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## **Part 1 Business Operations**

### **1. Business Policy and Overview**

Bangkok Expressway and Metro Public Company Limited (the “Company”) is a company incorporated from the amalgamation, pursuant to the Public Limited Company Act B.E. 2535 (1992), and its amendments, 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 at December 31, 2015, 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 businesses comprise the provision of the expressway and metro services, including commercial development relating to the expressway systems and metro, which will lay a foundation for business expansion through future extension of the network routes, 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. In addition, 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 Business Overview of the Company**

##### **1.1.1 Expressway Business**

The Company has been granted concessions for construction and operation of the expressways, namely, (1) the Si Rat Expressway (Second Stage Expressway) under the Second Stage Expressway Agreement with the Expressway Authority of Thailand (“EXAT”) for a concession period of 30 years from March 1, 1990, and the Extension of the Second Stage Expressway System, Sector D, under the Agreement for the Extension of the Second Stage Expressway System, Sector D, with EXAT for a period of 30 years from April 17, 1997; (2) 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, with EXAT for a concession period of 30 years from December 15, 2012; and (3) the Udon Rattaya Expressway (Bang Pa-in - Pak Kret Expressway), operated by a subsidiary, namely, Northern Bangkok Expressway Company Limited (“NECL”) under the Bang Pa-in - Pak Kret Expressway Agreement with EXAT for a period of 30 years from September 27, 1996.

##### **1.1.2 Metro Business**

The Company has been granted concessions for two mass rapid transit rail system projects from the Mass Rapid Transit Authority of Thailand (“MRTA”), namely, (1) the M.R.T. Chaloe M Ratchamongkhon Line (Blue Line) (Hua Lamphong Station - Bang Sue Station) (“MRT Blue Line Project”), whereby the Company has the exclusive right to collect fare box revenue and undertake activities and commercial development, including advertising, leasing space and telecommunications services in the metro stations and in the trains for a period of 25 years from July 2, 2004; and (2) the MRT Purple Line Project, Bang Yai - Rat Burana, Bang Yai - Bang Sue Section (Khlomg Bang Phai Station - Tao Poon Station) (“MRT Purple Line Project”), Contract 4: Concession for Supply of M&E Systems and O&M Services, 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, whereby MRTA is entitled to all fare box revenue and commercial development revenue from the utilization of the civil infrastructure and the railway systems and MRTA shall make repayment to the Company in the form of service fee for the O&M Services and the M&E Systems throughout the concession period of 30 years from the date of execution of the Agreement.

In addition, the Company has been selected to operate the MRT Purple Line Project, Bang Yai - Rat Burana, Bang Yai - Bang Sue Section (Tao Poon Station - Bang Sue Station, excluding stations), Contract 5: Concession for Investment, Supply of M&E Systems and O&M Services under the resolution of the Council of Ministers on October 28, 2014, implemented under Section 16 of the Act on Private Participation in State Undertaking B.E. 2535 (1992) (“Private Participation Act”) by negotiating directly with the Company

(formerly, BMCL), whereby the Company shall have the duties to design, supply, install and test the operation of the M&E Equipment and other relevant systems, and trial run for the public service to the extent of commencement of the train operation service in connection with the MRT Blue Line Project within the specified time, as well as providing all financing for operation of Phase 1 of the Concession Agreement, Contract 5, which shall complete the works under the scope of Works in Phase 1 within 15 months, and under the scope of Works in Phase 2, O&M Services for a period of 12 months from the commencement date of train operation service for the MRT Purple Line Project under the Concession Agreement, Contract 5. At present, the draft Concession Agreement, Contract 5, is in the process of consideration and review of the contract term for further seeking approval of the Council of Ministers.

### **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 for 1) procurement and/or production of advertising media of various forms in the trains and metro stations; 2) lease of retail spaces in the MRT Blue Line stations and spaces in the basement level of the Lat Phrao park and ride facility; and 3) provision of service and maintenance of telecommunications system equipment inside the metro stations. In addition, as for the expressways, the Company and another subsidiary, namely, NECL, allowed private entities and individuals to take on lease of 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 installation of 3G signal boosters, etc.

