percent
Telephone : 0 2641 4647
Fax : 0 2641 4646

Company Issuing Securities : Bangkok Metro Networks Limited ("BMN")

Business Operation : Procurement and production of advertising media in various

forms in the MRT stations and inside the MRT trains, lease of retail space in the MRT stations, the MRT Blue Line Project and the basement level of the Lat Phrao park and ride facility, including provision of service of telecommunications system in the MRT stations and inside

the MRT trains.

Head Office : 832 Sutthisarn Road, Ratchadaphisek Subdistrict,

Dindaeng District, Bangkok 10400

Registered Capital : Baht 254 Million, which is fully paid up.

Shareholding Percentage : 90.52 percent
Telephone : 0 2690 8200
Fax : 0 2690 8212

Website : www.bmn-mrt.com

Company Issuing Securities : TTW Public Company Limited ("TTW")

Business Operation : Production and distribution of water supply to the Provincial

Waterworks Authority and investment in companies

operating the business of other public utilities

Head Office : 30/130 Moo 12, Buddhamonthon 5 Road, Tambon Rai

Khing, Amphoe Samphran, Nakhon Pathom Province 73210

Registered Capital : Baht 3,990 Million, which is fully paid up.

Shareholding Percentage : 18.47 percent

Telephone : 0 2811 7526

Fax : 0 2420 6064

Website : www.ttwplc.com

Company Issuing Securities : CK Power Public Company Limited ("CKP")

Business Operation : Investment by holding shares in other companies (Holding

Company) operating the business of production and distribution of electricity from various types of energy

Head Office : 587 Viriyathavorn Building, 19th Floor, Sutthisan Winitchai

Road, Ratchadaphisek Subdistrict, Dindaeng District,

Bangkok 10400

Registered Capital : Baht 9,240 Million, Baht 8,129 Million of which is paid up.

Shareholding Percentage : 17.59 percent
Telephone : 0 2691 9720
Fax : 0 2691 9723

Website : www.ckpower.co.th

Company Issuing Securities : Eastern High-Speed Rail Linking Three Airports

Company Limited ("EHSR")

Business Operation : Development of railway projects, performance of design

and construction, civil works in association with other projects, supply of M&E Systems and rolling stocks, including provision of train operation and maintenance services, and development of areas for supporting the rail

services of the project.

Head Office : 313 C.P. Tower, 14th Floor, Silom Road, Silom Subdistrict,

Bangrak District, Bangkok 10500

Registered Capital : Baht 4,000 Million, which is fully paid up.

Shareholding Percentage : 10.00 percent

Telephone : 0 2858 3149

(3) Reference

Securities Registrar : Thailand Securities Depository Company Limited

The Stock Exchange of Thailand

93 Rachadapisek Road, Dindaeng Subdistrict,

Dindaeng District, Bangkok 10400 Telephone : 0 2009 9382 Fax : 0 2009 9476

Auditor : EY Office Limited

193/136-137 Lake Rajada Office Complex, 33rd Floor,

New Rajadapisek Road

Klongtoey District, Bangkok 10110 Telephone : 0 2264 0777 Fax : 0 2264 0789

Legal Advisor : The Legists Group

Abdulrahim Place, 9th Floor

No. 990 Rama IV Road, Silom Subdistrict

Bangrak District, Bangkok 10500

Telephone : 0 2636 1111 Fax : 0 2636 0000

Financial Advisor : Advisory Plus Company Limited

1550 Thanapoom Tower, 10th Floor

New Petchburi Road, Makkasan Subdistrict

Ratchathewi District, Bangkok 10400

Telephone : 0 2652 7858-64 Fax : 0 2652 7867

#### **Debenture Registrars**

#### Siam Commercial Bank Public Company Limited

G Tower, Grand Rama 9, 15th Floor, North Wing 9, Rama 9 Road, Huai Khwang Subdistrict, Huai Khwang District, Bangkok 10310

Telephone : 0 2128 2326-9 Fax : 0 2128 4625

## Krung Thai Bank Public Company Limited

977/2 Phaholyothin Road, Samsen Nai Subdistrict

Phayathai District, Bangkok 10400

Telephone : 0 2298 0831 Fax : 0 2298 0835

# **Debenture Holders'** Representative

# Siam Commercial Bank Public Company Limited

G Tower, Grand Rama 9, 17th Floor, North Wing 9,

Rama 9 Road, Huai Khwang Subdistrict, Huai Khwang District, Bangkok 10310

Telephone : 0 2128 2316-7 Fax : 0 2128 4621

## **Regularly Contacted Financial Institutions**

## Krung Thai Bank Public Company Limited

35 Sukhumvit Road, Khlong Toei Nuea Subdistrict

Watthana District, Bangkok 10110

Telephone : 0 2208 4631-9 Fax : 0 2256 8619

## Siam Commercial Bank Public Company Limited

9 Ratchadaphisek Road, Chatuchak Subdistrict Chatuchak District, Bangkok 10900

Telephone : 0 2256 2323

## TMB Bank Public Company Limited

3000 Phaholyothin Road, Chom Thong Subdistrict Chatuchak District, Bangkok 10900

Telephone : 0 2299 2511-2

Fax : 0 2299 2752

## **Bangkok Bank Public Company Limited**

333 Silom Road, Silom Subdistrict Bang Rak District, Bangkok 10500

Telephone : 0 2230 1036 : 0 2230 2722 Fax

# 6.2 Other Significant Information

- None -



# Part 2: Management and Corporate Governance

#### 7. Information on Securities and Shareholders

## 7.1 Number of Registered Capital and Paid-up Capital

- 7.1.1 The Company has the registered capital of Baht 15,285 Million, comprising 15,285 million ordinary shares at the par value of Baht 1 per share, Baht 15,285 Million of which has already been paid up, divided into 15,285 million ordinary shares at the par value of Baht 1 per share.
- 7.1.2 As at December 30, 2020, the Company's 1,307,026,321 ordinary shares were used as underlying securities for the issuance of Non-Voting Depository Receipt or NVDR, representing 8.55 percent of all shares in the Company. Such shares entitle their holders to receive dividends from investment in NVDR in the same amount as such dividends received by Thai NVDR Company Limited from the Company, provided that NVDR holders shall not be entitled to vote at any shareholders' meeting of the Company. Investors may check the number of NVDR from the Stock Exchange of Thailand's website at www.set.or.th/nvdr.

#### 7.2 Shareholders

# 7.2.1 List of Major Shareholders

As at June 26, 2020, which was the latest closing date of the share register book, the first 10 major shareholders were as follows:

No.	Shareholders	Number of Shares (shares)	Shareholding Percentage (percent)
1	Group of CH. Karnchang Public Company Limited (1)	4,923,781,781	32.21
2	Mass Rapid Transit Authority of Thailand	1,256,259,584	8.22
3	Thai NVDR Company Limited	1,205,839,759	7.89
4	Krung Thai Bank Public Company Limited	815,356,075	5.33
5	Social Security Office	480,341,600	3.14
6	Mr. Wichai Wachiraphong	369,888,857	2.42
7	STATE STREET EUROPE LIMITED	305,512,331	2.00
8	Bangkok Bank Public Company Limited	303,448,709	1.99
9	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	290,696,674	1.90
10	Mr. Min Tieanworn	200,000,000	1.31
	Total	10,151,125,370	66.41
	Others	5,133,874,630	33.59
	Grand Total	15,285,000,000	100.00

Remarks: (1) CH. Karnchang Group's shareholding in the Company represented 32.21 percent of the Company's paid-up capital, with the details as follows:

CH. Karnchang Group	Number of Shares	% of Paid-up Capital
1. CH. Karnchang Public Company Limited (2)	4,787,121,829	31.32
2. CH. Karnchang-Tokyu Construction Company Limited <sup>(3)</sup>	136,659,952	0.89
	4,923,781,781	32.21



(2) CH. Karnchang Public Company Limited ("CH. Karnchang Plc.") operates the general construction business, with Trivisvavet Group holding shares representing 33.54 percent of the Company's paid-up capital (information as of June 30, 2020), with the details as follows:

Trivisvavet Group	Number of Shares	% of Paid-up Capital
1. Mahasiri Siam Co., Ltd. <sup>(4)</sup>	242,745,365	14.331
2. CH. Karnchang Holding Co., Ltd. (5)	181,787,530	10.732
3. CK. Office Tower Co., Ltd. (6)	86,048,212	5.080
4. Mrs. Sopida Trivisvavet	15,383,225	0.908
5. Mr. Plew Trivisvavet	14,231,497	0.840
6. Mrs. Pranee Tongkittikul	6,614,342	0.390
7. Mrs. Saikasem Trivisvavet	6,061,142	0.358
8. Miss Walainut Trivisvavet	3,177,484	0.187
9. Mr. Nattavut Trivisvavet	2,465,785	0.146
10. Miss Supamas Trivisvavet	1,700,000	0.100
11. Mr. Kritsada Trivisvavet	1,366,145	0.081
12. Mr. Kris Trivisvavet	1,363,070	0.080
13. Mr. Puwanet Trivisvavet	1,114,855	0.066
14. Mrs. Korakot Trivisvavet	1,100,000	0.064
15. Miss Kanthanat Trivisvavet	1,067,600	0.063
16. Miss Thanatchsorn Trivisvavet	780,040	0.046
17. Miss Sawanya Trivisvavet	600,025	0.040
18. Mr. Prasert Trivisvavet	204,285	0.012
19. Mrs. Ornanong Trivisvavet	102,775	0.006
20. Mrs. Saranthorn Trivisvavet	100,000	0.005
21. Miss Phatsanan Trivisvavet	97,000	0.005
22. Miss Suratha Trivisvavet	59,300	0.003
23. Mr. Sompol Trivisvavet	25,500	0.001
24. Mrs. Bangorn Trivisvavet	10,000	0.000
25. Mrs. Chayanich Trivisvavet	1,742	0.000
	568,206,919	33.544

Shareholders may view additional information of CH. Karnchang Plc. in the Annual Registration Statement (Form 56-1) on the website of the SEC Office (www.sec.or.th) or the website of the Stock Exchange of Thailand (www.set.or.th).

- (3) CH. Karnchang-Tokyu Construction Company Limited operates the business of construction of all types, having a total of 1,000,000 shares, with its 549,999 shares representing 55 percent held by CH. Karnchang Plc.
- Mahasiri Siam Co., Ltd. operates the investment business, having a total of 9,000,000 shares, with its 7,782,987 shares representing 86.48 percent held by Trivisvavet Group.
- (5) CH. Karnchang Holding Co., Ltd. operates the investment and consultation business, having a total of 8,400,000 shares, with its 2,100,000 shares representing 25 percent held by Mahasiri Siam Co., Ltd., and its 5,250,000 shares representing 62.50 percent held by Trivisvavet Group.
- CK. Office Tower Co., Ltd. operates the business of investment and consultancy, having a total of 3,000,000 shares, with its 750,000 shares representing 25 percent held by Mahasiri Siam Co., Ltd., and its 1,875,000 shares representing 62.50 percent held by Trivisvavet Group.



## 7.2.2 The Company's Shareholding Structure

It has demonstrated the Company's defense mechanisms for preventing a hostile takeover, whereby the Company has no policy on shareholding in two or more companies to form a structure of company group, such as, by means of a cross holding or pyramid holding.

# 7.2.3 The Company's Free Float Percentage

According to the report on the shareholding distribution of strategic shareholders as at June 26, 2020, as submitted to the SET by the Company, the proportion of the Company's non-strategic shareholders was 54.02 percent of all issued and paid-up shares of the Company.

## 7.2.4 Shareholders' Agreement

There was no shareholders' agreement between the Company and its major shareholders.

#### 7.3 Issuance of Other Securities

#### 7.3.1 Long-Term Loans

In 2020, the Company made the long-term loan drawdown for the MRT Blue Line Extension Project in the amount of Baht 5,300 Million, and repaid the long-term loan according to the payment schedule in the amount of Baht 1,312 Million, and as a result, as at December 31, 2020, the Company and its subsidiaries had long-term loans amounting to Baht 18,818 Million.

#### 7.3.2 Debentures

In 2020, the Company issued debentures at the total value of Baht 3,000 Million, for the purpose of repayment of the Company's existing debts. As at December 31, 2020, the Company's outstanding debentures were as per the following details:

Details of Debentures	Debentures	Debentures	
	No. 1/2016	No. 1/2016	
	Series 2	Series 3	
Debenture Symbol	BEM216A	BEM236A	
Total Value of Debentures	Baht 1,615 Million	Baht 2,000 Million	
Type of Debentures	Unsubordinated and unsecured debentures bearing names of the holders without a debenture holder representative	Unsubordinated and unsecured debentures bearing names of the holders without a debenture holder representative	
Number of Debentures	1,615,000 units	2,000,000 units	
Par Value per Unit	Baht 1,000	Baht 1,000	
Interest Rate per annum	2.52%	3.00%	
Maturity	5 years	7 years	
Issue Date of Debentures	June 24, 2016	June 24, 2016	
Maturity Date	June 24, 2021	June 24, 2023	
Registrar	SCB	SCB	
Early Redemption Right	- None -		
Repayment of Principal		repay the principal in full on the ty date.	
Rating	A	A	



Details of Debentures	Debentures	Debentures	Debentures		
	No. 1/2016	No. 1/2016	No. 2/2016		
	Series 4	Series 5			
Debenture Symbol	BEM266A	BEM286A	BEM286B		
Total Value of	Baht 3,335 Million	Baht 2,750 Million	Baht 500 Million		
Debentures					
Type of Debentures	Unsubordinated	Unsubordinated	Unsubordinated		
	and unsecured	and unsecured	and unsecured		
	debentures bearing	debentures bearing	debentures bearing		
	names of the	names of the	names of the		
	holders without	holders without	holders without		
	a debenture holder	a debenture holder	a debenture holder		
	representative	representative	representative		
Number of Debentures	3,335,000 units	2,750,000 units	500,000 units		
Par Value per Unit	Baht 1,000	Baht 1,000	Baht 1,000		
Interest Rate per annum	3.30%	3.61%	3.61%		
Maturity	10 years	12 years	11.9 years		
Issue Date of Debentures	June 24, 2016	June 24, 2016	August 11, 2016		
Maturity Date	June 24, 2026	June 24, 2028	June 24, 2028		
Registrar	SCB	SCB	SCB		
Early Redemption Right	- None -				
Repayment of Principal	The issuer of debentures shall repay the principal in full on the maturity date.				
Rating	A	Ā	A		

Details of Debentures	Debentures Debentures Deb		Debentures		
	No. 3/2016	No. 3/2016 No. 3/2016			
	Series 1 Series 2		Series 3		
Debenture Symbol	BEM20OA	BEM25OA	BEM27OA		
Total Value of Debentures	Baht 2,500 Million	Baht 2,500 Million Baht 2,500 Million			
Type of Debentures	Unsubordinated and unsecured debentures bearing names of the holders without a debenture holder representative	Unsubordinated and unsecured debentures bearing names of the holders without a debenture holder representative	Unsubordinated and unsecured debentures bearing names of the holders without a debenture holder representative		
Number of Debentures	2,500,000 units	2,500,000 units	3,000,000 units		
Par Value per Unit	Baht 1,000	Baht 1,000	Baht 1,000		
Interest Rate per annum	2.62%	3.78%	3.95%		
Maturity	4 years	9 years	11 years		
Issue Date of Debentures	October 21, 2016	October 21, 2016	October 21, 2016		
Maturity Date	October 21, 2020	October 21, 2025	October 21, 2027		
Registrar	SCB	SCB	SCB		
Early Redemption Right	- None -				
Repayment of Principal	The issuer of debentures shall repay the principal in full on the maturity date.				
Rating	A	A	A		



Debentures (continued)				
Details of Debentures	Debentures	Debentures		
	No. 1/2017	No. 1/2017		
	Series 1	Series 2		
Debenture Symbol	BEM229A	BEM249A		
Total Value of	Baht 2,000 Million	Baht 3,000 Million		
Debentures				
Type of Debentures	Unsubordinated and	Unsubordinated and		
	unsecured debentures bearing	unsecured debentures bearing		
	names of the holders without	names of the holders without		
	a debenture holder	a debenture holder		
	representative	representative		
Number of Debentures	2,000,000 units	3,000,000 units		
Par Value per Unit	Baht 1,000	Baht 1,000		
Interest Rate per annum	2.65% 3.10%			
Maturity	5 years	7 years		
Issue Date of Debentures	September 7, 2017	September 7, 2017		
Maturity Date	September 7, 2022	September 7, 2024		
Registrar	KTB	KTB		
Early Redemption Right	- None -			
Repayment of Principal	The issuer of debentures shall repay the principal in full on			
	the maturity date.			
Rating	A	A		

Details of Debentures	Debentures	Debentures Debentures			
	No. 1/2018	No. 1/2018	No. 1/2018		
	Series 1	Series 2	Series 3		
Debenture Symbol	BEM214A	BEM234A	BEM254A		
Total Value of Debentures	Baht 3,000 Million	Baht 3,500 Million	Baht 3,500 Million		
Type of Debentures	Unsubordinated and unsecured debentures bearing names of the holders without a debenture holder representative	Unsubordinated and unsecured debentures bearing names of the holders without a debenture holder representative	Unsubordinated and unsecured debentures bearing names of the holders without a debenture holder representative		
Number of Debentures	3,000,000 units	3,500,000 units	3,500,000 units		
Par Value per Unit	Baht 1,000	Baht 1,000	Baht 1,000		
Interest Rate per annum	2.05%	2.46%	3.01%		
Maturity	3 years	5 years	7 years		
Issue Date of Debentures	April 5, 2018	April 5, 2018	April 5, 2018		
Maturity Date	April 5, 2021	April 5, 2023	April 5, 2025		
Registrar	SCB	SCB	SCB		
Early Redemption Right	- None -				
Repayment of Principal	The issuer of debentures shall repay the principal in full on the maturity date.				
Rating	A	A	A		



Details of Debentures	Debentures	Debentures		
	No. 1/2019	No. 1/2019		
	Series 1	Series 2		
Debenture Symbol	BEM225A	BEM245A		
Total Value of Debentures	Baht 1,000 Million	Baht 2,000 Million		
Type of Debentures	Unsubordinated and unsecured debentures bearing names of the holders	Unsubordinated and unsecured debentures bearing names of the holders		
Number of Debentures	1,000,000 units	2,000,000 units		
Par Value per Unit	Baht 1,000	Baht 1,000		
Interest Rate per annum	2.65%	3.18%		
Maturity	3 years	5 years		
Issue Date of Debentures	May 9, 2019	May 9, 2019		
Maturity Date	May 9, 2022	May 9, 2024		
Registrar	SCB	SCB		
Holders' Representative	SCB	SCB		
Early Redemption Right	- None -			
Repayment of Principal	The issuer of debentures shall repay the principal in full on the maturity date.			
Rating	A	A		

Descritates (continued)	<b>D</b> 1	D 1		
Details of Debentures	Debentures	Debentures		
	No. 1/2019	No. 1/2019		
	Series 3	Series 4		
Debenture Symbol	BEM265A	BEM295A		
Total Value of	Baht 1,000 Million	Baht 1,000 Million		
Debentures				
Type of Debentures	Unsubordinated and	Unsubordinated and		
	unsecured debentures bearing	unsecured debentures bearing		
	names of the holders	names of the holders		
Number of Debentures	1,000,000 units	1,000,000 units		
Par Value per Unit	Baht 1,000	Baht 1,000		
Interest Rate per annum	3.59%	3.84%		
Maturity	7 years	10 years		
Issue Date of Debentures	May 9, 2019	May 9, 2019		
Maturity Date	May 9, 2026	May 9, 2029		
Registrar	SCB	SCB		
Holders' Representative	SCB	SCB		
Early Redemption Right	- None -			
Repayment of Principal	The issuer of debentures shall repay the principal in full on			
	the maturity date.			
Rating	A	A		



Debeniures (continued)				
Details of Debentures	Debentures	Debentures Debentures		
	No. 1/2020	No. 1/2020	No. 1/2020	
	Series 1	Series 2	Series 3	
Debenture Symbol	BEM246A	BEM306A	BEM326A	
Total Value of Debentures	Baht 1,000 Million	Baht 1,300 Million	Baht 700 Million	
Type of Debentures	Unsubordinated and unsecured debentures bearing names of the holders		Unsubordinated and unsecured debentures bearing names of the holders	
Number of Debentures	1,000,000 units	1,300,000 units	700,000 units	
Par Value per Unit	Baht 1,000	Baht 1,000	Baht 1,000	
Interest Rate per annum	2.88%	3.50%	3.78%	
Maturity	4 years	10 years	12 years	
Issue Date of Debentures	June 10, 2020	June 10, 2020	June 10, 2020	
Maturity Date	June 10, 2024	June 10, 2030	June 10, 2032	
Registrar	SCB	SCB	SCB	
Holders' Representative	SCB	SCB	SCB	
Early Redemption Right	- None -		The issuer of debentures shall have the early redemption right.	
Repayment of Principal	The issuer of debenture in full on the	The issuer of debentures shall either repay the principal in full on the maturity date or repay the principal, in full or in part, on the date of the issuer of debentures' exercise of the early redemption right.		
Rating	A	A	A	



## 7.4 Policy on Dividend Payment

The Company has the policy to pay a dividend at not less than 40 percent of the net profit of each year, taking into account the operational results, financial structure and obligations, investment, as well as regular payment of dividends to shareholders.

In this regard, the Board of Directors may pay an interim dividend to shareholders when it is of the view that the Company has sufficient profit and cash flow to pay a dividend. Once the dividend payment has been made, such dividend payment shall be reported to the following shareholders' meeting.

The Company's dividend payment in the previous years was as follows:

Dividend from Operations	Dividend Declared	Dividend per share	Net Profit (Million Baht)			_	rcentage of Dividend to Net Profit	
	(Million Baht)	ion (Baht)	Separate Financial Statements	Consolidated Financial Statements	Separate Financial Statements	Consolidated Financial Statements		
2016								
- First half	764	0.05	1,218	1,206				
- Second half	917	0.06	1,345	1,400				
Total in 2016	1,681	0.11	2,563	2,606	65%	65%		
2017								
- First half	917	0.06	1,442	1,425				
- Second half	1,070	0.07	1,533	1,698				
Total in 2017	1,987	0.13	2,975	3,123	67%	64%		
2018								
- First half	917	0.06	1,695	1,714				
- Second half	1,376	0.09	1,412	3,603				
Total in 2018	2,293	0.15	3,107	5,317	74%	43%		
2019								
- First half	917	0.06	1,626	3,977				
- Second half	1,376	0.09	1,298	1,458				
Total in 2019	2,293	0.15	2,924	5,435	79%	42%		
Total in 2020 (1)	1,529	0.10	1,698	2,051	90%	75%		

Remark: (1) This is put on the Agenda of the 2021 Annual Ordinary General Meeting of Shareholders for consideration.

#### 7.5 Policy on Dividend Payment of the Subsidiaries

NECL has the policy on dividend payment at the rate of approximately 40 percent of net profit after deducting statutory reserves, by taking into consideration the operational results in the fiscal year of the separate financial statements as at the end of the fiscal year and under the conditions of the credit facility agreement, subject to the investment plan, necessity and appropriateness in other aspects as the board of directors of the subsidiary deems appropriately.

BMN has the policy on dividend payment at the rate of not less than 40 percent of net profit each year, by taking into account the operational results, financial structure and obligations, investment, as well as regular payment of dividends to shareholders.



#### 8. Management Structure

The Company has established and reviewed the Company's management structure by realizing the organizational leadership roles and responsibilities of the Board of Directors in achieving the sustainable value creation for the business. The Company has also assigned the Board of Directors to ensure that all directors and executives discharge their duties with duty of care and duty of loyalty and to ensure that the Company's operations have been carried out in compliance with applicable laws, articles of association and resolutions of the shareholders' meeting.

As for the structure of the Board of Directors, the Company has taken into account scale, composition, proportion of independent directors, skill, experience, education, capability and character traits, together with gender and age as appropriate and necessary to lead the organization to meet the objectives and goals specified by the Company. As at December 31, 2020, the Board of Directors consisted of 15 qualified persons, namely, five executive directors, five independent directors and five non-executive directors. To ensure that the entire Board of Directors has suitable qualifications, can understand and satisfy the needs of stakeholders, as well as enabling the Board of Directors to carry out operations by exercise of their discretion to make decisions independently.

Currently, the Company has the Board of Directors and four subcommittees as appointed to help supervise the Company's administration in various aspects, namely, the Audit Committee, the Executive Board, the Nomination and Remuneration Committee, and the Corporate Governance and Risk Management Committee, and also has the Management Team, per the details as follows:

#### 8.1 Board of Directors

The Board of Directors comprised 15 directors who were acknowledgeable, competent and experienced in varied fields of business; whose names, as of December 31, 2020, were listed below:

No.	Name-Surname	Position	Category	Attendances /Number of Board of Directors' Meetings
1	Mr. Plew Trivisvavet	Acting Chairman of the Board of Directors (1)	Executive Director	7/7
		Deputy Chairman of the Board of Directors		
		Chairman of the Executive Board		
		Nomination and Remuneration Committee Member		
2	Mr. Vitoon Tejatussanasoontorn	Chairman of the Audit Committee	Independent Director	7/7
		Nomination and Remuneration Committee Member		
3	Gen. Chetta Thanajaro	Chairman of the Nomination and Remuneration Committee Audit Committee Member	Independent Director	6/7
4	Dr. Annop Tanlamai	Audit Committee Member	Independent Director	6/7
5	Mrs. Vallapa Assakul	Chairman of the Corporate Governance and Risk Management Committee	Independent Director	7/7
6	M.L. Prasobchai Kasemsant	Director	Independent Director	5/7
7	Mr. Supong Chayutsahakij	Executive Director Nomination and Remuneration Committee Member	Executive Director	7/7



No.	Name-Surname	Position	Category	Attendances /Number of Board of Directors' Meetings
8	Mr. Phongsarit Tantisuvanitchkul	Executive Director Corporate Governance and Risk Management Committee Member	Executive Director	7/7
9	Miss Arisara Dharamadhaj	Director	Non-executive Director	7/7
10	Mr. Panit Dunnvatanachit	Director	Non-executive Director	5/7
11	Mr. Vithaya Punmongkol <sup>(2)</sup>	Director	Non-executive Director	3/3
12	Mrs. Natamon Bunnak	Director	Non-executive Director	7/7
13	EXAT's Representative (3)	Director	Non-executive Director	N/A
14	Dr. Sombat Kitjalaksana	Executive Director Corporate Governance and Risk Management Committee Member Managing Director	Executive Director	7/7
15	Mrs. Payao Marittanaporn	Executive Director Corporate Governance and Risk Management Committee Member	Executive Director	7/7

<u>Remarks</u>: Directors' profiles appear in Attachment 1, pages A1-1 to A1-13.

(1) Dr. Virabongsa Ramangkura former Chairman of the Board of Directors, resigned from his

position as director on April 2, 2020.

(2) Mr. Vithaya Punmongkol was appointed as director on April 9, 2020 to replace

Mr. Yuttana Yimgarund who resigned from his position as

director on October 25, 2019.

(3) EXAT's Representative was in the process of being nominated as director to replace Mr.

Wichan Ekarintrakul, who resigned from his position as director

on February 14, 2020.

## **Authorized Directors**

The Company has determined five directors authorized to sign and bind the Company, comprising Mr. Plew Trivisvavet, Mr. Supong Chayutsahakij, Mr. Phongsarit Tantisuvanitchkul, Dr. Sombat Kitjalaksana, and Mrs. Payao Marittanaporn, whereby two of these five directors shall jointly sign and affix the Company's seal.

#### **Independent Directors**

The Board of Directors of the Company comprises of five independent directors or representing one-third of the total number of directors of the Company. The Company specifies the qualifications of its independent directors in compliance with the notifications of the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand, as follows:

## **Qualifications of Independent Directors**

1. Holding shares of not exceeding 0.5 percent of the total number of voting shares of the Company, its parent company, subsidiaries, associated companies, major shareholders or controllers of the Company, including shares held by any related persons of each independent director;



- 2. Not being or having been a director having involvement in the management, an employee, a staff member, an advisor receiving a regular salary or a controller of the Company, its parent company, subsidiaries, associated companies, subsidiaries of the same tier, major shareholders or controllers of the Company, unless such independent director has no longer been in such capacity for not less than two years prior to the appointment date, provided that such prohibited characteristics shall not apply to an independent director who was a public servant or an advisor to a government authority which is the Company's major shareholder or controller;
- 3. Not being a person having a relationship by blood or by legal registration in the capacity as parent, spouse, sibling, and offspring, including spouse of the offspring of other directors, executive, major shareholder, controller or person to be nominated as a director, an executive or a controller of the Company or its subsidiaries;
- 4. Not having or having had any business relationship with the Company, its parent company, subsidiaries, associated companies, major shareholders or controllers of the Company in a manner which may prevent the exercise of his or her independent judgment; and not being or having been a substantial shareholder or controller of any person having a business relationship with the Company, its parent companies, subsidiaries, associated companies, major shareholder or controller of the Company, unless such independent director has no longer been in such capacity for not less than two years prior to the appointment date;

The aforesaid business relationship shall include any transaction in the ordinary course of business for lease of immovable property, any transaction relating to assets or services or grant or receipt of financial assistance through receiving or extending any loan, guarantee, providing assets as collateral, including any other similar action, which causes the Company or contractual party to be subject to indebtedness payable to the other party in the amount of three percent or more of the Company's net tangible assets or in the amount of Baht Twenty Million or more, whichever is lower. Such indebtedness shall be calculated according to the calculation method of connected transaction value under the Notification of the Capital Market Supervisory Board, Re: Rules on Connected Transactions, mutatis mutandis. However, the consideration of such indebtedness shall include the indebtedness incurred during the course of one year prior to the commencement of a business relationship with the same person;

- 5. Not being or having been an auditor of the Company, its parent company, subsidiaries, associated companies, major shareholder, or controller of the Company; and not being a substantial shareholder, controller, or partner of an audit firm which employs the auditor of the Company, its parent company, subsidiaries, associated companies, major shareholders, or controllers of the Company, unless such independent director has no longer been in such capacity for not less than two years prior to the appointment date;
- 6. Not being or having been a professional service provider, including legal advisor or financial advisor which receives an annual service fee exceeding Baht Two Million from the Company, its parent company, subsidiaries, associated companies, major shareholder, or controller of the Company; and not being a substantial shareholder, controller, or partner of such professional service provider, unless such independent director has no longer been in such capacity for not less than two years prior to the appointment date;
- 7. Not being a director appointed as a representative of the Company's director, major shareholder or shareholder who is a related person of the major shareholder;
- 8. Not engaging in any business of the same nature as material competition with the business of the Company or its subsidiaries; or not being a substantial partner in a partnership or a director having involvement in the management, an employee, a staff member, an advisor receiving a regular salary or holding more than one percent of the total number of voting shares of another company engaging in any business of the same nature as material competition with the business of the Company or its subsidiaries;
- 9. Not having any other characteristics preventing the provision of independent opinions on the Company's operations.



## 8.2 Management Team

## 8.2.1 List of Names of Management Team<sup>(1)</sup>

The Management Team under the structure as at December 31, 2020, comprised 10 persons as listed below: (executives' profiles appear in Attachment 1, pages A1-14 to A1-20.)

No.	Name	Position
1.	Dr. Sombat Kitjalaksana	Managing Director
2.	Mrs. Payao Marittanaporn <sup>(2)</sup>	Managing Director
3.	Mr. Sanguan Kunatinun	Deputy Managing Director Expressway Engineering
4.	Mrs. Sudruthai Prommart	Deputy Managing Director Expressway Operation
5.	Mr. Phakpoom Thaweewittayarut	Deputy Managing Director Administration and Company Secretary
6.	Miss Panan Tosuwanthaworn	Deputy Managing Director Finance
7.	Mr. Witoon Hatairatana	Deputy Managing Director Railway System Operation and Engineering
8.	Mr. Alvin Gee	Deputy Managing Director Operation Support
9.	Dr. Vites Techangam	Deputy Managing Director Technology and E-Business
10.	Mr. Anawash Suwanarit	Deputy Managing Director Business Development

## Remarks:

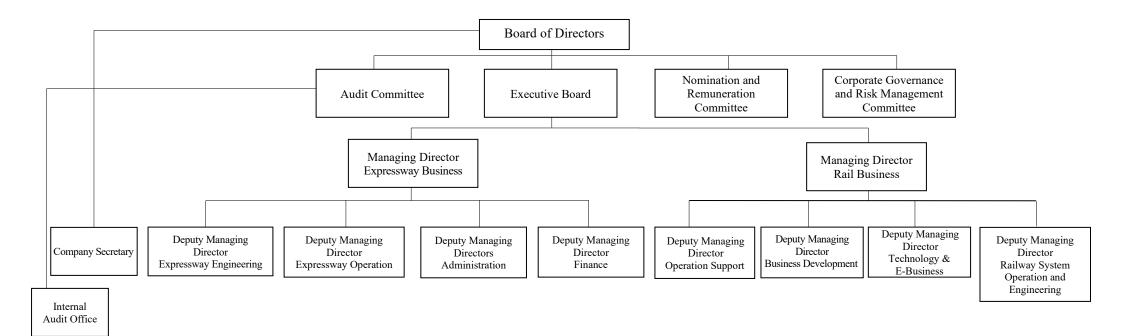
<sup>(1)</sup> Executives Nos. 1-10 of the Management Team were executives under the definition of "executive" required by the Office of the Securities and Exchange Commission.

<sup>(2)</sup> Mrs. Payao Marittanaporn was due to retire from her position as Managing Director on December 31, 2020.



#### 8.2.2 Management Structure of the Company

# Organizational Chart of Bangkok Expressway and Metro Public Company Limited



Remark : Since January 1, 2021, Dr. Sombat Kitjalaksana has held the position as Managing Director with his duty to supervise both the expressway and rail businesses.



#### 8.2.3 Structures of the Boards of Directors of Subsidiaries

### 1) Northern Bangkok Expressway Company Limited

As at December 31, 2020, the Board of Directors of Northern Bangkok Expressway Company Limited comprised six directors as follows:

1.	Mr. Plew Trivisvavet	Chairman of the Board of Directors
2.	Mr. Supong Chayutsahakij	Director
3.	Mr. Phongsarit Tantisuvanitchkul	Director
4.	Dr. Sombat Kitjalaksana	Director
5.	EXAT's Representative*	Director

Remark: \* In the process of being nominated as director to replace Mrs. Tasanuch Thammachot who resigned from her position on January 10, 2020.

Director

#### **Authorized Directors**

6. Mrs. Payao Marittanaporn

Northern Bangkok Expressway Company Limited has determined five directors authorized to sign and bind the subsidiary, comprising Mr. Plew Trivisvavet, Mr. Supong Chayutsahakij, Mr. Phongsarit Tantisuvanitchkul, Dr. Sombat Kitjalaksana, and Mrs. Payao Marittanaporn, whereby two of these five directors shall jointly sign and affix the subsidiary's seal.

### 2) Bangkok Metro Networks Limited

As at December 31, 2020, the Board of Directors of Bangkok Metro Networks Limited comprised seven directors as follows:

1.	Mr. Phongsarit Tantisuvanitchkul	Chairman of the Board of Directors
2.	Dr. Sombat Kitjalaksana	Director
3.	Mr. Witoon Hatairatana	Director
4.	Miss Panan Tosuwanthaworn	Director
5.	Mrs. Thipsuda Yimwilai	Director
6.	Mr. Anawash Suwanarit	Director
7.	Mr. Nattavut Trivisvavet	Director

## **Authorized Directors**

Bangkok Metro Networks Limited has determined seven its authorized directors, namely:

- o Mr. Phongsarit Tantisuvanitchkul and Dr. Sombat Kitjalaksana shall jointly sign and affix the company's seal; or
- Either Mr. Phongsarit Tantisuvanitchkul or Dr. Sombat Kitjalaksana shall jointly sign together with Mr. Witoon Hatairatana, Miss Panan Tosuwanthaworn, Mr. Anawash Suwanarit, Mr. Natthavut Trivisvavet, or Mrs. Thipsuda Yimwilai, totaling two persons, shall jointly sign and affix the company's seal.



# 8.3 Company Secretary, the Person Taking the Highest Responsibility in Finance and Accounting, and the Person Supervising Accounting

## 1) Company Secretary

The Board of Directors has considered appointing the qualified person as Company Secretary. On December 30, 2015, the Board of Directors appointed Mr. Phakpoom Thaweewittayarut, who was knowledgeable and capable in the fields of accounting, law, and audit, as well as fully understanding rules, regulations and criteria applicable to listed companies, to serve as the Company Secretary (details of his profile appear in Attachment 1, No. 17), with the duties and responsibilities as follows:

- 1. Providing suggestions to directors relating to provisions of laws, relevant rules and regulations.
- 2. Arranging for orientation and providing necessary information for the performance of duties to the current and new directors.
- 3. Monitoring the Company to ensure its compliance with laws, Articles of Association, relevant regulations and the good corporate governance principles.
- 4. Convening meetings as stipulated by laws and Articles of Association, preparing and keeping minutes of meetings, as well as coordinating to ensure efficient performance in compliance with resolutions passed by the Board of Directors or the shareholders' meetings.
- 5. Preparing and keeping the following documents:
  - a) Directors' register;
  - b) Notices, minutes of the Board of Directors' meetings and annual reports of the Company;
  - c) Notices and minutes of the shareholders' meetings.
- 6. Keeping reports on interest filed by directors or executives.
- 7. Monitoring to ensure disclosure of information and information memorandum to regulatory units in compliance with relevant laws, rules, and regulations.
- 8. Contacting and communicating with shareholders and relevant regulatory units, whereby shareholders may inquire or request any information as needed by contacting at Tel. 0 2641 4611 or sending questions via email to companysecretary@bemplc.co.th.
- 9. Promoting the provision of various training courses and providing useful information for the performance of duties of new directors.
- 10. Making other arrangements as announced by the Capital Market Supervisory Board.
- 11. Proceeding with other matters as assigned by the Board of Directors.

## 2) The Person Taking the Highest Responsibility in Finance and Accounting

The Board of Directors appointed Miss Panan Tosuwanthaworn, who had knowledge and abilities in the fields of accounting and finance, to serve as the Deputy Managing Director: Finance, holding the position of top management in accounting and finance (details of her profile appear in Attachment 1, No. 18), with the duties and responsibilities as follows:

- 1. Planning financial strategies to encourage internal and external growth as well as financing to accommodate growth linking with the Company's growth strategies and business value.
- 2. Controlling and managing infrastructure in terms of financial information and financial management of the Company to ensure that the Company's work operations are driven to achieve tasks and goals as planned.
- 3. Developing and managing financial tools to contribute to the analysis of the efficiency of work operations and analysis of business value.
- 4. Communicating the organization's significant financial information to enhance the understanding and trust of investors relating to stability and opportunities of the Company.



In 2020, Miss Panan Tosuwanthaworn, the Deputy Managing Director: Finance, received training in the courses of TFRS 15 Revenue Recognition with Requirements on Revenue Code, Discussion Paper: Business Combinations - Disclosures, Goodwill and Impairment, New TSA 540: Accounting Estimate, and Samples of Recognition of Transactions on the parts of Lessees and Lessors in case of reduction of rental fees under the lease agreements offered by the lessors due to the COVID-19 situation, organized by the Federation of Accounting Professions under the Royal Patronage of His Majesty the King, for a total of 6 hours.

## 3) The Person Supervising Accounting

Per the organizational chart of the Company, an officer at the management level i.e., Miss Saranya Lertjiraprasert, who had knowledge and understanding of the accounting system of the Company, was appointed to hold the position of General Manager of Accounting Division, as the person supervising accounting (details of her profile appear in Attachment 1, No. 23), with her duties and responsibilities as follows:

- 1. Drawing up policies and plans on accounting and finance as well as determining the accounting and financial systems in line with the guidelines for the Company's work operations.
- 2. Overseeing preparation of accounts and inspecting close of accounts of the Company in each period to ensure that they are made properly and in accordance with the specified practices.
- 3. Overseeing and inspecting preparation of financial statements, balance sheet, income statement, and accounting reports.
- 4. Overseeing and inspecting income-expenditure of the Company.
- 5. Overseeing the Company's budgeting and inspecting to ensure that the budget is utilized properly and in accordance with the budget plan as specified.
- 6. Overseeing the preparation of relevant tax reports for submission to relevant government authorities.

In 2020, Miss Saranya Lertjiraprasert, the General Manager of Accounting Division, received training in the course of TFRS in Financial Instruments: Perspectives on Use and Analysis of Data through Financial Statements of Non-Institutional Entities, from the Federation of Accounting Professions under the Royal Patronage of His Majesty the King, for six hours.

## **8.4** Remuneration of Directors and Executives

The Company has the policy to pay remuneration for directors and executives, by taking into account appropriate remuneration in accordance with criteria on remuneration determination as follows:

#### **Remuneration for Directors and Managing Directors**

- 1. The remuneration shall be appropriate for and in line with the scope of duties and responsibilities of each director, e.g., as Chairman of the Board of Directors, chairman of each subcommittee and the member of the Executive Board, the Audit Committee, the Nomination and Remuneration Committee and the Corporate Governance and Risk Management Committee, who shall receive additional remuneration for such position.
- 2. The remuneration for the directors and the Managing Directors is at the level which is appropriate and sufficient to attract as well as retaining knowledgeable and qualified directors to perform duties for the Company efficiently in order to lead the organization to accomplish the short-term and long-term goals.
- 3. The elements of remuneration are clear, transparent and easy to understand.
- 4. The remuneration shall be considered by the Nomination and Remuneration Committee to ensure that the remuneration is at the appropriate and competitive level and stays at the same level as that in the same sector which is adequate to retain the directors and the Managing Directors who possess the qualifications in line with the goals in the business operations of the Company.



#### **Remuneration for Executives**

Remuneration for executives, excluding the Managing Directors, shall be considered in accordance with the criteria and policy specified by the Executive Board, corresponding to the Company's operational results and each executive's performance evaluation results through the Performance Management System (PMS).

In 2020, the Company paid remuneration for directors and executives as follows:

### (1) Monetary remuneration

(1.1) Remuneration for directors of the Company comprised annual remuneration, meeting allowance, and bonus. In 2020, the total remuneration for directors of the Company amounted to Baht 35,166,147, in line with the resolution of its 2020 Annual Ordinary General Meeting of Shareholders which approved the remuneration for directors in the total amount not exceeding Baht 39,000,000, namely, bonus for directors for 2019 in an amount not exceeding Baht 21,000,000 and remuneration for directors for 2020 in an amount not exceeding Baht 18,000,000.

