

# 1 Risk Factors

Factors which may give rise to risks towards investment by investors are as follows:

## 1.1 Risk from Insufficient Revenue to Cover Expenditure

Toll revenue is the Company's core revenue, which may be affected by external factors having material impact on toll rates and traffic volume. Provided that the toll revenue differ from the study or the projections, it may affect the liquidity management in covering the existing financial obligations, such as interest expense, scheduled repayment of loans, operating expenses under the Expressway Agreement, as well as compensation for site acquisition cost to be paid to the Expressway Authority of Thailand ("EXAT") under the Second Stage Expressway Agreement.

The toll rates as specified in the Second Stage Expressway Agreement are to be reviewed every five years in accordance with the increased rate of the Consumer Price Index of Bangkok. As for the past toll revisions on three occasions in 1998, 2003 and 2008, the Company was granted approval to increase toll rates but not at the proposed rates (as per the details in Legal Disputes on pages 47 to 50) which in the Company's opinion, did not comply with the Agreement, thereby causing the Company's revenue to be lower than that should have been received. In 2003, the Company remedied such effect by entering into negotiation with the group of lending banks for extension of time for repayment of due loans and request for reduction of interest rate. However, the Second Stage Expressway Agreement provides a dispute settlement procedure in case of any dispute, disagreement, or claim from noncompliance with the Agreement, in respect of which the Company has already proceeded with the specified procedures.

In respect of traffic volume, the Company estimated that there would remain a risk from uncertainty of the traffic volume on the Expressways, which directly affects the Company's revenue. The growth rate of traffic volume in 2009 was positive as compared to that of the previous year at 3.11 percent, resulting from the commencement of toll collection of the Bang Pli - Suksawad Expressway, constructed and administered by EXAT, since 23 March 2009, resulting in increase in traffic volume on the Expressways and toll revenue. The Company has closely monitored the impact and continuously followed up on policies, laws, regulations and traffic management plans by the government. Changes in policies of the government may include the opening of new Expressways for service, as well as the repair and maintenance of flyovers across several intersections in Bangkok and its surrounding areas, and the construction of additional roads on the outskirts of Bangkok so as to form a range of networks, some projects will support and facilitate more motorists to use the Expressways or help increase the traffic volume on the Expressway Systems or may give rise to impact in the form of competing roads from motorists' change in their commuting behavior in case where projects are competing roads which would affect the number of motorists on the Expressways as well.

The traffic volume on the Expressways in 2009 remained constant amid the global economic recession, including the H1N1 flu pandemic concerns, that led to the national economic slowdown, and the declining number of foreign tourists visiting Thailand. However, the decrease in oil prices in the market, as well as the gradual opening of the Government Complex Commemorating His Majesty the King's 80th Birthday Anniversary on Chaeng Watthana Road, enables the Company to maintain the constant traffic volume on the Expressways.

As for the other public mass transit services, such as, the BTS, which was opened for public service since December 1999, the Extension of Silom Line, which was opened for service since May 2009, and the metro, which was opened for service since July 2004, the Company has been continuously collecting information and conducting a survey in this regard, which can be concluded that such services have no impact upon the traffic volume of the Company in respect of indirect competition since customers of the BTS and the metro are not the target group of customers and they would mostly use public transportation, let alone the fact that at present, the networks of the BTS and the metro are limited to their respective service areas only. Whereby, the behavior of personal car owners may have some changes to a certain extent, but the information obtained from the survey revealed that the Company's revenue is not affected.

The Suvarnabhumi Airport Rail Link is expected to be opened for full service by 2010, comprising a route running parallel to Sector D of the Si Rat Expressway (Second Stage Expressway), may slightly affect the traffic volume on the said Expressway route. However, when passengers get off at Makkasan Terminal Station or City Airport Terminal (CAT) near the on-ramps of

Sector A of the Si Rat Expressway (Second Stage Expressway) around Asoke 2 Toll Plaza, such Toll Plaza would serve to accommodate the traffic volume from CAT for more convenient commute.

## 1.2 Risk Relating to Business Operations under Agreements with Government Sector

Due to the fact that the Company has been doing business with EXAT under the Second Stage Expressway Agreement, different interpretation of the contents and conditions of the Agreement between contractual parties may occur during the business operations. In order to resolve any possible dispute or disagreement, the Agreement provides a dispute settlement procedure. Should the Company and EXAT be unable to settle any dispute, either party may refer such dispute to the Panel for settlement pursuant to the Agreement. If such dispute cannot be settled through the mediation by the Panel, or the decision of the Panel is not unanimous, or the parties fail to comply with such decision, the dispute shall be further referred to arbitration pursuant to the Agreement.

Currently, the Company and the Subsidiary have disputes on different interpretation of several matters with EXAT, such as, adjustment of toll rates and interpretation on determination of the Priority Component Opening Date, which give rise to an impact on the toll revenue sharing.