### **1.1.4 Investment in Other Companies**

The Company invests in the companies operating the public utility businesses, as follows: (1) CK Power Public Company Limited (“CKP”) operates its core business by holding shares in other companies (Holding Company) operating the business of production and distribution of energy of various types; (2) TTW Public Company Limited (“TTW”) operates the business of production and distribution of tap water to the Provincial Waterworks Authority and invests in companies which operate the business of other public utilities; and (3) Xayaburi Power Company Limited (“XPCL”) operates the main business for construction and operation of the Xayaburi Hydroelectric Power Project, located on the Mekong River, for the installed capacity of 1,285 MW.

## **1.2 Vision, Mission and Goals of Operations**

### **1.2.1 Vision**

The Company’s vision is:

“To become a leading, fully-integrated transportation service provider in Thailand and ASEAN.”

### **1.2.2 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 life;
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.

### 1.2.3 Goals and Business Strategies

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

1. 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 provision of quality services of the expressway and metro systems;
5. To build social recognition of the corporate good image.

### 1.3 Significant Changes and Developments

The Company was incorporated from the amalgamation, under the Public Limited Company Act B.E. 2535 (1992) and its amendments, between BECL and BMCL on December 30, 2015, for construction and operation of the expressways and for operation of the metro system, including commercial development relating to the metro and expressway systems.

BECL was founded on December 23, 1987 and listed on the Stock Exchange of Thailand ("Stock Exchange") since August 31, 1995. Prior to the amalgamation, BECL's registered and paid-up capital amounted to Baht 7,700,000,000, divided into 770,000,000 ordinary shares, at the par value of Baht 10 per share.

BECL constructed and operated the expressways, namely, the Si Rat Expressway (Second Stage Expressway) under the Second Stage Expressway Agreement with EXAT for a concession period of 30 years from March 1, 1990, and the Extension of the Second Stage Expressway System, Sector D, under the Agreement for the Extension of the Second Stage Expressway System, Sector D, with EXAT for a period of 30 years from April 17, 1997.

On September 14, 2012, the Company entered into the Concession Agreement for Investment, Design, Construction, Operation, Service and Maintenance of the Si Rat - Outer Ring Road Expressway Project with EXAT for a concession period of 30 years from December 15, 2012, with a construction period of not exceeding 48 months from the date of the Notice to Proceed.

BMCL registered its incorporation on February 18, 1998, and was listed on the Stock Exchange since September 21, 2006. Prior to the amalgamation, BMCL's registered and paid-up capital amounted to Baht 7,585,000,000, divided into 20,500,000,000 ordinary shares, at the par value of Baht 0.37 per share.

BMCL entered into the Agreement for the MRT Blue Line Project with MRTA on a PPP Net Cost (AOT) basis, and BMCL had the exclusive right to collect fare box revenue and undertake activities and commercial development, including advertising, leasing space and telecommunications services in the metro stations and in the trains for a period of 25 years, from July 2, 2004 to July 1, 2029. Under such Agreement, BMCL was obliged to make payment of remuneration from fares and commercial development to MRTA at the rates as mentioned in the Agreement.

Subsequently, on September 4, 2013, BMCL entered into the Agreement for the MRT Purple Line Project with MRTA for a period of 30 years on a PPP Gross Cost (ATO) basis, namely, MRTA invested in all civil works and BMCL invested in the M&E Systems and the rolling stocks, provided that MRTA shall make a gradual repayment of the M&E Equipment to BMCL after the delivery of the ownership, and BMCL shall provide the O&M services in accordance with the service provision standards as specified in the Agreement. In this regard, MRTA is entitled to all fare box revenue and commercial development revenue from the utilization of the civil infrastructure and the railway systems and MRTA shall make payment to BMCL in the form of service fee for the O&M Services from the date of BMCL's operation service until the end of the Concession Agreement.

On October 28, 2014, the Council of Ministers resolved to grant approval for implementation under Section 16 of the Act on Private Participation in State Undertaking B.E. 2535 (1992) (“Private Participation Act”) by negotiating directly with BMCL for the MRT Purple Line Project, Contract 5, on a PPP Gross Cost basis. MRTA proceeded under the procedures of the Private Participation Act and established a committee for consideration and selection of a private sector to participate in state undertaking, as well as entered into negotiations and other undertakings relating to the Project. At present, the draft Concession Agreement, Contract 5, is in the process of consideration and review of the contract term for seeking further approval of the Council of Ministers.