Unit: Baht

List of Directors	Remuneration for Directors 2020					Unit: Baht Remuneration		
	Board of Directors	Executive Board	Audit Committee	Nomination and Remuneration Committee	Corporate Governance and Risk Management Committee	Total	Bonus 2019	for Directors in Holding Directorships in Subsidiaries (NECL/BMN)
Dr. Virabongsa Ramangkura (1)     Chairman of the Board of     Director	700,000					700,000	2,500,000	
Mr. Plew Trivisvavet     Deputy Chairman of     the Board of Directors     Chairman of the Executive Board     Nomination and Remuneration     Committee Member	750,000	1,000,000		175,000		1,925,000	2,300,000	NECL 1,000,000
Mr. Vitoon Tejatussanasoontorn     Director     Chairman of the Audit     Committee     Nomination and Remuneration     Committee Member	650,000		525,000	175,000		1,350,000	1,225,000	
Gen. Chetta Thanajaro     Director     Chairman of Nomination and     Remuneration Committee     Audit Committee Member	600,000		325,000	250,000		1,175,000	1,225,000	
5. Gen. Sampao Choosri (2)  Director  Chairman of the Corporate Governance and Risk Management Committee Audit Committee Member							1,212,534	
Mrs. Vallapa Assakul (3)     Director     Chairman of the Corporate     Governance and Risk     Management Committee	650,000				275,000	925,000	1,027,877	
7. Dr. Annop Tanlamai  Director  Audit Committee Member	600,000		325,000			925,000	1,025,000	
Mr. Supong Chayutsahakij     Director     Executive Director     Nomination and Remuneration     Committee Member	650,000	500,000		175,000		1,325,000	1,275,000	NECL 650,000



List of Directors	Remuneration for Directors 2020					Remuneration		
	Board of Directors	Executive Board	Audit Committee	Nomination and Remuneration Committee	Corporate Governance and Risk Management Committee	Total	Bonus 2019	for Directors in Holding Directorships in Subsidiaries (NECL/BMN)
M.L. Prasobchai Kasemsant     Director	550,000					550,000	1,050,000	
10. Mr. Phongsarit Tantisuvanitchkul Director Executive Director Corporate Governance and Risk Management Committee Member	650,000	500,000			175,000	1,325,000	1,275,000	NECL 650,000 BMN 179,000
11. Mr. Werapong Suppasedsak <sup>(4)</sup> Director							283,562	
12. Miss Arisara Dharamadhaj <sup>(5)</sup> Director	650,000					650,000	616,438	
13. Mr. Panit Dunnvatanachit Director	550,000					550,000	900,000	
14. Mr. Yuttana Yimgarund <sup>(6)</sup> Director							732,329	
15. Mr. Vithaya Punmongkol <sup>(7)</sup> Director	368,407					368,407	-	
16. Mrs. Natamon Bunnak Director	650,000					650,000	900,000	
17. Mr. Wichan Ekarintrakul <sup>(8)</sup> Director								
18. Dr. Sombat Kitjalaksana Director Executive Director Corporate Governance and Risk Management Committee Member Managing Director	650,000	500,000			175,000	1,325,000	1,275,000	NECL 650,000 BEM 131,000
19. Mrs. Payao Marittanaporn Director Executive Director Corporate Governance and Risk Management Committee Member Managing Director	650,000	500,000			175,000	1,325,000	1,275,000	NELC 650,000
Total	9,318,407	3,000,000	1,175,000	775,000	800,000	15,068,407	20,097,740	3,910,000
Amount Approved by Shareholders						18,000,000	21,000,000	

Remarks: (1) Dr. Virabongsa Ramangkura resigned from his position as director on April 2, 2020.

(2) Gen. Sampao Choosri resigned from his position as director on December 18, 2019.
 (3) Mrs. Vallapa Assakul was appointed as Chairman of the Corporate Governance and Risk Management Committee on December 18, 2019.

4) Mr. Werapong Suppasedsak retired by rotation in the 2019 Annual Ordinary General

Meeting of Shareholders on April 26, 2019.

(5) Miss Arisara Dharamadhaj was appointed as a director on April 26, 2019.

(6) Mr. Yuttana Yimgarund resigned from his position as director on October 25, 2019.

(7) Mr. Vithaya Punmongkol was appointed as a director on April 9, 2020.

Mr. Wichan Ekarintrakul resigned from his position as director on February 14, 2020. (with his intention not to receive remuneration)

- (1.2) In 2020, the Company paid remuneration, comprising salary and bonus for its executives at the levels of Managing Director downwards to Deputy Managing Director, totaling 10 persons, in the total amount of Baht 103,258,280.70.
- (1.3) In 2020, NECL paid remuneration for its directors, comprising annual remuneration, meeting allowance, and bonus, in the total amount of Baht 3,764,805, in line with the resolution of its 2020 annual ordinary general meeting of shareholders which approved the remuneration for directors in an amount not exceeding Baht 4,250,000, namely, bonus for its directors in 2019 in an amount not exceeding Baht 1,400,000 and remuneration for its directors for 2020 in an amount not exceeding Baht 2,850,000.



(1.4) In 2020, BMN paid remuneration for its directors, comprising annual remuneration and meeting allowance, in the total amount of Baht 965,000, in line with the resolution of its 2020 annual ordinary general meeting of shareholders which approved the remuneration for directors for 2020 in an amount not exceeding Baht 1,044,000.

#### (2) Other remuneration

- (2.1) Other remuneration for directors None -
- (2.2) Other remuneration for executives

The Company has established a provident fund, which provides executives with long-term remuneration upon termination of employment with the Company or upon retirement, whereby executives pay savings at the rate of 5-10 percent of their respective salaries according to service years and the Company pays contributions at the same rate to the fund. In 2020, the Company paid contributions to the provident fund for all 10 executives as Managing Directors and Deputy Managing Directors in the total amount of Baht 5,219,984.6.

The Company's contribution rates shall be in accordance with the resolution of the Board of Directors' Meeting, by mainly taking into account the Company's profitability and the Company's operational results.

#### 8.5 Personnel

#### 8.5.1 Number of Staff as at December 31, 2020

- Expressway business: there were a total of 986 staff, comprising personnel in two main functions, namely, Operation and Engineering, representing 81.34 percent of all staff, and personnel in supporting functions, namely, Administration, Finance and Corporate Governance, representing 18.66 percent of all staff.
- Rail business: there were a total of 2,996 staff, comprising personnel in main functions, namely, Project Management and Development Group, Engineering & Maintenance Group, Train Operation Group, Strategy Group, representing 87.35 percent of all staff, and personnel in supporting functions, namely, Technology & E-Business, Business Development Group, Human Resources Group, General Affairs Group, Safety and Quality Group, Law and Compliance Division, representing 12.65 percent of all staff.
- As of December 31, 2020, the Company had its staff in each function (excluding executives) as follows:

Functions	Staff (persons)		
1. Main functions	3,419		
2. Supporting functions	563		
Total	3,982		

#### Subsidiaries

- NECL has no employment of executive and permanent staff but operates the Udon Ratthaya Expressway by means of a service agreement with BEM.
- o BMN had a total of 207 staff in each work unit (excluding executives), comprising Sale and Marketing Department, Design and Production Department, Business Development Department, Finance Department, and Operation Department.
- In 2020, the Company paid remuneration to its staff in the total amount of Baht 2,051,91 Million, comprising salaries, overtime pays, bonus in the amount of Baht 1,954.38 Million, and contributions to the provident fund in the amount of Baht 97.53 Million. Moreover, the subsidiaries paid remuneration to their staff in the same manner as the Company did in the total amount of Baht 98.51 Million.
- Significant Change in Number of Staff over the Past Three Years None -
- Relationship between Executives and Labor Union (if any) None -



#### 8.5.2 Personnel Development Policy

The Company is determined to be a leading, fully-integrated transportation service provider in Thailand and ASEAN, with its social mission to provide the transport service with convenience, rapidity, and safety by engaging in the business with its commitment to social and environmental responsibility, attainment of value added creation and optimum benefits for all stakeholders with fairness and sustainability.

Currently, the Company continues to undergo changes and business competition, and, to enable the Company to create the "Route of Happiness for Better Travelling Mode", the Company then realizes the significance of personnel development to ensure that they have preparedness and capability to not only create value for the Company but also value for the society as a whole.

Personnel is regarded as a key feature in moving the business forward with sustainability, the Company has thus clearly incorporated the practices for staff's compliance into the Company's Codes of Conduct. In this regard, the Company is committed to development of efficiency of its staff to meet quality of work and quality of life of staff by fostering conceptions and values relating to quality policies, comprising personnel development, teamwork, creation of quality, working environment, and accountability of executives and staff, including formulation of clear policies on safety and hygiene along with ensuring environment and hygiene in the workplace with safety to life and property of personnel and the Company.

The Company firmly believes that qualified staff is a key factor in bringing the sustainable growth and success to the organization, it has thus clearly formulated the personnel development policy, as follows:

- 1. The Company establishes a policy on nomination, development, and retention of its personnel by means of provision of remuneration in the form of salary, welfare, and other remuneration which are competitive in the same industry.
- 2. The Company regards its staff as valuable resources, that is, human resources are one of the major factors to the Company's development and competitiveness as well as the achievement of the Company's objectives. The Company realizes the significance of internal personnel development and improvement by the way of regular training and performance review, including local and overseas study visits and training, particularly the awareness and training in respect of service safety. The Company's staff must strictly comply with the Company's safety rules and international standards.
- 3. The Company arranges for the efficient personnel management system based on fairness, equality, and opportunity for staff development and exercise of competency at full capacity.
- 4. The Company gives priority to morale and a sense of pride in work performance of staff by determining remuneration and career advancement based on knowledge, competency, and fairness, as well as arranging for the reasonable welfare system, together with the development of staff lifestyle in order to retain the Company's valuable human resources.
- 5. Retention of the Company's competent personnel

The Company takes care of the highly capable and competent staff by ensuring to provide them opportunities for career path advancement.

The Company is ready to create the path to happiness, by starting from the "Source of Happiness", which signifies the Company's personnel. To ensure that the Company's personnel can provide the quality service, particularly in respect of safety, the Company has encouraged the sphere of safety at work with a commitment to fostering and creating awareness of occupational safety and health to its personnel at all levels and then to its business alliances, customers, together with nearby communities. In addition, the Company has integrated the social and environmental responsibility activities in processes related to safety, for that reason, the Company not only gives priority to the safety of the service users, but also to all persons throughout the value chain of the Company.



### Personnel Development and Improvement Policies in 2020

## 1) Creation of Organizational Culture

The Company has aimed to provide the expressway service and train operation service with efficiency and continuous development, it has therefore fostered the conceptions and practices in various aspects, whether it be awareness of safety or awareness of accountability and responsibility, which are communicated via the operating process and with support of supervisors until attaining the organizational culture. This is to rest assured of the staff's practices and behavioral expressions in accordance with the Company's goals.

## 2) Management of Work Competency

Personnel is regarded as an invaluable resource which will support the Company to endlessly evolve and have business competitiveness, and as the Company has planned to develop competency of staff at all levels by establishing core competency, performance competency and managerial competency of each work position, performance evaluation process and training provision as suitable for staff according to his/her work position, duties and responsibilities, to ensure staff's in-depth and extensive expertise, resulting in the Company's competency in moving its business forward to be the fully-integrated transportation service provider in Thailand and ASEAN.

#### 8.5.3 Benefits

#### 1) Remuneration for Staff

In order to determine the appropriate and competitive remuneration to maintain the good and competent staff to work with the organization, the Company then participates in the survey of wages and remuneration to compare with labor market and other companies in the same sector as well as reviewing the starting salary for new graduates and base salary based on the value of work via the institute conducting wage survey on a regular basis. Therefore, it can be assured that the Company determines the fair and appropriate remuneration to the staff.

The Executive Board considers adjusting wages on a yearly basis by taking into account the Company's operational results through the Competency KPIs and its payment coverage ratio.

Furthermore, the Company establishes a provident fund for long-term care of staff in order to motivate staff to work with the Company and to encourage staff's saving habits to secure adequate retirement savings for a quality retirement life. Staff may apply for provident fund membership, whereby staff pay savings at the rate of 5 to 15 percent of his/her salary according to his/her ability to save and the Company pays contributions at the rate of 5 to 10 percent according to such staff's service years and requirements of the fund. Staff who are fund members shall gain benefits arising from management in proportion to each staff's savings in the fund. The Company also provides group life insurance benefits for staff so as to secure staff and staff's family.

#### 2) Staff Welfare

In addition to welfare required by law, the Company also provides staff with an additional and appropriate welfare and encourages the roles of the Staff Welfare Committee, beginning with the arrangement for the legitimate election as required by law in order to jointly provide advice and suggestions to the Company on welfare benefits for its staff as a whole and monitor to ensure that the Company's welfare benefits are properly provided to its staff, which lead to adjustment and improvement of the Company's welfare in various aspects as appropriate according to the changing economic and social circumstances.

## 3) Labor Relations

The Company sets out a policy to take care of its staff via the line management through the human resources unit with the duties to provide advice to, support supervisors and provide them with regular training on personnel management and understanding of the work rules and regulations of the Company. The Company also sets out the investigation procedures with clarity in case of any disciplinary misconduct by staff to ensure fairness and solutions to prevent repeated misconduct, including clear and rapid grievance procedures. Furthermore, the Company yearly organizes the activities to strengthen relationships with benefit its staff, comprising merit-making and food offering



to monks activities on the occasion of New Year Day and merit-making to celebrate the Company's anniversary, New Year's Eve activity, Blood Donation to Thai Red Cross Society activity, Songkran Day activity, workout activity, mindfulness mediation activity, health and nutrition activity. In addition to the Company's internal activities as mentioned above, the Company also encourages and supports budget for off-work activities by allowing staff who are interested in useful activities to form activity group in the form of various clubs, such as, sports club, photo club, volunteer club, and music club. The sports club arranges for activities all year round, i.e., football match, walking-jogging for good health, as well as participation in walking-running for charity in association with the government sector on various occasions; internal sports activity so as to encourage staff to work out and then select the Company's athletes to participate in sports competition with external organizations to gain more experience and strengthen good intercompany relationships. The music club regularly arranges for recreational activities every year to promote staff to show their artistic and performance talents, to perform their shows in various events of the Company, and to spread happiness to the society, particularly to the underprivileged communities.

## 4) Occupational Safety and Health

The Company gives priority to the occupational safety and health by setting out a policy to require each work unit to set out measures and practices relating to proper use of safety equipment as appropriate for each task, as well as providing budget support in improvement of the efficiency of such equipment to be ready for effective and sufficient use, including review of use of such equipment on a regular basis throughout the year and emergency simulation drill. Moreover, the Company also provides training to its staff on the awareness of safety at work, life, and assets of its customers.

#### 5) Quality of Staff's Life

The Company realizes the significance of life quality of staff, including staff of construction and management of the expressways and the metro projects, together with motorists and the society along the expressway routes, and then sets out a policy on hygienic workplaces and routes:

- By adopting the ISO 14001 Environmental Management System to the work operations. The Company was certified by SGS (Thailand) Limited in accordance with UKAS Standard of England and NAC Standard of Thailand and through the commitments of the management and contribution of staff in realizing the significance and necessity as members of the world community with duty to preserve the environment, and the Company continues to undergo a recertification audit of ISO 14001 Environmental Management System.
- By adopting the international standard safety management system as a guideline for operations, namely, OHSAS/TIS 18001, as well as engaging Ricardo Rail as a safety consultant to provide suggestions on risk management and to devise new safety management techniques for improvement of the Company's work processes to ensure more safety.

## 6) Anti-Drug in Office Campaign

With the Company's awareness of the country's drug problems which give rise to major impacts on the economic and social stability, public order and morality, the Company, in association with the external organizations, namely, the Department of Labor Protection and Welfare, Bangkok Area 2, and the Department of Labor Protection and Welfare, Bangkok Area 5, including the Department of Labour Protection and Welfare in Nonthaburi Province, then carried out the Drug Free Workplace project, which has been defined as the Company's policy to demonstrate the Company's commitment and guidelines for implementation, as follows:

- Supervisors at all levels have to behave themselves as a role model, provide knowledge, recommendations and assistance to staff, and give them advice about appropriate and proper lifestyle practices, including dangers and harmful effects of drug use.
- Supervisors at all levels have to be on the lookout for their line staff and employees to prevent them from being involved in drugs.



- Staff and contractors have to assume the role and participate in campaigns for prevention and resolution of drug problems, as well as helping monitor, and give promptly report to the supervisors if any something illegal or any person with suspicious drug-related behavior is found within the Company.
- All staff and contractors have to provide cooperation in drug testing.
- The Company is willing to provide cooperation with government agencies in providing information, news and behaviors of persons involved in drugs.

To ensure that the Drug Free Workplace project has been carried out widely and continuously, the Occupational Health and Working Environment Subcommittee working in all areas of the Company then has been assigned to run this project. The duties and responsibilities of the working group of the Drug Free Workplace project are as follows:

- Providing suggestions about guidelines for drug prevention and solution;
- Complying with policies and action plans for drug prevention and solution;
- Promoting and supporting activities for raising awareness and campaign on anti-drug in the business premises;
- Training and meeting to ensure staff's and contractors' drug-related knowledge, understanding, and correct drug prevention and solutions;
- Providing cooperation with government officials in reporting on drug offenses.

Anti-Drug Campaign Activities in 2020

- A slogan contest on prevention and solution of drug problems under the "Say No To Drug" slogan to ensure that staff and contractors engaged in preventing and solving drug problems in the business premises, which attracted a lot of attention from staff and contractors and more than 340 slogans were then submitted for the contest.
- A no drug addicted activity to alert staff to the existing drug problems.
- Drug education activities on a monthly basis through all internal communication channels of the Company.

The Company is one of 150 business premises which was granted a Drug Free Workplace Certificate by the Department of Labor Protection and Welfare due to the Company's "Drug Management System in the Business Premises Ranking No. 1", as a role model for other business premises in a way which the Company could encourage its staff to participate in anti-drug campaigns in the business premises until concrete success could be achieved.

## 7) Anti-Corruption in All Operating Procedures

The Company has designed its operating procedures on the basis of independent check and balance and has adopted the SAP system to inspect every step of the operating procedures, including prevention of any potential unusual practices in the procedures.

The adopted SAP system comprises purchasing and procurement, maintenance, inventory, accounting and finance modules, all of which are connected together as one single system (Integrated System), thereby ensuring that every step of the operating procedures and cross-platform processing can be inspected, including financial data tracking, and as a result, corruption can be prevented efficiently.



## 9. Corporate Governance

## 9.1 Corporate Governance Policy

The Board of Directors and management put their trust in and realize the significance of the Corporate Governance Code, comprising establishing organizational leadership role and responsibilities of the Board for creating value for the business to attain the sustainable business operations, strengthening effective management and internal control, implementing mechanisms for control including checks and balances intended to ensure the transparent and auditable management, respect for rights and equality of shareholders by encouraging and supporting participation and communication with shareholders, ensuring disclosure and maintaining financial integrity; and ensuring all groups of stakeholders-oriented management, as crucial factors in adding value and bringing the highest returns to the Company's shareholders with the long-term sustainability.

To boost confidence of all shareholders, investors and stakeholders and development resulting in the good corporate governance of the Company and its subsidiaries on a continuous basis, including understanding of the Board of Directors in the Company's business operations, expectations of stakeholders, opportunities and risks affecting the business operations, the Board of Directors shall regularly review the corporate governance policy on a yearly basis at least once a year. In this connection, the Company has publicized the corporate governance policy on its website at http://www.bemplc.co.th to allow all shareholders, investors, and stakeholders to acknowledge the practical guidelines and business operations of the Company based on the Corporate Governance Code. Moreover, the Company has informed and communicated to the Company's staff to acknowledge and adhere to such policy.

## • Corporate Governance Policy

The Company realizes the significance and benefits of good corporate governance to ensure that the Company has the efficient, transparent, auditable management systems in place to help build trust and confidence among shareholders, investors, stakeholders, and all concerned parties, in pursuit of the Company's sustainable growth. To that effect, the Company adheres to the guidelines of the Company's corporate governance policy in accordance with the Principles of Governance Corporate Code covering 8 chapters, namely:

## 1. Establish Clear Leadership Role and Responsibilities of the Board

- Fulfill the duties with awareness and thorough understanding of its leadership roles in supervising and ensuring good management and creating sustainable value for the business.
- Monitor and supervise that directors and executives comply with their own scope of duties and responsibilities with care and honesty, in accordance with laws, regulations and meeting resolutions.

#### 2. <u>Define Objectives that Promote Sustainable Value Creation</u>

- ❖ Define business objectives and goals which conform to and promote sustainable value creation for the Company, stakeholders and society.
- Monitor, oversee the formulation of strategies to ensure compliance with business objectives and goals, by appropriately adopting innovations and technologies.

#### 3. Strengthen Board Effectiveness

- ❖ Establish and review the board structure in terms of size, composition and the proportion of independent directors to ensure appropriateness.
- **Ensure** the transparent and clear selection and nomination procedures.
- Ensure the remuneration structure which is appropriate for their respective roles and responsibilities.
- Promote the development of skills and knowledge for the performance of their duties on a regular basis.
- Put a limit on the number of listed companies in which the Company's director will hold the directorship that no director may hold a directorship position in more than five listed companies, to ensure efficiency in performance of duties.



### 4. Ensure Effective CEO and People Management

- ❖ Have the recruitment and development procedures for top executives to ensure they have knowledge, skills, experience and qualifications required to drive the organization towards its goals.
- **the Ensure the appropriate remuneration structure.**
- ❖ Have the human resources management and development to ensure the Company has adequate staff who are knowledgeable, skilled, and experienced.

### 5. Nurture Innovation and Responsible Business

Nurture and develop the creation of a culture of corporate innovation development to add value to the business according to the constantly changing circumstances, by taking both internal and external stakeholders into account.

## 6. Strengthen Effective Risk Management and Internal Control

- Ensure the appropriate risk management and internal control systems in place, supervise the Company's operations to effectively achieve its objectives.
- ❖ Handle conflicts of interest and prevent any inappropriate use of assets, information, opportunities and execution of transactions with any related parties to ensure compliance with applicable laws and standards.

## 7. Ensure Disclosure and Financial Integrity

- ❖ Ensure the accuracy, completion, adequacy, punctuality, transparency in disclosure of significant financial information and non-financial information of the Company.
- ❖ Ensure the appropriate use of technology in communicating and disseminating information to stakeholders.
- Protect information which affects the Company's securities prices to ensure that the disclosed information can reflect implementation or creation of sustainable value for the business.

## 8. Ensure Engagement and Communication with Shareholders

- ❖ Ensure the participatory process so that the Company's shareholders have the opportunity to participate effectively in decision-making regarding the Company's significant matters.
- Ensure equitable treatment toward and protection of basic rights of the Company's shareholders to ensure that all shareholders are treated equitably, have measures against the improper use of insider information to seek benefit for oneself or for others, which causes damage to shareholders as a whole.
- Encourage the Company's shareholders to exercise their basic rights, and take care of shareholders to the greater degree than their legal rights
- \* Refrain from committing any violation or infringement of shareholders' rights.

As a result of the operational results from the adherence to and compliance with the aforesaid Principles of Corporate Governance Code, the Company then received assessments and awards for the corporate governance in 2020, as follows:

- The Company received the "Excellent" rating in the assessment of the quality of the 2020 Annual Ordinary General Meeting of Shareholders (AGM Checklist 2020), from the Thai Investors Association.
- The Company received the "Excellent" rating from the results of corporate governance survey of listed companies, from the Thai Institute of Directors Association (IOD).
- The Company was announced as one of the Thailand Sustainability Investment 2020 list for the fourth consecutive year as a listed company engaging in business operations by taking into account environment, society and corporate governance.
- The Company was awarded the Thailand's Top Corporate Brand 2020 as one of the organizations which realized the significance of development of its corporate brand to ensure greater strength for the country's social and economic sustainability, with the highest brand value in the transportation and logistics sector in 2020, from the Faculty of Commerce and Accountancy Chulalongkorn University.



In 2020, the Board of Directors supervised and monitored to ensure the development of the Company's corporate governance through activities held throughout the year 2020 covering and in compliance with the Corporate Governance Code for Listed Companies, as follows:

## 9.1.1 Shareholders' Rights and Encouragement of Participation by Shareholders

The Board of Directors acknowledges and realizes the significance of shareholders' fundamental rights as well as encouraging participation by shareholders and communication with shareholders, namely, share purchase, sale and transfer, entitlement to the Company's profit sharing, meeting attendance for exercising their rights to vote in the shareholders' meeting independently and equitably, participation in decision-making in the Company's important matters, appointment or removal of directors, determination of remuneration for directors, appointment of auditors, determination of remuneration for auditors, and rapid receipt of the Company's complete and sufficient information and news via easily accessible channels, whereby the Company encourages its shareholders to fully exercise their rights through the shareholders' meeting and refrains from taking any actions which violate or infringe shareholders' rights, as follows:

#### 1. Shareholders' Meeting

#### 1.1 Shareholders' participation in the shareholders' meeting

The Company realizes and gives priority to shareholders' rights and encourages their participation, whereby the Board of Directors clearly sets out in the corporate governance policy that the Company must support all groups of shareholders, particularly minority shareholders, foreign shareholders, and institutional shareholders, to exercise their rights without limitation to only such rights provided by laws. In this regard, the Company must not take any actions which violate or infringe shareholders' rights and also promote shareholders' right to decide on significant changes, by ensuring that the shareholders have been provided with the Company's sufficient information. Furthermore, the Company prepares documents in both Thai and English versions for clear acknowledgment and understanding of all shareholders.

In case it is inconvenient for any shareholder to attend the meeting in person, the Company prepares proxy forms for enabling the shareholders to decide among themselves how they wish their votes to be cast, and gives them an option of appointing the Company's independent director nominated by the Company as their proxy to exercise the right to attend the meeting and vote on each agenda item on their behalf. Three available proxy forms under the law are prepared, as follows:

- Proxy Form A is a general simple proxy form (for shareholders in all cases):
- Proxy Form B is a proxy form with specific details;
- Proxy Form C is used only by foreign shareholders who appoint a custodian in Thailand.

The Company makes these three proxy forms available on the Company's website for shareholders to choose and use them as appropriate. Furthermore, the Company prepares duty stamps available for free for shareholders who appoint their proxies to attend the meeting.



#### 1.2 Shareholders' access to the Company's information

The notice of the meeting which contains detailed explanations, facts and reasons in support of each agenda item, date, time, place, including details relating to the documents or evidence in support of participation in the meeting, is prepared by the Company in both Thai and English versions to ensure all shareholders' acknowledgment and clear understanding. The Company posts the notice of the meeting on the Company's website 30 days in advance. In 2020, the Company convened one shareholders' meeting, namely, the 2020 Annual Ordinary General Meeting of Shareholders on July 20, 2020, the Company had disseminated the notice of the meeting on the Company's website since June 19, 2020 and also sent the notice of the meeting to Thailand Securities Depository Company Limited, as the Company's share registrar, for delivery of the same to shareholders 10 days prior to the meeting, i.e., July 10, 2020, so as to allow shareholders to have time to consider the details of each agenda item. Furthermore, the shareholders' meeting was proceeded in accordance with the order of agenda as specified in the notice of the meeting without adding any agenda to the meeting without prior notice to shareholders in the meeting, so that shareholders had time to study the information for support of their consideration of each agenda item.

# 1.3 Facilitation to shareholders' exercise of their rights to attend the meeting and vote

The Company has not defined any special conditions which may restrict shareholders' opportunity to attend the meeting. The Company sets shareholders' meeting date which do not fall on any long holidays or public holidays; and an appropriate meeting time which is not too early in the morning or too late in the evening. The meeting is held at a venue which is convenient for commuting, such as, close to a metro station or expressway on-off ramp, and with sufficient parking area, together with meeting venue and travelling map. In 2020, the Company convened one shareholders' meeting, namely, the 2020 Annual Ordinary General Meeting of Shareholders on July 20, 2020 at 14.00 hrs., which was held at the Le Concorde Ballroom, 2nd Floor, Swissotel Bangkok Ratchada, No. 204 Ratchadaphisek Road, Huai Khwang, Bangkok, which shareholders could conveniently travel to by public transportation system such as buses, MRT, and by car, etc. However, due to the situation of the outbreak of the COVID-19, the Company complied with the meeting guidelines issued by the Center for COVID-19 Situation Administration or CCSA, by which the Company could provide a maximum of 200 seats at an appropriate physical distancing of at least one meter from each other and asked for shareholders' cooperation in appointing the Company's independent director as their proxy to attend the meeting on their behalves.

## 1.4 Shareholders' opportunity to ask questions in advance

To ensure communication with shareholders and build participation with shareholders, the Company provides an opportunity for its shareholders to propose agenda items or send questions or comments in advance, under the criteria and process which are publicly disclosed on the Company's website at <a href="https://www.bemplc.co.th">www.bemplc.co.th</a>, or via E-mail address: <a href="mailto:companysecretary@bemplc.co.th">companysecretary@bemplc.co.th</a>, Tel.: 0 2641 4611, Fax: 0 2641 4610, or by post, to the Managing Director Office, Bangkok Expressway and Metro Public Company Limited (Branch Office 1) No. 238/7 Asoke-Dindaeng Road, Bangkapi Subdistrict, Huai Khwang District, Bangkok 10310. In this regard, the Company will consider answering the questions via appropriate channels or further clarify in the ordinary general shareholders' meeting.

As for the 2021 Annual Ordinary General Meeting of Shareholders, the Company had provided an opportunity for shareholders to propose agenda items or send questions in advance via the website from October 1, 2020, to December 31, 2020, of which shareholders had been widely notified via the SET's website.



## 2) Conduct of the Shareholders' Meeting

As a result of the situation of the outbreak of the COVID-19, the Company adhered to the rules on organizing meetings in accordance with the order of the Center for COVID-19 Situation Administration or CCSA to ensure conformity to various practices and operating the principles of SET, by giving a written notice of the Company's measures for organizing the 2020 Annual General Meeting of Shareholders to shareholders for acknowledgment, per the following details:

- Kindly requested shareholders to appoint the Company's independent director as their proxy to attend the meeting on their behalves;
- Provided the temperature-screening points before all attendees' attendance at the meeting, in which case, if any shareholder/proxy failed the screening for temperature measurement, the Company reserved the right not to allow such shareholder/proxy to attend the meeting.
- Resulted in the limited number of available seats in the meeting room, the attendees' seats must be spaced at an appropriate physical distancing of at least one meter from each other. In the event that the meeting room could not be accommodated because the provided seats in the meeting were fully occupied, the Company kindly requested shareholders coming in person to appoint the Company's independent director as their proxies instead.
- Neither served complimentary snack box nor served tea or coffee in the shareholders' meeting in order to minimize the common contact of objects with others for the sake of safety and hygiene of all attendees.
- Kindly requested all present shareholders to always wear a face mask during attendance at the meeting venue, and the Company reserved the right not to allow those who were not wearing a medical face mask to attend the meeting venue. Moreover, the Company facilitated shareholders' attendance at the meeting by having the Company's reception staff available to provide relevant information to shareholders, both before-after and during the meeting. The Company also used the facilities, including methods to conduct the meeting, as follows:

## 2.1 Use of technology in the meeting

The Company used barcodes and computer systems for meeting registration and voting to ensure accuracy, convenience, rapidity, and as such voting results could be displayed promptly.

## 2.2 Directors' participation in the shareholders' meeting

The Board of Directors always gives priority to their participation in the shareholders' meeting to answer questions and take suggestions of shareholders into consideration. The 2020 Annual Ordinary General Meeting of Shareholders was held on July 20, 2020, with 14 directors out of a total of 14 directors attending the meeting (the proportion of directors attending the meeting was 100 percent). The Chairman of the Board of Directors, the Audit Committee Chairman, chairs of various subcommittees, the Managing Directors, and the Management Team of the Company attended such shareholders' meeting to answer shareholders' questions.

## 2.3 Rules on voting

The Company specifies that shareholders have one vote for each share held by them. Normally, the majority votes of shareholders who attend the meeting and cast votes is applicable. Agenda items on the determination of remuneration for directors must be passed by not less than two-thirds of all votes of the shareholders who attend the meeting. As for other issues, votes are in accordance with the Articles of Association, laws and relevant regulations. Agenda items for acknowledgement require no resolution.



## 2.4 Vote counting or examination in the shareholders' meeting

To ensure transparency, compliance with the laws and the Articles of Association, the Company provides for a legal advisor to count or inspect the counting of votes to ensure transparency and compliance with the laws and the Articles of Association. The Company would introduce the examiners of vote counting to the meeting and has them recorded in the minutes of the shareholders' meeting. In casting votes on each agenda item, the Company uses the barcode system to record such votes to ensure that the voting results are expeditiously displayed to the meeting. Voting results of the meeting, favorable, unfavorable, abstaining votes, and voided voting cards, would be also displayed. The Company discloses resolutions, together with voting results on each item to the meeting, and also disseminates such resolutions via the SET's system as well as making such resolutions and minutes of the meeting available on the Company's website for the shareholders' information and examination of voting results in a rapid manner.

#### 2.5 Use of voting cards

- Voting cards are provided for every agenda for those who attend the meetings in person or by proxy and have power to vote on each agenda item. The Company's officers facilitate the collection of voting cards in the meeting room. To ensure transparency, the Company has its legal advisor and the shareholders' representatives serve as examiners and witnesses in the counting of votes.
- In case shareholders appointing their proxies have clearly voted for, against or abstained from voting on the respective agenda items, the Company collects and records such votes into the computer system for processing in advance. The legal advisor and the shareholders' representatives examine the counting of votes by proxy.
- To ensure that the conduct of the meeting in each agenda item is efficient and beneficial to shareholders as a whole that the Board of Directors has sufficient time to clarify or answer shareholders' questions, the Company collects only the voting cards of the shareholders attending the meeting in person and intending to vote against or abstain from voting.
- For the agenda item on the appointment of directors in respect of which shareholders may vote on an individual basis, the Company collects the voting cards from all shareholders attending the meeting in person to ensure transparency in the counting of votes which can be requested for review at a later date. In case of by proxy, the Company will check votes cast in the provided proxy form.

# 2.6 Shareholders' opportunity to share opinions or ask questions in the meeting

This was due to the situation of the outbreak of the COVID-19, the Chairman of the Board of Directors who presided over the shareholders' meeting allowed and encouraged shareholders to share opinions and ask questions concerning related matters to the meeting, based on the following practices:

- Allowing shareholders to share additional opinions or ask additional questions on the agenda in advance through various channels, such as, registered mail with return receipt requested, e-mail and facsimile, and having shareholders attending the meeting write their questions on the question sheet provided by the Company during the meeting instead of using a microphone to avoid contract;
- Allowing shareholders to share additional opinions or ask additional questions relating to matters other than the agenda items after the meeting had been proceeded in accordance with all agenda items.

While proceeding the meeting, the Company's staff was provided to facilitate shareholders' submission of their question sheets to directors in place of directly asking them questions during the meeting.



# 3) Preparation of Minutes of the Shareholders' Meeting and Disclosure of the Meeting' Resolutions

- 3.1 The Company discloses resolutions of the shareholders' meeting in each item on the Company's website in addition to the disclosure to the SET via the SETLink system within the shareholders' meeting day for shareholders' acknowledgement of the information and review of the voting results, together with cast votes in a rapid manner.
- 3.2 The Company prepares minutes of every shareholders' meeting with accuracy and completeness, comprising the following information:
  - The list of directors attending the meetings;
  - The number of shareholders/shares present at the meetings (in person/by proxy);
  - Brief explanation on material issues, such as voting procedures and display of voting results, to the meetings prior to conducting the meetings;
  - Names of persons who ask/answer questions or share opinions in brief;
  - Resolutions of the meetings, with details of votes for, against, abstentions, and voided cards.
- 3.3 After the end of the shareholders' meeting, minutes of the shareholders' meeting are required to be completed within 14 days, provided that such minutes shall contain sufficient details for the shareholders absent from the meeting to review on the Company's website. Moreover, video presentation of the atmosphere of the shareholders' meeting is made available on the Company's website until the next shareholders' meeting, so that shareholders who are not attending the meeting or those who are interested in the Company's information can access to the meeting's details other than that recorded in the minutes of the meeting.

## 9.1.2 Equitable Treatment towards Shareholders

The Board of Directors realizes the significance of supervision and monitoring to ensure the Company's equal and fair treatment towards all shareholders, both major shareholders and minority shareholders, including foreign shareholders, and ensure the Company's prevention of usage or receipt of inside information which has not yet been disclosed to the public in a manner which such is done for personal interests or others' interests; which may take advantage of and cause damage to shareholders as a whole, all of which are considered unfair treatment in capital market. As a result, the Board of Directors formulates measures to prevent inside information usage and disclose information, as well as setting out fair criteria and methods for execution of transactions which may give rise to a conflict of interest, as follows:

## 1) Provision of Information prior to Shareholders' Meeting

The Board of Directors ensures that the Company gives a notice of the meeting, together with agenda items and opinions of the Board on each agenda item, to the SET in accordance with the rules on disclosure, and such notices are posted on the Company's website on the following business day; ensures that the Company prepares the notice of the meeting, together with details of each agenda item, both in Thai and English, for the convenience of foreign shareholders; and disseminates such notice of the meeting, together with details of each agenda item, on its website 30 days prior to the meeting date. The Board of Directors also ensures that the Company gives prior notice to shareholders on rules and regulations in the conduct of the meeting, voting procedures, including their voting rights.

## 2) Protection of Minority Shareholders' Rights

To enable shareholders to exercise their rights to propose any matters relating to the Company's significant changes, the Company, therefore, adopts a policy to fairly and equally allow all shareholders to exercise their rights to propose agenda items to the shareholders' meeting and to nominate qualified persons for appointment as directors via the channels announced on the Company's website. Shareholders may



exercise such rights three months prior to the end of the accounting period. In this regard, the Board of Directors considers incorporating agenda items proposed by shareholders as appropriate. As for the persons nominated for appointment as directors, the management proposes such names to the Nomination and Remuneration Committee for further submission to the Board of Directors and the shareholders' meeting. In addition, shareholders are allowed to exercise their rights to appoint directors on an individual basis in the agenda item of appointment of directors, in respect of which shareholders may vote on an individual basis.

# 3) Prevention of Trading of Securities from Inside Information Usage

The Board of Directors has set out written guidelines for protection and prevention of inside information usage, and informed all directors, executives, and staff of such guidelines for compliance. In this regard, directors and executives are required to do as follows:

- submit the first report on their own securities holdings, their respective spouses and minor children's securities holdings in the Company; and report on every change in such securities holdings from purchase, sale, transfer or acceptance of transfer of securities, to the Office of the Securities and Exchange Commission in accordance with Section 59 of the Securities and Exchange Act B.E. 2535 (1992) within three business days from the date of purchase, sale, transfer or acceptance of transfer of securities, and the Company regularly reminds the Board of Directors thereof. Directors and executives are also required to report on their securities trading or holdings to the Board of Directors' Meeting on a quarterly basis.
- Report on each change in the securities holdings to the Office of the Securities and Exchange Commission and submit a copy of such report to the Company at the same date which the report on such change has been made to the Office of the Securities and Exchange Commission.
- No directors, executives, and staff who have known any material inside information with an effect on the securities prices shall disclose such material inside information to any third party before it has been disclosed to the public.
- Report to the Board of Directors' acknowledgment on the securities holdings in the Company by directors, executives, including their related persons, together with report on every change in the securities holdings to the Board of Directors' Meeting.

Moreover, directors and executives have been aware of their specified duties and responsibilities, including punishments under the laws. In addition, the Company prohibits its executives who have access to inside information from taking any actions contrary to the relevant laws, rules, and regulations. In this aspect, the Company has established a policy on securities trading for all directors and executives to impose measures to prevent the misuse of insider information as follows:

- Directors and executives shall avoid and refrain from trading the Company's securities during the period of 1 month prior to the disclosure of quarterly and annual financial statements.
- Directors, executives and employees, who have known any financial statements information or any other material information that affect the Company's securities prices, are prohibited to trade or allow other persons to use such information to trade the Company's securities during the period of 1 month prior to the disclosure of the financial statements and/or any other information that affect the Company's securities prices whether for one's own benefits or others.

In 2020, the Board of Directors and executives complied therewith strictly, no any violation or non-compliance with the criteria for securities trading by usage of the inside information and asset trading under the rules of the SET and the Office of the Securities and Exchange Commission was found.



## 4) Interests of Directors and Executives

## 4.1 Report on interests of directors and executives

The Board of Directors imposes a duty on its directors and executives to report on their personal interests and disclose their holdings of directorships or executive positions in other legal entities, and their shareholdings in other legal entities in excess of 25 percent of total voting shares and this obligation applies to both reporters and their related persons. This is to ensure that the Board of Directors has information in support of its consideration and approval of execution of transactions of the Company and its subsidiaries with accuracy and transparency in compliance with the relevant rules and regulations.

The Company Secretary keeps such reports on interests of directors and executives, and provides copies of such reports to the Chairman of the Board of Directors and the Audit Committee Chairman within seven business days from the date of the Company's receipt thereof.

Report on securities holdings by directors and executives for 2020

Names of Directors/Executives	Amount of Ordinary Shares				
	As at Change in As at D		As at Decem	ber 31, 2020	
	December 31, 2019	2020	Amount	Percent (%)	
Directors	2017				
Mr. Plew Trivisvavet	24,606,878	1,000,000	25,606,878	0.1675	
The spouse	2,402,527	-	2,402,527	0.0157	
2. Mr. Vitoon Tejatussanasoontorn	803,893	(803,893)	-	-	
3. Gen. Chetta Thanajaro	-	-	-	-	
4. Dr. Annop Tanlamai	-	-	-	-	
5. Mrs. Vallapa Assakul	-	-	-	-	
6. Mr. Supong Chayutsahakij	-	-	-	-	
7. M.L. Prasobchai Kasemsant	-	-	-	-	
8. Mr. Phongsarit Tantisuvanitchkul	-	-	-	-	
9. Miss Arisara Dharamadhaj	-	-	-	-	
10. Mr. Panit Dunnvatanachit	-	-	-	-	
11.Mr. Vithaya Punmongkol *	-	-	-	-	
12. Mrs. Natamon Bunnak	-	-	-	-	
13. Dr. Sombat Kitjalaksana	2,999,141	-	2,999,141	0.0196	
14. Mrs. Payao Marittanaporn	-				
Executives					
15. Mr. Sanguan Kunatinun	-	-	-	-	
16. Mrs. Sudruthai Prommart	-	-	-	-	
17. Mr. Phakpoom Thaweewittayarut	-	-	-	-	
18. Miss Panan Tosuwanthaworn	-	-	-	-	
19. Mr. Witoon Hatairatana	-	_	_	-	
20. Mr. Alvin Gee	-	-	-	-	
21. Dr. Vites Techangam	-	-	-	-	
22. Mr. Anawash Suwanarit	-	-	-	-	

Remark: \* Mr. Vithaya Punmongkol was appointed as director on April 9, 2020 to replace Mr. Yuttana Yimgarund who resigned from his position on October 25, 2019.