Other than the disputes on the different interpretation of the Agreement, the Company also has a risk from noncompliance with the Agreement by the contractual party, namely, the Company is obliged to construct the Collection and Distribution Roads (CD Roads), provided that EXAT is obliged to deliver the sites to the Company by 18 October 2000. Given the failure on the part of EXAT to deliver the sites to the Company by the specified time, the Company's obligation in respect of such construction has therefore ceased, but the Company is entitled to claim damages from EXAT due to EXAT's inability to deliver the construction sites to the Company within the specified time, as well as the loss of toll revenue if the construction would have been completed as scheduled.

The cessation of such obligation to construct the Collection and Distribution Roads resulted in failure of the Company's revenue to meet the projected revenue and had an impact on overall traffic system, as such roads might be able to alleviate traffic problems in downtown. Failure in construction of said roads therefore impaired efficiency in provision of overall traffic services. However, as at 31 December 2009, such dispute has not yet been referred to arbitration proceedings.

The details on other disputes are described in Disputes with EXAT on pages 47 to 51, most of which claim for damages by the Company from EXAT. Therefore, the decision should not materially have any negative risk towards the Company's operational results.

## 1.3 Risk from Interest Rate Fluctuation

The Company had a large amount of debts in the form of long-term loans for investment in construction of the Si Rat Expressway and the extensions under the Second Stage Expressway Agreement. Thus, interest expenses are considered the significant expenditures for the Company. The increased interest rate on loan may affect the Company's operational results due to the fact that the interest cost in respect of the certain credit facility was at MLR - 2% per annum, thereby exposing the Company to a risk from interest rate fluctuation or increase in the money market.

However, the Company is aware of such risk, and as such, in September 2009, the Company issued and offered additional debentures with maturity of 3.5 and 4 years in the total amount of Baht 2,000 Million, at the fixed interest rates of 4.10 to 4.25 percent; and in December 2009, the Company offered additional debentures in such year with maturity of 5.5 years in the amount of Baht 2,000 Million, at the floating interest rate of MLR - 3% per annum, to minimize the financial costs and prevent risk from interest rate fluctuations in money market, as well as minimizing risk from depending on the only source of fund in the type of long-term loans from banks.

As at 31 December 2009, the Company had long-term liabilities of Baht 23,585 Million comprising long-term loans and debentures at the floating interest rate, in the amount of Baht 10,085 Million or representing 42.76 percent and debt from debentures at the fixed interest rate, in the amount of Baht 13,500 Million or representing 57.24 percent.

Change in interest rate by 1 percent per annum would affect the interest expenses by Baht 100 Million per year.

#### 1.4 Risk from Investment in Northern Bangkok Expressway Company Limited (“Subsidiary”)

The Subsidiary which invested, constructed and operated the Udon Rattthaya Expressway (Bang Pa-in - Pak Kret) continuously sustained the operating loss due to an impact from the government policy on the construction of the competing road, namely, the Don Muang Tollway (National Memorial - Rangsit Section), resulted in the substantially lower volume of vehicles using the Udon Rattthaya Expressway than projected. The Subsidiary’s operational results are below projections and remained at a loss. As at 31 December 2009, the Subsidiary had accumulated loss amounting to Baht 5,009 Million and the outstanding liabilities and loans amounting to Baht 9,903 Million, affecting the quality of the Company’s investment funds and assets.

In order to minimize the risk from investment in the Subsidiary, the Company reduced the portion of investment by selling a certain portion of shares held in the Subsidiary to other legal entity, namely Cargo Village Co., Ltd., at the book value as at the selling date, in accordance with the resolution of the 2003 Annual Ordinary General Meeting of Shareholders assigning the Company’s Board of Directors to consider and proceed with such matter. As a result, the Company’s shareholding percentage in the Subsidiary then decreased to 53.33 percent of the registered capital.

On 1 November 2003 and 1 November 2008, the Ministry of Transport issued its Notifications on toll revision for the Udon Rattthaya Expressway, but such toll revision did not increase at the rate proposed by the Subsidiary, which in the Subsidiary’s opinion, did not comply with the Agreement, thereby causing the Subsidiary’s revenue to be lower than that should have been received. The aforesaid competing road also caused the actual traffic volume to be materially lower than the traffic volume study for making the decision to invest, and the Subsidiary thus continued to face operating losses. Based on such effect, the Subsidiary needs to give discount on tolls for this Expressway to attract more motorists.

#### 1.5 Risk from Investment in Various Companies

Due to the fact that the Company has invested in the construction and management of the Second Stage Expressway System which nearly approach the contract period, in order to establish long-term return and increase business value to its shareholders so as to enable the Company to continue as a going concern despite the expiration of the Project Agreement, the Company therefore considered investing in the public utility infrastructure business or in supporting business.