The MRT Purple Line Project, Contract 4, under BMCL’s responsibility, and the MRT Purple Line Project, Contract 5, will connect the MRT Purple Line Project with the existing MRT Blue Line Project at Tao Poon Station, thereby increasing the passenger volume and revenues for the existing MRT Blue Line Project under BMCL.

### **Significant Changes and Development in 2015**

#### **Amalgamation Timeline**

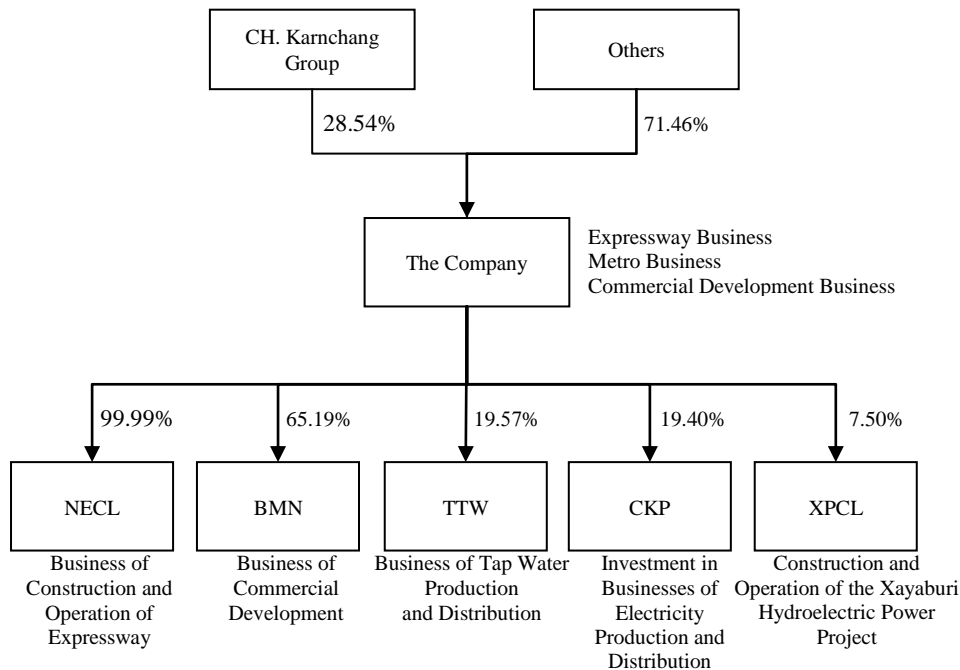
January 21, 2015	The Boards of Directors of BECL and BMCL resolved to grant approval to propose the matter to their respective shareholders’ meetings for further consideration and approval of the amalgamation.
April 2, 2015	The shareholders’ meetings of BECL and BMCL resolved to approve the amalgamation.
April 3, 2015	BECL registered its capital decrease from Baht 8,000 Million to Baht 7,700 Million.
June 24, 2015	BMCL registered the decrease of its registered capital and its paid-up capital with the Department of Business Development from Baht 20,500 Million, by Baht 12,915 Million, thereby remaining the registered capital of Baht 7,585 Million, by decreasing the par value from Baht 1 per share to Baht 0.37 per share.
July 2, 2015	BECL sold its 2,050,134,895 ordinary shares in BMCL to CH. Karnchang Public Company Limited (“CH. Karnchang Plc.”)
August 11, 2015	The Boards of Directors of BECL and BMCL resolved to grant approval to propose the matter to the Joint Shareholders’ Meeting of BECL and BMCL for consideration and approval for an extension of time for the amalgamation for another six months.
September 29, 2015	The Joint Shareholders’ Meeting No. 1/2015 between BECL and BMCL resolved to approve the extension of time for the amalgamation for another six months.
November 5, 2015	The Boards of Directors of BECL and BMCL resolved to grant approval to propose the matter to the Joint Shareholders’ Meeting of BECL and BMCL for consideration of various issues of the new company as a result of the amalgamation.
December 28, 2015	The Joint Shareholders’ Meeting No. 2/2015 between BECL and BMCL resolved to approve various issues of the new company as a result of the amalgamation.
December 30, 2015	The amalgamation was registered with the Ministry of Commerce as Bangkok Expressway and Metro Public Company Limited, whereby the Stock Exchange of Thailand listed the Company’s ordinary shares as “BEM” securities on the Stock Exchange, which started trading on January 5, 2016.
December 30, 2015	BEM executed the Amendments to the Concession Agreements, by changing name of the contractual party with the Expressway Authority of Thailand (EXAT) and the Mass Rapid Transit Authority of Thailand (MRTA).