## 4.2 Interested directors' participation in the shareholders' meeting

The Board of Directors sets out a policy to prohibit its directors and executives, who are connected persons or interested persons in relation to any agenda items to be considered, from participating in the meeting and voting on such items. The Company Secretary gives prior notice to such interested directors and executives to express their intention not to participate in the meeting nor vote on such item. In considering a connected person and interested person, the Board of Directors takes into account such reports on interests which all directors and executives have a duty to prepare and submit to the Chairman of the Board of Directors and the Audit Committee Chairman.

### 5) Related Party Transactions / Connected Transactions

#### 5.1 Policy on related party transactions / connected transactions

In case the Company executes a connected transaction/related party connection under the definition of the SET, the Company must comply with the rules and regulations of the SET, as follows:

- The Company shall comply with the rules and regulations of the SEC Office and the SET, including the requirements on the disclosure of connected transactions as well as acquisition and disposition of significant assets of the Company or its subsidiaries and the accounting standards as prescribed by the Federation of the Accounting Professions. If there are transactions which may give rise to a conflict of interest in the future, such as, hiring a group of persons who may have a conflict of interest to carry out construction, project management, project maintenance, the Audit Committee shall jointly consider the necessity and justification of such transactions, including pricing and terms of the transactions, which must be based on the ordinary course of business. Pricing must also be compared with third party prices or market price. Interested persons will not be allowed to participate in the consideration and approval of the transactions.
- The Company has no policy to extend or guarantee a loan for a person who may have a conflict of interest under the definition of the SEC Office.
- Should the Board of Directors and/or the Audit Committee have no expertise in considering any particular related party transaction which may take place, the Company will arrange for an independent expert or the Company's auditor to give any opinion on such related party transaction to support the decision-making of the Board of Directors and/or the Audit Committee or the shareholders, as the case may be.
- The Company will disclose the related party transactions in the notes to the financial statements that have been reviewed or audited by the Company's auditor.

## 5.2 Criteria on execution of connected transactions on arm's length basis

The Board of Directors approves in principle the Company's execution of connected transactions on arm's length basis, namely, transactions which involve commercial terms in a manner persons of ordinary prudence may enter into with general parties under the same circumstances, through commercial negotiation without any influence in the capacity as director, executive or related person, as to execution of such transactions between the Company and its subsidiaries with directors, executives or their related persons, as follows:

 Engagement of any company or legal entity which is the connected person for repair, improvement or additional construction of expressways and related equipment should such company or legal entity propose fair price and conditions to the utmost benefit of the Company.



- Engagement of any company or legal entity which is a connected person for repair or purchase of materials or equipment, inclusive of labor, for maintenance of administration buildings and depots in the future, subject to the commercial conditions and other agreements which are not different from others.
- Transactions between the Company and its subsidiaries with MRTA, as follows:
  - Support of public relations and advertising activities to facilitate the metro service, in an amount not exceeding Baht One Million per year.
  - Support of government policies to facilitate people's commute by the metro during the specified period from time to time by means of discounts or free rides, provided that MRTA will compensate for revenue during such period in accordance with appropriate and fair criteria.
- Transactions in the manner of management or advisory service to any legal entity which is a connected person.
- Leases of office building spaces for the Company and its subsidiaries from CH. Karnchang Public Company Limited.
- Other transactions which are connected transactions on arm's length basis under the definition of the SEC Office or the SET.

#### 5.3 Prevention of a conflict of interest

- Directors and executives must inform the Company of relationships or connected transactions in any business which may give rise to a conflict of interest;
- Any connected transaction with directors which may give rise to a conflict of interest with the Company must be avoided. Any connected transaction which is necessary to be executed must be proposed to the Audit Committee to consider providing an opinion in relation to justifications and benefits for the Company prior to proposing the same to seek approval of the Board of Directors in accordance with the Corporate Governance Code, and ensure compliance with the rules of the SET and the SEC Office;
- Executives and staff must strictly comply with the Articles of Association and the code of business ethics of the Company, in order to ensure the Company's reliability and trust for all stakeholders, and ensure dissemination of the information for all staff's understanding and adherence to the same.

## 9.1.3 Role of Stakeholders and Responsible Business Operations

The Company has a clear policy which focuses on and realizes rights of every group of all stakeholders, whether inside, such as, staff and executives of the Company and its subsidiaries, or outside, such as, customers, business related persons, lenders, traders, society and communities where the Company is located, nearby schools, government sector, including competitors, and other relevant authorities. Any stakeholder wishing to contact or have any comments may directly contact directors or the Company Secretary. In addition, the Board of Directors has laid down the corporate governance policy that requires the Company to treat stakeholders based on their rights as specified by applicable laws without any actions in violation of stakeholders' right; and compensation measures in case any stakeholder sustains any damage arising from violation of the rights; as well as focuses on its operations with respect to human rights. The Company has continued to take care of stakeholders in accordance with the policies, as follows:

## 1) Policy on Treatment towards Each Group of Stakeholders

1.1 Customers: The Company has a commitment to provision of quality, standard and reliable services as well as taking into account health, safety and fairness, keeping customers' information confidential, following up and evaluating customers' satisfaction for the purpose of development and improvement of services, together with advertisement, public relations and sales promotion, in



response to customers' needs to have access to the mass transit system and routes which save their travelling time in Bangkok and its surrounding provinces. Work plans/programs are also continuously set out for improvement of the expressway and metro services for users to ensure a more rapid and convenient service with a standard safety. Rules and regulations of service provision to which the Company has adhered are as follows:

- Providing quality, safe and standard services to satisfy service users' expectations.
- Ensuring prompt responses to service users' needs, without discrimination, and allowing and facilitating submission of any comments or suggestions for service improvement.
- Providing accurate and timely information on services.
- Organizing special activities to allow the service users to visit the operation and management of the expressways and metro under the Company's concessions, including regular promotion of the service usage by and marketing activities with customers.
- 1.2 Business counterparts: The Company strictly discharges its obligations under the Agreements with EXAT and MRTA in its capacity as a contractual party, and fairly treats its business counterparts on the basis of equitable and impartial treatment, without discrimination. The Company also complies with conditions, rules, regulations, mutual practices, and promotes good relationships, which are clearly written in the Company's code of business ethics, along with the work procedures in accordance with ISO 9001 Quality Management System. This is to ensure its collaboration with EXAT and MRTA to provide efficient and regular services. In this regard, the Company arranges for monthly performance satisfaction assessment in order to develop and improve the efficiency of the operations. According to the assessment results, both EXAT and MRTA are completely satisfied with the Company's collaboration.

Moreover, the Company organizes quarterly meetings between its operating staff and EXAT's personnel and monthly meetings with MRTA, which not only enhance the efficiency and results in the service users' satisfaction but also minimizes conflicts or impacts which may give rise to disputes over joint operations between both parties.

- 1.3 Traders / Contractors: The Company has a commitment to the procurement of standard goods and service, for the purpose of development and maintenance of sustainable relationships with traders, with the clear objectives in terms of quality of goods and service worth its value, technical standard, and creditability. The Company, therefore, provides fair and equal procurement procedures for all traders and follows the procedures in a systematic way in compliance with the work procedures regarding procurement and conditions of contracts or agreements with fairness in accordance with the requirements of ISO 9001 Quality Management System, based on the practices, as follows:
  - Determining the criteria for selection of trade counterparts through a strict screening process to ensure fair business operations without violation of human rights.
  - Ensuring equal and fair competition on a database, without discrimination or preventing any trader from participating in business competition.
  - Preparing contracts or agreements in appropriate, fair and standard forms.
  - Arranging for management, monitoring, surveillance, including rechecking systems to ensure the full compliance with contracts or agreements and internal control system to prevent fraud and misconduct in all steps of the procurement procedures.
  - Paying consideration to traders on time in accordance with terms of payment as mutually agreed.
  - Not allowing directors and/or staff to accept any benefit from traders privately or by reason of personal relationship.
  - Evaluating traders on a yearly basis and informing them of the results of the evaluation with suggestions for traders to continuously improve the quality of goods and services, and also allowing traders to contact the management to make any complaints if they are unfairly treated.



- Refraining from seeking any trader's confidential information dishonestly or improperly, such as bribing directors and staff of its competitors.
- Refraining from making a serious accusation against traders without reasonable grounds.
- 1.4 Lenders / Debenture holders: The Company strictly complies with the conditions of credit facilities agreements, suretyship agreements, capital management to build up the confidence of the financial institution lenders who provide financial support to the Company's projects, and refrains from breaching any conditions thereof as mutually agreed. The Company complies with and adheres to the following practices:
  - Strictly complying with the conditions of the credit facilities agreements as mutually agreed. Failure to comply with any condition must be informed to the lenders in advance for jointly seeking a solution.
  - Ensuring equitable and fair treatment towards all lenders, based on fair returns for both parties.
  - Reporting correct and reliable financial information to the lenders accurately, completely, timely and regularly.
  - Refraining from giving, soliciting, receiving, agreeing to receive or accepting an engagement for any benefits fraudulently in commercial terms.
  - Disclosing information (if any) on giving, soliciting, receiving, agreeing to receive or accepting engagement fraudulently, to the lenders, and jointly resolving such problems with fairness and rapidity.

Debenture holders: The Company issues debentures in accordance with applicable requirements, laws and notifications of the SEC and strictly complies with policies, objectives and resolutions of the shareholders' meeting, and also realizes the significance of its responsibility to fulfill commitments in accordance with the requirements regarding the debenture issuer's rights and duties, including relevant contractual conditions.

1.5 Staff: The Company considers staff as a key resource behind its business movements and as a crucial factor to the Company's sustainable success and growth, and then clearly sets out the staff practices, as suitable for each work position, and has respect for human rights, for instance, determination of remuneration and other benefits with fairness, provision of welfare benefits not less than that provided by law or higher as appropriate, taking into account staff's hygiene and safety at work, provision of training, development of competency and support of career advancement, as well as providing staff opportunity to improve their important and essential skills in connection with working or in any other fields, etc. In this regard, the Board of Directors has authorized the management to follow up, evaluate and review work performance on a yearly basis.

### 1. Treatment of staff

- Establishing structures and providing fair and appropriate benefits to staff according to work competency, to which staff performance evaluation system (people assessment) has been applied, focusing on work competency assessment and capability measurement as principle for development of staff's skills and competency to suit work position and ensure the Company's growth, as well as clearly measuring their performance based on KPIs in all key activities for supporting consideration and assessment of staff's performance.
- Creating a participatory and teamwork environment by allowing staff to express their opinions on work performance.
- Ensuring that staff take pride in and engage with the organization by encouraging their career advancement.
- Ensuring equitable treatment, integrity, and fairness in punishment, appointment, and transfer, including rewards, on the basis of staff's knowledge, capacities, and qualifications.



- Giving priority to and promoting the development of knowledge and capacities of staff at all levels, whereby the Company allows and encourages staff to attend training courses or further study in order to enhance their skills, knowledge, and expertise, as well as fostering positive attitudes toward them. Such training would emphasize the development of skills, knowledge, and competency of staff, whether it be functional skills, core skills or leadership skills. In 2020, the Company arranged for staff training, averaging 34.85 training hours/person.
- Respecting human rights in respect of nondiscrimination, provision of equitable opportunity for employment of female labor, disabled persons, underprivileged persons, youths, and the elderly.
- Supervising and monitoring to ensure that staff strictly comply with laws and regulations relating to staff, including provision of suggestions and close monitoring in order to prevent any illegal action, whereby the Company supervises and encourages staff to ensure that they use lawful products without infringement of copyrights or intellectual property, along with support of their compliance with the operational guidelines and performance of duties with integrity, without involvement with corruption in any form, for the benefits and success of the Company.

### 2. Policy on safety and hygiene

The Company realizes and gives priority to the safety and hygiene of the business premises to ensure staff's quality performance and quality of life with safety and hygiene at work, by setting out the policy on safety and hygiene, as follows:

- The Company formulates measures to prevent any work-related accident, injury and illness through sincere cooperation among all staff as well as restrict and cope with safety risks arising from undertaking work under the normal operating process.
- The Company formulates measures to design tools and equipment, set out practices, provide for training and supervise operations by taking into account safety for life, hygiene and property of staff and that of the Company as a whole.

The Company not only provides the hygienic work environment at the workplace for the sake of safety for life, hygiene together with property of staff and the Company, the Company also takes into account safety and hygiene of the service users, through provision of regular training to technical and engineering teams, including rescue and traffic management staff on the expressways, so as to ensure their efficient and safe performance; and in regard to the metro business, the Company also holds training to all staff on work safety and implements safety operations in accordance with the laws as well as local and international safety standards, i.e., TIS 18001: 2001 and OHSAS 18001: 2007, with the main aim of taking care of welfare in terms of safety, occupational health and work environment for staff related to the metro operations.

In 2020, the Company had five work-related accidents on the expressways, and had three work-related accidents in metro operations, without any loss of staff.

Work-Related	Accidents	Injury Frequency Rate		
(times	)	(I.F.R.)		
Expressway Rail		Expressway	Rail Business	
Business	Business	Business		
5 3		1.82	0.45	

 $\frac{Remark}{Remark}: \quad \text{The injury frequency rates (I.F.R.) were calculated from the number of work-related injuries (N) per man-hours worked (MH) whereas I.F.R. = N*1,000,000/MH.}$ 



- 1.6 Supply chain: The Company deals with the supply chain in strict compliance with international standards, ISO 9001 Quality Management System, and ISO 14001 Environment Management System, by way of providing education and close monitoring and audits to ensure that the supply chain of traders in business association with the Company takes account of environmental impact, in the interests of the sustainability of their mutual business alliance.
- 1.7 Communities: The social and environmental impacts of its business operations, particularly impacts on the communities adjacent to the expressways, metro routes, or near the office where the Company is located are of concern to the Company, and therefore, the Company continues to organize special activities for providing benefits and building a learning center for business and communities in the long run.

## 2) Anti-Corruption Policy

The Company realizes and gives priority to anti-corruption and fraud prevention and also adopts measures to prevent corruption, both inside and outside. The Company sets out guidelines and procedures for regular practices, monitoring, surveillance, review, risk assessment, and training as suitable and up-to-date, to ensure that all directors, executives, and staff of the Company have strictly adhered to and complied with such guidelines. In this regard, the Company formulates anti-corruption policy containing the key practical guidelines, as follows:

- The Company's directors, executives, and staff at all levels should carry out activities with fairness, integrity, and transparency in business dealings with various agencies, provided that such activities must be proper in compliance with applicable laws, policies, Articles of Association, regulations, notifications or practical procedures.
- The Company encourages and promotes fair treatment with integrity towards all its traders and compliance with any contractual commitments made with the Company's stakeholders.
- The Company encourages and promotes directors', executives' and staff's awareness to ensure that they refrain from committing any fraud and realize the negative impacts of corruption.
- The Company encourages and promotes directors, executives and staff to refrain from receiving, agreeing to receive or offering any hospitality, gifts, and any other payments which are extravagant and inappropriate to those in business dealings with the Company.
- The Company arranges for staff training to educate them regarding the anti-corruption policy, practices, and guidelines.

In this regard, the Company has imposed the duty on the Internal Audit Unit to follow up, conduct surveillance, review, risk assessment and training for preventing / suppressing corruption.

## 3) Policy and Practices on Non-infringement of Intellectual Property

The Company respects and upholds the proprietary rights in others' intellectual property, whereby use of the intellectual property shall be subject to the prior consent of the intellectual property owner, and then, the Company formulates a policy to forbid any arrangements which infringe intellectual property of any kind, based on the following guidelines:

- All staff have duty to protect and keep the Company's intellectual property confidential to ensure that such information must not be leaked out and exploited for personal gain or any other person's gain without permission.
- All staff must respect and honor others' intellectual property and refrain from exploiting any work piece as others' intellectual property, whether in whole or in part, without the owner's permission.



## 4) Policy on Respect of Laws and Human Rights Principles

The Company makes it mandatory for directors, executives and staff to comply with the laws and human rights principles or human dignity, regardless of race, color, sex, language, religion, social origin, property, birth, political opinion, or other status, as well as realizing their own rights, duties, and responsibilities towards society and others, based on the guidelines, as follows:

- The Company strictly complies with the laws and human rights principles and does not support any business which violates human rights.
- The Company treats all staff equally, without discrimination in terms of employment, remuneration, training, promotion, termination or dismissal due to sex, race, color, religion, age, marital status, pregnancy, political opinion, or disability, etc.
- The Company allows all staff to enjoy equal rights for work pursuant to rules, regulations, notifications, and orders of the Company.

## 5) Policy on Corporate Social Responsibility and Sustainable Development

The Company is committed to its business operations with social and environmental responsibility; as well as mainly focusing on coordination for mutual benefit with all groups of stakeholders in every dimension as appropriate in the pursuit of the Company's sustainable business growth, along with its determined efforts to benefit and grow all groups of stakeholders together, as follows:

- To lead the organization with the concept of sustainable development, through communication and exchange of best practices with all of the Company's stakeholders;
- To incorporate the sustainable development concept into every aspect of the work and decision processes of the Company;
- To promote training, learning, and counseling, focusing on practices according to the sustainable development guidelines;
- To support regional operation and cooperation to achieve sustainable development.

It is the responsibility of every employee to seriously implement this policy as part of his or her own work processes for the sustainable growth of the Company and all groups of stakeholders.

In this regard, details on work operations in terms of corporate social responsibility and sustainable development of the Company in 2020 are shown in Part 2: Item 10: Corporate Social Responsibility.

## 6) Environmental Policy

The Company is environmentally responsible for its service business. Therefore, the Company is committed to environmental management based on the following practices:

- Giving priority to pollution prevention and control in compliance with international standards, taking into account the environmental impacts of all groups of stakeholders;
- Raising staff awareness and promoting the efficient use of energy and natural resources as well as providing staff with environmental knowledge and training;
- Performing duties in compliance with environment-related laws and other environmental regulations as applicable;
- Reviewing objectives and goals for improvement of the environment management system on a continuous basis;
- Communicating the environmental policy to the public and parties concerned, as well as adopting a policy to select and encourage use of eco-friendly products.

It is the responsibility of all the Company's staff and contractors to seriously and regularly implement this policy to ensure the environmental quality for the service users, staff, contractors, and communities nearby.



## 7) Information Security Policy

The information security plays an important part in contributing to the efficient and trustworthy business operations of the Company, the Company then is determined to develop the information security system and put it into practice, to rest assured that:

- Access to the information system shall be strict to only authorized users;
- The information system provides accuracy, reliability, and confidentiality;
- The information system is always readily available to the users;
- The information security is regularly reviewed;
- Staff are encouraged to have information security knowledge, ability, and awareness.

In this regard, it is the responsibility of everyone for the information security. Thus, the staff and external parties authorized to have access to the Company's information system have the duty to make every effort to ensure the information security of the Company.

The Company becomes aware of and considers information technology security and threats caused by the use of information technology. Currently, technology has been not only progressing rapidly, but also posing a threat, which as days go by, continues to become significant and acute. On July 5, 2018, the Company completed ISO/IEC 27001: 2013 certification from Bureau Veritas Certification (Thailand) Limited which shall be valid until July 4, 2021. The Company has then put the same into practice and set out regulations governing information system security, provided that such regulations shall be yearly reviewed as appropriate. The practices/prohibitions for staff's access to computers; the practices for computer system administrators; and the practices for external service providers are also set out.

Furthermore, the Company properly and sufficiently allocates and manages technology resources, and supports the state-of-the-art and efficient technology to be employed in work operations. There are the work system development department and the information technology department which shall be responsible for the computer system (software and hardware) and have access to the computer program to manage database of the Company's computer system. The Company has provided for job descriptions to clearly identify duties and responsibilities of each position. For the important work systems, the Company has prepared and transferred the body of knowledge to relevant personnel in the work fields to ensure that they can perform duties in place of others. On the other hand, the Company will choose to outsource the services for the work systems which need special skills or high operational safety.

#### 8) Innovation Promotion Policy

The Company realizes and strives for promotion and development of creating of innovative culture in the organization to add value to the businesses according to the ongoing changing circumstances by paying regard to internal and external stakeholders under the policy, as follows:

- To encourage staff to participate in improvement of the work process to ensure the highest efficiency in line with the corporate mission, by using innovations as suitable with current circumstances;
- To promote use of equipment, tools, devices, and technology in work operations, as well as using financial tools as appropriate;
- To support and promote innovative culture in the organization for taking care of the stakeholders in a continuous manner.

The Company has appointed a work group to formulate strategies and innovations to ensure the greater efficiency in management of various aspects, for instance, project analysis, engineering technique, finance, marketing, and in the context of contract, with the duty to brainstorm ideas and propose strategic and innovative guidelines for developing efficiency and generating more income for the Company, as well as conducting feasibility studies under the proposed guidelines, together with alternatives as it deems appropriate for the sake of economic benefits and improving a good image of the Company; to propose work plans to the Managing Directors for assigning agencies in charge to carry out such plans, follow up and conclude, assess, report the results to the Managing Directors.



Nowadays, Big data plays a key role in analyzing business data in a more widespread manner. The Company, as a service provider of transportation infrastructure which accommodates millions of trips per day, has then adopted the Business Intelligence (BI) which is capable of analyzing big data rapidly with less resources and displaying the results to summarize large data for easy understanding, while featuring the beautiful pattern, to the analysis, in order to predict the congestion of traffic volume, duration of trip, necessity for improvement or development of the physical expressways for the purpose of solving the current traffic congestion. This is to enable the expressway users to use the expressways which provide them with the convenient, fast, safe services, and by which the economic losses caused by fuel burning in the course of occurring traffic congestion can be minimized, not to mention the fact that greenhouse gases occurred from the oil production process and emitted from the exhaust pipes can also be reduced, thereby providing more clean and environmentally friendly air in and nearby the expressways.

In respect of expressway engineering management, the Company has developed the Pavement & Structure Management Systems, added tools to maintain the standards of the expressway services to expressway users to stay at an appropriate level in terms of rapidity, comfort, and safety in conformity with various relevant requirements and laws, whereby the Company has created such Systems in the form of Web-based Application which is capable of displaying the Management Information System (MIS) and the Geographic Information System (GIS) with the leading-edge technology, for example, Mobile Mapping System (MMS), Laser Point Cloud.

Moreover, the Company has initiated the Safety Management System to enable it to analyze the causes of accidents based on the engineering principles, and provide additional equipment / improve the routes to achieve the safety in all environments with greater efficiency. In this regard, the development of knowledge on research and innovation of the Company has been carried out in cooperation with the consulting companies which at lease have successfully passed the ISO 9001 quality assessment criteria, the leading higher education institutions, and in academic cooperation with the Thailand Institute of Scientific and Technological Research where are composed of faculty of teachers, researchers and experts as a working group, thereby enabling the Company to develop knowledge and receive information which is accurate, reliable and can be used to make decisions with maximum efficiency.

# 9) Procedures and Channels of Complaints

#### • Submission of complaints

The Company has arranged for channels for all groups of stakeholders to make complaints relating to matters which may cause damage to the Company or if they may find any behavior or event which may violate or be contrary to the code of ethics or policies, they may report or submit complaints directly to the Audit Committee Chairman or independent directors or contact the Company Secretary.

Audit Committee Chairman : Bangkok Expressway and Metro Public

Independent Directors Company Limited

Company Secretary

No. 238/7 Asoke-Dindaeng Road,
Bangkapi Subdistrict, Huai Khwang

District, Bangkok 10310

Telephone : 0 2641 4611

E-mail : companysecretary@bemplc.co.th

#### • Procedures upon receipt of complaints

## 1. Fact-finding

The independent directors will appoint and authorize a working group to make fact-finding and compile complaints.

## 2. Fact processing and screening

The authorized working group processes and screens such facts and then considers proposing appropriate steps and actions for handling such complaints.



#### Measures

The authorized working group proposes measures to deal with the violation or non-compliance with the code of ethics or policies to the Board of Directors' consideration so as to alleviate damage for those affected by such occurrence, taking the overall damage into account.

#### 4. Report on results

The Audit Committee Chairman or independent directors or the Company Secretary reports to the Board of Directors for acknowledgment and reports on the results to the stakeholders who submitted such complaints, if the complainants can be identified.

## Measures to protect the complainants or those who provide cooperation in the investigation

The complainants or those who provide cooperation in the investigation are protected in accordance with the following criteria:

- 1. The complainants or those who provide cooperation in the investigation of facts may choose to keep their identities undisclosed, in case such disclosure may jeopardize their safety or cause any damage.
- 2. In case their identities are disclosed, the Company will report on developments of the fact finding.
- 3. The Company may not disclose name-surname, address, photograph, or any other information which may identify the complainants or those who provide cooperation in the investigation of facts.
- 4. The person who accepts complaints must keep related information confidential and may disclose the same only to the extent necessary by taking into account safety and damage in respect of the complainants or those who provide cooperation in the investigation of facts, sources of information or related persons. If it is likely to cause damage or jeopardize safety, appropriate protection measures must be implemented.
- Those who sustain damage will be compensated by way of appropriate and fair procedures.

## 9.1.4 Ensuring Disclosure and Maintaining Financial Integrity

1) The Board of Directors sets out a policy to disclose information and maintain financial integrity by formulating practical guidelines, including systems for financial reporting and disclosure of significant information to ensure correctness, adequacy, equality, punctuality via appropriate channels, protecting confidential information and information which may affect securities price, as well as having the company-wide communication to make all staff have a common understanding that compliance with such policy is required in accordance with applicable requirements, standards and practices, in a transparent and auditable manner. This is to ensure that disclosed information is a matter of importance and is able to reflect practices and operations of the Company contributing to the sustainable value creation to the business.

Moreover, personnel related to preparation of the report and information disclosure are promoted and managed to ensure they have knowledge, skills and experience as suitable for their duties, responsibilities, and in an adequate amount for the Company's needs. Such personnel shall include the highest level executive in accounting and finance, accountant, internal auditor, Company Secretary, and investor relations. The Managing Directors have the power to approve information disclosure and ensure the accurate, complete, timely and transparent disclosure of both financial and non-financial, material information relating to the Company as required by the SEC Office and the SET, via the equitably accessible channels.

2) The Company has established the Investor Relations Unit to represent the Company, with the duty in appropriately, equitably and timely communicating information useful to shareholders and other stakeholders, such as debenture holders, investors, securities analysts, mass media, and relevant parties. The Company has also been a member of Thai IR Club, Thai Listed Companies Association. Interested investors may contact the Investor



Relations Department at 0 2641 4611. Investors who find it inconvenient to visit the Company's Office No. 238/7 Asoke-Dindaeng Road, Bangkapi Subdistrict, Huai Khwang District, Bangkok 10310, may contact to make a conference call or sign up for the news mailing list via the website or submit questions or e-mail to ir@bemplc.co.th.

Other than the mandatory disclosure pursuant to the practices and legal requirements, the Company also has a policy to rotate high level executives to participate in providing information and answers to investors' questions and to learn opinions and realize requirements of Thai and foreign investors in person, that is, the Managing Directors, the Deputy Managing Directors, the Assistant Managing Directors, and the Company Secretary, all of which regularly participate in the Company's Investor Relations activities.

3) The Company clearly sets out the authorization levels for information available to executives at each level, and their authorized access to such information for public disclosure, by means of communicating and ensuring proper understanding of information for investors, internal and external agencies of the Company, as well as contacting and coordinating with investors, collecting investors' opinions, and communicating with high level executives to staff at all levels, as follows:

#### 3.1 Internal communications

Although the Board of Directors and high level executives may have full access to all information of the Company, the Managing Directors are appointed as the authorized persons to disclose such information to the SET and to provide the information via the public media in accordance with the Company's disclosure policy.

The Board of Directors, executives, advisors, and staff of the Company, who perceive information, are obliged to keep any undisclosed information strictly confidential. The Company formulates work rules and regulations to prohibit staff from disclosing the Company's confidential information to any third party or abusing their positions for personal gains or for the gains of others. Any violation is deemed a disciplinary misconduct liable to termination of employment. In the past, there has never been any occurrence of misuse of inside information for personal interests or for the gains of others.

Moreover, the Company has also developed a control system on use of the Company's information by adopting such information security systems as the restriction of access to the Company's information by authorization level of staff's access to the Company's information based on their responsibilities. To prevent executives' misuse of the Company's inside information for securities trading, the Company has policies and procedures for controlling the use of inside information by directors, executives and staff to prevent any occurrence of the use of inside information for personal interests or for the interests of others.

The Company's disclosure of information to staff must be the same as the public disclosure in terms of accuracy, frequency, and timeframe. The Investor Relations Department prepares and submits to management monthly IR Reports, which collect and summarize investors' questions and opinions on the Company's business operations, in order to present useful suggestions or feedback of investors to management for further improvement of the Company's operations.

### 3.2 External communications

The Board of Directors adopts a policy that the Company's disclosure of material information follows the specified policy and requirements. The disclosure is prepared both Thai and in English and is made available via the SET's channel and on the Company's website at www.bemplc.co.th. The Company regularly updates such information as annual report, annual registration statement (Form 56-1), practical guidelines for good corporate governance, the Company's profile and various policies, loan status, operational results, financial ratios, securities price, dividend history, together with other information, e.g., corporate social responsibility activities and public relations news. Such information and news are made available in support of investment decision-making by investors and relevant parties, together with monthly corporate presentations to investors, which are regularly updated, so as to be regularly and timely available to all investors and those who may interest in investment, on the website. Moreover, opinions and investment analysis of the Company by securities analysts from securities companies from www.settrade.com, which are compiled in the form of Analyst Consensus, are shared on the Company's website in order to assist investors in making their decisions to invest.



In the disclosure of financial reports, the Board of Directors prepares the Report on Responsibilities of the Board of Directors towards the Financial Report to be presented along with the Report of the Auditor, as detailed on page 13-12.

The provision of the Company's related information to securities analysts is also another main duty of the Investor Relations Department since the Company's information is made available in the Analyst Consensus to assist investors in making their decisions to invest. The Investor Relations staff are then assigned to provide such information to ensure correct understanding and maintain good relationships with securities analysts. Staff may review and clarify for the purpose of accuracy of the Analyst Consensus, as opposed to guiding or distorting the Analyst Consensus by securities analysts, or may revise only such facts which have been outdated or disclosed to the public, in which case, such revision is not treated as guiding investment.

Other than public disclosure, the Company also participates in various activities to serve as a disclosure channel to directly meet with investors and hear their opinions as well as create good relationships with investors via activities, such as, Roadshow, Opportunity Day, Company Visit, Analyst meeting, exhibition booths, etc. The Company's management staff are rotated to accompany the Investor Relations staff to communicate and provide better explanations in support of their decisions to invest.

In 2020, the Company organized the Analyst Meeting, Company Visit, Site Visit, Conference Call, press conference and press interview, both in the offline and online forms, in order to suit the situation of the outbreak of the COVID-19, and to that effect, the Investor Relations Department organized 4 offline and 17 online meetings with various institutions, both at home and abroad, and also organized three analyst meetings.

The foregoing events were opportunities for the Company to provide appropriate clarification on the operational results and progress of the investment projects and for management to answer questions to investors and the press equally and fairly to provide material, necessary and accurate information for investment decisions to the general public, including investors and institutional analysts.

The Company regularly organizes the Company Visit program to allow shareholders to visit and meet its management. The Company also publishes BEM Magazine for disseminating business information and other useful information, which has been regularly delivered to all shareholders and debenture holders of the Company. In addition, the Company conducted a survey on the opinions and needs of analysts and investors on the quality of the communication and Investor Relations activities in 2020 (BEM IR SURVEY) for further improvement, with the survey results revealing that the percentage of satisfaction with the service provision in such Investor Relations activities was 90.06 percent.

# 9.1.5 The Board of Directors' Responsibilities and Strengthening Board Effectiveness

The Board of Directors realizes its roles and responsibilities in setting out policies and monitoring to ensure the Company's good management, covering its business objectives, goals, strategies, policies, important and adequate resource allocation to achieve the business objectives and goals, as well as monitoring, evaluating and ensuring the reporting on operational results in line with laws, the Articles of Association, together with resolutions of the shareholders' meeting, to ensure the operations which pursue the sustainable value creation for the business.

The Board of Directors complies with the practical principles of the Corporate Governance Code for Listed Companies in various aspects, as follows:

## 1. The Board of Directors' Structure

The structure of the Board of Directors is considered by the Company in terms of size, composition, proportion of the independent directors, skill, experience, education, capability and expertise, together with gender and age as suitable and necessary for leading the organization to achieve the Company's specified objectives and goals, consisting of 14 qualified members, namely, five executive directors, five independent directors and four non-executive directors. This is to rest assured that the Board of



Directors as a whole is qualified and is able to understand and respond to the stakeholders' needs, as well as enabling the Board of Directors to carry out operations conducive to exercising its discretion independently. In addition, two out of five non-executive directors are EXAT's and MRTA's representatives who have experiences in the Company's core businesses.

- The Board of Directors includes five independent directors, in line with the proportion as required by the SEC Office, who are able to independently provide opinions on the Management Team's performance. The Company also determines qualifications of "independent directors" stricter than the minimum requirements of the SEC Office and the SET.
- Directors have a term of office of three years, and the retiring directors may be re-elected. At every annual ordinary general meeting of shareholders, one-third of the number of directors vacates their office and if the number of directors is not a multiple of three, then the number nearest to one-third must retire from office.
- The Board of Directors has policy to set a limit on the number of listed companies in which each director may hold a directorship position which must not exceed five companies, to ensure efficiency in performance of their duties.

# 2. Performance of Duty of the Chairman of the Board of Directors and Managing Directors

The Chairman of the Board of Directors and the Managing Directors may not be the same person so as to separate between the policy making and supervisory duty and the regular managerial duty. The Board of Directors clearly determines powers and duties of the Chairman of the Board of Directors and the Managing Directors. The Chairman of the Board of Directors is an independent director by the definition of the SET and has no relationship with management.

#### 3. Subcommittees

The Company has established four subcommittees to closely monitor and supervise operations and regularly report to the Board of Directors, namely, the Audit Committee, the Nomination and Remuneration Committee, the Corporate Governance and Risk Management Committee, and the Executive Board. The Board of Directors has determined duties and responsibilities of each subcommittee as detailed on pages 9-31 to 9-35.

## 4. Role, Duties, and Responsibilities of the Board of Directors

- 1) The Board of Directors has its role and duty in supervising to ensure the Company's good management, covering the vision, missions, strategies, targets, business plan, budget of the Company, important and adequate resource allocation, as well as supervising and monitoring to ensure the management's operations in compliance with the specified plans, for the sustainable value creation for the Company's business, conducive to the ethical business operations, with respect for rights and responsibility towards shareholders and stakeholders, provision of social benefits, environmental development or reduction of environmental impacts.
- 2) The Board of Directors has established the corporate governance policy, subject to review at least once a year, for directors, executives and staff of the Company to comply with, and also provides for mechanisms conducive to their real compliance therewith, as well as following up the results.
- 3) The Board of Directors approves preparation of the Company's code of ethics, subject to review at least once a year, prescribing the best practices of directors, executives, and staff for treatment towards the Company, colleagues, third parties and society, to allow the Company to create and push ahead the ethical organizational culture.
- 4) The Board of Directors has its duty to ensure that the Company has adequate systems and mechanisms so that the Company's operations comply with applicable laws, Articles of Association, resolutions of the shareholders' meeting, together with policies or guidelines as specified, and also has approval process for significant matters, such as, any investment, transactions which materially affect the Company or any transactions which may involve a conflict of interest, in which case, interested directors may not attend nor vote on such matter at the meeting, etc., as required by law.



- 5) In respect of risk management, the Board of Directors follows up and acknowledges risk management plan of the Company from management's report on operational results in each Board of Directors' Meeting and from the Report of the Corporate Governance and Risk Management Committee.
- The Board of Directors shall supervise and monitor to ensure that the management conveys and transforms a strategic plan into operational plan, including performance assessment, and supervise and monitor the group companies. In this connection, the management is required to report on performance, together with any significant matters, to the Board of Directors for acknowledgment in the Board of Directors' Meeting.

In addition, the Company provides for the annual survey on compliance with the Company's code of ethics for directors, executives and staff, in which they must sign to signify their responsibility for compliance with the Company's code of ethics. Moreover, the Company not only arranges for the annual training and test on the code of ethics by means of e-learning for the Company's executives and staff, the Company also continues to encourage high and middle executives to undergo corporate governance training on a yearly basis.

#### The Board of Directors' Meetings and the subcommittees' meetings

Names of Directors	Attendances / Total Number of Meetings for 2020				
	Board of Directors	Executive Board	Audit Committee	Nomination and Remuneration Committee	Corporate Governance and Risk Management Committee
1. Dr. Virabongsa Ramangkura (1)	3/7				
2. Mr. Plew Trivisvavet	7/7	12/12		3/3	
3. Mr. Vitoon Tejatussanasoontorn	7/7		5/5	3/3	
4. Gen. Chetta Thanajaro	6/7		5/5	2/3	
5. Dr. Annop Tanlamai	6/7		5/5		
6. Mrs. Vallapa Assakul	7/7				3/3
7. Mr. Supong Chayutsahakij	7/7	12/12		3/3	
8. M.L. Prasobchai Kasemsant	5/7				
9. Mr. Phongsarit Tantisuvanitchkul	7/7	12/12			3/3
10. Miss Arisara Dharamadhaj	7/7				
11. Mr. Panit Dunnvatanachit	5/7				
12. Mr. Vithaya Punmongkol (2)	3/3				
13. Mrs. Natamon Bunnak	7/7				
14. Dr. Sombat Kitjalaksana	7/7	12/12			3/3
15. Mrs. Payao Marittanaporn	7/7	12/12			3/3

Remarks:

was appointed as director on April 9, 2020 to replace Mr. Yuttana Yimgarund who resigned from his position as director on October 25, 2019.

#### The Board of Directors' Meetings

The Company gives prior notice of the annual schedule of the Board of Directors' meetings, together with the main agenda, to directors so as to allow directors to be able to manage their time to attend the meetings. Pursuant to the Articles of Association, the Board of Directors must meet at least every three months; and a quorum consists of not less than half of the total number of directors. In 2020, the Board of Directors held its seven meetings.

<sup>(1)</sup> Dr. Virabongsa Ramangkura resigned from his position as director on April 2, 2020.

<sup>(2)</sup> Mr. Vithaya Punmongkol



The Managing Director Office will deliver the notice of each meeting and agenda as clearly pre-determined 7 days prior to the meeting date and deliver the supporting documents at least five business days prior to the meeting date, so as to allow the Board to review the same prior to the meeting.

The agenda is determined by mutual discussion between the Chairman of the Board of Directors and the Managing Directors. In addition, one meeting among non-executive directors and without management will be held in order for the directors to independently discuss and exchange their opinions and to efficiently follow up the performance of management. At every meeting, the Chairman of the Board of Directors presides over the meeting to ensure that each item is carefully considered and all directors are allowed to express their opinions and take part in discussions. In addition, the high level executives will attend the meeting to clarify the information in the capacity as persons directly relevant to the problems to the satisfaction of the meeting prior to passing resolution on each item.

Moreover, the Board of Directors sets out a policy to prohibit directors and executives who are connected persons or interested persons in relation to any items to be considered from attending the meeting or voting on such item, and management gives prior notice to such directors and executives who are not allowed to attend the meeting or vote on such item. In considering who is a connected person and interested person, the Board of Directors takes into account the report on interests which all directors and executives have a duty to submit in accordance with the Board of Directors' policy requiring directors and executives to report their personal interests in order to disclose such information to the Chairman of the Board of Directors and the Audit Committee Chairman.

## 2) Subcommittee meetings

The Board of Directors will monitor the implementation of the Company's policies and strategies by convening subcommittee meetings to consider various significant matters and preparing reports on work performance of every subcommittee for submission to each Board of Directors' meeting, as follows:

#### 2.1 Audit Committee

The Audit Committee regularly meets at least every quarter with the internal auditor and management and executives responsible for accounting and finance, for review of financial statements on a quarterly basis, and meets with the auditor for review of the annual financial statements, and makes a report to the Board of Directors, or in case management executes any connected transaction or transaction relating to asset acquisition or disposal which must take into account appropriateness, justification and the utmost benefit of the Company, the Audit Committee Chairman may convene additional meetings.

In 2020, the Audit Committee held its five meetings and one meeting with the auditor without management. The Audit Committee reports quarterly to the Board of Directors on its performance and will yearly summarize its performance during the previous year via the Audit Committee's report. Moreover, in 2020, the Audit Committee considered executing two connected transactions.

# 2.2 Nomination and Remuneration Committee

The Nomination and Remuneration Committee will meet to nominate qualified persons for appointment as directors of the Company to replace the directors who are due to retire by rotation and directors who resign prior to the end of term; review remuneration of directors and annual bonus for submission to the annual ordinary general meeting of shareholders for approval; and consider remuneration for the Managing Directors in accordance with the results of performance evaluation for submission to the Board of Directors for approval. In this regard, the Nomination and Remuneration Committee will review the criteria for nomination and consideration of remuneration for directors every year to keep it aligned with the Company's business strategies, and ensure that the criteria for consideration of remuneration stay at the same standard as those of other companies in the same industry so as to appreciate and retain the qualified directors.



The Company schedules the Nomination and Remuneration Committee's meetings to be held at least twice a year.

In 2020, the Nomination and Remuneration Committee held its three meetings to nominate qualified persons for appointment as the Company's directors to replace those directors who vacated office; and consider scrutinizing remuneration for directors for proposal of the same to the 2020 Ordinary General Meeting of Shareholders for consideration and approval; and consider reviewing the criteria for nomination and consideration of remuneration for directors.

### 2.3 Corporate Governance and Risk Management Committee

The Corporate Governance and Risk Management Committee will meet to follow up and evaluate the results of performance in compliance with the Corporate Governance Code; improve the guiding practices in line with the corporate governance policy for listed companies under the guidelines of the SET; consider risk management plan, risk management process; as well as monitor, inspect and review the Company's overall risks to stay at an appropriate level.

Furthermore, the Board of Directors has reviewed the Company's operations in compliance with the Corporate Governance Code for Listed Companies.

In 2020, the Corporate Governance and Risk Management Committee held its four meetings to monitor and review the good corporate governance practices in respect of shareholders' rights; treatment towards shareholders and stakeholders; information disclosure; and responsibilities in risk management. The Board of Directors has considered compliance with the annual risk management plan, reviewed and followed up the risk management plan on a regular basis. It was found that the Company was able to conduct risk management to meet the targeted plan, without any material impact on the Company's business operations. Furthermore, the 2021 annual risk management plan is sufficient and in line with the current business circumstances, together with proper action plan and risk management method.

## 2.4 Executive Board

The Executive Board of the Company meets to help provide suggestions and advice to the management, and review the operations in compliance with the Company's policies and work plans as well as to consider various matters within the scope of its authority and duties as assigned by the Board of Directors and to consider screening such matters to be proposed to the Board of Directors for consideration and approval.

In 2020, the Executive Board held its 12 meetings to consider scrutinizing the agenda items as proposed to the Board of Directors; consider approving transactions with a value not exceeding Baht 500 Million, and consider salaries and bonus for staff.

# 6. Board Self-Assessment

The Board of Directors has a policy to ensure the self-assessment of the Board of Directors and subcommittees at least once a year, including assessment of the performance in accordance with the Company's code of business ethics. In addition, the Managing Directors' performance must be assessed by the Board of Directors every year in accordance with the rules as specified by the Nomination and Remuneration Committee. Furthermore, the Board of Directors determines to review topics of assessment to ensure appropriateness and conformity to roles, duties, responsibilities, and its practices in accordance with the Corporate Governance Code.

#### Results of Board / Subcommittee Self-Assessment

In 2020, the Company delivered board and subcommittee self-assessment forms to each group of directors/subcommittee members to evaluate the overall performance of the Board of Directors and subcommittees, the results of which were proposed to the Board of Directors for consideration and improvement of performance.



In this regard, most of the opinions provided by directors/subcommittee members can be summarized as follows:

1) Structure and Qualifications of the Board of Directors / Subcommittees: The structure and qualifications of the Board of Directors and subcommittees are proper and suitable to the nature of business operations of the Company. The Board of Directors comprises personnel with sufficient knowledge and experiences in a variety of fields and performed their overall duties efficiently.

Moreover, the Board of Directors appoints four subcommittees, namely, the Audit Committee, the Nomination and Remuneration Committee, the Corporate Governance and Risk Management Committee and the Executive Board to perform the duties to help supervise, monitor the businesses, nominate qualified personnel as director with transparency, fairness, independence from any person's influence, including determination of reasonable and competitive remuneration to retain quality and competent directors, draw up operational policies and direction in respect of good corporate governance of the Company, code of business ethics, together with risk management, as well as taking care of and providing suggestions to the management, for the benefit of the Company's business operations based on good corporate governance.

- 2) Role, Duties, and Responsibilities of the Board of Directors / Subcommittees:
  - The Board of Directors gives priority and contributes sufficient time to consider significant matters relating to the direction of the Company's business operations, reviews the good corporate governance policy of the Company, as well as ensures compliance with various policies, reviews the code of business ethics, and monitors to ensure that no conflict of interest arises from any connected transactions and transactions. The Board of Directors also follows the procedures as specified by taking into account the optimum benefit of the Company. Furthermore, the Board of Directors regularly reviews the internal control system to ensure good and sufficient internal control system and appropriate risk management, as well as follow up and monitor to ensure the performance of duties of management in accordance with the policies as assigned by the Board of Directors.
  - The Audit Committee has ensured that the financial statements have been prepared in accordance with the generally accepted accounting standards; the internal audit tasks have been supervised and monitored for ensuring the appropriate and effective internal audit system; the execution of transactions which may have a conflict of interest has been considered under the specified procedures and for the utmost benefit to the Company; the Company has complied with the securities and exchange law and other applicable laws; and nomination of persons for appointment, determination of remuneration, and assessment of the auditor's performance are appropriate.
  - The Nomination and Remuneration Committee has ensured that the appropriate criteria for nomination of directors have been determined; the qualified persons have been considered and nominated for appointment as the Company's directors; the appropriate and transparent criteria for consideration of remuneration for directors have been determined; remuneration for directors has been considered under the specified criteria for submission to shareholders; the results of the Managing Directors' performance have been assessed under the specified criteria; and remuneration for the Managing Directors has been considered in line with the results of assessment.
  - The Corporate Governance and Risk Management Committee has conducted studies and followed up movement, tendency, and practice in respect of the good corporate governance; has improved and made suggestions on the good corporate governance policy of the Company, including the code of business ethics; has followed up and evaluated the results under the good corporate governance principles of the Company; has considered policies and work plans relating to risk management; has monitored and reviewed overall risk management of the Company, strategies for risk management and risk prevention system of all kinds; has reported on risks and actions taken to minimize risks to the Board of Directors.



- The Executive Board has provided guiding policies, supervised, made suggestions and advice for the Managing Directors and management; has set up business plan, budget and managerial power of the Company as assigned by the Board of Directors; has inspected and followed up the compliance with the Company's policies and plans with efficiency; has conducted feasibility studies on new projects; has approved justifiable juristic acts; has approved the appropriate appointment, and determination of remuneration for executives.
- 3) The Board of Directors' / Subcommittees' Meetings: The results of assessment are satisfactory, namely that directors/subcommittee members are given prior notice of the annual schedule' meetings so as to enable them to manage time to attend every meeting; the number of the meetings and agenda are suitable to support the performance of its duties efficiently and to supervise and monitor the Company's business operations successfully; directors/subcommittee members are also given supporting documents prior to each meeting and sufficient time to read such information in preparation for each meeting; the supporting documents contain information sufficient for their decision making; the Board Directors/subcommittees can request any other necessary information in support of their decisions for the benefit to the Company; the atmosphere at each meeting allows all directors/subcommittee members to express constructive opinions without undue influence of any person; and directors/subcommittee members can fully discuss significant issues at each meeting.
- 4) Directors' / Subcommittee Members' Performance of Duties: The results of assessment are satisfactory, namely that directors/subcommittee members are well prepared and sufficiently study information prior to each meeting; have regularly attended the meetings; independently provide their opinions and impartially consider various matters and are independent in making decisions and passing resolutions; provide useful suggestions for the Company's operations, and understand the significance of each matter and properly contribute their time to consider such matters without wasting time on minor issues; and accept different opinions among them without conflict.
- 5) Relationship with Management: The results of assessment are satisfactory, namely that directors/subcommittee members may straightforwardly discuss with the Managing Directors; maintain a good relationship with management; the Managing Directors can request directors'/subcommittee members' advice as necessary; the Board/subcommittees do not intervene with management's performance of duties; and the Board/subcommittees participate in solving problems as appropriate in case management's performance does not meet the specified plans and budget.
- 6) Self-Development of Directors/Subcommittee Members and Executives: The results of assessment are satisfactory, namely that directors/subcommittee members understand their roles, duties, and responsibilities; directors/subcommittee members have sufficient knowledge and understanding relating to the Company's businesses; have paid attention to significant information or news relating to economic and industrial conditions, changes in rules and regulations and the status of competition, which allows them to efficiently perform their duties; all directors/subcommittee members undergo training to ensure their understanding of the performance of duties in their capacity as directors/subcommittee members; and in case of newly-appointed directors/subcommittee members, the Board monitors to ensure management provides documents or briefings for the new directors/ subcommittee members to understand the businesses and ensure performance of duties as directors/subcommittee members; and a succession plan has been set out to ensure continued performance of duties as high level management of the Company.

# 7. Assessment of Performance in Compliance with the Company's Code of Business Ethics

The Board of Directors sets out the Company's code of business ethics as principles and goals of the Company's business operations, and guidelines for performance of all directors, executives, and staff. Directors, executives, and staff will assess their performance in compliance with the Company's code of business ethics every year. In this regard, the results of the assessment can be summarized as a whole that directors and executives have complied with the Company's code of business ethics, as follows:



- Compliance with the code of business ethics: Understanding and adhering to the guidelines as specified in the Company's code of business ethics.
- Guidelines for business operations: Strictly complying with applicable laws to the Company and the trading business under the desirable morality, including the Company's policies.
- Conflict of interests: Not disclosing any confidential information of the Company to any third party; refraining from any act which will give rise to a conflict of interest between their own interest and the Company's interest; not involving in nor holding any share in any business which may have a conflict of interest with the Company.
- Insider trading: Not disclosing any insider information which has not yet been disclosed to the public, which may affect the prices or trading of securities of the Company and its related companies.
- Commitments to shareholders: Making an effort in best to create value added to the organization to ensure its capability to accommodate the business growth and expand its businesses with continuity and create value added to the shareholders in the long run.
- Treatment towards counterparts and business contractual parties: Keeping counterparty's and contractual parties' information confidential for the purpose of fair and independent business operation; refraining from wrongful business operation between counterparts and contractual parties; refraining from offing any bribe to others or supplying them items in exchange for business benefits.
- Responsibilities for executives and staff: Setting out guidelines and practices for taking care of the working environment to ensure safety for their life and properties at all times.
- Treatment towards business competitors: Complying with the business policies in a fair manner by the rules and laws relating to trading competition.
- Commitments to communities, society, environment, and government sector: Providing cooperation in making benefits for the communities, society, environment and government sector on an occasional and ready basis.
- Gambling, drinking alcohol and drugs: Not possessing, purchasing-selling or drinking alcoholic beverages, drugs while being in the workplace or during doing businesses of the Company, except parties or other social gatherings held by the Company; and not playing or supporting all kinds of gambling activities during working times or in the area of the Company.
- Disclosure the information and confidentiality: Complying with the policy to efficiently manage the Company's information; and disseminating necessary, correct and proper information to the public on an occasional basis; and not disclosing the Company's information which has not yet been disclosed to the public, including any personal information, nor using any information as known from performance of duties for their own interest.
- The Company's assets: Setting out practices in taking care of the Company's assets to prevent them from loss, damage or misuse.
- Gifts and parties: Setting out practices regarding giving of gifts and holding of
  parties by refraining from receiving any item or benefit from counterparts,
  contractual parties or persons who have connection with the Company's businesses,
  except during festival or according to custom, in which case, at the reasonable value
  as shall be considered by recipient;
- Safety and hygiene: Strictly complying with the laws and regulations relating to safety and hygiene; and earnestly providing cooperation in preventing any accident, injury, and illness.
- Non-compliance with the code of ethics: Realizing and complying with the code of ethics of the Company by not committing any violence which may cause the violator to be held liable for punishments under applicable laws and disciplinary actions.



#### 8. Assessment of Performance of the Managing Directors

All directors of the Company, except the Managing Directors, will constantly assess the performance of the Managing Directors on a yearly basis in accordance with the criteria specified by the Nomination and Remuneration Committee. The Nomination and Remuneration Committee is assigned by the Board of Directors to propose remuneration and other benefits as appropriate for the Managing Directors, taking into consideration the Corporate KPIs used in the annual assessment of performance in order to obtain the Board of Directors' approval.

#### 9. Remuneration of Directors and Executives

Remuneration for : directors

The Company establishes a clear and transparent policy on remuneration for directors and the Managing Directors in line with the scope of duties and responsibilities of each director serving as chairman or subcommittee member, subject to review by the Nomination and Remuneration Committee. The remuneration is at the same level as that in the same industry and sufficiently high to retain the qualified directors.

Remuneration for : Managing Directors

The Nomination and Remuneration Committee considers remuneration for the Managing Directors in accordance with the Company's operational results under the Corporate KPIs and the Managing Directors' performance and propose the same to the Board of Directors for consideration each year.

Remuneration for executives

Remuneration for executives, excluding the Managing Directors, is in accordance with the principles and policies determined by the Executive Board corresponding to the Company's operational results and performance of each executive.

Remuneration in 2020 is shown in the caption of Remuneration of Directors and Executives on pages 8-8 to 8-11.

## 10. Development of Directors and Executives

#### 1) Directors and Executives Training

The Board of Directors has a policy to support and facilitate training and learning for its directors and executives to ensure their continued improvement and performance, involving both internal and external training courses. All directors must attend training for an understanding of the performance of their duties in their capacity as directors.

The Company's Board of Directors and high level executives realize the significance of their participation in training or seminars in various courses or development of their knowledge and skills. The Board of Directors attends training courses organized by the Thai Institute of Directors Association (IOD), namely, Director Certification Program (DCP), Director Accreditation Program (DAP), Board Performance Evaluation, The Role of Chairman (RCP), Audit Committee Program, Role of Compensation Committee (RCC).

In 2020, one of the Company's directors, namely, Mr. Vithaya Punmongkol, received training on the Director Accreditation Program (DAP 175/2020).

#### 2) Orientation for New Directors

The Board of Directors determines the operational practices for the Company to arrange for orientation for newly-appointed directors and to provide documents or briefings for the new directors to understand the business and performance of duties as directors. The Board of Directors assigns the Managing Directors, the Company Secretary, and the Managing Director Office to arrange for orientation for newly-appointed directors by convening a meeting with the relevant directors and/or executives and/or officers for clarification and answering questions. In 2020, there was one new director, whereby the Company has complied with such operational



practices, by briefing the new director about the Company's information as well as preparing documents and summary information for the new director, such as, information relating to the Company, listed company director's handbook, the Corporate Governance Code, the Company's code of ethics, power and duties of the Board of Directors, and the annual schedule of the Board of Directors' meetings. Furthermore, the Company also has its directors attend training courses, as suggested by the SEC Office, conducted by the Thai Institute of Directors Association (IOD).

#### 11. Succession Plan

The Board of Directors prepares and reports on a succession plan for the positions of Managing Directors and the high-level executives and in the primary line, taking into account the performance, potentials, and readiness of each person. In this regard, the Company makes preparations for those potential successors in the development of their knowledge, competency, and skills as required for their work positions for succession in the event that the Managing Directors or executives in the key positions are not able to perform duties.

The Company sets out a succession plan for the high-level executives of the Company, particularly executives and work positions in the primary line, by emphasizing nomination from internal personnel, and the Company requires promotion to be considered every year under the specified criteria for development of personnel who have good performance and competency for their advancement to a higher position in accordance with the staff's line of command, both the middle level executives and staff. The consideration committee, comprising the Managing Directors and executives at the General Manager level or higher or the middle level executives, shall consider this matter in accordance with the clearly specified criteria. With regard to the implementation of strategy and succession plan of the high level executives, who may be changed or vacate office by rotation or retirement, the Nomination and Remuneration Committee's meeting shall review the criteria and select knowledgeable, competent and qualified persons, whereby the Board of Directors shall consider appointing candidates to hold the office of Managing Director, and the Executive Board shall consider appointing executives at the General Manager level or higher.

An executive who has been assigned to succeed to an office must not only be suitably qualified and experienced in such field, but must also have accepted transfer of knowledge and experience by rotation to other related work units, and have attended additional necessary training courses to be well prepared for performance of duties in a higher position in the future, and to ensure smooth succession and continued management. The Company sets up the human resource management system through adequate allocation, controlling, following up, performance assessment, that is, nomination process for qualified and knowledgeable persons as required, appropriate and fair remuneration, determination of duties and responsibilities, performance of personnel, performance standard, personnel development, and efficient communication, to ensure that staff have knowledge and skills; and the Company's human resource management is efficient and suitable, emphasizing development of staff competency and ensuring clarity of the performance assessment in support of consideration of remuneration appropriate for their capabilities and performance.



#### 9.2 Board Structure

The Board structure comprises the Board of Directors and four subcommittees, namely, the Audit Committee, the Corporate Governance and Risk Management Committee, the Nomination and Remuneration Committee, and the Executive Board.

Details of such four subcommittees, their powers, and duties as well as the nomination procedures in accordance with their respective charters, are as follows:

#### 9.2.1 Board of Directors as at December 31, 2020

The Board of Directors was comprised of a total of 14 qualified persons, divided into five executive directors, five independent directors and four non-executive directors, per the list given below:

1.	Mr. Plew Trivisvavet*	Vice Chairman of the Board of Directors	
2.	Mr. Vitoon Tejatussanasoontorn	Director	(Independent Director)
3.	Gen. Chetta Thanajaro	Director	(Independent Director)
4.	Dr. Annop Tanlamai	Director	(Independent Director)
5.	Mrs. Vallapa Assakul	Director	(Independent Director)
6.	Mr. Supong Chayutsahakij	Director	
7.	M.L. Prasobchai Kasemsant	Director	(Independent Director)
8.	Mr. Phongsarit Tantisuvanitchkul	Director	
9.	Miss Arisara Dharamadhaj	Director	
10.	Mr. Panit Dunnvatanachit	Director	
11.	Mr. Vithaya Punmongkol	Director	
12.	Mrs. Natamon Bunnak	Director	
13.	Dr. Sombat Kitjalaksana	Director	
14.	Mrs. Payao Marittanaporn	Director	

Remark: \* Acting the Chairman of the Board of Directors.

# The Board of Directors' Authority and Duties

- Monitoring and supervising the Company's operations to ensure compliance with laws, objectives and the Articles of Association, as well as resolutions of shareholders' meeting, and protecting the Company's interests based on the Corporate Governance Code, as well as complying with the rules and requirements stipulated by the Stock Exchange of Thailand and the Office of the Securities and Exchange Commission.
- Establishing operational policies and directions of the Company, as well as supervising
  to ensure that management takes actions in compliance with the established policies with
  efficiency and effectiveness to contribute to economic value maximization for the
  business and the wealth maximization for shareholders.
- Convening the annual ordinary general meeting of shareholders by no later than four months from the Company's year-end account closing date and convening extraordinary general meetings of shareholders as required.
- Convening the Board of Directors' meetings on a quarterly basis; each meeting requires at least 50 percent of all directors. Decisions of each meeting are made by majority votes. In the case of an equality of votes, the chairman of the meeting has an additional casting vote.
- Considering approval for the budget for investment and the Company's annual business operations, including monitoring use of the Company's resources.
- Providing complete, correct and sufficient reports on financial information, the Company's information and general information which are important for shareholders, and verifying information in the reports.



- Introducing to the Company an internal control system, internal audit and risk management measures with effectiveness, as well as following up on such matters on a regular basis.
- Establishing subcommittees to ensure the good corporate governance.
- Considering clearly determining and separating roles, duties, and responsibilities among
  the Board of Directors, subcommittees and management, with regular communication
  regarding such roles, duties and responsibilities to the Board of Directors,
  subcommittees, management and staff of the Company.
- Supervising the Executive Board to comply with the specified policies, whereby the Executive Board is authorized to approve any transaction binding upon the Company in an amount not exceeding Baht 500 Million per transaction, excluding those transactions giving rise to a conflict or interest, including such transactions requiring approval from shareholders as per the regulations of the SEC Office and the SET.
- Appointing any persons to engage in the Company's business under the supervision of the Board of Directors, or, if applicable, authorizing such persons to have power for a period of time as the Board of Directors deems appropriate, provided that the Board of Directors may revoke, repeal, amend or change such authorization as appropriate.
- Appointing the Company's authorized signatory directors.

## The Chairman of the Board of Directors' Authority and Duties

- Considering and setting out the business goals in conjunction with management.
- Monitoring the administration by management.
- Providing suggestions for the business operations through the Executive Board and the Managing Directors on a regular basis without interfering in the routine works under the responsibility of management. The Chairman of the Board of Directors also plays an important role in making decisions on the Company's policies.
- Having a duty to preside over both the Board of Directors' meetings and the shareholders' meetings to ensure the efficiency and effectiveness in such meetings, by encouraging all directors to participate in each meeting and independently provide opinions.
- Ensuring their strict compliance with the Corporate Governance Code and taking into account the shareholders' rights.

#### 9.2.2 Audit Committee

The Board of Directors appoints the Audit Committee to assist in supervising the Company's businesses. Mr. Vitoon Tejatussanasoontorn, an independent director who has knowledge in the field of accounting and finance, was appointed to hold office as Audit Committee Chairman, and the General Manager of the Internal Audit Office serves as secretary to the Audit Committee. As at December 31, 2020, the Audit Committee comprised three independent directors as listed below:

1. Mr. Vitoon Tejatussanasoontorn\* Audit Committee Chairman (Independent Director)

2. Gen. Chetta Thanajaro Audit Committee Member (Independent Director)

3. Dr. Annop Tanlamai \* Audit Committee Member (Independent Director)

Remark: \* served as audit committee members with knowledge in the field of accounting and finance.

#### The Audit Committee's Authority and Duties

- Reviewing to ensure that the Company's financial reports are accurate and adequate.
- Reviewing to ensure that the Company's internal control system and internal audit system are suitable and effective, considering the independence of the internal audit unit as well as granting approval on consideration for appointment, transfer, termination of employment of head of the internal audit unit or any other unit responsible for the internal audit.



- Reviewing to ensure the Company's performance in compliance with the securities and exchange law, requirements of the SET and the laws relating to the Company's business.
- Considering, selecting, submitting for appointment of a person who is independent to serve as the Company's auditor, and proposing remuneration and termination of employment of such person as well as meeting with the auditor without management at least once a year.
- Considering connected transactions or transactions which may involve a conflict of interest in compliance with the laws and requirements of the SET in order to ensure that such transactions are justified and of the utmost benefit to the Company.
- Preparing a report of the Audit Committee to be disclosed in the Company's Annual Report. Such report must be signed by the Audit Committee Chairman and comprise at least the following information:
  - (a) Opinions on correctness, completeness, and reliability of the Company's financial reports;
  - (b) Opinions on the adequacy of the Company's internal control system;
  - (c) Opinions on compliance with the securities and exchange law, requirements of the SET or laws relating to the Company's business;
  - (d) Opinions on the appropriateness of the auditor;
  - (e) Opinions on transactions which may involve a conflict of interest;
  - (f) Number of meetings of the Audit Committee and attendance of each Audit Committee member;
  - (g) Overall opinions or observations by the Audit Committee from the performance of duties in accordance with the Charter;
  - (h) Other matters that should be informed to shareholders and general investors within the scope of the duties and responsibilities assigned by the Board of Directors.
- Supervising and monitoring the internal audit tasks by reviewing missions, scope of works, independence and development plan and providing internal audit personnel training to catch up with the business changes and develop themselves on a continual basis, in order to accommodate the direction of the Company's operations and international standards, including consideration and approval of annual internal audit plans.
- Performing any other activities as assigned by the Board of Directors to independently
  provide opinions and suggestions in line with the requirements and the best practice
  guidelines for the audit committee of the SET.
- In performing its duties, should the Audit Committee find or should there be any doubt as to whether or not the following transactions or actions may have a material impact on the Company's financial position and operational results, the Audit Committee will report on its findings to the Board of Directors in order to improve and rectify the same within the time as the Audit Committee deems appropriate:
  - (a) Any transactions giving rise to a conflict of interest;
  - (b) Corruption or unusual occurrence or material fault in the internal audit system;
  - (c) Violation of the securities and exchange law, requirements of the SET or laws related to the Company's business.

## 9.2.3 Nomination and Remuneration Committee

The Board of Directors appoints the Nomination and Remuneration Committee to perform the duty to nominate and consider remuneration for directors and the Managing Directors to ensure transparency and fairness, and General Chetta Thanajaro, an independent director, was appointed as Chairman of the Nomination and Remuneration Committee in accordance with the Corporate Governance Code which states that the chairman of each subcommittee should be an independent director. As at December 31, 2020, the Nomination and Remuneration Committee comprised four members as follows:

1. General Chetta Thanajaro

Nomination and Remuneration Committee Chairman (Independent Director)



2.	Mr. Vitoon	Tejatussanasoontorn	Nomination and Remuneration Committee Member (Independent Director)
3.	Mr. Plew	Trivisvavet	Nomination and Remuneration Committee Member
4.	Mr. Supong	Chayutsahakij	Nomination and Remuneration Committee Member

#### The Nomination and Remuneration Committee's Authority and Duties

- Considering criteria and procedures of nomination as well as selecting and proposing qualified persons to hold the position of the Company's directors to the Board of Directors so as to nominate them to the shareholders' meeting, or proposing the nomination to the Board of Directors for consideration and appointment.
- Considering selecting and proposing qualified persons to hold the positions of the Managing Directors to the Board of Directors for consideration and appointment.
- Considering and determining criteria for consideration of remuneration of directors and the Managing Directors.
- Considering and determining remuneration of directors and proposing the same to the shareholders' meeting for consideration and approval.
- Considering and reviewing salary rates and other remuneration for the Managing Directors and proposing the same to the Board of Directors for consideration and approval.
- Proceeding with other matters as assigned by the Board of Directors.

### 9.2.4 Corporate Governance and Risk Management Committee

The Board of Directors appoints the Corporate Governance and Risk Management Committee to perform the duty to formulate policies and directions of operations in respect of the good corporate governance of the Company, including business ethics, and to ensure performance of duties with transparency and independence in compliance with the guidelines of the good corporate governance, consider risk management plan, risk management process, as well as monitor, inspect and review the Company's overall risks to stay at an appropriate level. To this effect, the Company appointed Mrs. Vallapa Assakul, an independent director, to hold the position as the Corporate Governance and Risk Management Committee Chairman. As at December 31, 2020, the Corporate Governance and Risk Management Committee comprised four members as follows:

1.	Mrs. Vallapa	Assakul	Corporate Governance and Risk
			Management Committee Chairman
			(Independent Director)
2.	Mr. Phongsarit	Tantisuvanitchkul	Corporate Governance and Risk
			Management Committee Member
3.	Dr. Sombat	Kitjalaksana	Corporate Governance and Risk
			Management Committee Member
4.	Mrs. Payao	Marittanaporn	Corporate Governance and Risk
			Management Committee Member

#### The Corporate Governance and Risk Management Committee's Authority and Duties

- Studying and following up movement, tendency and performance in respect of the good corporate governance for submission to the Board of Directors for consideration as to appropriateness for adoption as guidelines for the Company's operations.
- Improving and proposing the good corporate governance policy of the Company, including business ethics, to the Board of Directors.
- Following up and evaluating the results under the good corporate governance principles of the Company as well as reporting the same to the Board of Directors.
- Considering policies and work plans relating to risk management for submission to the Board of Directors for consideration.



- Monitoring and reviewing overall risk management of the Company, strategies for risk management and alert system of all kinds of risks in order to deal with risks to stay at an acceptable level to ensure compliance with the risk management policy of the Company.
- Reporting on risks and operations for minimizing risks to the Board of Directors.
- Proceeding with other matters as assigned by the Board of Directors.

#### 9.2.5 Executive Board

The Board of Directors appoints the Executive Board to assist in providing advice and suggestions to management and make other arrangements as assigned by the Board of Directors. As at December 31, 2020, the Executive Board comprised five directors as listed below:

1.	Mr. Plew	Trivisvavet	Chairman of the Executive Board
2.	Mr. Supong	Chayutsahakij	Executive Director
3.	Mr. Phongsarit	Tantisuvanitchkul	Executive Director
4.	Dr. Sombat	Kitjalaksana	Executive Director
5.	Mrs. Payao	Marittanaporn	Executive Director

#### The Executive Board's Authority and Duties

- Delivering guidelines for policy, supervising, providing suggestions and advice for the Managing Directors and management.
- Setting up a business plan, budget and managerial authority of the Company as assigned by the Board of Directors.
- Inspecting, following up to ensure compliance with the Company's policies and plans with efficiency.
- Conducting feasibility studies on investment in new projects for business expansion and prospects.
- Having power to approve any juristic act binding upon the Company in an amount not exceeding Baht 500 Million per transaction, excluding those transactions giving rise to a conflict or interest with the Company or its subsidiaries under the notifications of the Securities and Exchange Commission, including such transactions requiring approval from shareholders under the regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand.
- Having power to approve, appoint, remove, and determine salary and other remunerations, including expenses and facilities of the Company's officers or staff in the position of General Manager or higher, but not including the Managing Directors.
- The Executive Board or the Chairman of the Executive Board has the power to convene the Executive Board's meetings and/or determine rules and regulations of the meetings as it deems appropriate.
- Reporting on the Company's operational results to the Board of Directors.
- Proceeding with other matters as assigned by the Board of Directors.

# The Managing Directors' Authority and Duties

The Board of Directors determines the Managing Directors' authority and duties as follows:

- Controlling and managing main business of the Company.
- Monitoring all activities of the Company to ensure compliance with resolutions and policies as assigned and suggested by the Board of Directors.
- Conducting feasibility studies on new projects and having power to consider approving various projects as authorized by the Executive Board.
- Having power to approve, appoint, remove, and determine salary and other remunerations, including expenses and facilities of the Company's staff at the level of General Manager downwards.
- Having power to approve any juristic act binding upon the Company in an amount not exceeding Baht 5,000,000 per transaction.



- Having power to sign cheques without affixing the Company's seal, and having power to sign and affix the Company's seal for withdrawal of money from all accounts of the Company and utilize credit facilities available to the Company by all banks or financial institutions in the amount not exceeding Baht 5,000,000 per transaction.
- Having power to make a payment order by various electronic methods in the amount not exceeding Baht 5,000,000 per transaction, and having power to appoint a sub-attorney(s) to act on his/her behalf.
- Authorizing the Company's staff in the executive positions, namely, Deputy Managing Director, Assistant Managing Director, General Manager or equivalent to perform duties on behalf of the Managing Directors in certain matters (such as purchase order, procurement, payment order) as appropriate.
- Appointing any Deputy Managing Directors or any other persons acting in place of the Managing Directors from time to time in the event that the Managing Directors are unable to perform their duties, whereby such acting persons shall have the same authority as the Managing Directors.
- Having power to appoint any persons or groups of persons to engage in the Company's business under the supervision of the Managing Directors, or, if applicable, authorizing such persons to make arrangements as the Managing Directors deem appropriate and having power to change, amend, revoke and repeal such authorization.
- Proceeding with other matters as assigned by the Board of Directors or the Executive Board from time to time.

In this regard, the Board of Directors regularly evaluates performance of duties of the Managing Directors for comparison with the target as determined on a yearly basis, and the Nomination and Remuneration Committee considers remuneration of the Managing Directors by assessing their performance in the previous year and proposing the same to the Board of Directors for approval under the criteria.

#### **Table of Approval Authority**

Persons with Approval Authority	Details
Board of Directors	Having the approval authority in accordance with the objectives and the Articles of Association of the Company, exclusive of execution of any transactions which give rise to a conflict of interest or interest, including transactions which require the shareholders' approval in accordance with the regulations of the SEC Office and the SET.
Executive Board	The amount limit not exceeding Baht 500 Million per juristic act, exclusive of transactions which give rise to a conflict of interest or interest with the Company or its subsidiaries in accordance with the notifications of the Securities and Exchange Commission, including transactions which require the shareholders' approval in accordance with the regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand.
Managing Directors	<ul> <li>The amount limit not exceeding Baht 5,000,000 per juristic act;</li> <li>Having the authority to sign cheques without affixing the Company's seal, and having the authority to sign and affix the Company's seal for withdrawal of money from all accounts of the Company and utilization of credit facilities available to the Company by all banks or financial institutions in the amount not exceeding Baht 5,000,000 per transaction.</li> <li>Having the authority to make a payment order by various electronic methods in the amount not exceeding Baht 5,000,000 per transaction, and having the authority to appoint a subattorney(s) to act on his/her behalf.</li> </ul>



## 9.3 Nomination of Directors and Top Executives

#### (1) Nomination of Independent Directors

The Company establishes the structure of the Board of Directors which shall be composed of independent directors of at least one-third of all directors, but no fewer than three persons, whereby such independent directors can provide their opinions independently and perform the duty to safeguard benefits of the Company and shareholders in their best.

The Nomination and Remuneration Committee nominates directors who are qualified in terms of useful skills and experience for the Company and meet the qualifications of independent directors by the definition of the Company's independent directors, as follows:

- 1. Holding shares of not exceeding 0.5 percent of the total number of voting shares of the Company, its parent company, subsidiaries, associated companies, major shareholder or controller of the Company, including shares held by any related persons of each independent director;
- 2. Not being or having been a director having involvement in the management, an employee, a staff member, an advisor receiving a regular salary or a controller of the Company, its parent company, subsidiaries, associated companies, subsidiaries of the same tier, major shareholder or controller of the Company, unless such independent director has no longer been in such capacity for not less than two years prior to the appointment date, provided that such prohibited characteristics shall not apply to an independent director who was a public servant or an advisor to a government authority which is the Company's major shareholder or controller;
- 3. Not being a person having a relationship by blood or by legal registration in the capacity as parent, spouse, sibling and offspring, including spouse of the offspring of other director, executive, major shareholder, controller or person to be nominated as director, executive or controller of the Company or its subsidiaries;
- 4. Not having or having had any business relationship with the Company, its parent company, subsidiaries, associated companies, major shareholder or controller of the Company in a manner which may prevent the exercise of his/her independent judgment; and not being or having been a substantial shareholder or controller of any person having a business relationship with the Company, its parent company, subsidiaries, associated companies, major shareholder or controller of the Company, unless such independent director has no longer been in such capacity for not less than 2 years prior to the appointment date;
  - The aforesaid business relationship shall include any transaction in the ordinary course of business for lease of immovable property, any transaction relating to assets or services or grant or receipt of financial assistance through receiving or extending any loan, guarantee, providing assets as collateral, including any other similar action, which causes the Company or contractual party to be subject to indebtedness payable to the other party in the amount of 3 percent or more of the Company's net tangible assets or in the amount of Baht 20,000,000 or more, whichever is lower. Such indebtedness shall be calculated according to the calculation method of connected transaction value under the Notification of the Capital Market Supervisory Board, Re: Rules on Connected Transactions, mutatis mutandis. However, the consideration of such indebtedness shall include the indebtedness incurred during the course of 1 year prior to the commencement of a business relationship with the same person;
- 5. Not being or having been an auditor of the Company, its parent company, subsidiaries, associated companies, major shareholder, or controller of the Company; and not being a substantial shareholder, controller, or partner of an audit firm which employs the auditor of the Company, its parent company, subsidiaries, associated companies, major shareholder, or controller of the Company, unless such independent director has no longer been in such capacity for not less than 2 years prior to the appointment date;
- 6. Not being or having been a professional service provider, including legal advisor or financial advisor which receives an annual service fee exceeding Baht 2,000,000 from the Company, its parent company, subsidiaries, associated companies, major shareholder, or controller of the Company; and not being a substantial shareholder, controller, or partner of such professional service provider, unless such independent director has no longer been in such capacity for not less than 2 years prior to the appointment date;



- 7. Not being a director appointed as a representative of the Company's director, major shareholder or shareholder who is a related person of the major shareholder;
- 8. Not engaging in any business of the same nature as and in material competition with the business of the Company or its subsidiaries; or not being a substantial partner in a partnership or a director having involvement in the management, an employee, a staff member, an advisor receiving a regular salary or holding more than 1 percent of the total number of voting shares of another company engaging in any business of the same nature as and in material competition with the business of the Company or its subsidiaries;
- 9. Not having any other characteristics preventing the provision of independent opinions on the Company's operations.

## (2) Nomination of Directors and Top Executives

#### (2.1) Nomination of Directors

#### (2.1.1) Criteria

The Nomination and Remuneration Committee considers nominating persons to be appointed as directors to replace those directors who vacate office, both resignations prior to the end of term and retirement by rotation, in accordance with the following criteria:

- Having qualifications in compliance with the Public Limited Companies Act, the Securities and Exchange Act, rules of the SEC Office and rules of the SET.
- Having knowledge, ability, and experience in a variety of fields which will be beneficial and add value to the Company.
- Having characteristics supporting and promoting the corporate governance to create value to the Company, such as independence, willingness to share opinions, initiative, and performance of duties with responsibility, due care, integrity, and full-time contribution, etc.
- In case of a director who retires by rotation, the Nomination and Remuneration Committee considers from his past records whether he performed duties as a director with due care, integrity, and full-time contribution.
- In the nomination of directors, there should be consideration of the required qualifications taking into account the necessary skills for the Board and qualifications in line with the Company's business strategies.
- In case such vacancy is a director representing the Expressway Authority of Thailand or the Mass Rapid Transit Authority of Thailand under the conditions of the relevant Concession Agreements, the replacement director must be nominated by the said authority to fill the vacancy.

The Nomination and Remuneration Committee shall nominate such qualified persons to the Board of Directors for consideration for submission to the shareholders' meeting for appointment as directors.

## (2.1.2) Nomination Procedures

The Board of Directors sets out the procedures for nomination of directors, and the Nomination and Remuneration Committee proceeds in accordance with the following procedures:

- Nominating qualified persons to fill the vacancy.
- Considering the qualifications of the directors who represent EXAT and MRTA in accordance with the conditions as specified in the Concession Agreements.
- Considering the qualifications of persons nominated by minor shareholders according to the Company's policy to allow shareholders to propose their nominations in advance (if any).
- Proposing the nominations to the Board of Directors for consideration and appointment (in case of interim vacancy).
- Considering proposing the nominations to the Board of Directors for consideration and approval for submission to the annual ordinary general meeting of shareholders for an appointment.



Pursuant to the Articles of Association, at every annual general meeting, one-third of the number of directors must vacate their offices. If the number of directors is not a multiple of three, then the number nearest to one-third must retire from office. Therefore, the directors have a term of three years, and a retiring director may be re-elected. In this regard, the Company does not fix the number of terms of holding office as a director or the number of other listed companies in which the directors will hold office as directors but considers the suitability of appointment of directors who are due to retire by rotation to resume office.

Pursuant to the Articles of Association, the criteria and procedures for appointment of directors by shareholders are as follows:

- 1. One shareholder has one vote for every one share held by that shareholder;
- 2. When electing directors, each shareholder shall exercise all of his or her votes to elect all directors to be elected on such occasion, or in case the shareholders' meeting deems it appropriate, the casting of votes is made to elect directors on an individual basis. In this regard, in casting votes, whether in the election of directors on an individual basis or the election of all directors, each such person elected by the shareholders must receive votes from shareholders according to the total number of shares held by each shareholder under clause 1., and no shareholder can allot his or her votes to any person in any number.
- 3. In case of the election of directors on an individual basis, persons receiving the most votes are those who are elected to be directors, in descending order, for the number of directors who are to be elected. If there is a tie for the last to be elected and this exceeds the said number of directors, the election shall be drawn by lots.

## (2.2) Nomination of Managing Directors and Executives

- The executives in the position of Managing Directors must be nominated by the Nomination and Remuneration Committee, which considers nominating qualified persons, namely, those who have knowledge and capacities and experience which are useful for management and operations to achieve objectives or targets as determined by the Board of Directors and have a good understanding of the Company's business, whereby the Nomination and Remuneration Committee shall propose the nominations to the Board of Directors for consideration and appointment.
- For any executives at the level of Assistant Managing Director or higher, the Managing Directors propose the nominations to the Executive Board for consideration and appointment.

# (2.3) Consideration on determination of holding a directorship in other listed companies

To ensure that each of the directors, Managing Directors and high level executives can dedicate their adequate time to performance of their duties with efficiency, the Board of Directors then considers determining the number of listed companies in which each of the directors, Managing Directors and high level executives is allowed to hold a directorship, as follows:

- 1. Holding a directorship in other listed companies by directors
  - Each director is allowed to hold a directorship in other listed companies not exceeding five companies to achieve efficiency in management.
- 2. Holding a directorship in other listed companies by the Managing Directors and the high level executives
  - Each of the Managing Directors and high level executives is allowed to hold a directorship or management position in other listed companies not exceeding five companies, provided that such Managing Director and high level executive must be approved by the Board of Directors.



#### 9.4 Supervision of Operations of Subsidiaries

To ensure that supervision of operations of the Company's subsidiaries is conducted in compliance with the business policy specified by the Board of Directors of the Company and in line with the Corporate Governance Code, and to safeguard investment benefits of the Company and its shareholders, the Board of Directors of the Company thus sets out criteria and guidelines for supervision and control of management of the subsidiaries, as follows:

- 1) The subsidiaries are encouraged to put the Corporate Governance Code into practice.
- 2) The selection of any persons as representatives of the subsidiaries is subject to the approval of the Board of Directors of the Company, according to their respective shareholding percentage.
- 3) The subsidiaries shall be supervised through representative directors and executives and in compliance with the policies specified by the parent company.
- 4) Any significant matters, such as strategies, action plan, capital increase or reduction, company dissolution, including various important policies shall be considered. The guidelines for exercising the right to cast votes in the shareholders' meetings are also formulated.
- 5) The operational results shall be followed up through the management, executive board, for reporting to the Board of Directors of the Company.
- 6) The subsidiaries shall be monitored to ensure their compliance with laws, relevant regulations stipulated by the supervisory units, including generally acceptable accounting standards.

The Company requires its subsidiaries to yearly review the respective internal control systems to ensure adequacy and appropriateness, whereby the Internal Audit Office of the Company shall regularly review, follow up and evaluate compliance with the good internal control principles, which is specified in the annual audit plan.

In this regard, the Company has assigned the Managing Directors or his/her delegate(s) to monitor its subsidiaries, in the Company's capacity as their major shareholder, whereby the delegates have been appointed as directors or executives to supervise and monitor operations of its subsidiaries to ensure compliance with the action plans and consistency with the policies of the Company as their major shareholder.

## 9.5 Control of Inside Information Usage

The Company determines its written control of inside information usage in accordance with the Corporate Governance Code, as follows:

## **Inside Information Usage Policy**

(1) Due to the fact that the Company is listed on the Stock Exchange of Thailand, any sale or purchase of the Company's securities by any of its directors, executives or staff in a manner which may take advantage of a third party by using information material to changes in the prices of the securities which have not yet been disclosed to the public and to which he/she has access in the exercise of his/her duty or position in the Company, is then considered as unfair securities trading practices, subject to a criminal penalty under the law.

Therefore, the Company has set guidelines to prevent the use of insider information. Such guidelines will be revised from time to time as appropriate, and all directors, management, and staff of the Company will strictly adhere to these guidelines with accountability as well as causes and effects on a case by case basis. These guidelines or policies will be stricter than the provisions of applicable laws in a manner which, for example, the Company imposes the blackout periods ondirectors, management and staff, including their related persons.

(2) Securities Sale and Purchase Using Insider Information

Persons who should not sell or purchase securities pursuant to the guidelines to prevent the use of insider information are as follows:

- 1. Directors and management of the Company;
- 2. Directors and management of the subsidiaries, including its affiliates;
- 3. All staff of the Company and of the Company's subsidiaries, who have perceived insider information of the Company;
- 4. Spouses and minor children of the directors, executives and staff, who have perceived insider information of the Company; and
- 5. Relatives who live with the directors, executives, and staff who have perceived insider information of the Company.



Securities refer to shares, share warrants, convertible debentures and transferable subscription rights issued by the Company.

## General Practice

- Any person who has perceived insider information of the Company should not sell or purchase the securities under any circumstances if such person knows or should have known the publicly undisclosed material information that may affect change in the market price of the Company's securities.
- 2. Any person who has perceived material insider information of the Company from their duties and positions as the Company's staff shall not disclose such information to any other person while such information has not yet been disclosed to the public unless it is done in the performance of their duties to the Company.