**Significant Changes and Developments of BECL and BMCL prior to the Amalgamation**

May 26, 2015	BECL exercised its right to acquire CKP's ordinary shares for capital increase as per its shareholding proportion in the total amount of Baht 1,088,470,044.
August 11, 2015	The Board of Directors of BMCL resolved and approved to propose the matter to its shareholders' meeting for consideration and approval for execution of the connected transactions on engagement of CH. Karnchang Plc. for repair and maintenance of the civil infrastructure and M&E Equipment of the MRT Blue Line Project and the MRT Purple Line Project.
August 13, 2015	MRTA approved in principle for execution of the Concession Agreement for the MRT Purple Line Project, Contract 5, with BMCL, awaiting the Council of Ministers' resolution granting approval for MRTA to execute the Agreement with the Company.
August 20, 2015	<p>The Board of Directors of BMCL resolved to grant approval for execution of the Concession Agreement for the MRT Purple Line Project, Contract 5, with MRTA, and resolved to propose the matter to its shareholders' meeting for consideration and approval for execution of three connected transactions on engagement of CH. Karnchang Plc., as follows:</p> <ol style="list-style-type: none"><li>1) Project management, including supply, installation of the M&amp;E Equipment, and maintenance of the civil infrastructure and M&amp;E Equipment of the MRT Purple Line Project, Contract 5, including supply and installation of equipment for improvement of the communication system of the MRT Blue Line Project;</li><li>2) Project management for maintenance of the civil infrastructure and M&amp;E Equipment of the MRT Blue Line Project;</li><li>3) Amendment of the Project Management Agreement with CH. Karnchang Plc., including supply and installation of the M&amp;E Equipment of the MRT Purple Line Project with the scope of additional works.</li></ol>
October 14, 2015	The shareholders' meeting of BMCL resolved to approve execution of all three connected transactions on engagement of CH. Karnchang Plc. as proposed.
November 5, 2015	The Board of Directors resolved to grant approval for BECL to acquire 280 million shares in NECL in the total amount of Baht 154 Million.
November 5, 2015	To ensure continued train operation between the existing MRT Blue Line Project and the MRT Purple Line Project, as well as to provide facilitation to metro service users, BMCL then executed the Project Management Agreement with CH. Karnchang Plc., including supply and installation of the M&E Equipment under the Concession Agreement, Contract 5 (Bang Sue Station - Tao Poon Station, excluding stations), including supply and installation of equipment for improvement of the communication system of the MRT Blue Line Project.
November 17, 2015	BMCL entered into the Agreement for engagement of CH. Karnchang Plc. for repair and maintenance of the civil infrastructure and the M&E Equipment of the MRT Blue Line Project and the MRT Purple Line Project.
December 25, 2015	BECL made redemption of all debentures from the debenture holders under the resolution of the debenture holders' meeting which was held on June 8, 2015.

## 1.4 Shareholding Structure of Company Group

### Chart of Shareholding Structure and the Company's Shareholding Percentage as at December 31, 2015



**Remark :** CH. Karnchang Group comprises 1) CH. Karnchang Plc., 2) CH. Karnchang-Tokyu Construction Company Limited, 3) Mahasiri Siam Co., Ltd., and 4) CH. Karnchang Holding Co., Ltd.