## Specific Guidelines

In addition to the general guidelines to prevent the use of insider information, persons who have perceived insider information of the Company shall also comply with the following guidelines:

- 1. Any person who has perceived insider information of the Company and is directly involved in the preparation of the Company's financial statements and the balance sheet is prohibited from purchasing or selling the Company's securities during the period of 1 month prior to the public disclosure of the financial statements
- 2. Any director, management or staff who has received the draft financial statements as referred to above, is prohibited from purchasing or selling the Company's securities during the period of 1 month prior to the public disclosure of the financial statements.
- 3. Any person who has perceived insider information of the Company and knows or should have known that the Company will disclose material information that may affect change in the market price of the Company's securities, is prohibited from purchasing or selling the Company's securities during the period of one month prior to the public disclosure.
- (3) Report of Persons who have Perceived Insider Information of the Company

## A. Duty to Prepare Reports

Directors, Managing Directors or persons who hold management positions as specified in the Securities and Exchange Act shall be required to prepare disclosure reports of their initial securities holdings, and changes in such holdings, pursuant to the relevant laws and regulations, together with such reports to the Company.

## B. Reporting Procedures

Directors, Managing Directors or persons as specified in paragraph A. above who have the duty under law to disclose their securities holdings, their spouses' securities holdings, and their minor children's securities holdings to government agencies or regulators shall submit copies of such reports to the Company on the same day.

#### Protection and prevention of inside information usage

- (1) The Company has policies and procedures for controlling the use of inside information by directors, executives and staff to prevent any occurrence of the use of inside information for personal interests or the interests of others. The work rules and regulations of the Company prohibit staff from disclosing the Company's confidential information to any third parties or abusing their positions for personal gains or others. Any violation is deemed a disciplinary misconduct. In addition, this obligation has been specified as an important condition in new employment agreements, whereby staff must keep confidential information relating to the Company's business to which they have access, whether directly or indirectly, and must refrain from disclosing it to any third parties or other unauthorized persons. In this regard, the confidential information relating to the Company's business refers to financial information, marketing plan or business plan, wages, etc.
- (2) The Company has a control system for use of the Company's information by adopting such information security systems as the restriction of access to the Company's information by setting authorization level of staff's access to the Company's information to correspond to their responsibilities and setting user password for common use of data files with other persons via the computer system, provided that the password must be changed every three months.



The Company has obtained the certification of the ISO/IEC 27001:2013 international standard which describes the best practices relating to information security system which is applicable to improvement of the toll collection system at the control center to ensure compliance with the standard, and the Company also lays down standard for management of significant information to ensure continued operations of the business, with an aim of enhancing the organization's worldwide reputation for reliability.

(3) The Company prohibits executives who know insider information from taking any actions contrary to the prohibitions on securities trading by using the Company's insider information for his own or another person's benefit under Section 242 of the Securities and Exchange Act, including relevant rules and regulations.

#### 9.6 Remuneration for Auditor

The Audit Committee and management jointly consider the qualifications of the auditor in respect of the reliability, independence, knowledge and experience in audit services, advice on accounting standards, certification of the financial statements in a timely manner, and appropriate remuneration, and then propose this matter to the Board of Directors for submission to the annual ordinary general meeting of shareholders to consider approving the appointment of the auditor.

The proposed auditor shall have neither relationship with nor interest in the Company or its subsidiaries, executives, major shareholders or their related persons.

#### Remuneration for auditor is divided into two categories, namely:

#### (1) Audit fee

The Company paid the audit fees for 2020 in the amount of Baht 4,240,000 to the EY Office Limited. When compared to the average audit fees of other listed companies in the same sector, the Company's audit fee was reasonable.

The Company's subsidiaries, namely, Northern Bangkok Expressway Company Limited ("NECL") and Bangkok Metro Networks Limited ("BMN"), paid the audit fees for 2020 amounting to Baht 990,000 and Baht 1,290,000, respectively.

#### (2) Non-audit fee

In 2020, the Company and its subsidiaries used other services from the EY Office Limited, incurring the non-audit fee in the amount of Baht 150,000.

## 9.7 Compliance with the Corporate Governance Code for Listed Companies

The Board of Directors has understood the roles, duties, benefits, and principles of the Corporate Governance Code for Listed Companies, whereby the Board of Directors has suitably applied the Corporate Governance Code to the contexts of the Company. The Corporate Governance and Risk Management Committee, which is deemed a subcommittee with the duty to supervise and monitor to ensure the Company's compliance with the Corporate Governance Code to promote and support the Company's business operations conducive to the sustainable value creation, requires that the appropriateness of compliance with the Corporate Governance Code shall be reviewed at least once a year. The Board of Directors has then authorized the Corporate Governance and Risk Management Committee to consider and evaluate the application of the same for proposal to the Board of Directors for further consideration.

The Board of Directors shall have the duty to establish the Company's visions and missions so that its executives and staff are intended to perform their works in the same direction. The Board of Directors will call its annual meetings to consider reviewing and approving the visions, missions, strategies, goals and directions of business operations of the Company, including review of significant policies to ensure that they shall be appropriate and consistent with the business operations in accordance with the Corporate Governance Code.

The Board of Directors has monitored and supervised to ensure the Company's strategies shall be practically implemented. In the Board of Directors' Meeting on a quarterly basis, the Board of Directors has followed up the management team's performance, which is required that that there shall be report on performance and operational results of the Company, particular in respect of the financial goals and action plans, in order to achieve the formulated strategies.



#### 9.8 Compliance with the Corporate Governance Code in other Matters

The Company has complied with the Corporate Governance Code for Listed Companies in order to achieve assessment in various aspects. The Company received the "Very Good" rating as a whole from corporate governance assessment in the Corporate Governance Report of Thai Listed Companies 2020 from the Thai Institute of Directors Association (IOD). The Company has conformed to all principles of the Corporate Governance Code for Listed Companies 2017, except for the following:

- 1. Determination of the number of terms of holding of office as director and independent director. The Board of Directors does not clearly determine any number of terms of holding of office as director. In regard to determination of a term of consecutive holding of office as independent director of not exceeding nine years, the Board of Directors considers and deems that the appointment of independent directors to resume office as directors will be useful for the Company and shareholders since the directors consecutively holding such office will have better knowledge and experience in the Company's business operations and create more value for shareholders. In this regard, no director serves on the Board of Directors for more than nine years.
- 2. The composition of the Nomination and Remuneration Committee: It should be consisted mainly of independent directors (more than 50 percent): The Board of Directors establishes the composition of the Nomination and Remuneration Committee of the Company that it shall be comprised of four members, out of which not less than half shall be independent directors which have leadership, vision, independence in making decisions, skills and experience which are useful for the Company, prudence, honesty and dedication of their time to performance of their duties in an adequate manner.
- 3. The Board of Directors consisting of 5-12 directors: The Company gives priority to the good corporate governance together with the nomination of personnel who have knowledge and capability to conduct management. At this point, the Company realizes necessities and potential benefits from the nomination of personnel who have appropriate qualifications, knowledge, and capability to be appointed as additional directors. Currently, some directors serving on the Board of Directors are from the amalgamation between Bangkok Expressway Public Company Limited and Bangkok Metro Public Company Limited and from directors who are representatives from the Expressway Authority of Thailand and the Mass Rapid Transit Authority of Thailand in accordance with the conditions of the Concession Agreement, and as such, the Company has more than 12 directors.
- 4. The composition of the Board of Directors required that more than 50 percent of the Board shall be independent directors: The structure of the Board of Directors shall consist of persons engaging in the business and in various other fields, which have qualifications, skills, experience in administration and operating works which are useful for the Company, have knowledge in terms of concession agreement, out of which at least one director shall be experienced in the core businesses or industry currently operated by the Company, and shall include independent directors which have at least qualifications under the requirements stipulated by the SEC Office and the SET, namely, there must be at least one-third of the total number of directors as independent directors but not less than three persons. The Chairman of the Board of Directors shall be an independent director and shall not the same person as Managing Directors.



#### 10. Corporate Social Responsibility

The convenient and efficient transportation systems currently remain the cornerstone of the urban lifestyle, whether it be road or rail systems, all of which play a key role in integrating livelihoods of the people in the society from one side of the city to the other side. Bangkok Expressway and Metro Public Company Limited (the "Company"), as the expressway and metro service provider, has its commitment to development of the transportation system network to facilitate the people's travelling and help mitigate traffic problems in Bangkok and its surrounding provinces to upgrade the quality of life of the service users. The Company has continued to improve and develop provision of the services to achieve efficiency, by giving priority to safe, convenient and rapid travelling to ensure delivery of services with modern transportation network and improved life quality to the people through the business operations always based on the social and environmental responsibility, the guidelines to which the Company has adhered for the sustainable business operations.

## 10.1 Policy Overview

The Company is committed to operating its businesses with particular emphasis on the society and environment in pursuit of the Company's sustainable business growth. As such, the Company focuses on transparency and fairness in its operations with the aim of coordinating benefits and growing together with all groups of stakeholders. Therefore, the Company adopts and communicates its operating policy for sustainable development to all staff to ensure that they seriously implement and harmoniously incorporate it into their own work processes for sustainable growth of the Company and all its groups of stakeholders, as follows:

- To be a leading organization for sustainable development through communication and exchange of best practices with all groups of the Company's stakeholders;
- To build up the culture and concept of the sustainable development for incorporation into every work process and decision-making process of the Company;
- To promote training, learning, and counseling, focusing on practices according to sustainable development guidelines;
- To support the operations, disseminate the guidelines, and ensure collaboration at the regional level as well as transferring the body of knowledge to achieve sustainable development on a continuous basis.

## 10.2 Corporate Social Responsibility and Sustainable Development

The Company, as the **expressway operator**, is committed to fulfilling the people's requirements for their travelling via the expressway network which has been connected and stretched to the central business districts of Bangkok. The expressway service is considered the transportation service provided to the expressway users who need convenience, rapidity, and safety in their travelling. For that reason, the Company has continued to conduct the study and improvement of the expressways to ensure engineering safety in accordance with international standards; enhance efficiency in the service provision to the expressway users by the way of an addition of Easy Pass lanes, including relocation of the positions of the lane entrance gates to minimize traffic conflict points with the cash lanes, which will mitigate the traffic congestions in front of the toll plazas. Furthermore, the Company has conducted a study on new routes in response to the urbanization in the future.

With regard to the **metro system**, the Company has emphasized creativity and development of the modes of services to facilitate the passengers' travelling both peak and off-peak hours based on the Company's professional operations on the motto "Service above all else". The Company then sets out the aims for quality services, namely, convenience, fast, reliability, punctuality, and above all, safety which are the first priority of which all staff have to be aware. Moreover, to create an atmosphere of safety throughout the service users' travelling, staff shall strictly comply with the safety requirements of the Company, including public relations regarding safety via media and activities to ensure knowledge and understanding of the general people.

As for the commercial development business, it is considered as the Company's non-core business which the Company also gives importance other than its core businesses, thereby diversifying the Company's services which can fully satisfy the needs of the service users and those who live along the stations. The Company has developed spaces for retail shops and sale promotions to suit the convenience of the MRT service users.



With the Company's competency of and commitment to provision of the expressway and metro services, the Company always gives priority to provision of convenient, rapid and safe services which meet standards to the service users, in which the Company believe that it will be able to play a part in completing daily life for all persons for good.

## **Summary of Social Performance**

#### **Human Capital Development**

The Company is determined to be a leading, fully-integrated transportation service provider in Thailand and ASEAN, with its social mission to provide the transport service with convenience, rapidity, and safety by engaging in the business with its commitment to social and environmental responsibility, attainment of creation of added value and optimum benefits for all stakeholders with fairness and sustainability. Therefore, it is a clear policy of the Company to be responsible for the rights of all groups of stakeholders, as follows:

- Internal stakeholders, i.e., staff, executives of the Company and its subsidiaries, including their shareholders;
- External stakeholders, i.e., customers, business partners, lenders, counterparts, competitors, society, communities, schools located near the rights of way and the electric train routes, including government sector and relevant authorities.

## **BEM's Human Resource Development**

At present, the Company has to continue facing the ongoing changes and business competitions. To enable the Company to create the "Route of Happiness for Better Travelling Mode", the Company emphasizes the development of its personnel to ensure their readiness and capabilities which will not only create value for the Company, but also for the society as a whole.

## 1. The Source of Happiness

The Company appreciates the value and importance of its staff, rest assured that the qualified staff is an essential factor in contributing to the organization's sustainable growth and success, as well as being competitiveness indicating factor. Therefore, the Company is determined to look for talent and good persons and regularly and continuously support the development and training of staff at all levels. The Company is also committed to fair treatment towards its staff under the nondiscrimination policy and provision of equitable opportunity for employment pursuant to the work rules and regulations and laws. The Company treats all staff equally regardless of gender, age, race, religion, work position or physical abilities.

The Company has always treated and cared for its staff at all levels in all respects, for example, job description, safety, occupational health and work environment, including training and development of skills in various aspects, together with career opportunity and advancement, fair consideration and welfare through the clearly specified criteria for career path, and fair and appropriate remuneration based on benchmarking with the same industry. Furthermore, the Company has promoted a participatory work environment and teamwork as well as organizing the workplace on the occupational safety and health basis, not to mention the fact that staff are also allowed to show off their abilities.

Realizing the significance and development of personnel as mentioned above satisfy staff to work for the Company to achieve the Company's goals, and with the Company's notion that staff are regarded as valuable resources and its strong belief in their inner potential in order to make staff proud and determined to perform works as well as improving their own performance on a continual basis.

"Source of Happiness", the Company has regularly arranged for development of personnel in both main and supporting lines of work on a systematic basis. Regarding "Career Opportunity and Advancement", the Company is determined to restructure its organization, work positions, career paths, and salaries of staff to make them more appropriate and fairer, to create opportunities for their career advancement.

Therefore, the human resources management has become absolutely essential and necessary, and the Company must establish its direction which is clearer and concrete, appropriate and fair for the retention of its existing personnel, and recruitment of new staff for business expansion, as well as development of knowledge and skills for both existing and new staff, and update of job descriptions, including transfer of staff according to their knowledge and abilities, and promotion for career advancement.

Particularly staff in main line of work directly related to services on the expressway and rail systems, where quality and safety are compulsory, in order to achieve its goal of providing excellent service



to the utmost satisfaction and impression of the expressway and MRT service users. The Company formulates training courses so that staff will have skills and ability to use equipment and devices for specific tasks, i.e., rescue operation, traffic management, toll collection and maintenance of the system and carriageway, including training courses relating to the metro system, various relevant rules and regulations, especially knowledge regarding work safety.

Moreover, the Company has nurtured innovative development by allowing staff to provide suggestions and opinions which are useful for the development of competency in work process as well as supporting varied studies and researches which are striving for benefits and value creation for the business, on a community, social and eco-friendly basis.

"Staff Capacity Building", the Company focused on personnel training and development, both inside and outside the organization, to maintain core knowledge within the organization, and to prepare our personnel to become the international standard service operator, as well as conveying important knowledge in other aspects to enable them to further knowledge in the future. Training courses provided for staff are described below.

## 1) Knowledge Management: KM

The Company implemented the knowledge management project as intermediate KM Roadmap, with the objectives to identify the body of core knowledge which was necessary and important for the organization, to ensure a systematic collection of knowledge for all staff to have wide access to the source of such knowledge, knowledge sharing for ensuring the optimum benefits, and furthering the Company's corporate transition into a learning organization. Other than the management of core knowledge for the Company's businesses, the Company also promoted a community of practices (CoPs) to ensure learning and sharing of work experiences, problem-solving, including solutions and improvement to work processes, in order to come up with the best practices.

## 2) Codes of Conduct and Business Ethics Training

This training course was intended to serve as guidance for all staff regarding their work responsibilities and duties and to ensure that they understand and also follow the preliminary guidance described in the Company's Codes of Conduct and Business Ethics handbook, which is in line with the Company's vision, mission, and corporate culture, in order to achieve goals for improved quality of work and life for staff. The Company also provides for refresher training to update staff's knowledge by the way of E-Learning & E-Exam, which all new staff are required to attend, including regular exams for the existing staff on a yearly basis.

## 3) Annual Training & Development

The Company put into practice the idea of developing staff competency by improving the Training Roadmap for all levels of staff, namely, executives, supervisors, and operating staff. The roadmap is intended to make sure that staff gain basic knowledge and skills required for their work performance, both technical and soft skills. These two types of skills are fostered in mandatory programs for new staff, e.g., an orientation program for new staff about the Company and about the "Route of Happiness for Better Travelling Mode" including rules, regulations, and requirements; a work safety program; and a quality management system program.

The existing permanent staff are given refresher training on knowledge every year. All of these training programs should enable staff to apply such knowledge to their work performance and adapt themselves to the corporate culture, so as to have a sense of pride and to conduct themselves properly and in line with the goals. In such training programs, staff are also encouraged to employ their own expertise.

### • Rescue Operation and Traffic Management

The Company, in association with the Expressway Authority of Thailand ("EXAT"), has conducted rescue operation and assistance drills in case of serious accidents on the expressways, with safety training every year, including training on use of the rescue operation vehicles on the expressways, safe driving training, traffic volunteer training and on the job training; and the Company has arranged for three-month new staff orientation prior to actual operation on the expressways, as well as service mind training. However, due to the situation of the epidemic of the COVID-19 in 2020, the Company and EXAT postponed the drills as originally scheduled for February - June 2020 to July - October 2020, during which the COVID-19 situation had been ameliorated. In this regard, such drills were under the social spacing measures, with all staff being screened strictly.



#### • <u>Toll Collection Operation</u>

The Company's personnel in charge of this field comprises of personnel with the duty to collect tolls of the Si Rat - Outer Ring Road Expressway, whereby the Company provides the personnel training in toll collection to ensure that tolls are correctly and completely collected to facilitate the expressway users' toll payment with convenience and rapidity. The Company's personnel in charge of toll revenue operation are responsible for ensuring that tolls are correctly, transparently and precisely collected, in collaboration with the government sector, namely, EXAT. The Company provides the internal on the job training regarding the role and responsibilities of toll collection controllers, emphasizing that tolls must be collected punctually, and verification of data on vehicle counting and collection records must be made correctly and accurately.

In addition, the condition of toll collection equipment must be checked to get it ready for full-time service and to ensure the accuracy of toll collection, which will help assure the Company's complete revenue streams and equally protect the interests of shareholders and stakeholders. The Company also arranges for overseas study visits on toll collection systems.

## • Structure Maintenance Operation

This is to ensure that the expressways will be ready and safe for service. The Company is internationally recognized as a company specializing in the inspection and maintenance of the Segmental Box Girder structures, with regular inspection, monitoring, and surveillance all year round.

# • MRT Control Officer and MRT Operation Control Officer Training

The MRT control officer training takes at least 600 hours of training and the MRT operation control officer training takes at least 1,100 hours of training, which are provided in theory and in practice by the way of actual train driving and train-driving simulator, training to use equipment in train operation control room, emergency response drills and exercises, including on the job training, where safety is given the top priority, whereby professional trainers are provided to closely monitor staff's training. Moreover, the Company's staff are given refresher training on a yearly basis to ensure that all trained staff will be able to discharge their duties in the metro service provision with safety, convenience, rapidity, reliability, punctuality, and efficiency in order to improve the quality of life of residents.

## **Enhancement of Quality of Life**

#### 2. On the Route of Happiness

The expressway users and MRT users are the heart of the Company. The Company is then ready to deliver and improve the expressway services to ensure the most efficiency as the "Route of Happiness for Better Travelling Mode" of rapid and safe transportation, uplift the quality of life, and play a role in developing Thai society. The Company appreciates innovations which will help minimize the impact of the operations on society, environment and stakeholders from construction to repair and maintenance of the expressways to stand ready for service to users to ensure their convenience and safety both under normal and emergency situations.

To maintain the Route of Happiness, the Company emphasizes taking care of the delivery process and improvement of services in detail on a regular basis, as follows:

# The delivery process and improvement of services in detail of the expressway service

- 2.1 Expressway Construction: The Company adopted the internationally recognized Segmental Box Girder technology, which meets the AASHTO (American Association of State Highway Transportation Officials) standards, and which was considered a sophisticated technology at the time it was adopted. As a result, the Company was able to minimize the impact on at-grade traffic and dust and noise pollution during the construction. The construction was then completed according to plan without any protests from society and nearby communities. The expressways are safe, meet standards and effectively respond to users' transportation needs.
- 2.2 Expressway Maintenance: The Company carries out regular inspection and maintenance of the main structures of the expressways, under the independent consulting engineer's supervision and quality assessment of the expressways. The expressways are in a stable condition, meet standards and safety requirements, and the expressway users are able to enjoy convenient, rapid and safe transportation to their destinations.



- 2.3 Expressway Services: The expressways, by physical characteristics, mostly are elevated and linked as a network with a total length of approximately 268 kilometers. The expressways have become effective strategic routes for sending aid to disaster victims, transporting equipment and supplies, and travelling by both public and private sectors, during the occurrence of any event or disaster which may impede the at-grade roads. Those events in the past have perfectly confirmed the strategic route status. Therefore, the Company, in its capacity as the operator of the Si Rat Expressway, the Si Rat Outer Ring Road Expressway and the Udon Ratthaya Expressway, sets out practical guidelines for dealing with unusual occurrences, so as to make the expressways available for service under emergency situations and return to normal as soon as possible. In this regard, the Company is ready to take various actions as follows:
  - Expressway Control Center: The Company's communications staff in the Control Center monitor traffic condition on the expressways and provide travelling information to the expressway users. CCTV surveillance systems are installed on the expressways, along with radio-communications systems through the Control Center working 24 hours in close collaboration with other relevant authorities. The Company's rescue operation teams are patrolling the expressways at all times, therefore, they are ready to instantly assist service users in any incident on the expressways. In addition, the teams also coordinate with police officers on duty on the expressways and at-grade roads in order to facilitate traffic management 24 hours a day. The traffic condition on the expressways is viewable by at-grade police officers from the video signals connected with the Company's CCTVs.
  - The automatic toll collection system or Easy Pass: This system was implemented by the Company's collaboration with the government sector beyond the terms and conditions of the relevant Concession Agreements, with the intention to improve services and minimize environmental impact from traffic congestion. This system has helped save travelling time and fuel for the expressway users, protect the environment, minimize pollution at the toll plazas, reduce fuel consumption, and improve the quality of life.
  - Toll payment service with Contactless EMV at the cash lane: The Company, in association with EXAT and Krungthai Bank, developed the contactless credit or debit card payment system in accordance with an Europay MasterCard Visa standard (EMV) to facilitate the expressway users, by starting the trial service on the Si Rat Outer Ring Road Expressway from June 2020, and it was officially opened for service at the Si Rat Outer Ring Road Expressway and the Udon Ratthaya Expressway on January 26, 2021, with the service opening at the Si Rat Expressway scheduled for April 2021.
  - Safety innovations: The Company sets up a dedicated unit responsible for research and development (R&D) to regularly improve the safety of the expressways by means of road safety audits. The audit results are used for the expressway improvements for greater safety.

## • The delivery process and improvement of services in detail of the MRT service

- 2.4 Value added to safety: The Company's business operations give priority to the safety of passengers, staff, contractors, including everyone in the MRT system, as evidenced by the adoption of the international standard safety management system as a guideline for operations, namely, ISO 45001. Moreover, Ricardo (Thailand) Company Limited is engaged as a safety consultant to evaluate the Company's operations in accordance with the safety management system standard after opening the MRT Purple Line for service, and provide suggestions on improvement of the risk management process, system assurance, and review of the train operation service process to achieve greater efficiency and to accommodate the growth in the future.
- 2.5 Value added to convenience: As the metro is a mass rapid transit system with rapidity and definite service schedule for the service users' commute convenience as they can somewhat precisely anticipate the service schedules and sets out their commute plans, the Company thus gives priority to value added in convenience in its services from making an entrance to the stations, utilization of services until leaving the stations. This effect, the Company has made various preparations to suit the convenience of the passengers and the service users in all respects such as information services, common ticketing system, and facilities within the stations.
- 2.6 Value added to rapidity: As the metro is a mass rapid transit system which offers the rapid services, a main reason that people select to commute by the metro, therefore, the Company supports other services from the passengers' entering into the stations until leaving the services with rapidity by means of development of the efficiency in service provision from where the passengers make an entrance to the stations and during the services, deletion of certain repeated steps which cause any unnecessary delay or increase in certain steps which more



impress the passengers such as the passenger volume management system during rush hours on platforms, rapid services in the time when the passengers are so crowded or during the exhibitions, ticket issue or stored value card services are provided by staff who are active in providing clear suggestions, etc.

- 1) Value added to reliability: The Company is committed to the regular services of the required standard to build the reliability in the metro system in respect of safety, convenience, and rapidity, whereby the Company continues to improve the quality of the services, for instance, maintenance and test of equipment are planned in a preventive and corrective manner, annual rehearsals for handling various emergency stimulations together with internal and external rescue agencies, improvement of safety system, ethical and equitable treatment towards passengers. Moreover, the Company accepts any comments or complaints from customers for further taking remedial actions to ensure improved services.
- 2) Value added to punctuality: The clear and punctual schedule of the MRT service enables passengers to manage their travelling time and do various activities more easily, not to mention that it results in their quality of life and mind health. The punctual services can be assessed based on the train service availability and punctuality. In 2020, the M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line)'s train service availability delayed by not more than 3 minutes during peak hours and not more than 6 minutes during off-peak hours, accounting for 99.46 percent from the target of 99.00 percent, and its train service punctuality delayed by not more than 5 minutes accounting for 99.68 percent from the target of 99.00 percent.

As for the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line), its train service availability with a delay of not more than 2 minutes during peak hours and not more than 5 minutes during off-peak hours, accounting for 99.97 percent from the target of 99.25 percent; and its train service punctuality with a delay of not more than 5 minutes, accounting for 99.98 percent from the target of 99.25 percent.

Moreover, the Company's membership in NOVA Group of Metros, a consortium of international metro service operators in a program of railway benchmarking, has inspired the development and improvement of service operations to achieve a higher level of success. Other than the standard out of service performance indicators, the Company has set out benchmarking indicators that are comparable to those of other members of the NOVA Group of Metros in various aspects in order to share knowledge and experience which will result in improvement and development of the services. Furthermore, in comparison with information in the NOVA Group, the Company's operational results are excellent in various respects, such as train punctuality as compared with the train schedule, repair and maintenance to ensure the availability of trains for service, and work safety of staff, etc.

Other than the safety, efficiency in the services and new technology as employed to satisfy the service users' needs, the Company has also realized the significance of its traders which are considered as a business supply chain as comparable to the service users.

The Company formulates a policy to fairly treat its business partners and promotes the knowledge, understanding, practice, development in accordance with the framework for sustainable development in the Company's business sector, building reliability through the fair business operations with its traders and financial supporters, regarded as key success factor which enables the Company to deliver the quality services to the expressway and MRT service users even during a crisis. The Company then set out the practices towards traders in a way of the business operations with fairness to ensure that acquisition of goods and services meet standards, together with the commitment to developing and maintaining sustainable relationships with traders, and having the clear objective regarding quality of goods and services as suitable for monetary value, technical quality and trust in each other.

The Company has arranged for the procurement process with equality and fairness for its traders in all systems, which is in accordance with the operating process governing procurement under the requirements of the ISO 9001 quality management system, by methods and measures adopted in against unfair competitions, determined the guidelines to promote respect for intellectual property rights of traders and safeguard the rights in assets, as well as the business operations with the supply chain in strict compliance with the international standards of the ISO 9001 quality management system and the ISO 14001 environmental management system through provision of knowledge, understanding and close monitoring system, to rest assured that the Company's supply chain transacting a business with the Company has carried out its operations with environmental care to ensure sustainability in mutual business operations. As for the group of financial supporters, it included lenders, debenture holders, creditors, the Company is determined to comply with agreements and commitments and maintain the financial discipline on a strict basis.



Regarding safety for staff and contractors, the Company has conducted its work safety in accordance with Thai laws and local and international safety standards, e.g., ISO 45001, as assessed by TUV NORD (Thailand) Limited. The main objective is to supervise welfare for work performance in respect of occupational safety, health, and environment of staff and persons in connection with operations in the metro system. The Company also prepared Plod Online E-magazine for communication with its staff to ensure their awareness of safety, quality, and environment.

# • The delivery of services with social responsibility under the Company's crisis management measures against the COVID-19 situation

In 2020, the world had been faced with the widely-growing crisis due to the epidemic of the COVID-19 which eventually caused an enormous problem on a global level. In the midst of such situation, the Company remained committed to "safety", one of the Company's missions which the Company has always strived to achieve, with the Company's concerns for the health and safety of the expressway users and MRT users, along with stakeholders of the Company, while fulfilling the Company's role as the expressway and mass rapid transit service provider to ensure the business continuity with excellence. In each phase of such crisis, the Company monitored the situation of the outbreak of the COVID-19 from the beginning of the overseas outbreak, by considering the local and global outbreak situations from the number of infected persons, the rising rate of infected persons, relevant reports and recommendations of the Department of Disease Control. The Company's evaluation of the situations was conducted based on the information so obtained to set the level of measures which needed to be taken to contain and prevent the spread of the COVID-19 in the train system to make it suitable for the situation and the severity level of the disease outbreak, in order to rapidly and timely cope with the potential impacts of the disease outbreak, with the Company adapting measures to suit the situation of the outbreak during any such period, namely:

- Performing the train operation work in which a suitable manpower plan must be prepared to ensure the continuous train service, and the work shift pattern must be adjusted as appropriate to prevent the spread of the disease, and replacement personnel must be made available in the case of closure of the stations.
- Implementing measures to clean areas inside the MRT trains, station buildings, as well as cleaning with spraying disinfectants at the toll plazas and toll booths.
- Adopting methods of screening before entering the train system, body temperature measurement before entering the areas of the Company.
- Monitoring the illness of staff and contractors suspected of being infected with the disease.
- Increasing the frequency of the train service during peak hours so as not to cause the crowed trains.
- Implementing the social distancing measures within the stations.

Each of the aforesaid measures had been reviewed by the Safety Committee, consisting of executives in various work fields. Meetings were held to regularly monitor the situation of the outbreak every day during the periods of high domestic infections. Meanwhile, the Company has always issued orders/announcements in support of the government measures to prevent infection and guide all staff and contractors to follow such practical rules while preparing the Business Continuity Plan before the occurrence of the COVID-19 outbreak. More importantly, the Company has also requested cooperation from its executives and staff to remain vigilant and strictly observe the preventive measures by way of a suspension of business leave, annual leave for travel to other countries during May 2020, refraining from participating in activities, parties, or entering risk-prone areas, wearing medical face masks at all times when being in communication with others, ensuring the social distancing, and behaving themselves during COVID-19.

The Company became keenly aware that the epidemic of the COVID-19 does not only affect the Company's business, but also affects all stakeholders involved with the Company such as staff and their families, customers, business partners, shareholders, together with communities and societies. The Company therefore drew up the guidelines to alleviate the impacts or turn this crisis into an opportunity to benefit all concerned stakeholders with a view of building long-term trust-based relationships and maintain good relationships with stakeholders of various sectors as well as fulfilling the Company's role as good citizenship, per details below:

## Staff and their families

- Taking care of staff's hygiene and providing adequate relevant equipment for them.
- Providing assistance not only in pecuniary terms but also four requisites, such as, special
  grants or low-interest loans for staff whose families are affected, scholarships for staff's
  children, food or accommodation, cost assistance in case of infection, etc.



#### Customers

- Offering payment deferrals/reduction of payment rates
- Organizing programs for customers to buy goods at special prices; relieving the burden of living cost of the people by maintaining the MRT "Blue Line" fares at the original rates, starting from Baht 16 up to Baht 42, continuously until December 31, 2020, regardless of the fare revisions originally scheduled for July 2, 2020 under the MRT Blue Line Concession Agreement.
- BEM has granted toll exemptions on the three expressways: "the Chalerm Mahanakorn Si Rat Udon Ratthaya Expressways", every public holiday; toll reductions under the respective new Concession Agreements, currently scheduled for 19 days. In addition, BEM has reduced the tolls at "At Narong 1 Toll Plaza" from the Chalong Rat Expressway access to the First Second Expressway heading to Bangna at the rate of Baht 25 baht per trip for vehicles of all types for one year, effective from July 1, 2020 to June 30, 2021.
- Traders: Shortening payment terms to traders in case of postponement of order for goods and services from traders/business alliances, under fairly agreed conditions, etc.
- O Shareholders: Under the circumstances of the COVID-19, the Company strictly implemented the preventive measures in accordance with the order of the Center for COVID-19 Situation Administration (CCSA), i.e., asking for shareholders' cooperation to appoint the Company's independent director as their proxy to attend the meeting instead of their attendance in person, setting up screening points for shareholders, arranging for seats at least one meter apart from one another, and requiring attendees to wear medical face masks throughout the meeting, requiring for checks-in and checks-out on the Thai Chana Application before the registration to attend the meeting, organizing an online shareholders' meeting, providing channels for opinions and communication on guidelines for risk management and responses in the situation of the COVID-19 epidemic in order to build confidence among shareholders, etc.
- Communities or society: The Company has played a part in helping communities or society from the situation of the COVID-19 epidemic, by organizing the Healthy Journey with BEM project giving away free one million cloth masks to the MRT users and communities surrounding the expressways and the MRT routes.

Despite the fact that the situation of the COVID-19 epidemic would be likely to improve, the Company still has to continue the containment and prevention of the disease outbreak to cope with the situation of the outbreak of other serious communicable diseases which may arise at any time, and to that effect, the Company may need to adjust the operating plans of its work units to suit and conform to the local and international situations. As Bangkok Expressway and Metro Public Company Limited or BEM operates the business of mass rapid transit system service provision, particularly the metro business, the metro passengers are at risk from a serious infection, as a result, the service users may be more concerned and cautious in using the service, thereby having an impact on the Company's business operations. Therefore, the Company needs to continuously adjust the business guidelines accordingly to assure the service users and concerned parties of the Company's services and business operations, whereby the occupational hygiene measures must be strictly observed.

# o BEM's care for society, promotion of measures against the spread of the COVID-19

With the Company's realizing the importance of contributing to society in the crisis of the COVID-19 epidemic which has forced people to rigorously adjust their daily lifestyle in social coexistence under the government measures, the Company, as one of organizations which provides the mass rapid transit services, has then organized a "HEALTHY JOURNEY WITH BEM" project during the months of June - August 2020. Such project was aimed to support the government policies in campaign for people to wear medical or cloth face masks, ensure a social distancing in public spaces for their good health and hygiene and ensure conformity to the government announcements to ease or relieve the lockdown measures due to the situation of the COVID-19 epidemic which allowed people to return to normal life. The Company has established various activities and preventive measures to contain the disease epidemic and allay the service users' anxieties about the use of the services, boost their confidence in the greater safety of the metro services. Meanwhile, the Company has provided cooperation with the government sector in providing assistance to mitigate the burdens and sufferings of the people surrounding the MRT routes, namely:



## 1) One Million Face Masks Giveaway Activities

The Company, in association with the Ministry of Transport, the Mass Rapid Transit Authority of Thailand, undertook a one million face mask giveaway activity to campaign for awareness-raising and providing knowledge about hygiene care and self-protection to both the MRT Blue and Purple Line passengers, at all 53 stations, for their good health and hygiene, as well as campaigning for passengers to always wear medical or cloth face masks in the public transport systems to prevent the spread of the disease throughout the period of the service use.

## 2) Delivery of Cloth Face Masks and Consumable Goods Activities

The Company provided assistance to alleviate the burdens and sufferings of the people, in cooperation with government agencies and communities surrounding the MRT routes, both the MRT Blue and Purple Lines, serving as a representative in receiving the assistance provided by the Company for further forwarding to the people. There were several related agencies, namely, District Offices, Local Administration Organizations, schools, and hospitals. In the meanwhile, the Company also sent its representatives to distribute free cloth masks to the people residing adjacent to the MRT stations. Such assistance could be provided through such activities to a total of 130 locations, with the Company providing consumable goods for the communities surrounding the MRT routes to support the "Pantry of Sharing" project of the government sector.

# 3) Activities under Measures to Maintain Cleanliness in MRT Stations and Trains (Big Cleaning)

- The Company undertook the "Big Cleaning Day" activity at MRT Sanam Chai and Tha Phra Stations under the "Healthy Journey with BEM" project to achieve the safety and good hygiene in response to the measures to prevent the spread of the COVID-19 with cooperation from more than 70 executives and volunteer staff who jointly cleaned up the frequently touched points, both inside and outside the station areas, including stair handrails, passenger elevators, doors and various automatic machines, to build the people's confidence in the use of MRT services.
- The Company, in association with the RTA Chemical Department, Royal Thai Army, sprayed disinfectants against the COVID-19 in all 53 stations of the MRT Blue and Purple Lines after the service closure.
- The Company's executives and staff, in association with government agencies, organized the cleaning activities to prevent the spread of the COVID-19 to encourage confidence of the service users in various areas surrounding the MRT routes.
- The Company, in association with the Ratchathewi District Office and the Huai Khwang District Office, cleaned up the areas to prevent the disease epidemic at MRT Phetchaburi Station.
- The Company, in association with the Wattana District Office, cleaned up buildings, places at Asoke Intersection on Sukhumvit Road, in front of Terminal 21 Shopping Center, and frequently touched surfaces at MRT Sukhumvit Station.

## 4) Service Users' Confidence Building Activities

The Company has established a **wear-press-away** measure by campaigning for all passengers to always wear face masks on board in the MRT systems in order to contain the spread of the COVID-19, adding more than 800 service points for using free hand sanitizers in the stations thoroughly, both at entries and exits of the stations, as well as establishing the social distancing measures, setting a distance of at least one meter while using the service both inside the trains and stations, forming the orderly queues to access the service in case of crowded passengers, increasing the service frequencies of the additional trains during the morning and evening peak hours to relieve overcrowding, and increasing the cleaning frequencies of the frequently touched surfaces in every half to one hour inside the stations and trains, whereby the Company additionally engaged special part-time staff at 100 rates with the duty to be responsible for cleaning the frequently touched surfaces inside the stations and trains, with the Company's aim of helping unemployed people who had been affected and suffered from layoffs during the COVID-19 epidemic crisis to ensure that they are employed and can earn enough income to sustain themselves through such crisis together.



# 5) Pecuniary and In-Kind Donations in Aid of Communities and Society due to the COVID-19 Epidemic Situation

- BEM, in association with CH. Karnchang Public Company Limited (CK) and TTW Public Company Limited (TTW), donated Baht 5,000,000 to the Chaipattana Foundation to support the Chaipattana Covid-19 Aid Fund (and Other Pandemics) in aid of hospitals and medical personnel to purchase necessary equipment and supplies for treatment of the COVID-19 patients.
- BEM, in association with CH. Karnchang Public Company Limited (CK) and TTW Public Company Limited (TTW), donated Baht 5,000,000 to the Fund for Education and Procurement of Medical Equipment under the Project to Prevent and Provide Assistance in the Situation of the COVID-19 Epidemic of the Faculty of Medicine Ramathibodi Hospital.
- BEM made pecuniary donations in aid of people affected by the COVID-19 situation, by distributing 1,000 survival bags to communities underneath the expressway vicinities in Ratchathewi District and Phayathai District.
- BEM undertook activities granting scholarships to students with good academic performance, scholarships for school development and purchase of the COVID-19 prevention devices, i.e., medical face masks, gel- and alcohol-based hand sanitizer dispenser stands, under the "Healthy Journey with BEM" project, to 24 schools adjacent to the vicinities of the Si Rat Expressway and the Udon Ratthaya Expressway, and the Si Rat Outer Ring Road Expressway. Other than that, BEM also provided the COVID-19 prevention devices to 56 schools surrounding the MRT routes, Siriraj Hospital, Kanchanaphisek Medical Center, Ramathibodi Hospital, RTA Chemical Department (RTACD), and 23 district offices, including communities surrounding the stations in order to build good relationship with them, support education for youths and contribute to helping the communities from the COVID-19 epidemic situation.

# 6) Other Activities

The Company, in association with the Ministry of Public Health, provided knowledge as to prevention of the spread of the COVID-19:

- Supporting the Department of Disease Control, Ministry of Public Health, in providing knowledge of proper cleanliness at MRT Yaek Nonthaburi 1 Station and Talad Bang Yai Station.
- Supporting the Department of Health Service Support, Ministry of Public Health, in providing recommendation as to proper cleanliness as well as giving away medical face masks and gel-based hand sanitizers to passengers at MRT Tao Poon Station.
- Supporting private-sector agencies, such as Siam University Medical Service Center, in giving away medical face masks and gel-based hand sanitizers to passengers at MRT Phetchaburi and Bang Wa Stations.

#### 7) Various Measures to Prevent the Spread of the COVID-19

The Company has heightened measures in terms of hygiene and screening for passengers within the metro system areas while taking measures for cleanliness and health care of staff/contractors as follows:

- Arranging staff to make temperature screening for passengers with a handheld thermometer at the baggage checkpoints of the entrances to the stations.
- Requesting passengers to always wear medical or cloth face masks along the journey with the MRT system.
- Providing health care advice to passengers with a fever higher than 37.5 degrees Celsius.
- Ensuring the social distancing by which the MRT has determined a one-meter standing distance at the ticket office areas in front of the ticket vending machines, platforms, passenger elevators, and inside the trains.
- Increasing the cleaning frequencies with disinfectants in all MRT stations.
- Cleaning with disinfectants inside all MRT trains during, after, and before service every day.
- Increasing the frequencies of cleaning with disinfectants in the areas frequently touched by passengers, such as, ticket vending machines, stair handrails, escalators, escalator handrails, fare collection gates, elevators, handrails inside the trains, seats, etc.



- Providing alcohol-based hand sanitizers at the baggage checkpoints and ticket offices in all MRT stations and at every entrance-exit of Metro Mall in all stations.
- Providing health care for staff who provide services in the stations and trains with health check-ups, body temperature measurement before on duty every time.
- Requiring staff to wear medical or cloth face masks at all times on duty.
- Cleaning and disinfecting tokens before being circulated in every MRT station.
- Increasing public relations to build knowledge and understanding of self-practices to passengers to avoid the transmission of pathogens, through media, such as, billboards, digital information displays inside the stations and trains, sound public relations inside the MRT stations, and social media of the Company.
- Establishing practical guidelines for staff and contractors to prevent the transmission of pathogens, such as, a policy requiring staff to refrain from traveling to risk countries, as well as monitoring the situation and various government measures to ensure the Company's readiness to adjust various measures to be appropriate, efficient for strict compliance.

#### 3. Happy Society

Throughout the period of the business operations, the Company is committed to being the "Route of Happiness for Better Travelling Mode" and the pursuit of happiness of travelers, the following matters are given priority:

- Family: Spending quality family time can be made in various manners, one of which is travelling together as a family on expressway route or metro route, to see and experience new stories of community lifestyles and to ensure income distribution to their destinations;
- Education of children and youth: The Company aims to promote children's outdoor learning experience by organizing outdoor learning activities to allow children to gain important first-hand experience and apply such gained experience to their lives in the future, and meanwhile, the Company has provided educational opportunities for underprivileged children and youth with good academic records, by distribution of scholarships to them as a cost for their sustainable careers.
- Public interest assistance and alleviation of hardships from various disasters: The Company
  has always provided assistance in this matter to play a part in healing of the suffered society
  from such disasters.

### 4. Summary of Environmental Performance

Environmental Quality Promotion and Environmental Impact Reduction (More Quality and Less Impact)

The Company, in its capacity as the expressway and metro service provider, has realized the business operations based on sustainable development in three aspects, namely, economy, continuously developing quality of services; society, taking care of the Source of Happiness to ensure that they have the improved quality of life, with the readiness to transfer value to society nearby and as a whole; and environment, emphasizing prevention and control of pollution and impacts which may occur.

The Company is determined to develop the quality of the services, with the commitment to environmental responsibility; therefore, the environmental management policy has been formulated, with the guidelines as follows:

#### **Environmental Policy**

- 1. Giving the priority to prevention and control of pollution to ensure compliance with the international standards and taking into account the environmental impacts of the service users, staff and communities;
- 2. Instilling the awareness on the utilization of natural resource energy in an efficient manner in our staff and promoting them to do so;
- 3. Performing duties in compliance with laws and other requirements in relation to the environment;
- 4. Reviewing the objectives and goals for improving the environmental management system on a regular basis;
- 5. Disseminating the environmental policy to the public and other concerned parties.

It is deemed to be all staff's and traders' responsibility to strictly and regularly adhere to this policy for ensuring a good environment for the service users, staff, traders, and nearby communities.



The Company has a policy and is determined to continuously take care of every sector of society in respect of the management of improved operational results, creation of value added to shareholders, and giving priority to nearby communities as well as taking care of both nearby and remote communities. In 2020, the Company then organized the corporate social and environmental contribution activities as follows:

## 1) Activities for Development of Quality of Life on Safe Travelling

The safety lies at the heart of the Company's success to which the Company gives foremost priority in order to help prevent and reduce potential accidents on roads, including expressways, as well as ensuring the greater safety to motorists and their companions. The Company has therefore organized traveling safety promotion activities, as follows:

# "Provision of Facilities and Safety for People's Travelling during New Year and Songkran Festivals"

The Company, in association with EXAT, conducted a campaign for safe driving during the Songkran festivals under Road Safety Measure 777 "Driving Slowly, Daytime Headlight Switching on, Seat Belt Fastening", and also provided for the public service points on the expressways in order to facilitate the people's travelling during the New Year festival.

## 2) Activities for Moral and Ethical Awareness for Corporate Social Responsibility

## "Blood Donating"

It is to give blood to give life as the greatest giving. The Company, in association with the Faculty of Medicine Vajira Hospital, Navamindradhiraj University, then held a blood donation activity at the Si Rat - Outer Ring Road Expressway Control Center, two times, (usually held 3 times a year, but this year the activity was suspended in April 2020 due to the situation of the epidemic of the COVID 19), with active cooperation of a lot of executives, staff and residents nearby.

#### "Listening to Dhamma with BEM"

To create a positive work environment in the organization by applying Dharma or the principles of Buddhism to promote the proper fulfillment of an individual's role with all's mutual cooperation in order to bring workers happiness and efficient performance, and to that effect, the Company invited Phra Bai Dika Worawat Worawattano, Assistant Abbot of Tanot Temple, to deliver them a Buddhist sermon on the "Happy People Happy Work" topic.

## 3) Activities for Good Relationships with Related Authorities

#### "Thai Farmer Lifestyle Learning in Suphan Buri Province with BEM"

The management and staff of the toll collection division of EXAT and the toll collection division of the Company participated in an activity to strengthen relationships with each other at the Lifestyle and Spirit of Thai Farmers-Nahai Chai Learning Center in Suphan Buri Province, one of the important tourist attractions in Suphan buri Province, where had compiled fascinating stories and new knowledge about the valuable way of life of Thai farmers for study and learning.

## 4) Activities for Promotion of Youth Learning

The youth are the vital force of the nation. Education is the cornerstone of the youth's sustainable development of knowledge, abilities, perspectives, and virtues to ensure that they become good and quality citizens of the society. The Company has then continued to encourage and support the youth's education every year through various activities as follows:

# "Scholarships to Students of Adjacent Schools"

The Company undertook activities to grant scholarships to students with good academic records, together with school development scholarships, to 9 schools adjacent to the Si Rat Expressway, the Udon Ratthaya Expressway and the Si Rat - Outer Ring Road Expressway, to provide the youth educational opportunities and foster good relationships with communities nearby, and to provide educational support to the youth.

# "Scholarships for Children of the Expressway Police Station 2's Police Officers"

The Company granted scholarships to children of the Expressway Police Station 2's police officers, who collaborated with the Company to ensuring convenience and safety of the expressway users.



#### 5) Activities for Support of the Outdoor Learning Experience

Outdoor experience opens up an opportunity for children to fully engage in learning by themselves, giving them a deep and clear understanding and enabling them to apply the gained knowledge to their life in the future. The Company thus organized outdoor learning experience activities as follows:

#### National Children's Day 2020 Activities

#### "Wonderland AI World"

The Company undertook the 2020 National Children's Day activities in the atmosphere of "Wonderland AI World", with a lot of students from schools adjacent to the expressway vicinities, staff's descendants and children from nearby communities joining in fun activities, including AI invention, LEGO building, plaster painting, Bozo balloons, smart robot competition. The event atmosphere was filled with happiness, brightness of the children who enjoyed closely learning about Artificial Intelligence technologies at the Si Rat Expressway Control Center Building.

## "MRT Delivers Happiness on the Children's Day 2020" Activity

On the occasion of the National Children's Day 2020, the Company, in association with Museum Siam, undertook an activity to enhance the development of ideas for children under the concept of "Thai Banjerd: Kerd Ideas" at the Activity Hall at Museum Siam, MRT Sanam Chai Station, Exit1, where children joined in various skill-building activities, enjoyed the MRT quiz games through the knowledge station of the use of metro cards, skill-enhancing station in image link of MRT network map, flair-developing station in spellings, color separation, alphabet learning, and knowledge station about the correct and safe use of the MRT, as well as enjoying eating a wide variety of sweets, ice creams and winning prizes. Other than that, in the Museum Siam event, there were also everyday problem-solving games, i.e., folding paper airplanes with secret messages inside station, drought conquest station, cooling down station, Museum Commercial station, in order to build knowledge and understanding about how to tackle different problems correctly. The event atmosphere was filled with happiness, enjoyment and smiles of more than 2,000 children and their families who joined in the activities persons.

#### "MRT Happy Blue Line"

The Company realized the significance of the youth and communities surrounding the MRT routes, and therefore undertook an activity to promote the new route of the M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line Extension), Tao Poon - Tha Phra Section, for the youth, people and communities surrounding the MRT route so that they learned on how to use the MRT system correctly and safely, together with a free trial trip with the new MRT line to the four most exquisite underground stations, namely, Wat Mangkon Station, Sam Yot Station, Sanam Chai Station, and Itsaraphap Station, which were elaborately designed and decorated with the Thai style architectures in the Rattanakosin era perfectly reflecting the arts, cultures, and livelihoods of communities nearby. The activities were held throughout January-February 2020, as follows:

- A group of 490 students in schools nearby participated in the MRT's trial runs with accuracy and safety, and there was a creating of awareness and public relations for the opening of the M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line Extension), Tao Poon Tha Phra Section, by organizing a safety knowledge promotion activity, "MRT Safety Share, Safety You Can Do", and introduction of the MRT routes through "Bangkok MRT Application".
- A group of 135 residents in communities nearby participated in the MRT's trial runs with accuracy and safety and continuously travelled to important cultural attractions, learned how to correctly use the MRT system, elevators, escalators, and minimize travel accidents for the elderly, along with enjoying the free trial trip with the new MRT line to visit the spectacular architecture within the stations and continued to Wat Mangkon Kammalawat (Leng Nei Yi Temple) to pay homage to Buddha images. Such activities were considered a part of promoting people's travelling with the MRT system and promoting the cultural tourism around the MRT routes.



#### • "Share2Child" Activity

With the Company's commitment to contributing to promoting educational development for children and youth through learning and trial of the trial of the MRT system as well as enhancing their outdoor learning experiences, the Company therefore continued to undertake the "Share2Child" activity. In 2020, activities were organized for children to join in a field trip to visit learning centers surrounding the MRT Blue Line, namely:

- Study Tour of Museum Siam: By bringing a group of more than 100 teachers and students from Wat Chat Kaew Chongkonnani School (located near MRT Bang O Station) and Wat Paolohit School (located near MRT Sirindhorn Station) to do a study tour for outdoor learning experience around the MRT Blue Line, Tao Poon Station Tha Phra Station, learn how to ride the MRT correctly and safely, along with learning how to issue tokens through the Ticket Vending Machines (TVM), as well as taking the students to visit the Decoding Thainess exhibition at Museum Siam: Discovery Museum, and enjoy the magnificent Thai architecture of the MRT Sanam Chai Station, regarded as one of the most exquisite underground stations, all of which received the children's great attention. The children gained a lot of knowledge and experience from these activities.
- Study Tour of Energy Learning Center: By bringing a group of 80 teachers and students from Wat Samakkhi Sutthawat School (located near MRT Bang Phlat Station) to do a study tour for outdoor learning experience around the MRT Blue Line, Bang Phlat Station Bang O Station, learn how to ride the MRT correctly and safely, along with learning how to issue tokens through the Ticket Vending Machines (TVM), as well as taking the children to go on a study tour of the EGAT Learning Center, a learning center of Thailand's energy and a learning center of energy conservation buildings of international standard, encouraging the youth to realize the efficient energy use. This study tour activity provided the children with the overwhelming impression and broadened their knowledge of energy.

## • "MRT Bring Nong to Conquer TCAS Year 12"

The Company has valued the youth who are a driving force of the nation, and therefore, in association with the Mass Rapid Transit Authority of Thailand (MRTA) and Bangkok Metro Networks Company Limited (BMN), organized the giving back to society activities in terms of improving the quality of life in education, by providing opportunities for high school students nationwide to participate in the activity under the name of "MRT Bring Nong to Conquer TCAS" Year 12 to enable them to apply the knowledge so gained for the higher education entrance examination, which was given a great honor by three highly qualified tutors to share knowledge, provide free intensive tutorials about TCAS exams, namely, Teacher Somsri Thammasarn Sophon in English, Teacher P'Wiset Keesukphan (Teacher P'Ae) in PAT1 Mathematics, and Teacher Surachet Phichitphongphao (Teacher P'Yu) in GAT, at C ASEAN, 10<sup>th</sup> Floor, CW TOWER.

Such activity attracted the attention of students nationwide, by receiving feedbacks from over 200 students from 54 schools to participate in the live learning activity and over 10,000 students for the online learning activity. Moreover, BEM continued to further the activity, by passing on knowledge to secondary school students in Bangkok under the "MRT Jaidee Give Away TCAS Exam Preparation Books" activity at the MRT Chatuchak Station, between October 9-10, 2020, with more than 300 students providing attention to the activity and traveling to receive the books in person, and BEM also provided opportunities to students of all regions who missed out on free tutorial courses to gain knowledge, by delivering TCAS exam preparation books for all the thee subjects, together with VDOs, to more than 70 schools via the mail channels for enabling students to have prepared for the examination for entrance to universities of dream with confidence, and grow up to become a major force of the nation.

# • "Making Dream Come True with Learning Center for Kids by BEM"

The Company remained committed to continuing the policy to promote and develop the quality of life in education for children and youth in educational institutions/communities surrounding the MRT routes of the M.R.T. Chaloem Ratchamongkhon Line and the M.R.T. Chalong Ratchadham Line, by undertaking a "Making Dream Come True with Learning Center for Kids by BEM" activity for educational institutions or little child development centers to ensure their greater competency and readiness as a modern learning center, in order to promote Thai children's reading habits, strengthen physical development to ensure



they would grow up to become a driving force of the nation, by granting educational materials, scholarships, and a set of playground equipment for child development. Meanwhile, the Company's executives and staff volunteered to participate in recreational activities, activities for learning and skill practice station, and provided free lunch for children, with representatives from the Bangkok Yai District Office, Director of Wat Pradu Chimplee School giving a welcome at Wat Pradu Chimplee School in Bangkok, located adjacent to the MRT Blue Line (Tha Phra Station).

## 6) Support for Other Social Activities

#### "Thot Kathin Ceremony 2020"

The Company has upheld the good culture and tradition, and maintained while fostering the Buddhism by regularly organizing a Thot Kathin ceremony every year, which in 2020, it was held at Wat Samakkhi Sutthawat, Bang Phlat District, Bangkok, adjacent to the MRT Bang Phlat Station, by collecting donated money from executives, staff, service users of the M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line) and the M.R.T. Chalong Ratchadham Line (MRT Purple Line) to fund the restoration of the sermon hall of Wat Samakkhi Suthawat for upholding the Buddhism, together with contribution of scholarships to Wat Samakkhi Suthawat School, located adjacent to the MRT Bang Plat Station, as scholarships for the underprivileged students.

# • "BEM's Felicitation Activities in Honor of the Monarch and His Royal Family Members"

To express the Company's unswerving loyalty to the Monarch and his royal family members on auspicious occasions of their birthday anniversaries, the Company set up celebratory arches and blessing books to provide opportunities executives, staff, MRT passengers, together the general public, to join in the blessings on various occasions, as follows:

- On the auspicious occasion of Her Majesty the Queen's birthday anniversary on June 3, 2020 at the Company's office building and MRT Phahon Yothin Station and Sam Yan Station;
- On the auspicious occasion of His Majesty the King's birthday anniversary on July 28, 2020 at the Company's office building and MRT Sanam Chai, Sam Yan, Chatuchak and Tao Poon Stations;
- On the auspicious occasion of Her Majesty Queen Sirikit the Queen Mother's birthday anniversary on August 12, 2020 at the Company's office building and MRT Sanam Chai, Sam Yan, Chatuchak and Tao Poon Stations.
- "Activities in Commemoration of the Royal Grace of His Majesty the late King Rama IX"
  - On the occasion of His Majesty King Bhumibol Adulyadej The Great's death anniversary on October 13, 2020, the altar tables where the pictures of the late King were positioned, together with royal worship, were set up at the Company's office building and MRT Sam Yan station;
  - On the occasion of His Majesty King Bhumibol Adulyadej The Great's birthday anniversary, the National Father Day, on December 5, 2020, the altar tables where the pictures of the late King were positioned, together with royal worship, were set up at the Company's office building and MRT Sam Yan station.

# 10.3 Anti-Corruption Policy

The Company realizes and gives priority to anti-corruption and fraud prevention, both inside and outside its organization. The Company thus formulates guidelines for the proper conduct of directors, management and staff via the code of business ethics of the Company. Furthermore, with the potential damage from corruption in mind, the Company then formulates anti-corruption policy containing the key practical guidelines as follows:

- The Company's directors, executives, and staff at all levels should carry out activities with fairness, integrity, and transparency in business dealings with various agencies, provided that such activities must be in accordance with laws, proper policies, regulations, rules, announcements or work processes.
- The Company promotes and supports comprehensive and fair treatment with integrity towards all of its traders and compliance with any contractual commitments made with the Company's stakeholders.



- 3. The Company promotes and supports awareness-raising of directors, executives and staff to refrain from committing any fraud or corruption and become aware of adverse impacts of corruption.
- 4. The Company promotes and encourages directors, executives, and staff not to accept, agree to accept, or offer any reception, gifts, and any other payments which are extravagant and inappropriate for those who have business dealings with the Company.
- 5. The Company arranges for staff training to educate them regarding the anti-corruption policy, practices, and guidelines.

The Company which operates the expressway business and the metro business did formulate and implement the respective anti-corruption policies, which can be summarized as follows:

#### • Anti - Corruption Guidelines

The Company sets out measures, based on both disciplinary and legal actions, against corruption. The fact-finding must be conducted by a committee comprising representatives from the human resources department, from the department of the offender and from other units. The Managing Director is authorized to consider imposing disciplinary actions in case of written warning and termination of employment. Should the misconduct constitute embezzlement, legal action will be undertaken to protect the Company's interests. Guidelines under this policy are as follows:

- 1. No business dealings may be entered into with any organization or unit which is involved in corruption.
- 2. Disciplinary and legal actions will be imposed and instituted against such staff who are involved in corruption.

#### • Additional Anti-Corruption Practices

The Company intends to operate its business with transparency without involvement with any corruption, in accordance with the corporate governance policy. All directors, executives and staff must perform their duties with integrity, due care, prudence and in the best interests of the Company and fairness to stakeholders, as well as free from corruption, both internal and external.

- 1. The Company and its subsidiaries set out policy and measures for anti-corruption and prevention of payments or acceptance of bribery, including any actions contrary to morality and customary practices, which are written in the corporate governance policy, the Company's code of business ethics, and the work rules and regulations, for compliance by all directors, executives and staff.
- 2. The Company is aware of business risks from both internal and external factors which may affect its operations. The Company therefore sets out a systematic risk management, monitoring and measures to continuously minimize risks. The Corporate Governance and Risk Management Committee was thus appointed to consider the policy level while the Management has the duty to supervise the overall risk management process and perform the day-to-day operation on behalf of the Corporate Governance and Risk Management Committee. Such duties include monitoring, evaluation and preparation of a risk management report at the department level for submission to the Board of Directors for information. Moreover, the risk management manual and plan are prepared as operational guidelines, including risk monitoring, evaluation and review in line with the internal and external circumstances. All work units must also prepare emergency plans for any emergency situation so as to be ready to resolve problems forthwith.
- 3. In order to comply with the written anti-corruption policy, the Company also builds up recognition of anti-corruption practices in the organization through physical and mental development training to have a positive attitude because the Company believes that decency emanates from inside out. In preparation for the application for certification of membership in Thailand's Private Sector Collective Action Coalition Against Corruption, the Company also had various departments conduct a self-assessment to identify potential improvements in compliance with the anti-corruption measures in Thailand's Private Sector Collective Action Coalition Against Corruption. Moreover, the Company assigned two representatives, who are responsible for the corporate governance and the internal audit, to attend the Anti-Corruption: The Practical Guide (ACPG 15) course, organized by the Institute of Directors Association (IOD).
- 4. The Company surveys the compliance with the code of business ethics yearly for the management to review their conduct in accordance with the code of business ethics.



- 5. The Company treats misconduct relating to fraud and corruption as serious disciplinary misconduct, which, if any misconduct is committed, is subject to severe disciplinary action, up to termination of employment without prior warning. The details of such misconduct are described as follows:
  - Disclosure of the Company's confidential information to any third parties;
  - Breach of duty and/or fraudulent acts towards the Company, including a conspiracy with others to do so;
  - Abuse of position for personal interest or for the interest of others;
  - Acceptance of undue consideration in relation to assigned tasks;
  - Showing offensive behaviors or use of aggressive, threatening, insulting words or causing bodily injury to supervisors, including third parties who contact or are related to the Company.



#### 11. Internal Control and Risk Management

#### 11.1 Internal Control

The Board of Directors continues to realize the significance of its good and effective internal control system, including its good corporate governance guidelines, in the belief that a good internal control system lies in a good performance process, organization chart and work system, which can help the Company achieve its goals or missions with efficiency and effectiveness, as well as minimize risks and prevent possible risks and damage in the Company's business operations. The Board of Directors has thus authorized the Audit Committee comprising independent directors to audit the evaluation of the effectiveness of the internal control system. The Internal Audit Office, which independently performs its duty and directly reports to the Audit Committee, shall have the duty to audit the work operation systems in various departments of the Company as per the annual audit plan approved by the Audit Committee, with an aim of ensuring each department's efficient and effective performance of work and optimum use of the Company's resources, as well as ensuring corruption control and prevention. This also includes the control of the work performance, and the accurate, reliable and timely financial reporting, as well as the compliance with the policies as well as laws and regulations of the government agencies and relevant authorities. Furthermore, the effectiveness of the internal control system is regularly reviewed to ensure the optimum benefit to the shareholders from the business operation based on fairness in terms of benefits to all stakeholders. In addition, the Audit Committee shall have the duties to consider, select and submit for the appointment of the auditor, including remuneration of the auditor, consider accurate and complete disclosure of the Company's connected transactions or any transactions which may give rise to any conflicts of interest.

### 11.2 Risk Management

The Board of Directors has realized the significance of using the risk management system in the administration by assigning the Corporate Governance and Risk Management Committee to supervise and review the Company's overall risks, risk management strategies, and risk alert system. This is to ensure proper and timely response to various challenges, as well as to provide training for executives and staff about the risk management guidelines for their understanding and engagement in the firmwide risk management, covering both corporate level and operational level. The Company's management takes into account various risk factors currently sustained or threatened to be sustained in the future by the Company to analyze an impact and possibility of such risks and to determine measures to prevent and deal with such risks to stay at an acceptable level in line with the Company's policy, and to report to the Corporate Governance and Risk Management Committee to consider the adequacy and appropriateness. The risk management plan shall be reviewed every year, and the effectiveness of the risk management system shall be monitored and evaluated at any time when the risk level has changed, to monitor incidents which constitute both internal and external risk factors in order to take precautions against any risks which affect the Company and to prevent, mitigate possible damage. The results are regularly followed up on a quarterly basis by the secretary to the Corporate Governance and Risk Management Committee and then reported to the Corporate Governance and Risk Management Committee for acknowledgment and further report to the Board of Directors. The Company's significant risk factors and management are described in Risk Factors on pages 3-1 to 3-8.

11.3 The Board of Directors has evaluated the adequacy of the internal control system based on the Internal Control Adequacy Evaluation Form, taking into consideration five components, i.e., corporate internal control, risk assessment, control measures, information and communication system, and follow-up system. It was concluded that the Company's internal control system was considered adequate and appropriate to the business operations; no material defect in the internal control system was found; and control and prevention of corruption and improper or unauthorized use by executives or employees of the property of the Company and the subsidiaries could be efficiently conducted; the financial reports of the Company were accurate and reliable in accordance with the generally accepted accounting standards and the financial reporting standards; and the Company's business operations were in full compliance with the law on securities and exchange and other applicable laws.



The Board of Directors, the Audit Committee and the auditor's opinions coincide that the Company's business operations are based on good corporate principles, transparency, with the Company having the suitable and effective internal control system which is capable of preventing improper or unauthorized use by executives or employees of the property of the Company.

The Head of the Internal Audit Unit is Miss Vasana Wattananukulchai, General Manager of the Internal Audit Office. The Audit Committee is of the view that she has knowledge, abilities and work experience and is suitably and adequately qualified to efficiently perform duties as the Head of the Internal Audit Unit. The appointment, removal, and transfer of the person holding an office as Head of the Internal Audit Unit shall be subject to the Audit Committee's approval. (Her detailed information is described in Attachment 3 on pages A3-1 to A3-2)

The Head of the Compliance Unit is Mr. Phakpoom Thaweewittayarut, Deputy Managing Director - Administration and Company Secretary, having knowledge in the fields of law and accounting, abilities and long experience in the position as Company Secretary, who shall be responsible for compliance matters. (His detailed information is described in Attachment 3 on page A3-3)



#### 12. Connected Transactions

# 12.1 Criteria and Procedures for Approval of Execution of Connected Transactions

Transactions with persons who may have a conflict of interest are subject to the conditions and criteria in the ordinary course of business. The execution of connected transactions and transactions with a conflict of interest are in accordance with the regulations of the Stock Exchange of Thailand and the Office of the Securities and Exchange Commission.

In the consideration and approval of any connected transaction, the Company shall propose such matter to the Board of Directors' Meeting, in which the directors having any involvement which may give rise to a conflict of interest shall not be entitled to attend and vote on such matter. Furthermore, the Audit Committee, as assigned by the Board of Directors, shall consider the disclosure of the Company's information in respect of the connected transaction or the transaction which may have a conflict of interest, to ensure accuracy and completeness.

In respect of connected transactions with general commercial terms which the Company and its subsidiaries have or may have in the future, the Company already requested approval in principle from the Board of Directors' Meeting.

# 12.2 Policy or Trend of Future Connected Transactions

The Company shall comply with the requirements and regulations of the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand, as well as the rules on disclosure of information on connected transactions and acquisition and disposition of material assets of the Company and its subsidiaries, including the accounting standards as prescribed by the Federation of Accounting Professions. Should there be any transaction which may have a conflict of interest in the future, for example, engagement of a group of persons who may have a conflict of interest for construction, project management, maintenance, the Board of Directors, together with the Audit Committee, will consider the necessity and justification for execution of such transaction, as well as pricing and conditions on the execution of such transaction whether they are in the ordinary course of business, and in comparison with third party prices or market price, provided that the interested parties shall not take part in the consideration and approval for execution of the transaction. The Company has no policy for lending loans or providing guarantee to any person who may have a conflict of interest in accordance with the definition of the SEC Office.

In case that the Audit Committee has no expertise to consider any potential connected transaction, the Company will arrange for an independent expert or the Company's auditor to provide an opinion on such connected transaction in support of the decision-making by the Board of Directors and/or the Audit Committee or shareholders, as the case may be. In this regard, the Company discloses its connected transactions in the Company's notes to the financial statements as audited or reviewed by the Company's auditor.



# 12.3 Connected Transactions of the Company and the Subsidiaries with Persons who May Have a Conflict of Interest for 2020 and 2019

# 1. Transactions of the Company and its Subsidiary with CH. Karnchang Public Company Limited ("CK")

CK engages in the construction business and a full range of development, investment and management of large-scale infrastructure concession projects within the country and the region. CK is also the Company's related company since CK is the Company's major shareholder, holding shares in the Company representing 31.32<sup>1</sup> percent of the Company's registered and paid-up capital. CK and the Company also have common directors and executives, namely, (1) Mr. Plew Trivisvavet, (2) Mr. Phongsarit Tantisuvanitchkul, and (3) Mrs. Payao Marittanaporn, the spouse of Mr. Prasert Marittanaporn.

	Transaction Volu	me (Million Baht)	
Transaction	Accounting Period Ended December 31, 2020	Accounting Period Ended December 31, 2019	Transaction Nature/Necessity and Justification
Inspection, Repair and Improvement of the Structures and System Works of the Si Rat Expressway and the Si Rat - Outer Ring Road Expressway			
- Construction cost	814.24	742.88	The Company engaged CK to carry out inspection, repair, and improvement of the structures and system works of the Si Rat Expressway and the Si Rat - Outer Ring Road Expressway, as follows:
- Costs of inspection and repair of the structures of the expressways	35.50	209.55	1) No. 4, Phase 1:  The contract was executed on August 17, 2018 in the total value of Baht 32 Million, with a contract term of 12 months from the date of the contract signing.
- Trade payable	12.14	92.01	2) Construction and Improvement of the Structures:  The contract was executed on January 23, 2019 in the total value of Baht 780 Million, with a contract term of 12 months from the date of receipt of the Notice to Proceed.

<sup>&</sup>lt;sup>1</sup> Information as at the closing date of the share register for suspension of the share transfer of the Company on June 26, 2020.



	Transaction Volu	me (Million Baht)	
Transaction	Accounting Period Ended December 31, 2020	Accounting Period Ended December 31, 2019	Transaction Nature/Necessity and Justification
Inspection, Repair and Improvement of the Structures and System Works of the Si Rat Expressway and the Si Rat - Outer Ring Road Expressway (Continued)			
• • • • • •			3) No. 4, Phase 3 and Improvement of the Structures:
			The contract was executed on August 16, 2019 in the total value of Baht 233 Million, with the contract term of 12 months from the date of the contract signing.
			Subsequently, on July 17, 2020, the Company executed the Variation Order for the Repair Work No. 4, Phase 3, and the Improvement Work of the Structures; as a result, the contract's value was changed to Baht 237 Million, with the extension of the work period ending in December 2020.
			4) Construction and Improvement of the Structures and System Works of the Si Rat Expressway:
			The contractor was executed on April 14, 2020 in the total value of Baht 831 Million, with the contract term of 12 months from the date of the contract signing.
			5) No. 4, Phase 4: Repair and Improvement of the Structures and System Works:
			The contract was executed on December 21, 2020 in the total value of Baht 920 Million, with a contract term of 12 months from the date of receipt of the Notice to Proceed.
			The work prices were reasonable and lower than the prices as appraised by the Company and the independent certification engineer.



	Transaction Volu	me (Million Baht)	
Transaction	Accounting Period Ended December 31, 2020	Accounting Period Ended December 31, 2019	Transaction Nature/Necessity and Justification
Management of Civil Infrastructure and Electrical and Mechanical Systems Maintenance for the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line)			
- Cost of maintenance of civil infrastructure and electrical and mechanical systems	329.03	165.85	On November 17, 2015, the Company executed the Project Management Agreement engaging
- Replacement of M&E Systems and cost of preparation for repair	467.91	4.50	CK for Civil Infrastructure and Electrical and Mechanical Systems Maintenance for the M.R.T. Chaloem Ratchamongkhon Line Project (MRT
- Trade payable	324.10	82.93	Blue Line) for a period of 8 years, with the total contract value of Baht 1,270 Million. Subsequently, on August 29, 2018, the Company executed the Amendment Agreement with CK for Civil Infrastructure and Electrical and Mechanical Systems Maintenance for the MRT Blue Line Extension Project, for a period of 8 years and 6 months, together with the extension of the contract term of the M.R.T. Chaloem Ratchamongkhon Line Project for another 3 years and 5 months to end at the same time as the Agreement for the MRT Blue Line Extension Project, as well as adjustment and replacement of the expired M&E Systems of the M.R.T. Chaloem Ratchamongkhon Line Project, with the total contract value of Baht 2,778 Million, which was considered an integral part of the aforesaid Project Management Agreement. Such work value was reasonable and lower than that as appraised by the independent certification engineer.



	Transaction Volu	me (Million Baht)	
Transaction	Accounting Period Ended December 31, 2020	Accounting Period Ended December 31, 2019	Transaction Nature/Necessity and Justification
Civil Infrastructure and Electrical and Mechanical Systems Maintenance, including Maintenance of Elevators and Escalators inside the Metro Stations, Elevated Structures and Depot, as well as Supply of Equipment, Tools, Spare Parts and Personnel for Maintenance Services for the MRT Purple Line Project			
<ul> <li>Cost of maintenance of civil infrastructure and electrical and mechanical systems</li> <li>Trade payable</li> </ul>	220.00 65.39	220.00	On November 17, 2015, the Company executed the Project Management Agreement with CK for Civil Infrastructure and Electrical and Mechanical Systems Maintenance, including maintenance of elevators and escalators inside the metro stations, elevated structures and depot, as well as supply of equipment, tools, spare parts and personnel for maintenance services for the MRT Purple Line Project, for a period of 8 years from November 17, 2015 to November 16, 2023, with the contract value of Baht 1,520 Million.  Subsequently, on December 14, 2016, the Company additionally executed the Project Management Agreement with CK for Civil Infrastructure and Electrical and Mechanical Systems Maintenance for the MRT Purple Line Project, with the contract value of Baht 155 Million, for a period of 7 years from January 1, 2017 to December 31, 2023. Such work value was reasonable and lower than that as appraised by the independent certification engineering.



	Transaction Vol	ume (Million Baht)	
Transaction	Accounting Period Ended December 31, 2020	Accounting Period Ended December 31, 2019	Transaction Nature/Necessity and Justification
Project Management, as well as Supply, Installation, and Test Run and Commissioning of M&E Equipment for the MRT Blue Line Project			
- Project management cost	1,523.14	5,560.61	On June 20, 2017, the Company executed Project
- Trade payable	-	455.40	Management Agreement with CK for Project Management, as well as Supply, Installation, and Test Run and Commissioning of M&E Equipment for the MRT Blue Line Project, in the total amount of Baht 19,643 Million.
			Subsequently, on February 9, 2018, the Company executed the Variation Order engaging CK for management of construction and improvement of the administrative building in the area of Huai Khwang Depot, as well as supply and installation of the (additional) M&E Equipment for the MRT Blue Line Project, for a total value of Baht 558 Million, whereby it shall be deemed as an integral part of the aforesaid Project Management Agreement.
			Later, on July 12, 2018, the Company executed the Variation Order for expediting the opening of the train operation ahead of schedule and installation of the telecommunication network system inside 4 metro stations of the MRT Blue Line Extension Project, in the total amount of Baht 898 Million, and the scope of works under the existing Agreement remained unchanged.
			On January 7, 2020, the Company executed the Variation Order for the M&E Equipment and the Civil Work as assigned by MRTA which were beyond the scope of works under the existing Agreement in the total amount of Baht 293 Million. The work value was reasonable and lower than that as appraised by the independent certification engineer.



	Transaction Volu	ume (Million Baht)		
Transaction	Accounting Period Ended December 31, 2020	Accounting Period Ended December 31, 2019	Transaction Nature/Necessity and Justification	
Office Space Lease in Viriyathavorn 2 Building				
- Office space rental and service charge	8.79	8.44	The subsidiary: Bangkok Metro Networks Limited	
- Trade payable	0.09	0.09	("BMN") entered into the office space lease agreement in Viriyathavorn 2 Building with CK, for the term of 3 years, ending on July 9, 2022.	
			The office rental rate was comparable to the rental rates charged by the lessor to third party lessees.	



# 2. Transactions of the Company and its Subsidiary with Mass Rapid Transit Authority of Thailand ("MRTA")

MRTA engages in mass rapid transit business and other business for the benefit of Mass Rapid Transit Authority of Thailand and the people in using the mass rapid transit service. MRTA is connected with the Company since MRTA holds shares in the Company representing 8.22<sup>2</sup> percent of the Company's registered and paid-up capital. In this regard, MRTA's executives, namely: 1. Mrs. Natamon Bunnak and 2. Mr. Vithaya Punmongkol, are directors of the Company.

	Transaction Volu	me (Million Baht)	
Transaction	Accounting Period Ended December 31, 2020	Accounting Period Ended December 31, 2019	Transaction Nature/Necessity and Justification
Remuneration from Farebox Revenue and Commercial Development Revenue			
- Remuneration from farebox revenue and commercial development revenue	350.69	393.65	The transaction was in accordance with the conditions of the Concession Agreement
- Prepaid project remuneration	7,307.90	5,086.37	with which the Company is required to comply.
- Building and land taxes	1.87	14.81	
- Trade and other payables	224.99	213.21	
Space Lease for Billboard Installation			
- Remuneration for space use	9.90	9.21	BMN took a lease on the space for billboard installation and retail shop development, with the rental rate at the market price.
- Building and land taxes	0.86	1.32	

<sup>&</sup>lt;sup>2</sup> Information as at the closing date of the share register for suspension of the share transfer of the Company on June 26, 2020.



# Part 3: Financial Position and Operational Results

# 13. Financial Highlights

#### **Summary of Auditor's Report**

EY Office Limited, as the auditor for the Company and its subsidiaries, has audited the consolidated statement of financial position as at 31 December 2020, which comprise the consolidated statement of financial position, and the related consolidated statement of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information. The auditor is of the opinion that the financial statements referred to above present fairly, in all material respects, the financial position of Bangkok Expressway and Metro Public Company Limited and its subsidiaries, their operational results and cash flow in accordance with Thai Financial Reporting Standards.

	2020		2019		2018	
Statement of financial position	Amount	Percent	Amount	Percent	Amount	Percent
Assets						
Current assets						
Cash and cash equivalents	1,613,584,108	1.42	703,750,307	0.63	526,200.490	0.51
Bank deposit for unearned fare box revenue	224,486,696	0.20	205,697,086	0.18	150,016,110	0.14
Trade and other receivables	548,903,316	0.48	481,786,671	0.43	514,055,818	0.50
Current portion of receivable under the concession agreement	1,649,683,274	1.45	1,649,683,274	1.48	1,649,683,274	1.59
Current tax assets	125,377,096	0.11	128,148,743	0.11	-	-
Other current financial assets	761,275,133	0.67	1,157,746,702	1.04	1,282,474,987	1.24
Other current assets						
Prepaid expenses	90,825,229	0.08	83,599,640	0.08	78,021,423	0.07
Advance payment for service contracts	17,783,816	0.02	24,639,141	0.02	4,008,809	-
Others	11,835,188	0.01	12,526,757	0.01	12,128,257	0.01
Total current assets	5,043,753,856	4.44	4,447,578,321	3.98	4,216,589,168	4.06

	2020		2019		2018	
Statement of financial position (continued)	Amount	Percent	Amount	Percent	Amount	Percent
Assets (continued)						
Non-current assets						
Receivable under the concession agreement, net of current portion	7,561,048,340	6.65	9,210,731,614	8.25	10,860,414,888	10.46
Other non-current financial assets	15,840,737,472	13.94	17,096,827,328	15.31	6,688,646,612	6.44
Investments in associates	-	-	-	-	6,368,744,918	6.13
Investment properties	120,357,493	0.11	120,357,493	0.11	120,357,493	0.12
Building and equipment	379,278,437	0.33	311,376,837	0.28	323,936,668	0.31
Right-of-use assets	86,514,411	0.08	-	-	-	-
Rights to operate expressway sectors	31,701,521,503	27.90	32,253,366,737	28.88	35,146,019,997	33.85
Rights to use sites for expressway construction	-	-	61,467,080	0.06	390,198,219	0.38
Intangible asset under concession agreement of the MRT Blue Line Project	44,683,719,344	39.33	42,338,899,443	37.91	35,427,555,680	34.12
Project cost of the MRT Chalong Ratchadham Line	660,436,487	0.58	644,950,810	0.58	654,691,451	0.63
Prepaid project remuneration	7,307,904,942	6.43	5,086,367,785	4.54	3,495,195,243	3.37
Other intangible assets	63,165,051	0.06	74,027,004	0.06	84,777,999	0.08
Deferred tax assets	13,651,112	0.01	6,951,994	0.01	6,312,191	0.01
Other non-current assets	153,669,851	0.14	43,867,537	0.03	47,468,811	0.04
Total non-current assets	108,572,004,443	95.56	107,249,191,662	96.02	99,614,320,170	95.94
Total assets	113,615,758,299	100.00	111,696,769,983	100.00	103,830,909,338	100.00

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	2020		2019		2018	(Unit : Baht)
Statement of financial position (continued)	Amount	Percent	Amount	Percent	Amount	Percent
Liabilities and shareholders'						
equity						
Current liabilities			2 250 000 000	2 01	2 014 504 224	2.71
Short-term loans from financial institutions	3,000,000,000	2.64	3,250,000,000	2.91	2,814,594,224	2.71
Trade and other payables	1,744,651,781	1.53	1,938,481,838	1.74	1,683,472,969	1.62
Current portion of long-term loans from financial institutions	3,745,161,069	3.30	3,166,120,069	2.83	3,041,760,069	2.93
Current portion of lease liabilities	45,512,736	0.04	-	-	-	-
Current portion of debentures	4,615,000,000	4.06	2,500,000,000	2.24	5,000,000,000	4.82
Unearned fare box revenue	228,290,262	0.20	212,234,424	0.19	163,117,129	0.16
Deposits on stored value ticket	87,727,497	0.08	79,946,797	0.07	65,265,286	0.06
Income tax payable	41,623,582	0.04	25,467,515	0.02	69,746,084	0.07
Current portion of provision for compensation for site acquisition cost	-	-	-	-	1,546,891,698	1.49
Current portion of derivative financial liabilities	11,860,783	0.01	-	-	-	-
Other current financial liabilities	64,602,760	0.06	56,227,880	0.05	27,735,192	0.03
Other current liabilities						
Value added tax payable	64,913,271	0.06	61,238,396	0.05	76,044,732	0.07
Withholding tax deducted at source payable	59,123,553	0.05	99,118,066	0.09	90,510,248	0.09
Others	25,094,642	0.02	40,071,839	0.04	27,701,626	0.02
Total current liabilities	13,733,561.936	12.09	11,428,906,824	10.23	14,606,839,257	14.07
Non-current liabilities						
Long-term loans from financial institutions, net of current portion	23,670,054,666	20.83	21,745,560,898	19.46	18,373,779,608	17.70
Lease liabilities, net of current portion	40,912,590	0.03	-	-	-	-
Debentures, net of current portion	34,057,924,287	29.98	35,670,826,818	31.94	33,169,822,210	31.95
Derivative financial liabilities, net of current portion	173,936,021	0.15	112,685,174	0.10	21,808,675	0.02
Provision for long-term employee benefits	932,330,697	0.82	886,390,430	0.79	686,898,092	0.65
Deferred tax liabilities	2,959,530,701	2.60	3,025,459,610	2.71	1,353,842,048	1.30
Other non-current liabilities	13,782,769	0.02	3,758,883	0.01	5,892,925	0.01
Total non-current liabilities	61,848,471,731	54.43	61,444,681,813	55.01	53,612,043,558	51.63
Total liabilities	75,582,033,667	66.52	72,873,588,637	65.24	68,218,882,815	65.70



	2020		2019		2018	
Statement of financial position (continued)	Amount	Percent	Amount	Percent	Amount	Percent
Shareholders' equity						
Share capital						
Registered						
15,285,000,000 ordinary shares of Baht 1 each	15,285,000,000	13.45	15,285,000,000	13.68	15,285,000,000	14.72
Issued and paid-up						
15,285,000,000 ordinary shares of Baht 1 each	15,285,000,000	13.45	15,285,000,000	13.68	15,285,000,000	14.72
Premium on ordinary shares	5,816,938,084	5.12	5,816,938,084	5.21	5,816,938,084	5.60
Capital deficit from change in shareholding in subsidiaries	(264,641,165)	-0.23	(256,942,521)	-0.23	(75,770,451)	-0.07
Retained earnings						
Appropriated - statutory reserve	1,464,000,000	1.29	1,379,090,000	1.23	1,232,890,000	1.19
Unappropriated	15,572,592,087	13.71	15,052,068,973	13.48	12,133,780,735	11.69
Other components of shareholders' equity	117,510,065	0.10	1,504,565,153	1.35	1,105,927,958	1.06
Equity attributable to shareholders of the Company	37,991,399,071	33.44	38,780,719,689	34.72	35,498,766,326	34.19
Non-controlling interests of the subsidiaries	42,325,561	0.04	42,461,657	0.04	113,260,197	0.11
Total shareholders' equity	38,033,724,632	33.48	38,823,181,346	34.76	35,612,026,523	34.30
Total liabilities and shareholders' equity	113,615,758,299	100.00	111,696,769,983	100.00	103,830,909,338	100.00

Note: Financial statement of the year 2019 and 2018 was reclassified in accordance with the change of financial presentation in 2020.