### 1.4.1 Investment in Subsidiaries, Associated Companies and Other Company

The Company has a policy on investment in businesses of infrastructure or businesses supporting the Company's operations and creating opportunity and long-term yields to the Company. The Company's investment as at December 31, 2015 was as follows:

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

Unit: Million Baht

Names of Companies	Nature of Business	Registered Capital	Paid-up Capital	Shareholding Percentage	Investment Value at Cost
<b>Subsidiaries</b>					
Northern Bangkok Expressway Company Limited	Construction and operation of the Udon Rattaya Expressway	6,000	5,250	99.99%	2,604
Bangkok Metro Networks Limited	Operation of the commercial development business	254	254	65.19%	166
<b>Associated Companies</b>					
CK Power Public Company Limited	Investment by holding shares in other companies (Holding Company) operating a business of electricity production and distribution	9,240	7,370	19.40%	3,223
TTW Public Company Limited	Tap water production and distribution	3,990	3,990	19.57%	4,303

Unit: Million Baht

Names of Companies	Nature of Business	Registered Capital	Paid-up Capital	Shareholding Percentage	Investment Value at Cost
<b>Other Company</b>					
Xayaburi Power Company Limited	Construction and operation of the Xayaburi Hydroelectric Power Project	26,861	12,175	7.50%	913

(2) **Details of Companies Invested by the Company**

**Expressway Business**

**1. 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 at December 31, 2015, the Company’s shareholding was 99.99 percent of its registered capital. NECL entered into the Agreement with EXAT for construction and operation of the Udon Rattaya Expressway (Bang Pa-in - Pak Kret Expressway) for a period of 30 years from September 27, 1996. The Udon Rattaya Expressway is northbound and continues from the Si Rat Expressway around Chaeng Watthana Road and passes Bang Phun, Chiang Rak and ends at Bang Sai.

**Commercial Development Business**

**1. 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 at December 31, 2015, the Company’s shareholding in BMN was 65.19 percent of its registered capital.

BMN was established by the amalgamation of three companies, namely, BMCL Network Limited, Metro Mall Development Limited, and Triads Networks Co., Ltd. BMN accepted the transfer of all three companies’ businesses, as well as all rights, duties, assets, liabilities and staff.

BMN currently operates the business of procurement and production of advertising media of various forms in the metro stations and trains, lease of retail spaces in stations of the MRT Blue 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 9,240 million ordinary shares, at the par value of Baht 1 per share, with the paid-up capital of Baht 7,370 Million. As at December 31, 2015, the Company’s shareholding was 19.40 percent of its registered 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, operating a business of investment and development of electricity business in the Lao People’s Democratic Republic, and Xayaburi Power Company Limited; cogeneration power business, by investing in Bangpa-in Cogeneration Limited; and solar power business, by investing in Bangkhenchai Company Limited, Nakhon Ratchasima Solar Limited, Chiangrai Solar Limited, CKP Solar Limited, Vis Solis Limited, Helios Power Limited, Apollo Power Limited, and Sole Power 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 at December 31, 2015, the Company’s shareholding was 19.57 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 25 percent of its registered capital.

**3. Xayaburi Power Company Limited (“XPCL”)**

XPCL’s total registered capital is Baht 26,861 Million (at the exchange rate of USD 1 to Baht 34), with the paid-up capital of Baht 12,175 Million. As at December 31, 2015, the Company’s shareholding was 7.50 percent of its registered capital. XPCL’s main business is to operate the Xayaburi Hydroelectric Power Project, located on the Mekong River, with around 100 kilometers distance from Luang Prabang. The Xayaburi Hydroelectric Power Project is a run-of-river hydroelectric project, generating electricity by building a diversion weir on the Mekong River to raise the water level without water diversion from the Mekong River and without water impounding like other reservoir dams.

**1.4.2 Relationship with Business Alliance of Major Shareholder**

CH. Karnchang Plc. is the Company’s major shareholder. As at December 31, 2015, CH. Karnchang Plc. was holding 4,199,031,529 shares in the Company, representing 27.47 percent of the Company’s paid-up capital. From the past until the present, the Company engaged CH. Karnchang Plc. for construction and operation of various projects, as CH. Karnchang Plc. is a large construction company in Thailand, with potential, knowledge and expertise, and is familiar with the civil infrastructure of the expressway and metro projects, as well as M&E Equipment. In addition, CH. Karnchang Plc. has experience in the operation on a Lump Sum Turnkey basis, which enables it to deliver quality works timely, and is also the Company’s strategic investment partner, and as a result, CH. Karnchang Plc. has responsibility and commitment to operating the projects with success. Therefore, in the future, it is possible that the Company will engage CH. Karnchang Plc. for project construction or management. However, in the execution of transactions with CH. Karnchang Plc., which may have a conflict of interests, the Company will comply 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**