T	2020		2019		(Unit : Baht) 2018		
Income statement	Amount	Percent	Amount	Percent	Amount	Percent	
Revenues							
Revenue from expressway business	8,144,975,668	56.87	10,302,412,750	50.49	10,173,901,910	53.30	
Revenue from rail business	4,519,840,374	31.56	5,022,100,349	24.61	4,736,002,363	24.81	
Revenue from commercial development business	824,644,414	5.76	782,564,040	3.84	704,536,036	3.69	
Other income							
Gains on sale of investments	3,530,367	0.02	181,078,813	0.89	499,393,573	2.62	
Gain on reclassification of investment	-	-	3,408,628,533	16.71	2,496,266,396	13.08	
Interest income	296,044,829	2.07	392,633,384	1.92	450,618,868	2.36	
Dividend income	482,715,660	3.37	257,868,552	1.26	-	-	
Others	50,809,869	0.35	56,312,532	0.28	26,601,445	0.14	
Total revenues	14,322,561,181	100.00	20,403,598,953	100.00	19,087,320,591	100.00	
Expenses							
Cost of expressway business	1,738,365,018	12.14	1,991,458,088	9.76	1,837,541,483	9.63	
Cost of rail business	4,713,365,429	32.91	3,796,981,929	18.61	3,541,571,456	18.55	
Cost of commercial development business	226,069,501	1.58	210,292,457	1.03	169,940,207	0.89	
Amortisation on rights to operate completed expressway sectors							
and compensation for site acquisition cost	1,389,661,862	9.70	4,048,131,964	19.84	4,036,823,398	21.15	
Amortisation on intangible asset under concession agreement							
of the MRT Blue Line Project	359,429,944	2.51	263,394,239	1.29	188,047,080	0.99	
Selling expenses	169,847,473	1.19	139,622,388	0.68	111,421,323	0.58	
Administrative expenses	1,176,670,273	8.21	1,196,759,191	5.87	1,252,317,805	6.56	
Total expenses	9,773,409,500	68.24	11,646,640,256	57.08	11,137,662,752	58.35	
Profit from operating activities	4,549,151,681	31.76	8,756,958,697	42.92	7,949,657,839	41.65	
Share of profit from investments in associates	-	-	172,910,981	0.85	432,797,238	2.27	
Finance cost	(2,112,506,968)	-14.75	(1,723,062,346)	-8.45	(1,857,460,775)	-9.74	
Profit before income tax expenses	2,436,644,713	17.01	7,206,807,332	35.32	6,524,994,302	34.18	
Income tax expenses	(381,919,095)	-2.66	(1,754,942,103)	-8,60	(1,189,146,759)	-6.23	
Profit for the year	2,054,725,618	14.35	5,451,865,229	26.72	5,335,847,543	27.95	



Income statement (continued)	2020	2020		2019		2018	
Income statement (continued)	Amount	Percent	Amount	Percent	Amount	Percent	
Profit attributable to:							
Equity holders of the Company	2,051,090,045	14.32	5,434,819,325	26.64	5,317,038,037	27.86	
Non-controlling interests of the subsidiaries	3,635,573	0.03	17,045,904	0.08	18,809,506	0.09	
	2,054,725,618	14.35	5,451,865,229	26.72	5,335,847,543	27.95	
Basic earnings per share							
Profit attributable to equity holders of the Company	0.13		0.36		0.35		



	2020		2019		2018	
Statement of comprehensive income	Amount	Percent	Amount	Percent	Amount	Percent
Profit for the year	2,054,725,618	14.35	5,451,865,229	26.72	5,335,847,543	27.95
Other comprehensive income						
Other comprehensive income to be reclassified to profit or loss in subsequent periods:						
Gain (loss) from cash flow hedges, net of income tax	(58,489,304)	-0.41	(72,701,199)	-0.36	24,916,559	0.13
Gain on valuation of available-for-sale securities, net of income tax	-	-	482,287,536	2.36	1,112,425,756	5.83
Share of other comprehensive income of associate recognised due to						
reclassification of investment	-	-	(9,019,502)	-0.04	(37,094,724)	-0.19
Share of other comprehensive income from associates	-	-	(1,929,640)	-0.01	33,256,127	0.17
Other comprehensive income to be reclassified to profit or loss in subsequent periods,						
net of income tax	(58,489,304)	-0.41	398,637,195	1.95	1,133,503,718	5.94
Other comprehensive income not to be reclassified to profit or loss in subsequent periods:						
Losses on investments in equity designated at fair value						
through other comprehensive income, net of income tax	(1,359,788,928)	-9.49	-	-	-	-
Actuarial gain (loss), net of income tax	26,618,808	0.18	(77,357,601)	-0.38	10,711,355	0.06
Other comprehensive income not to be reclassified to profit or loss						
in subsequent periods, net of income tax	(1,333,170,120)	-9.31	(77,357,601)	-0.38	10,711,355	0.06
Other comprehensive income for the year	(1,391,659,424)	-9.72	321,279,594	1.57	1,144,215,073	6.00
Total comprehensive income for the year	663,066,194	4.63	5,773,144,823	28.29	6,480,062,616	33.95
Total comprehensive income attributable to:						
Equity holders of the Company	659,430,621	4.60	5,755,875,433	28.21	6,461,253,110	33.85
Non-controlling interests of the subsidiaries	3,635,573	0.03	17,269,390	0.08	18,809,506	0.10
	663,066,194	4.63	5,773,144,823	28.29	6,480,062,616	33.95



			(Unit : Baht
Cash flow statement	2020	2019	2018
Cash flows from operating activities			
Profit before tax	2,436,644,713	7,206,807,332	6,524,994,302
Adjustments to reconcile profit before tax to net cash			
provided by (paid from) operating activities:			
Amortisation and depreciation	1,857,979,562	4,026,462,692	3,866,567,954
Allowance for expected credit losses (reversal)	(548,274)	(3,971,546)	(272,590)
Withholding tax deducted at source written off	605,265	-	-
Gain on sale of investment in financial assets	(3,530,367)	(181,078,813)	(499,393,573)
Gain on fair value adjustments of financial instruments	(14,508,454)	(24,997,738)	(10,442,237)
Gain on reclassification of investment	-	(3,408,628,533)	(2,496,266,396)
Gain on disposals/write-off of equipment, right-of-use assets and intangible asset under concession			,
agreement of the MRT Blue Line Project	(2,876,113)	(1,331,425)	(1,639,242)
Project remuneration expense	350,690,055	393,651,735	355,662,416
Compensation for site acquisition cost	61,467,080	397,839,441	464,364,839
Provision for long-term employee benefits	109,639,862	102,201,396	220,232,028
Share of profit from investments in associates	-	(172,910,981)	(432,797,238)
Unrealised loss on exchange rate	22,541	276	102,702
Effected of reduction in rental expenses	(19,715)	-	-
Interest income	(296,044,829)	(392,633,384)	(450,618,868)
Dividend income	(482,715,660)	(257,868,552)	-
Interest expenses	2,080,911,700	1,670,220,735	1,662,162,353
Financial fees	-	-	98,665,000
Profit from operating activities before changes			
in operating assets and liabilities	6,097,717,366	9,353,762,635	9,301,321,450
Operating assets (increase) decrease			
Bank deposit for unearned fare box revenue	(18,789,610)	(55,680,976)	(150,016,110)
Trade and other receivables	(55,567,070)	(7,760,875)	(43,104,677)
Receivable under the concession agreement	1,649,683,274	1,649,683,274	1,649,683,275
Other current assets	12,089,492	(11,393,416)	85,434,222
Other non-current assets	11,443,912	(3,048,985)	(3,438,527)
Cash paid for project remuneration	(2,559,221,912)	(1,894,886,245)	(1,350,459,625)
Operating liabilities increase (decrease)			
Trade payables and other payables	157,100,847	181,841,193	21,244,663
Unearned fare box revenue	16,055,838	49,117,295	24,855,415
Deposits on stored value ticket	7,780,700	14,681,511	10,897,739
Other current liabilities	(41,394,911)	34,359,081	27,513,762
Other non-current liabilities	11,563,379	(2,134,042)	(14,318,960)
Cash paid for long-term employee benefits	(36,876,553)	(11,000,415)	(10,325,738)
Cash paid for compensation for site acquisition cost	-	(1,616,000,000)	(1,600,000,000)
Net cash flows from operating activities	5,251,584,752	7,681,540,035	7,949,286,889
Cash received from interest income	296,045,709	392,634,064	452,272,207
Cash paid for income tax	(196,270,863)	(332,798,583)	(334,491,602)
Net cash flows from operating activities	5,351,359,598	7,741,375,516	8,067,067,494



(Unit : Bal								
Cash flow statement (continued)	2020	2019	2018					
Cash flows from investing activities								
Cash received from sales of financial assets								
designated at FVTPL	3,904,702,827	-	-					
Cash paid for purchase of financial assets								
designated at FVTPL	(3,492,504,112)	-	-					
Cash received from sale of financial assets								
designated at FVOCI	2,310,374	-	-					
Cash paid for purchase of financial assets								
designated at FVOCI	(526,342,927)	-	-					
Cash received from sales of current investments	-	17,447,889,696	13,949,038,431					
Cash paid for purchase of current investments	-	(17,290,610,050)	(13,767,671,038)					
Cash paid for purchase of investments in subsidiary	(11,470,313)	(269,240,000)	(60,284,267)					
Cash received from sales of investments in associate	-	398,386,200	540,351,710					
Cash received from sales of other long-term investments	-	78,219,853	2,075,443,606					
Increase in other long-term investment	-	(400,000,000)	(107,436,375)					
Cash received from sales of equipment, right-of-use assets								
and intangible asset under concession agreement of								
the MRT Blue Line Project	5,355,862	1,695,689	3,215,729					
Purchase of equipment	(127,506,633)	(46,552,497)	(23,042,080)					
Cash received from interest income	-	-	4,676,477					
Cash received from dividend income	482,715,660	488,801,682	493,938,904					
Cash paid for project cost of the MRT								
Chalong Ratchadham Line	(39,120,693)	(29,307,405)	(390,955)					
Cash paid for intangible asset under concession agreement of the MRT Blue Line Project	(2,987,424,067)	(6,840,809,764)	(9,963,513,656)					
Cash paid for expressway construction	(827,337,637)	(706,974,948)	(284,809,045)					
Interest expenses capitalised as cost of projects	(90,275,175)	(378,623,301)	(181,764,061)					
Increase in other intangible assets	(17,419,060)	(15,722,417)	(30,649,444)					
Net cash flows used in investing activities	(3,724,315,894)	(7,562,847,262)	(7,352,896,064)					
Cash flows from financing activities								
Cash received from short-term loan from financial institution	9,300,000,000	4,882,000,000	10,000,000,000					
Repayment of short-term loans from financial institution	(9,550,000,000)	(4,448,000,000)	(10,816,000,000)					
Cash received from long-term loans from financial institutions	5,299,998,000	6,530,000,000	5,300,000,000					
Repayment of long-term loans from financial institutions	(2,853,940,069)	(3,041,760,069)	(13,475,010,069)					
Cash payment for lease liabilities	(44,427,542)	-	-					
Cash received from debentures	3,000,000,000	5,000,000,000	10,000,000,000					
Cash paid for redemption of debentures	(2,500,000,000)	(5,000,000,000)	-					
Cash paid for financial fees	(8,815,078)	(11,516,532)	(181,553,849)					
Interest paid	(1,984,375,214)	(1,618,951,836)	(1,655,419,747)					
Dividend paid	(1,375,650,000)	(2,292,750,000)	(1,987,050,000)					
Net cash flows used in financing activities	(717,209,903)	(978,437)	(2,815,033,665)					
Net increase (decrease) in cash and cash equivalents	909,833,801	177,549,817	(2,100,862,235)					
Cash and cash equivalents at beginning of year	703,750,307	526,200,490	2,627,062,725					
Cash and cash equivalents at end of year	1,613,584,108	703,750,307	526,200,490					
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# 13.2 Significant Financial Ratios

	Unit	2020	2019	2018
LIQUIDITY RATIO				
1. Liquidity Ratio	Time	0.28	0.28	0.20
2. Quick Ratio	Time	0.26	0.26	0.19
3. Cash Flow Ratio	Time	0.31	0.50	0.52
PROFITABILITY RATIO				
4. Gross Profit Margin	%	37.53	35.99	37.40
5. Cash to Profitability Ratio	%	56.30	62.66	65.58
6. Net Profit Margin	%	14.60	18.66	20.35
7. Return on Equity	%	5.35	8.38	9.90
EFFICIENCY RATIO				
8. Return on Total Assets	%	2.00	3.24	3.76
9. Return on Fixed Assets	%	5.16	9.80	10.57
10. Assets Turnover	Time	0.14	0.17	0.18
FINANCIAL POLICY RATIO				
11. Interest Bearing Debt to Equity Ratio	Time	1.50	1.37	1.34
12. Interest Coverage Ratio	Time	3.37	7.06	7.43
13. Net Debt to EBITDA	Time	10.58	6.65	5.98
Per Share DATA				
14. Book Value per Share	Baht	2.49	2.54	2.32
15. Net Earnings per Share	Baht	0.13	0.36	0.35
16. Dividend per Share	Baht	0.10	0.15	0.15

Note: The Company has not presented Accounts Receivable Turnover, Average Collection Period, Accounts Payable
Turnover, Average Debt Servicing Period and Cash Cycle because these ratios are not appropriated for
consideration of the Company's operation according to the amount of accounts receivable and accounts payable
which are not significant for the Company's nature of operation.

Not include transaction related to the novation of the M&E systems under the concession agreement of the MRT Chalong Ratchadham Line Project which the MRTA is fully responsible for both loan repayment and interest expense in accordance to the concession agreement and gain on fair value adjustment of investment due to reclassification.

# Report on Responsibilities of the Board of Directors towards the Financial Report

The Company's Board of Directors realizes the significance of its duties and responsibilities in supervising the Company's business to ensure good management in accordance with laws, objectives and the Company's Articles of Association, as well as resolutions of the shareholders' meetings with integrity and prudence. The Board of Directors protects the benefits of the Company, shareholders and general investors by ensuring that the Company's financial report contains accurate and full accounting records that reflect the Company's actual financial status and operational results.

The Company's Board of Directors appointed the Audit Committee comprising independent directors fully qualified in accordance with the requirements of the Stock Exchange of Thailand to review and ensure accuracy and sufficiency of the financial report, including accurate and complete disclosure of connected transactions or transactions with possible conflict of interest, in compliance with the requirements of the Stock Exchange of Thailand and relevant rules and regulations. In this regard, the Audit Committee has already reported its performance to the Company's Board of Directors.

The Company's Board of Directors is of the opinion that the financial statements for 2020 of the Company and the Subsidiaries, which have been reviewed by the Audit Committee in conjunction with the management, and audited by the Company's auditor, reflect accurate financial status and operational results as appropriate in material aspects in accordance with generally accepted accounting principles.

- SignatureMr. Plew Trivisvavet
Acting Chairman of the Board of Directors
24 February 2021

- Signature-Dr. Sombat Kitjalaksana Managing Director 24 February 2021



#### 14. Management Discussion and Analysis

# Significant events in the year 2020

**February 20, 2020 :** the Company/the subsidiary and Expressway Authority of Thailand (EXAT) signed the Second Stage Expressway Agreement (Amendment) and the Bang Pa-in - Pak Kret Expressway Agreement (Amendment) which extend the concession to end in October 2035. However, the Company/the subsidiary is entitled to full renewal of the concession as stated in the previous agreements after October 2035. In addition, the Company/the subsidiary is eligible for fixed toll revision every 10 years in accordance with the concession which revenue sharing remained as current proportion.

The Company/the subsidiary has cooperated to waive the toll fees on annual public holidays as announced by the Office of the Prime Minister in 3 expressways, the First Stage Expressway, the Second Stage Expressway and the Bang Pa-In - Pak Kret Expressway.

March 30, 2020: the Company has fully commercial operated MRT Blue Line Project for the total distance of 48 kilometers and 38 stations, which connects as a circle line for center of Bangkok and connects with Thonburi side with 35 additional trains from 19 to 54. Moreover, MRT Blue Line also connects with other rail lines such as Green Line, Purple Line, Orange Line, Red Line and Airport Rail Link which is convenience for the passengers.

#### The effect of the Corona Virus Disease 2019 outbreak (COVID-19)

The COVID-19 outbreak affected the domestic and international travelling which resulted to revenue from main business of the Company due to the government and private companies allowed the employees to work at home to prevent the further spread of the virus, together with other government's measures such as the restriction of international trip, closing the risk-prone areas, no activity in crowded places, curfew and social distancing resulted in the decrease in traveling trips starting from February and the lowest was in April with the average traffic volume at 589,900 trips/day and the average ridership at 78,500 trips/day which was decreased from the previous year by 50 percent and 74 percent, respectively. After the government relaxed measures in May, the traveling trips continued to increase but the recovery of ridership was slower than that of traffic volume due to the social distancing measures in the MRT and the anxiety to use public transport.

Since the international travel has not opened up to normal as before the COVID-19 outbreak in Thailand, the current traveling trips were from the local only which gradually increased from the lowest in April. Compared to April 2020's, the traffic volume and ridership numbers in December 2020 increased by 88 percent and 243 percent, respectively. However, when compared to December 2019, the traffic volume was at 92 percent and the ridership numbers were at 75 percent.



#### Overview Operational Results Between the year 2020 and 2019

In the year 2020, the Company had the net profit attributable to equity holders of the Company in the amount of Baht 2,051 Million, representing a decrease from the previous year by Baht 3,384 Million or 62.3 percent mainly from one time gain on reclassification of investment in TTW Public Company Limited (TTW) in the year 2019 at the net amount of Baht 2,334 Million but there was no such transaction in this year. Comparing with the net profit of the year 2019 excluded the one time gain, the Company has net profit decreased by Baht 1,050 Million or 33.9 percent mainly from the effect of COVID-19 outbreak in the year 2020 resulting to the decrease in toll revenue and farebox revenue whereas there was an increase in expenses related to the operation of the MRT Blue Line which was operated in full commercial service on March 30, 2020.

The Company had revenue from main business of Baht 13,490 Million representing a decrease from the previous year by Baht 2,617 Million or 16.2 percent. Toll revenue decreased by Baht 2,157 Million, revenue from Rail business decreased by Baht 502 Million whereas revenue from Commercial Development business increased by Baht 42 Million. Other revenue of Baht 833 Million representing a decrease from the previous year by Baht 55 Million or 6.2 percent due to no gain on sale of investment in this year. Moreover, the Company recorded dividend income from TTW instead of share of profit from investment in associates after the reclassification of the investments in the second quarter of the year 2019.

Cost of service amounted to Baht 8,426 Million representing a decrease from the previous year by Baht 1,885 Million or 18.3 percent mainly from the decrease in amortization expense as cost of rights to operate expressway sectors of Si Rat Expressway Sector A, B, C were fully amortized in the first quarter of the year 2020 whereas there was an increase in expenses related to the operation of the MRT Blue Line which was operated in full commercial service on March 30, 2020. Although the Company had expenses related to the anti-COVID-19 measures, selling and administrative expenses slightly increased from the previous year due to efficient cost management.

Finance cost, after the full operation in commercial service of the MRT Blue Line, the Company recorded interest cost of the project, which formerly recorded as cost of construction, as interest expenses in the income statement in accordance to accounting standard, resulting to the increase of interest expense from the previous year.



(Unit: Million Baht)

Description	2020	2019	2020 vs. 2019 % Change	2018	2019 vs. 2018 % Change
Revenue from expressway business	8,145	10,302	-20.9	10,174	1.3
Revenue from rail business	4,520	5,022	-10.0	4,736	6.0
Revenue from commercial development business	825	783	5.4	705	11.1
Total revenue from main business	13,490	16,107	-16.2	15,615	3.2
Interest income from the MRT Purple Line Project	277	380	-27.1	435	-12.6
Gains on sale of investments	4	181	-97.8	499	-63.7
Gain on reclassification of investment	-	3,409	-100.0	2,496	36.6
Other income	552	327	68.8	43	660.5
Total revenues	14,323	20,404	-29.8	19,088	6.9
Cost of service	8,426	10,311	-18.3	9,775	5.5
Selling and administrative expenses	1,347	1,336	0.8	1,364	-2.1
Total expenses	9,773	11,647	-16.1	11,139	4.6
Profit before finance cost and tax expenses	4,550	8,757	-48.0	7,949	10.2
Finance cost	1,820	1,343	35.5	1,422	-5.6
Interest expense from the MRT Purple Line Project *	293	380	-22.9	435	-12.6
Profit before income tax expenses	2,437	7,034	-65.4	6,092	15.5
Income tax (revenue) expenses	382	1,755	-78.2	1,189	47.6
Profit before share of profit from associates and NCI	2,055	5,279	-61.1	4,903	7.7
Share of profit from investments in associates, net	-	173	-100.0	433	-60.0
NCI	(4)	(17)	76.5	(19)	10.5
Profit attributable to Equity holders of the Company	2,051	5,435	-62.3	5,317	2.2
Basic earnings per share (Baht)	0.13	0.36		0.35	

\* According to the adoption of Thai Financial Reporting Standard No.9 Financial Instruments since January 1, 2020, the Company reclassified loan from financial institution for the MRT Purple Line Project (the MRTA is fully responsible for both loan repayment and interest expense in accordance to the concession agreement) to financial liabilities which measured at amortized cost with effective interest rate. The Company recorded interest expense from the MRT Purple Line Project in the year 2020 in the amount of Baht 293 Million whereas recorded interest income as actual receipt in the amount of Baht 277 Million.



#### Segmental performance

#### 1. Expressway business

The Company had revenue from Expressway business of Baht 8,145 Million, representing a decrease from the previous year by Baht 2,157 Million or 20.9 percent mainly from 3 factors, 1) the Company is responsible for value-added tax for motorists after the extension periods of concession agreements starting from March 1, 2020 amounted to Baht 322 Million for the year 2020, 2) the Company cooperated to waive the toll fee on official holiday, amounted to Baht 305 Million for the year 2020 and 3) the effect of the COVID-19 outbreak amounted to Baht 1,530 Million, since there was the limited traveling trips and work from home starting from March 2020 and the government's measures according to the Emergency Decree on Public Administration in Emergency Situations B.E.2548 (2005) such as closing the risk-prone areas, no activity in crowded places and EXAT limited service time on expressway from 10 p.m. to 4 a.m. starting from April 3 to June 14, 2020 resulting to the major decrease in traffic volume especially in April 2020. However, after the government relaxed measures in May and cancelled the curfew in June, the traffic volume continued to increase. Therefore, the average traffic volume for the year 2020 was at 1,050,000 trips/day representing a decrease from the previous year by 15 percent.

Cost of service for operation of Expressway business consisted of costs of toll and amortization on rights to operate completed expressway sectors. For the year 2020, the cost was at Baht 3,128 Million, representing a decrease from the previous year by Baht 2,912 Million or 48.2 percent mainly from the decrease in amortization due to cost of right to operate expressway sector A, B, C were fully amortized in the first quarter of the year 2020 and amortization of sector D, the Si Rat-Outer Ring Road Expressway (SOE) and the Udon Ratthaya Expressway (C+) decreased in line with traffic volume regarding to the COVID-19 effect, as well as efficient cost management which suitable for the situation resulted to the decrease in cost of service.

#### 2. Rail business

The Company had revenue from Rail business of Baht 4,520 Million, representing a decrease from the previous year by Baht 502 Million or 10 percent. Revenue from O&M services of the Purple Line Project was as stated in the agreement. Although the Company has fully commercial operated MRT Blue Line Project, farebox revenue from the MRT Blue Line Project decreased significantly from the COVID-19 effect, work from home and social distancing measure resulted to the decrease in ridership especially in April and gradually increased after the government eased measures. Therefore, average ridership for the year 2020 was at 260,500 trips/day representing a decrease from the previous year by 23 percent and the average ridership per working day was at 308,800 trips/day representing a decrease by 21 percent.

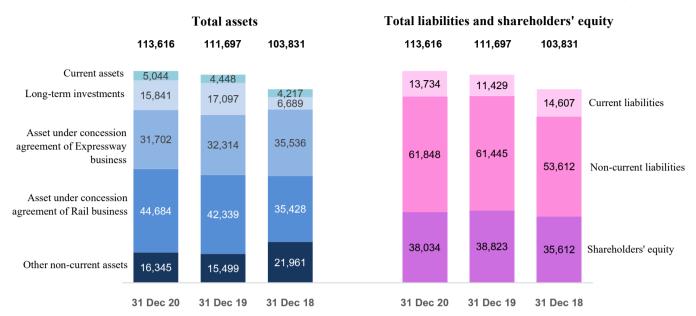
Cost of Rail business consisted of costs of farebox, O&M cost and amortization on intangible asset under concession agreement of the MRT Blue Line Project. For the year 2020, the cost was at Baht 5,009 Million, representing an increase from the previous year by Baht 1,001 Million or 25 percent mainly from expenses related to the full operation of the MRT Blue Line Extension on March 30, 2020.

# 3. Commercial Development business

In the year 2020, total Commercial Development revenue was at Baht 825 Million, representing an increase from the previous year by Baht 42 Million or 5.4 percent, mainly from the increase in telecommunication and advertising revenue from the operation of the MRT Blue Line Extension Project. Cost of Commercial Development business was at Baht 289 Million representing an increase from the previous year by Baht 26 Million or 10 percent.

# **Financial Position**

(Unit: Million Baht)



As at December 31, 2020, the Company and its subsidiaries had total assets amounted to Baht 113,616 Million, representing an increase by Baht 1,919 Million or 1.7 percent when compared with total assets as at December 31, 2019 mainly from the increase in the construction of the Blue Line Extension Project which was completed and operated in full commercial service on March 30, 2020. Total liabilities amounted to Baht 75,582 Million, representing an increase from the previous year by Baht 2,708 Million or 3.7 percent from the withdrawal of loan for the Blue Line Extension Project. Total shareholders' equity amounted to Baht 38,304 Million, representing a decrease from the previous year by Baht 789 Million or 2 percent when compared to the end of the year 2019 mainly from fair value adjustment of long-term investments in financial assets in accordance with the current stock market.



# **Cash Flows**

As at December 31, 2020, the Company and its subsidiaries had cash and cash equivalents amounting to Baht 1,614 Million, representing an increase from the end of the previous year by Baht 910 Million.

(Unit: Million Baht)

Description	2020	2019	2018
Net cash flows operating activities	5,351	7,741	8,067
Net cash flows investing activities	(3,724)	(7,562)	(7,353)
Net cash flows financing activities	(717)	(1)	(2,815)
Net increase in cash and cash equivalents	910	178	(2,101)
Cash and cash equivalents at beginning of the year	704	526	2,627
Cash and cash equivalents at end of the year	1,614	704	526

In the year 2020, cash from operating activities decreased when compared to the previous year according to the decrease in revenue from COVID-19.

Cash used in investing activities mainly resulted from payment for the M&E equipment of the MRT Blue Line Extension Project in the amount of Baht 3,117 Million, payment for constructions of the expressway and fixed asset for the operation in the amount of Baht 967 Million, additional investment in the net amount of Baht 123 Million and dividend receipt in the amount of Baht 483 Million.

Cash from financing activities resulted from the issuance of debenture and the withdrawal of loan in the net amount of Baht 2,696 Million, interest payment and financial cost in the amount of Baht 2,037 Million and dividend payment in the amount of Baht 1,376 Million.



# Significant Financial Ratios\*

Description	Unit	2020	2019	2018
Net Profit Margin ratio (NPM)	%	14.60	18.66	20.35
Return on Equity ratio (ROE)	%	5.35	8.38	9.90
Return on Total Assets ratio (ROA)	%	2.00	3.24	3.76
Debt to Equity ratio (D/E)	Time	1.76	1.62	1.59
Net Interest Bearing Debt to Equity ratio (Net IBD/E)	Time	1.50	1.37	1.34

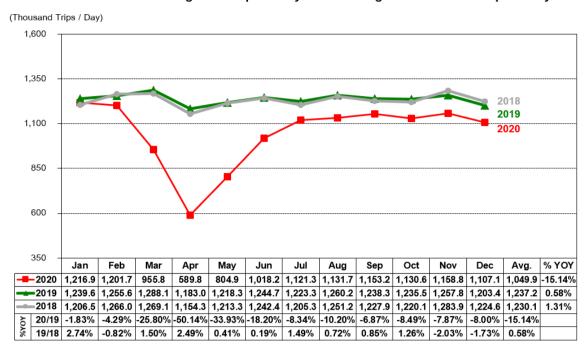
Net Profit Margin ratio, ROE and ROA decreased from the previous year as a result from the decrease in net profit which affected from the COVID-19. D/E ratio increased from the withdrawal of loan for the Blue Line Extension Project but lower than 2.5 times as stated in loan and debenture agreement.

\* The operational results were calculated based on the consolidated financial statements which consist of the Expressway Business, Rail Business, Commercial Development Business, and return on investment in other companies. Therefore, there was no similar type of business in the industry that can be used as a benchmark for comparison.

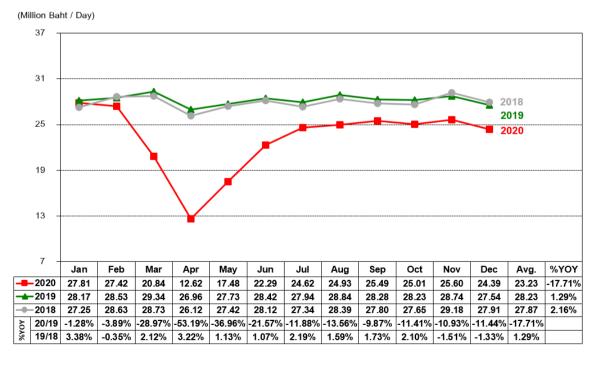
Not include transaction related to the novation of the M&E systems under the concession agreement of the MRT Chalong Ratchadham Line Project which the MRTA is fully responsible for both loan repayment and interest expense in accordance to the concession agreement and gain on fair value adjustment of investment.



# Average Daily Traffic Volume for the First Stage Expressway, the Second Stage Expressway, the Si Rat-Outer Ring Road Expressway and the Bang Pa-in - Pak Kret Expressway

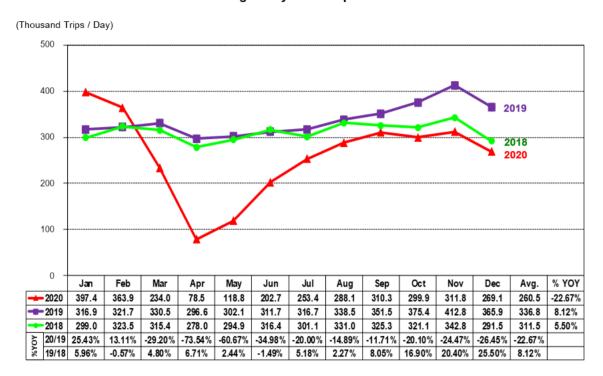


# Average Daily Toll Revenue for the First Stage Expressway, the Second Stage Expressway, the Si Rat-Outer Ring Road Expressway and the Bang Pa-in - Pak Kret Expressway

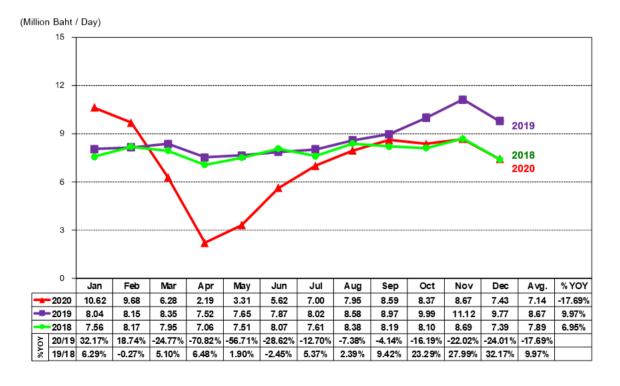




# Average Daily Ridership for Blue Line



# Average Daily Farebox Revenue for Blue Line





#### **Certification of Information**

The Company has reviewed the information provided in this annual registration statement and with care; the Company hereby certifies that such information is accurate, complete, true and has no misleading statement or omission of any material information which should be informed. Furthermore, the Company hereby certifies that:

- (1) The financial statements and financial information summarized in the annual registration statement show accuracy and complete material information on financial status, operational results and cash flow of the Company and the Subsidiaries;
- (2) The Company has provided the good information disclosure system to ensure that the Company has accurately and completely disclosed material information, both of the Company and the Subsidiaries, including supervising to ensure compliance with such system;
- (3) The Company has provided the good internal control system and has supervised to ensure compliance with such system. The Company also reported the information on evaluation of the internal control system as at 31 December 2020 to the auditor and the Audit Committee, including substantial faults and changes in the internal control system as well as an improper act which may affect the preparation of the financial reports of the Company and the Subsidiaries.

In witness whereof, to evidence that all documents certified by the Company are of the same set, the Company has authorized Mr. Phakpoom Thaweewittayarut, Company Secretary, to initial all pages of the documents. Any document bearing no signature of Mr. Phakpoom Thaweewittayarut shall not be treated as information certified by the Company.

Name	Position	Signature
1. Mr. Phongsarit Tantisuvanitchkul	Authorized Signatory Director	- Signature-
2. Dr. Sombat Kitjalaksana	Authorized Signatory Director	- Signature-
<b>Authorized Person</b>		
Mr. Phakpoom Thaweewittayarut	Company Secretary	- Signature-



# Information of Directors, Executives and Company Secretary (As at December 31, 2020)

Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship between		Work Experience for the Past 5	Years																																																		
				Directors and Executives	Period	Position	Organization																																																		
1 Mr. Plew Trivisvavet	75	- Honorary Doctorate of	0.1832%	-			Listed Companies:																																																		
- Acting Chairman of the Board of Directors <sup>(1)</sup>		Civil Engineering, Kasetsart University - Honorary Doctorate of	(28,009.405 shares) (0.1675% held by		2011 – Present	- Director	CK Power Public Company Limited																																																		
- Vice Chairman of the Board of Directors		Civil Engineering, Nakhon Phanom University	himself, 0.0157% held by his spouse)		2012 – Present	- Chairman of the Executive Board																																																			
- Chairman of the Executive Board						- Honorary Doctorate of			2009 - Present	- Director	TTW Public Company Limited																																														
- Nomination and Remuneration		Rajamangala University of Technology Isan - Honorary Doctorate of Science			2008 – Present	- Vice Chairman of the Board of Directors																																																			
Committee Member - Authorized Signatory Director		(Engineering) Thai-Nichi Institute of Technology - M.Sc. (Electrical Engineering).			2007 – Present	Corporate Governance and Risk Management Committee Member	CH. Karnchang Public Company Limited																																																		
(appointed on December 30, 2015)		Osaka University, Japan  - B.Sc. (Electrical Engineering), Osaka University, Japan  - National Defence Course for the Joint			2003 – Present	Nomination and     Remuneration     Committee Member																																																			
		State Private Sector, Class 366, National Defence College			1994 – Present	- Chairman of the Executive Board																																																			
	- Director Certification Program (DCP 50/2004), Thai Institute of Directors Association - Director Accreditation Program (DAP 18/2004), Thai Institute of Directors Association - Finance for Non-Finance Directors (FND 13/2004), Thai Institute of Directors Association - Capital Market Academy Leader Program (CMA Program), Class 4/2007, Capital Market Academy					50/2004),			1994 - 2015	- Chief Executive Officer																																															
																																																							1994 - 2015	Director     Chairman of the     Executive Board     Nomination and     Remuneration     Committee Member	Bangkok Expressway Public Company Limited
																																			2004 – 2015	- Chairman of the Board of Directors - Chairman of the Executive Committee - Nomination and Remuneration Committee Member	Bangkok Metro Public Company Limited Other Companies:																				
				2010 - Present	Director and Chairman     of the Executive Board	Xayaburi Power Company Limited																																																			
				2006 - Present	Director and Chairman     of the Executive Board	Nam Ngum 2 Power Company Limited																																																			
																																	2006 - Present	- Director and Chairman of the Executive Board	SouthEast Asia Energy Limited																						

Remark: (1) Mr. Plew Trivisvavet has held the position as Acting Chairman of the Board of Directors to replace Dr. Virabongsa Ramangkura who resigned from his position as director on April 2, 2020.



# Information of Directors, Executives and Company Secretary (As at December 31, 2020)

77 G //D '::			G1 1 11:	Б 11		W 1 F 2 C 4 P 4 5 W	
Name-Surname/Position	Age	Education/Training	Shareholding	Family Relationship		Work Experience for the Past 5 Y	ears
Date of Appointment	(Years)		in	between Directors		T	
			the Company	and Executives	Period	Position	Organization
2 Mr. Vitoon	80	- B.A. in Commerce and Accountancy,	-	-			Listed Companies:
Tejatussanasoontorn		Thammasat University			2014 - Present	- Chairman of the Nomination and	CH. Karnchang Public
- Director		- Director Certification Program (DCP			2014 - Present	Remuneration Committee	Company Limited
(appointed on		2/2000),					Company Emitted
December 30, 2015)		Thai Institute of Directors Association			2007 - Present	- Chairman of the Corporate	
- Chairman of the Audit		- IOD Chartered Directors,				Governance and Risk	
Committee		Thai Institute of Directors Association, Class 1/2007				Management Committee	
(appointed on February 25, 2016)		- Audit Committee Program			1999 - Present	- Director and Chairman of the	
- Nomination and		(ACP 27/2009),				Audit Committee	
Remuneration		Thai Institute of Directors Association					
Committee Member		- Advanced Audit Committee Program			2007 - 2014	- Nomination and Remuneration	
(appointed on		(AACP 3/2010),				Committee Member	
December 30, 2015)		Thai Institute of Directors Association			1991 - Present	- Deputy Senior Managing Director	AGC Flat Glass (Thailand)
		- Role of the Compensation Committee					Public Company Limited
		(RCC 12/2011),			2005 - 2015	- Independent Director,	Bangkok Metro Public
		Thai Institute of Directors Association			2003 - 2013	Audit Committee Member, and	Company Limited
						Nomination and Remuneration	Company Emitted
						Committee Member	
							Oth Ci
					2004 - Present	- Director	Other Companies: Asahi Glass Foundation of
					2004 - Flesciii	- Director	Thailand
					1988 - Present	- Director and Executive Director	Kiarti Thanee Country Club
					1700 Tresent	Breetor and Executive Breetor	Co., Ltd.
					1988 - Present	- Director and Executive Director	Pattaya Estate Co., Ltd.
					1987 - Present	- Director	Diachrome Chemicals Limited
					1988 - 2019	- Director and Executive Director	Kiarti Land Co., Ltd.
					2015 - 2018	- Director and Chairman of the	Thaisri Insurance Public
					2010 2010	Audit Committee	Company Limited
					1991 - 2018	- Director	Glass Way Co., Ltd.
					1988 - 2017	- Director and Executive Director	Sriracha Resort Co., Ltd.
					1986 - 2017	- Director and Executive Director	Sakata-Thai Corporation Ltd.



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Relationship		Work Experience for the F	Past 5 Years
				between Directors and Executives	Period	Position	Organization
3 Gen. Chetta Thanajaro - Director - Chairman of the Nomination and Remuneration Committee - Audit Committee Member	82	<ul> <li>Master of Arts         (Political Science),         Ramkhamhaeng University</li> <li>Bachelor of Science,         Chulachomklao Royal Military         Academy, Class 9</li> <li>Infantry Basic Officer Leadership         Course.</li> </ul>	-	-	2005 - 2015	Independent Director,     Chairman of the Audit     Committee     Chairman of the     Nomination and     Remuneration Committee	Listed Companies:  Bangkok Metro Public Company Limited
(appointed on December 30, 2015)		United States Army Infantry School			1999 - 2003	- Audit Committee Member	Bangkok Expressway Public Company Limited
	- The Royal Thai Army Command and General Staff Course - National Defence Course for The Joint State Private Sector, Class 6,			2005 - Present	- Director	Other Companies:  Double A (1991) Public Company Limited	
		National Defence College, - Director Certification Program			2004	- Minister of Defence	Ministry of Defence
		(DCP 33/2003), Thai Institute of Directors Association - Finance for Non-Finance Directors (FND 7/2003), Thai Institute of Directors Association			2003 - 2004	- Minister of Science and Technology	Ministry of Science and Technology



Age (Vears)	Education/Training	Shareholding in	Family Relationship		Work Experience for the P	ast 5 Years
(Tears)		the Company	between Directors	Period	Position	Organization
70	<ul> <li>Ph.D. Engineering Management, University of Missouri, USA</li> <li>M.B.A. (Quantitative Business Analysis).</li> </ul>	-	-	2012 - Present	- Director and Chairman of the Audit Committee	Listed Companies:  MK Restaurants Group Public Company Limited
	Indiana University, Bloomington, USA			2001 - 2015	- Director	Bangkok Expressway Public Company Limited
	Management,				- Audit Committee Member	
	- Bachelor of Engineering (Mechanical Engineering),			2011 - 2015	- Nomination and Remuneration Committee Member	
	- Director Certification Program (DCP 154/2011), Thai Institute of Directors			2011 - 2015	- Corporate Governance and Risk Management Committee Member	
						Other Companies:
	Compliance and Ethical Culture Oversight Program, Thai Institute of Directors			2016 - Present	- Dean of Faculty of Business Administration	Chitralada Technology College
	Association			2012 - 2016	- Dean of College of Management	Mahidol University
				2007 - 2011	- Dean of Faculty of Commerce and Accountancy	Chulalongkorn University
				1999 - 2007	- Director of the Committee of Master of Business Administration Program (MBA), Faculty of Commerce and Accountancy	
	(Years)	(Years)  70  - Ph.D. Engineering Management, University of Missouri, USA - M.B.A. (Quantitative Business Analysis), Indiana University, Bloomington, USA - M.S. in Engineering Management, University of Missouri, USA - Bachelor of Engineering (Mechanical Engineering), Chulalongkorn University - Director Certification Program (DCP 154/2011), Thai Institute of Directors Association - The Audit Committee's Role in Compliance and Ethical Culture Oversight Program, Thai Institute of Directors	(Years)  - Ph.D. Engineering Management, University of Missouri, USA - M.B.A. (Quantitative Business Analysis), Indiana University, Bloomington, USA - M.S. in Engineering Management, University of Missouri, USA - Bachelor of Engineering (Mechanical Engineering), Chulalongkorn University - Director Certification Program (DCP 154/2011), Thai Institute of Directors Association - The Audit Committee's Role in Compliance and Ethical Culture Oversight Program, Thai Institute of Directors	(Years)  The Company  Relationship between Directors and Executives  Ph.D. Engineering Management, University of Missouri, USA  M.B.A. (Quantitative Business Analysis), Indiana University, Bloomington, USA  M.S. in Engineering Management, University of Missouri, USA  Bachelor of Engineering (Mechanical Engineering), Chulalongkorn University  Director Certification Program (DCP 154/2011), Thai Institute of Directors Association  The Audit Committee's Role in Compliance and Ethical Culture Oversight Program, Thai Institute of Directors  Thai Institute of Directors	The Company   Relationship between Directors and Executives   Period	Cycars   C



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship		Work Experience for the Past	5 Years
				between Directors and Executives	Period	Position	Organization
5 Mrs. Vallapa Assakul - Director (appointed on December 30, 2015) - Chairman of the	70	- Master of Economics, University of Detroit, USA - Bachelor of Economics (Second Class Honors), Chulalongkorn University	-	-	2006 - Present	- Director - Supervision Committee Member	Listed Companies: Ocean Life Insurance Public Company Limited
Corporate Governance and Risk Management	and Risk Management Committee (appointed on December 18, 2019)  (ACP 21/2008), Thai Institute of Directors Association - Director Certification Program			2012 - 2016	- Director	Vinythai Public Company Limited	
(appointed on				2010 - 2015	- Director and Executive Director	Bangkok Expressway Public Company Limited	
, ,		(DCP 86/2007), Thai Institute of Directors			2009 - 2015	- Independent Director	Bangkok Metro Public Company Limited
		Association - Director Accreditation Program			2012 - 2015	- Chairman of the Risk Committee	
		(DAP 37/2005), Thai Institute of Directors			2005 - 2007	- Director	
	Association - Role of the Compensation Committee (RCC 5/2008),	Association - Role of the Compensation			2004 - 2007	- Senior Executive Vice President, Corporate and Investment Banking Group	TMB Bank Public Company Limited
		Association					Other Companies:
					2013 - Present	- Director	Ocean Property Co., Ltd.
					2013 - Present	- Director	Ocean Development Co., Ltd.
					2010 - Present	- Director	Siam Estate Co., Ltd.
					2006 - 2016	- Chairman of the Nomination and Remuneration Committee	Ocean Life Insurance Public Company Limited
					2008 - Present	- Director	Amphan Co., Ltd.
					2010 - 2016	- Director and Executive Director	Northern Bangkok Expressway Company Limited



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship		Work Experience for the Past 5	Years
				between Directors and Executives	Period	Position	Organization
6 Mr. Supong Chayutsahakij - Director - Nomination and Remuneration	79	<ul> <li>Honorary Ph.D. (Management Science),</li> <li>Phranakhon Rajabhat University</li> <li>Master of Political Science (Politics</li> </ul>	-	-	2006 - Present	- Director and Audit Committee Member	Listed Companies: Siam Steel International Public Company Limited
Committee Member - Executive Director		and Government), Sukhothai Thammathirat Open			2013 - 2016	- Director	CK Power Public Company Limited
- Authorized Signatory Director (appointed on December	Authorized Signatory Director University - Executive Master of Business	- Executive Master of Business Administration,			1994 - 2015	- Director	Bangkok Expressway Public Company Limited
30, 2015)		Sasin Graduate Institute of Business Administration of Chulalongkorn			2003 - 2015	- Vice Chairman of the Executive Board	
	University - Master of Engineering (Electrical), University of Tokyo, Japan - Bachelor of Engineering (Electrical) University of Tokyo, Japan - Director Certification Program (DC)			2007 - 2015	Nomination and     Remuneration Committee     Member     Corporate Governance     and Risk Management     Committee Member		
		8/2001), Thai Institute of Directors			2009 - 2015	- Vice Chairman of the Board of Directors	Bangkok Metro Public Company Limited
		Association - Audit Committee Program (ACP 17/2007),			2002 - 2015	- Director and Executive Committee Member	Company Emmed
		Thai Institute of Directors Association			2008 - Present	- Director	Other Companies: SouthEast Asia Energy Limited
					2008 - Present	- Director	Nam Ngum 2 Power Company Limited
					2006 - Present	- Chairman of the Institute	Thai-Nichi Institute of Technology
				1996 - Present	- Director and Executive Director	Northern Bangkok Expressway Company Limited	
					2014 - Feb 29, 2020	- Director	Xayaburi Power Company Limited
					2009 - 2017	- Chairman of the Board of Directors	Bangkok Metro Networks Limited
					2011 - 2013	- Director	CK Power Limited



Name-Surnam Date of Appo		Age (Years)	Education/Training	Shareholding in the Company	Relationship	,	Work Experience for the Past 5	Years
					between Directors and Executives	Period	Position	Organization
7 M.L. Prasobe Kasemsant - Director (appointed 30, 2015)	chai I on December	65	<ul> <li>M.S. (Civil Engineering) and</li> <li>M.S. (Operations Research),</li> <li>Stanford University, USA, 1979</li> <li>B.S. (Civil Engineering,</li> <li>Mathematics),</li> <li>Virginia Military Institute,</li> </ul>	-	-	1994 - 2015	- Director and Executive Director	Listed Company:  Bangkok Expressway Public Company Limited Other Company:
			Virginia, USA, 1976 - Thailand Energy Academy Course			Oct 2015 - Present	- Retired Military Officer	Ministry of Defence
			for Management, Class 3, 2013 - National Defence Course, Class 50, National Defence College			2013 - Sep 2015	- Chairman of the Defence Advisory Board	
	- Director Certification Program (DCP 33/2003), Thai Institute of Directors Association	(DCP 33/2003), Thai Institute of Directors			2012 - 2013	- Deputy Permanent Secretary for Defence (Energy and Defence Industry)		
						2009 - 2010	- Director-General, Office of Defence Logistics, Office of Permanent Secretary for Defence	



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding ir the Company	Relationship		Work Experience for the Past	5 Years
				between Directors and Executives	Period	Position	Organization
8 Mr. Phongsarit Tantisuvanitchkul - Director - Corporate Governance and Risk Management Committee Member	48	<ul> <li>Master of Engineering (Construction and Management), University of Michigan - Ann Arbor, USA</li> <li>Bachelor of Engineering (Mechanical Engineering),</li> </ul>	-	-	2016 - Present Oct 2020 - Present	Director and Chairman of the Executive Committee     Director	Listed Companies:  TTW Public Company Limited CH. Karnchang Public Company Limited
- Executive Director - Authorized Signatory Director (appointed on	- Executive Director - Authorized Signatory Director (appointed on  Kasetsart University - Director Certification Program (DCP 155/2012), Thai Institute of Directors			2016 - Present 2011 - 2015	- Senior Executive Vice President: Operation Group - Executive Vice President:		
December 30, 2015)		Association - Finance for Non-Finance Directors (FND 35/2007),			2014 - 2015	Business Development - Director and Executive Director	Bangkok Metro Public Company Limited
	Thai Institute of Directors Association - Understanding the Fundamental of Financial Statements			2020 - Present	- Chairman of the Board of Directors	Other Companies:  Pathum Thani Water  Company Limited	
		(UFS 9/2007), Thai Institute of Directors Association			2016 - Present	- Director and Executive Director	Northern Bangkok Expressway Company Limited
					Oct 2017 - Present	- Chairman of the Board of Directors	Bangkok Metro Networks Limited
					2009 - Oct 2017	- Director	
					2019 - Present	- Director	Eastern High-Speed Rail Linking Three Airports Company Limited
					2012 - 2015	- Director	Transit Expert Co., Ltd.



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship		Work Experience for the Past 5	Years
Date of Appointment	(Tears)		the Company	between Directors and Executives	Period	Position	Organization
9 Miss Arisara Dharamadhaj - Director (appointed on April 26, 2019)	62	<ul> <li>M.B.A., Roosevelt University, USA</li> <li>Bachelor of Economics Program (Second-Class Honors)         University of the Thai Chamber of Commerce     </li> <li>Director Certification Program (DCP 75/2006),         Thai Institute of Directors Association     </li> <li>National Defence Course for the Joint State Private Sector, Class 24, National Defence College,         National Defence Studies Institute     </li> </ul>			2014 - Sep 2018  2012 - 2014  2005 - 2012  Jan 2016 - Present  Apr 2014 - Apr 2019	- Senior Executive Vice President - Managing Director, Government & State Enterprise Relations Group - First Executive Vice President - Managing Director, Government & State Enterprise Relations Group - Executive Vice President - Director Corporate Banking Sector 2 - Director - Chairman of the Board of Directors	Listed Company: Krung Thai Bank Public Company Limited  Other Companies:  KTB General Services and Security Co., Ltd.  Krung Thai IBJ Leasing Co., Ltd.



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the	Family Relationship		Work Experience for the	e Past 5 Years
Date of rappointment	(Tears)		Company	between Directors	Period	Position	Organization
Date of Appointment  10 Mr. Panit Dunnvatanachit - Director (appointed on December 30, 2015)	(Years)	- M.B.A. (Finance), Washington University, St. Louis, USA - Bachelor of Arts & Science, Washington University, St. Louis, USA - Board and CFO Assessment Program, Thai Institute of Directors Association - Director Certification Program (DCP 10/2001), Thai Institute of Directors Association - Capital Market Academy Leader Program, Class 14/2012, Capital Market Academy - Broadcasting Executive Forum, Class 1/2013, Office of the National Broadcasting and Telecommunications Commission - Thailand Energy Academy Course for Management, Class 4/2014,	Company	Relationship	Period  2000 - Present  2003 - 2015  2003 - 2012  2006 - Present  1994 - Present  2003 - 2016	<u>,                                      </u>	Т
		Class 4/2014, Thailand Energy Academy - Public-Private Partnerships for Executive Program (PEP 1/2016)					



Name-Surname/Position	Age	Education/Training	Shareholding in			Work Experience for the	e Past 5 Years
Date of Appointment	(Years)		the Company	Relationship			
				between Directors and Executives	Period	Position	Organization
11 Mr. Vithaya Punmongkol - Director (appointed on April 9, 2020)	49	Master of Science in Civil Engineering, New Jersey Institute of Technology, USA     Bachelor of Engineering (Civil Engineering), Chulalongkorn University     Director Accreditation Program (DAP 175/2020), Thai Institute of Directors Association	-	-	2019 - Present 2015 - 2019 2015	- Deputy Governor (Operation) - Assistant Governor - Director of Construction Management 1	Listed Company:  - None -  Other Company:  Mass Rapid Transit Authority of Thailand
12 Mrs. Natamon Bunnak - Director (appointed on April 20, 2018)	56	- Master of Economics (Business Economics), University of the Thai Chamber of Commerce - Master of Public and Private Management Program (Honors), National Institute of Development Administration - Bachelor of Science (Agricultural Economics), Kasetsart University - Director Accreditation Program (DAP 152/2018), Thai Institute of Directors Association - National Defence Course, Class 61, National Defence College, National Defence Studies Institute	-	-	2019 - Present 2015 - 2019 2013 - 2015	- Deputy Governor (Finance) - Assistant Governor and Acting Deputy Governor (Finance) - Director of Office of the Governor	Listed Company: - None - Other Company:  Mass Rapid Transit Authority of Thailand



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship		Work Experience for the Pa	st 5 Years	
				between Directors and Executives	Period	Position	Organization	
13 Dr. Sombat Kitjalaksana - Director - Corporate Governance and Risk Management	63	<ul> <li>Dr. Techn. (Soil Mechanic),</li> <li>University of Innsbruck, Austria</li> <li>Bachelor and Master of</li> <li>Engineering (Civil),</li> </ul>	0.0196% (2,999,141 shares)	-	2000 - Present	- Director and Executive Director	Listed Companies: TTW Public Company Limited	
Committee Member - Executive Director		Chulalongkorn University - Director Certification Program			2006 - 2015	- Director	CH. Karnchang Public Company Limited	
<ul><li> Managing Director</li><li> Authorized Signatory</li></ul>		(DCP 81/2006), Thai Institute of Directors			2014 - 2015	- Managing Director and Executive Director	Bangkok Metro Public Company Limited	
Director (appointed on		Association - Finance for Non-Finance			2011 - 2014	- Vice Chairman of the Executive Committee		
December 30, 2015)		Directors (FND 19/2005), Thai Institute of Directors Association			2004 - 2015	- Director		
		- Director Accreditation Program (DAP 36/2005),				2004 - 2011	- Executive Committee Member	
		Thai Institute of Directors Association			2001 - 2010	- Executive Vice President: Business Development	CH. Karnchang Public Company Limited	
					2000 - 2011	- Managing Director	Bangkok Metro Public Company Limited	
							Other Companies:	
					Jan 1, 2021 - Present	- Acting Managing Director	Northern Bangkok Expressway Company Limited	
					2016 - Present	- Director and Executive Director		
					2009 - Present	- Director	Bangkok Metro Networks Limited	



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship		Work Experience for the Past	t 5 Years
			1 3	between Directors and Executives	Period	Position	Organization
14 Mrs. Payao Marittanaporn - Director - Corporate Governance and Risk Management	Marittanaporn - Director - Corporate Governance  Chulalongkorn University - Higher Diploma in Auditing, Thammasat University	-	-	2015 - Present	Director     Risk Management and     Corporate Governance     Committee Member	Listed Companies: TTW Public Company Limited	
Committee Member - Executive Director - Managing Director - Authorized Signatory		Chulalongkorn University  - Director Certification Program (DCP 48/2004), Thai Institute of Directors Association  - Role of the Compensation Committee (RCC 9/2009), Thai Institute of Directors Association  - Capital Market Academy Leader Program (CMA Program), Class 11/2010, Capital Market Academy			2007 - 2015	Director and Executive     Director     Managing Director	Bangkok Expressway Public Company Limited
Director (appointed on					2019 - Jul 2020	- Chairman of the Risk Management Committee	TTW Public Company Limited
December 30, 2015)					2015 - Jul 2020	- Nomination and Remuneration Committee Member	
					2013 - 2014	<ul> <li>Director</li> <li>Nomination and         Remuneration Committee         Member     </li> <li>Risk Management</li> <li>Committee Member</li> </ul>	
					2007 – Dec 31, 2020	- Acting Managing Director	Other Companies:  Northern Bangkok Expressway Company Limited
					2004 - Present	- Director and Executive Director	
					2011 - 2014	- Director	Xayaburi Power Company Limited



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship		Work Experience for the Past	5 Years
				between Directors and Executives	Period	Position	Organization
15 Mr. Sanguan Kunatinun - Deputy Managing     Director - Expressway     Engineering     (appointed on     December 30, 2015)  15 Mr. Sanguan Kunatinun - Deputy Managing     Director - Expressway     Engineering     (appointed on     December 30, 2015)  160 - M.B.A., Thammasat University - Bachelor of Engineering, Chulalongkorn University - Director Certification Program (DCP 101/2008), Thai Institute of Directors Association	60	Thammasat University - Bachelor of Engineering, Chulalongkorn University	-	-	2015 - Present	- Deputy Managing Director - Expressway Engineering	Listed Companies:  Bangkok Expressway and Metro Public Company Limited
	(DCP 101/2008), Thai Institute of Directors			2014 - 2015	- Deputy Managing Director, Engineering	Bangkok Expressway Public Company Limited	
			2006 - 2014	- Assistant Managing Director, Engineering			
							Other Company: - None -
16 Mrs. Sudruthai Prommart - Deputy Managing Director - Expressway Operation (appointed on	57	- M.B.A. (Financial Accounting), Northrop University, Inglewood, California, USA - Bachelor of Business	-	-	2015 - Present	- Deputy Managing Director - Expressway Operation	Listed Companies: Bangkok Expressway and Metro Public Company Limited
December 30, 2015)		Administration, Assumption University - Director Certification Program			2014 - 2015	- Deputy Managing Director, Operation	Bangkok Expressway Public Company Limited
		(DCP 151/2011), Thai Institute of Directors Association			2007 - 2014	- Assistant Managing Director, Operation	
							Other Company: - None -



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Relationship		Work Experience for the Pa	st 5 Years	
				between Directors and Executives	Period	Position	Organization	
17 Mr. Phakpoom Thaweewittayarut - Deputy Managing Director - Administration	54	<ul> <li>M.B.A., Thammasat University</li> <li>Bachelor of Laws, Chulalongkorn University</li> <li>Bachelor of Accountancy, Chulalongkorn University</li> <li>Certified Public Accountant (CPA)</li> <li>Certified Internal Auditor (CIA)</li> <li>Director Certification Program (DCP 102/2008), Thai Institute of Directors Association</li> <li>Company Secretary Program (CSP 9/2005),</li> </ul>	-	-	2015 - Present 2014 - 2015	Deputy Managing Director     Administration      Deputy Managing Director,	Listed Companies:  Bangkok Expressway and Metro Public Company Limited  Bangkok Expressway Public	
- Company Secretary (appointed on December 30, 2015)			- Certified Public Accountant (CPA)			2012 - 2014	Administration - Assistant Managing Director, Administration	Company Limited
					2008 - 2015 2011	Company Secretary     Senior General Manager of Administration Division		
			(CSP 9/2005),			2008 - 2011	- Senior General Manager of Managing Director Office	Other Company:
		Thai Institute of Directors Association					- None -	



Name-Surname/Position	Age	Education/Training	Shareholding in			Work Experience for the Past 5	Years
Date of Appointment	(Years)		the Company	Relationship between Directors and Executives	Period	Position	Organization
18 Miss Panan Tosuwanthaworn Deputy Managing Director - Finance (appointed on December 30, 2015)	53	<ul> <li>Master of Accountancy,         Thammasat University     </li> <li>Bachelor of Accountancy,         Thammasat University     </li> <li>Director Certification Program         (DCP 158/2012),         Thai Institute of Directors         Association     </li> <li>CFO Certification Program,         Class 1/2004,     </li> </ul>	-	-	2015 - Present  2014 - 2015  2012 - 2014  2008 - 2011	Deputy Managing     Director - Finance      Deputy Managing     Director, Finance      Assistant Managing     Director, Finance      Senior General Manager	Listed Companies:  Bangkok Expressway and Metro Public Company Limited  Bangkok Expressway Public Company Limited
		The Institute of Certified Accountants and Auditors of Thailand - Corporate Secretary Development Program, Class 13, Faculty of Commerce and Accountancy, Chulalongkorn University			Nov 2017 - Present	of Finance Division  - Director	Other Company:  Bangkok Metro Networks Limited



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship		Work Experience for the Past 5 Years		
				between Directors and Executives	Period	Position	Organization	
19 Mr. Witoon Hatairatana - Deputy Managing Director - Railway System Operation and Engineering (appointed on	63	<ul> <li>Master of Science (Business Administration), California University of Pennsylvania, USA</li> <li>Bachelor of Engineering (Civil), Chulalongkorn University</li> <li>Anti-Corruption for Executive</li> </ul>	-	-	2015 - Present	- Deputy Managing Director - Railway System Operation and Engineering	Listed Companies: Bangkok Expressway and Metro Public Company Limited	
December 30, 2015)		Program (ACEP 13), Thai Institute of Directors Association			2014 - 2015	<ul> <li>Deputy Managing         Director     </li> <li>Acting Assistant         Managing Director,         Train Operation Group     </li> </ul>	Bangkok Metro Public Company Limited	
					2012 - 2014	- Assistant Managing Director, Operations		
					2007 - 2012	- Acting Marketing & Commercial Development Director		
					2005 - 2015	- Risk Committee Member		
					2004 - 2012	- Operations Director		
					2002 - 2004	- Traffic Manager		
							Other Company:	
					Nov 2017 - Present	- Director	Bangkok Metro Networks Limited	



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship		Work Experience for the P	ast 5 Years
				between Directors and Executives	Period	Position	Organization
20 Mr. Alvin Gee - Deputy Managing Director - Operation Support (appointed on	49	<ul> <li>Bachelor of Science in Finance, Boston College, USA</li> <li>Director Certification Program (DCP 165/2012),</li> </ul>	-	-	2015 - Present 2013 - Feb 2016	- Deputy Managing Director - Operation Support - Director	Listed Companies:  Bangkok Expressway and Metro Public Company Limited  CK Power Public Company
December 30, 2015)		Thai Institute of Directors Association			2013 - Feb 2016	- Director, Executive Director and Managing Director	Limited SouthEast Asia Energy Limited
					2011 - 2013	- Deputy Managing Director, Accounting and Finance Department	
					2008 - 2011	- Investor Relations Officer	Bangkok Metro Public Company Limited
					2013 - Feb 2016 2011 - 2013	- Director, Executive Director and Managing Director - Deputy Managing Director	Other Companies:  Nam Ngum 2 Power Company Limited
					2007 - 2008	- Business Analyst, Corporate Finance	TMB Macquarie Securities (Thailand) Limited



Name-Surname/Position Date of Appointment	Age (Years)	Education/Training	Shareholding in the Company	Family Relationship	V	Work Experience for the Past 5 Year	ars
				between Directors and Executives	Period	Position	Organization
21 Dr. Vites Techangam - Deputy Managing Director - Technology & E-Business (appointed on October 1, 2017)	63	<ul> <li>Ph.D. in Computer Science, University of South Western Louisiana, USA</li> <li>M.Sc. in Computer Science, University of California, USA</li> <li>Bachelor of Engineering (Computer Engineering), Chulalongkorn University</li> </ul>	-	-	2017 - Present  Jun 2017 - Sep 2017  Jan 2015 - May 2017  Jun 2013 - Jan 2015	Deputy Managing Director     Technology &     E-Business     Senior Executive Vice     President - Managing     Director, Special Projects      Senior Executive Vice     President - Managing     Director, Technology     Group     Senior Executive Vice     President - Managing     Director, Electronic     Banking & Cash     Management Group	Listed Companies:  Bangkok Expressway and Metro Public Company Limited  Krung Thai Bank Public Company Limited
					2011 - Jun 2013	- President	Other Company: KTB Computer Services Co., Ltd.
					2007 - 2010	- Vice President	



		Relationship		Work Experience for the Pas	r the Past 5 Years		
			between Directors and Executives	Period	Position	Organization	
46	Northwestern University, Illinois, USA - Bachelor of Engineering	-	-	Jan 2019 - Present	- Deputy Managing Director - Business Development	Listed Companies:  Bangkok Expressway and Metro Public Company Limited	
	Chulalongkorn University			2017 - Dec 2017	- Assistant Managing Director - Acting Deputy Managing		
				2015 - 2017	Development - Assistant Managing Director - Project Development		
				2012 - 2015	- Director of Special Project Management Division	Bangkok Metro Public Company Limited	
				2019 - Present	- Director	Other Companies: Bangkok Metro Networks Limited	
				2009 - 2012	- Deputy Managing Director		
				2007 - 2009	- Operations Director	Metro Mall Development Limited	
A Manager of R ting Division - H	Administration, Ramkhamhaeng University - Higher Diploma in Auditing,	-	-	Dec 1, 2020 - Present	- General Manager of Accounting Division	Listed Company: Bangkok Expressway and Metro Public Company Limited	
	- Bachelor of Business			2015 - Nov 30, 2020	General Manager of     Accounting Division		
	Rajamangala University of Technology Thanyaburi					Other Company: - None -	
	(Years) 46	(Years)  46  - Master of Telecommunications, Northwestern University, Illinois, USA - Bachelor of Engineering (Electrical Engineering), Chulalongkorn University  50  - Master of Business Administration, Ramkhamhaeng University - Higher Diploma in Auditing, Chulalongkorn University - Bachelor of Business Administration, Rajamangala University of Technology	(Years) the Company  46 - Master of Telecommunications, Northwestern University, Illinois, USA - Bachelor of Engineering (Electrical Engineering), Chulalongkorn University  50 - Master of Business Administration, Ramkhamhaeng University - Higher Diploma in Auditing, Chulalongkorn University - Bachelor of Business Administration, Rajamangala University of Technology	(Years)  the Company  Relationship between Directors and Executives  46  - Master of Telecommunications, Northwestern University, Illinois, USA - Bachelor of Engineering (Electrical Engineering), Chulalongkorn University  50  - Master of Business Administration, Ramkhamhaeng University - Higher Diploma in Auditing, Chulalongkorn University - Bachelor of Business Administration, Rajamangala University of Technology	the Company Relationship between Directors and Executives Period  46 - Master of Telecommunications, Northwestern University, Illinois, USA - Bachelor of Engineering (Electrical Engineering), Chulalongkorn University  2017 - Dec 2017  2012 - 2015  2019 - Present  2019 - Present  2009 - 2012  2007 - 2009  50 - Master of Business Administration, Ramkhamhaeng University - Higher Diploma in Auditing, Chulalongkorn University - Bachelor of Business Administration, Rajamangala University of Technology	the Company Relationship between Directors and Executives  Period Position  Period Position	



**Information of Directors in the Subsidiaries and Related Companies** 

11110	nformation of Directors in the Subsidiaries and Related Companies															
			The Company		Related Companies											
				1	2	3	4	5	6	7	8	9	10	11	12	13
	Names of Directors and Executives			Bangkok Metro Networks Limited	Northern Bangkok Expressway Company Limited	CH. Karnchang Public Company Limited	Mahasiri Siam Co., Ltd.	CK Power Public Company Limited	CH. Karnchang Holding Co., Ltd.	CH. Karnchang- Tokyu Construction Company Limited	CK. Office Tower Co., Ltd.	TTW Public Company Limited	SouthEast Asia Energy Limited	Xayaburi Power Company Limited	Nam Ngum 2 Power Company Limited	CH. Karnchang Real Estate Co., Ltd.
1	Mr. Plew	Trivisvavet	3,4		2,4	1,4,5	1	1,4	1	2	1	3	1,4	1,4	1,4	2
2	Mr. Vitoon	Tejatussanasoontorn	1			1										
3	Gen. Chetta	Thanajaro	1													
4	Dr. Annop	Tanlamai	1													
5	Mrs. Vallapa	Assakul	1													
6	Mr. Supong	Chayutsahakij	1,4		1,4								1	1	1	
7	M.L. Prasobchai	Kasemsant	1													
8	Mr. Phongsarit	Tantisuvanitchkul	1,4	2	1,4	1,5				1		1,4				
9	Dr. Sombat	Kitjalaksana	1,4	1	1,4							1,4				
10	Mrs. Payao	Marittanaporn	1,4		1,4							1				
11	Miss Arisara	Dharamadhaj	1													
12	Mr. Panit	Dunnvatanachit	1													
13	Mrs. Natamon	Bunnak	1													
14	Mr. Sanguan	Kunatinun	5													
15	Mrs. Sudruthai	Prommart	5													
16	Mr. Phakpoom	Thaweewittayarut	5													
17	Miss Panan	Tosuwanthaworn	5	1												
18	Mr. Witoon	Hatairatana	5	1												
19	Mr. Alvin	Gee	5													
20	Dr. Vites	Techangam	5													
21	Mr. Anawash	Suwanarit	5	1												

**Remarks**: 1.Definitions: 1 = Director; 2 = Chairman of the Board of Directors; 3 = Vice Chairman of the Board of Directors; 4 = Executive Director; 5 = Executive



#### **Information of Directors in the Subsidiaries**

Name	es of Directors	Northern Bangkok Expressway Company Limited	Bangkok Metro Networks Limited
1. Mr. Plew	Trivisvavet	Chairman of the Board of Directors and Executive Director	-
2. Mr. Supong	Chayutsahakij	Director and Executive Director	-
3. Mr. Phongsarit	Tantisuvanitchkul	Director and Executive Director	Chairman of the Board of Directors
4. EXAT's represer	ntative (1)	Director	-
5. Mrs. Payao	Marittanaporn	Director and Executive Director	-
6. Dr. Sombat	Kitjalaksana	Director and Executive Director	Director
7. Mr. Witoon	Hatairatana	-	Director
8. Mrs. Thipsuda	Yimwilai	-	Director
9. Mr. Anawash	Suwanarit	-	Director
10. Miss Panan	Tosuwanthaworn	-	Director
11. Mr. Nattavut	Trivisvavet	-	Director

**<u>Remarks</u>**: 1. Subsidiaries refer to material subsidiaries whose revenues exceed 10 percent of total revenues as per the consolidated statement of income of the latest accounting year.

2. (1) EXAT's representative is in the process of being nominated as director to replace Khun Tasanuch Thammachot who resigned from her position on January 10, 2020.



# Information of Head of the Internal Audit Unit and Head of the Compliance Unit

## 1. Head of the Internal Audit Unit

General Manager							
Internal Audit Office							
<ul> <li>M.B.A.,</li> <li>National Institute of Development Administration</li> <li>Bachelor of Accountancy</li> <li>Bangkok University</li> </ul>							
2015 - Present - General Manager of Internal Audit Office Bangkok Expressway and Metro Public Company Limited 2008 - Dec 2015 - General Manager of Internal Audit Office							
Bangkok Expressway Public Company Limited  2006 - 2007 - General Manager of Toll Revenue Division  Bangkok Expressway Public Company Limited							
- Internal Auditing							
- Integrated Management ISO 9001, ISO 14001 and ISO 27001							
- Risk Management ISO 31000							
- Compliance Audit							
- Internal Control for Financial Reporting: Business Value-Added Strategy							
- Going from Good to Great in IT Governance and Outsourcing							
- In-depth Modern Risk Management Techniques							
- Anti-Corruption The Practical Guide (ACPG 15)							
Thai Institute of Directors Association (IOD)							
- Using Technology as an Efficient and Effective Auditing Tool							
- Employee Fraud Management Detection & Prevention Workshop							
Internal audit work							
1.1 Preparing the annual internal audit plan;							
1.2 Supervising the review of performance, adequacy, and appropriateness of the internal control system of the Company's work systems to ensure compliance with the plan;							
1.3 Concluding the results of the review, together with observations and suggestions for improvement for the audited works, as well as following up the suggested improvement;							
1.4 Reporting on the audit results to the management and the Audit Committee.							



- 2. Works in support of the Audit Committee
  - 2.1 Reviewing the annual and quarterly financial statements;
  - 2.2 Preparing information in support of the selection and nomination of the Company's auditor on a yearly basis;
  - 2.3 Reviewing the disclosure of information to ensure compliance with the rules and regulations and the good corporate governance principles;
  - 2.4 Assessing the adequacy of the Company's annual internal control system;
  - 2.5 Coordinating and organizing the Audit Committee's meetings.
- 3. Works in support of corporate risk management
  - 3.1 Coordinating all internal work units to prepare and review the annual emergency and risk management plans as well as compiling the summary results thereof as the overall emergency and risk management plans;
  - 3.2 Following up and concluding the results of risk management from all relevant work units on a quarterly basis for presentation of the same to the management and the Corporate Governance and Risk Management Committee once a quarter;
  - 3.3 Coordinating and organizing the Corporate Governance and Risk Management Committee's meetings.
- 4. Work in respect of quality, environmental and information security management system activity
  - 4.1 Following up the results of system audit conducted by the monitoring subcommittee and external certification agencies.
- 5. Other works as assigned by the Audit Committee.

<u>Remark</u>: Any appointment, removal, and transfer of Head of the Internal Audit Unit shall be subject to the power of the Audit Committee.



2. Head of the Compliance Unit

Name-Surname	Mr. Phakpoom Thaweewitta	yarut
Position	<ul><li>Deputy Managing Directo</li><li>Company Secretary</li></ul>	r, Administration
Education	<ul> <li>M.B.A.,         Thammasat University </li> <li>Bachelor of Laws,         Chulalongkorn University </li> <li>Bachelor of Accountancy,         Chulalongkorn University </li> </ul>	
Work Experience	2015 - Present	- Deputy Managing Director, Administration
		Bangkok Expressway and Metro Public Company Limited
	Oct 2014 - Dec 2015 -	- Deputy Managing Director, Administration
		Bangkok Expressway Public Company Limited
	2012 - Sep 2014	- Assistant Managing Director, Administration
		Bangkok Expressway Public Company Limited
Related Training	- Certified Public Accountage	nt (CPA)
	- Certified Internal Auditor	(CIA)
	- Director Certification Prog	gram (DCP 102/2008),
	Thai Institute of Directors	Association
	- Company Secretary Progra	am (CSP 9/2005),
	Thai Institute of Directors	Association
	- Advances for Corporate Se	ecretaries Program
	Thai Listed Companies As	ssociation
Duties and Responsibilities		of the good corporate governance in line with the omparison with international practices or principles;
	corporate governance po	iateness and adequacy of the Company's good licy and code of ethics, as well as their revisions to actices for good corporate governance;
		agement as to compliance with the good corporate as specified by the Company for disclosure
		es for evaluation of the performance of the Board of g Directors, as well as concluding the results for l of Directors;
		For the preparation of the Company's corporate at plan in compliance with the specified good nciples;
	6. Providing advice and sug to the Board of Directors	gestions on the good corporate governance practices;
	7. Performing any other fun	nctions as assigned by the Managing Directors.



#### **Reports of the Subcommittees**

#### **Report of the Audit Committee**

The Audit Committee of Bangkok Expressway and Metro Public Company Limited, as appointed by the Board of Directors, comprises three independent directors, namely, Mr. Vitoon Tejatussanasoontorn, as Chairman of the Audit Committee, General Chetta Thanajaro, and Dr. Annop Tanlamai, as Audit Committee Members. The Chairman of the Audit Committee and Dr. Annop Tanlamai specialize in accounting and finance, and the General Manager of Internal Audit Office serves as secretary to the Audit Committee.

The Audit Committee has performed its duties within the scope, duties and responsibilities as assigned by the Board of Directors in line with the requirements of the Stock Exchange of Thailand, together with the suggestions on various related matters. In 2020, the Audit Committee held five meetings for discussion and sharing of opinions with the management and internal auditor, and two meetings with the auditor without the management's presence, for discussion on the essence of the audit plan, significant accounting matters, and accounting standards to be applicable, along with independence in performance of duties and expression of opinions of the auditor.

The key performance of duties of the Audit Committee can be summarized as follows:

- 1. Review of Financial Report: The Audit Committee reviewed the quarterly financial statements and the financial statements for 2020 of the Company and its subsidiaries, including changes in the accounting policy, significant accounting adjustments, and correct and complete disclosure of information, by receiving clarifications from the auditor, management, and internal auditor, in which the auditor was asked about the accuracy and completeness of the financial statements, accounting adjustments which had a material impact on the Company's financial statements, audit scope, to rest assured that the financial statements were prepared in accordance with the legal requirements, the generally accepted accounting standards and the financial reporting standards, with correct and sufficient disclosure of information in a timely manner for the benefit of users of the financial statements, and therefore approved such financial statements as audited and reviewed by the auditor, representing a report on an unqualified opinion.
- 2. Review of Internal Control System: The Audit Committee reviewed the assessment results of the internal control in respect of the operating system and the IT system by using the Internal Control Adequacy Evaluation Form under the practice guidelines as specified by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and quarterly considered the results of review in terms of operations, resource utilization, property care, prevention or minimization of mistakes, damage and fraud, compliance with relevant laws, rules and regulations, and prevention of information risk to ensure the efficient and effective performance in all work units in order to meet the specified objectives and targets, compliance with various relevant laws and requirements, and adequate ability to control and prevent corruption.
- 3. Supervision of Internal Audit: The Audit Committee reviewed the Internal Audit Unit to ensure its independence, with a duty to report directly to the Audit Committee, by considering and approving the annual internal audit plan, and reviewed the results of operations as per the approved work plan, considered issues as a result of the audit and useful suggestions in order to enhance the efficiency of the internal audit system, and regularly followed up the operational results under the suggestions, as well as approving the consideration for appointment, transfer, termination of employment of the Head of the Internal Audit Unit.



- 4. Review of Good Corporate Governance: The Audit Committee reviewed the Company's operations to ensure that its business operations were reasonably carried out under the corporate governance principles in compliance with the law on securities and exchange, rules and regulations of the Office of the Securities and Exchange Commission, requirements of the Stock Exchange of Thailand, and other laws relating to the business operations, including obligations which might arise from agreements executed with third parties, and found that the Company has duly and properly complied with the relevant laws and requirements in a timely manner.
- 5. Review and Provision of Opinions on Connected Transactions or Transactions which might give rise to conflicts of interest, including Disclosure of Information on such Transactions: The Audit Committee reviewed and provided opinions on execution of connected transactions or transactions which might give rise to conflicts of interest in compliance with the applicable laws and requirements of the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand, and found that the Company executed such transactions with transparency, justification, and benefit to the Company's business operations and shareholders as a whole, together with correct and complete disclosure of information in a timely manner.
- 6. Consideration for Selection, Nomination of the Auditor and Annual Remuneration for the Auditor: The Audit Committee had the duties to consider selecting, nominating, re-electing, or terminating the engagement of the auditor, and consider the remuneration for the auditor, by taking into account the auditor's independence, knowledge, capability, experience, previous audit performance, reasonableness of the auditing fee, and was of the view that the auditor from EY Office Limited was independent, knowledgeable, capable and experienced regarding the audit, provision of advice on the accounting standards, certification of the financial statements in a timely manner, and that the auditing fee was reasonable. Therefore, it resolved to propose the matter to the Board of Directors to consider and seek approval from the meeting of shareholders for appointment of the auditor from EY Office Limited as the Company's auditor for 2021, with the remuneration in an amount not exceeding Baht 4,240,000 per year.

In summary, the Audit Committee has fulfilled its duties and responsibilities under the Audit Committee Charter as approved by the Board of Directors to provide various opinions and suggestions for the fair benefit of all interested parties, with its adequate knowledge, abilities, due care, prudence, and independence, and it was of the view that the Company's reports on financial information and operations were correct, reliable, in line with the generally accepted accounting standards and the financial reporting standards; that the Company's risk management and internal control system were proper, sufficient, together with the effective internal audit and operations in line with the good corporate governance principles, as well as compliance with applicable laws, rules and requirements relating to the business operations in all respects.

- Signature-

(Mr. Vitoon Tejatussanasoontorn) Chairman of the Audit Committee



#### Report of the Nomination and Remuneration Committee

The Board of Directors of Bangkok Expressway and Metro Public Company Limited appointed the Nomination and Remuneration Committee by having General Chetta Thanajaro as Chairman of the Nomination and Remuneration Committee, Mr. Plew Trivisvavet, Mr. Vitoon Tejatussanasoontorn and Mr. Supong Chayutsahakij as Nomination and Remuneration Committee Members, with the duties to nominate and consider remuneration for directors and Managing Directors to ensure transparency and fairness.

In 2020, there were three Nomination and Remuneration Committee's Meetings to consider various matters. The essence of the performance of its duties can be summarized as follows:

- 1. Considering selecting qualified persons to hold the position of the Company's directors in accordance with the Company's criteria and procedures for director nomination, per the following:
  - The Board of Directors considered the qualifications and roles in the previous year's performance of duties of the six directors who retired by rotation and then proposed that the 2020 Annual Ordinary General Meeting of Shareholders re-appoint them for another term:
  - The Board of Directors considered the qualifications of MRTA's representative who had knowledge in the concession agreements and had experience in the management and operating works of the mass rapid transit operation service, which were beneficial to the Company.
- 2. Reviewing criteria on consideration and determination of remuneration for directors for 2020

The Board of Directors considered reviewing the criteria on consideration of remuneration for directors and was of the opinion that such determined remuneration was appropriate and commensurate with the scope of assigned duties and responsibilities of each director; stayed at the same rate as that offered by other companies in the same industry to attract and retain knowledgeable, competent and qualified directors to perform duties for the Company; elements of remuneration were clear, transparent, and easy-to-understand, by proposing the remuneration for directors for 2020 to the shareholders' meeting for consideration and approval.

3. Reviewing nominating Managing Directors for appointment and determining remuneration

The Board of Directors considered the qualifications of the nominees for the positions of Managing Directors with the duty to conduct the Company's management, and determined remuneration for the Managing Directors to ensure that such remuneration remained at the long-term motivated rate; commensurate with the scope of assigned duties and responsibilities of the Managing Directors, whereby such consideration was based on the performance of the Managing Directors, together with the operational results of the Company, and then proposed that the Board of Directors' Meeting consider approval such matter.

In conclusion, the Nomination and Remuneration Committee has fulfilled their duties as specified in the Nomination and Remuneration Committee's Charter approved by the Board of Directors, by employing its knowledge and ability with due care, and having its independence as sufficient to provide the opinions and suggestions for the overall benefits of the Company.

- Signature(General Chetta Thanajaro)
Chairman of the Nomination and Remuneration Committee



#### Report of the Corporate Governance and Risk Management Committee

The Board of Directors of Bangkok Expressway and Metro Public Company Limited has realized the significance of compliance with the good corporate governance principles and risk management whereby the Board of Directors appointed the Corporate Governance and Risk Management Committee, comprising Mrs. Vallapa Assakul as Chairman of the Corporate Governance and Risk Management Committee, Mr. Phongsarit Tantisuvanitchkul, Dr. Sombat Kitjalaksana and Mrs. Payao Marittanaporn as Corporate Governance and Risk Management Committee Members, with the duties to formulate policies and directions of operations in respect of the good corporate governance of the Company to ensure performance of duties with transparency and independence in compliance with the guidelines for the good corporate governance, consider risk management plan, risk management process, as well as monitoring, inspecting and reviewing the Company's overall risks to stay at an acceptable level.

The Corporate Governance and Risk Management Committee has performed its duties as assigned by the Board of Directors, and in 2020, convened its three meetings with the high-ranking management team to consider reviewing policies and follow up progress of compliance with the good corporate governance principles and risk management plan of the Company. The key performance of its duties can be summarized as follows:

1. Monitoring to ensure the Company's compliance with the good corporate governance principles

The Board of Directors followed up and reviewed the practical guidelines for the good corporate governance whereby such guidelines were proposed to the Board of Directors' Meeting to consider the appropriateness of the same to be adopted as guidelines for the Company's operations. In this regard, the Board of Directors considered reviewing and improving the good corporate governance policy relating to shareholders' rights; treatment towards shareholders and stakeholders; disclosure of information; and the Board of Directors' responsibility, to ensure consistency with the requirements of the Stock Exchange of Thailand. In 2020, the survey results of the Company's corporate governance were shown at the excellent level; the assessment results of the Company's Annual Ordinary General Meeting of Shareholders were shown at the excellent level; and the Company was selected as one of 124 listed companies on the Thailand Sustainability Investment for the fourth consecutive year.

#### 2. Risk management

The Board of Directors, in association with the high-ranking management, considered compliance with the annual risk management plan, regularly reviewed and followed up the risk management as well as following up movement, tendency for review of the plan and strategies to manage risks to stay at the acceptable level in an appropriate and timely manner for the ongoing changing situations and consistent with the Company's work plan. In 2020, two risk matters no longer existed, i.e., the implementation of the MRT Blue Line Project, because its entire line was opened



for service on March 30, 2020; and the legal disputes, because the Company, the Subsidiary and the EXAT settled all the legal disputes between each other and expanded the concession periods of both the Second Stage Expressway Agreement (Sectors AB, C, and D) and the Bang Pa-in - Pak Kret Expressway Project to end on October 31, 2035. Furthermore, there was a risk with a substantial change in the operations as a result of the outbreak of Coronavirus Disease 2019 (COVID-19), the Company therefore formulated a business continuity management plan in case of a severe disease outbreak, with its preparedness responding to such situation, and an action plan to accommodate any potential threatening situations.

In conclusion, the Corporate Governance and Risk Management Committee is certain that the Company has complied with the good corporate governance principles and guidelines, has continuously and efficiently conducted risk management, as well as making prudent emergency response preparedness in advance for enabling the Company to carry out operations uninterruptedly to ensure the sustainable existence.

- Signature(Mrs. Vallapa Assakul)
Chairman of the Corporate Governance and Risk Management Committee