In 2001, the Company invested in Bangkok Metro Public Company Limited (“BMCL”), a company awarded concession from the Mass Rapid Transit Authority of Thailand (“MRTA”), in respect of investment in the M&E Equipment, together with provision of train operation service and maintenance of the MRTA Initial System for a period of 25 years. As at 31 December 2009, the Company holds shares in BMCL representing 11.88 percent. Furthermore, in 2005, the Company invested in SouthEast Asia Energy Limited (“SEAN”), a company investing in a concession business awarded by the government of the Lao People’s Democratic Republic to carry out design, construction and operation of the Nam Ngum 2 Hydroelectric Power Project for a period of 25 years, with a shareholding proportion as at 31 December 2009 of 16.67 percent. In addition, the Company also invested in Thai Tap Water Supply Public Company Limited (“TTW”), which operates the business of tap water production and distribution to the Provincial Waterworks Authority for a period of 30 years, with a shareholding proportion as at 31 December 2009 of 9.24 percent.

Although the Company has considered that the investment in such companies would derive a favorable return on investment in the long run, the uncertainty of such return on investment may occur due to any change of substantial factors from anticipation, which may affect the said companies’ revenue and operations.

BMCL was listed on the Stock Exchange of Thailand on 21 September 2006, rendering its financial costs to decrease, whereby BMCL utilized some portions of funds from the public offering to partially repay the loan and accommodate its liquidity. The delay of the plan for extension projects did affect its operational results. Therefore, in 2008, BMCL has undergone debt restructuring by extending the grace period for repayment of the principal and reduction of interest rates to a fixed interest rate of 3.75 percent per annum until the end of 2012, as well as changing the conditions in the loan agreements in line with cash flow while awaiting the growth of revenue from the extensions. In 2009, BMCL suffered a net operating loss of Baht 1,340 Million. However, the government also established the policy to encourage people to increasingly use the public transport whereby bidding for extension projects would be held so as to expand the metro network, which would increase the volume of passengers in the future for BMCL.

SouthEast Asia Energy Limited (“SEAN”) invests in Nam Ngum 2 Power Company Limited which is a contractual party to the Nam Ngum 2 Hydroelectric Power Project Concession Agreement with the government of the Lao People’s Democratic Republic, on a BOOT (Build-Own-Operate and Transfer) basis, that is, for design, development, construction and operation of the Nam Ngum 2 Hydroelectric Power Project for a period of 25 years from the commercial operation date; and is a contractual party to the Power Purchase Agreement with the Electricity Generating Authority of Thailand (“EGAT”) for sale of all electricity derived from the Nam Ngum 2 Hydroelectric Power Project to EGAT throughout the concession period of 25 years, whereby the sale price has been agreed upon in advance in order to minimize marketing risks. However, it would be possible that the power production may be lower than the required volume, which would be subject to penalty due to its inability to produce electricity for EGAT as agreed, and which may affect its revenue accordingly. The electricity production in the Nam Ngum 2 Project would mainly rely on hydroelectric power and in case of less quantity of inflowing water into the system, it may affect the production process. Nevertheless, according to a study of data on the quantity of water in such area during the years 1949-2003, the quantity of water should be sufficient to accommodate the requirement.

Currently, SEAN is constructing the Nam Ngum 2 Project and its progress, as at 31 December 2009, equaled 92 percent which is in accordance with the construction plan. It is expected that the construction would be completed for operation as planned, therefore, there would be a low level of risk from a delayed operation commencement. In 2009, SEAN suffered a net operating loss of Baht 102.90 Million since it is in the process of the project construction which has no income but pre-operating expenses.

Thai Tap Water Supply Public Company Limited (“TTW”) is a contractual party to the Water Purchase and Sale Agreement with the Provincial Waterworks Authority (“PWA”), on a BOO (Build-Own-Operate) basis, for a period of 30 years, in other words, investing in construction of tap water production system and distribution system for consumers without transfer of ownership in the tap water production system and distribution system to the PWA at the end of the Concession Contract. The risk from investment in TTW may arise from a termination of the Water Purchase and Sale Agreement by the PWA which is TTW’s sole customer, which may have an impact on TTW’s business operation, financial position and revenue in the future.

TTW commenced the tap water production and distribution since 2004, and its current production capacity for tap water and the water standard complied with the specified plan. It is deemed that TTW is the largest privately owned tap water producer in Thailand and Southeast Asia. Furthermore, TTW also registered its conversion into a public limited company and was listed on the Stock Exchange of Thailand on 22 May 2008.

TTW has been deriving profit from the operation since the commencement of business operation. In 2009, TTW has a net profit in the total amount of Baht 1,601 Million and has made dividend payment to shareholders, whereby the Company received dividend from TTW for the operational results of 2008 at the rate of Baht 0.20 per share and for the operational results of the first half of 2009 at the rate of Baht 0.11 per share, bringing the total dividend for 2009 to Baht 114.31 Million.

## 1.6 Risk from Work Operations

The Company takes into account the risk from operations 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 staff in charge from all divisions, thereby leading to the quality and availability of efficient, complete and continued service.

In addition, the Company also established the preventive measure for the significant structures of the Expressway Systems so as to be used at all times by way of drawing up a plan for inspection of the structures of both the Si Rat Expressway and the Udon Rattaya 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. With respect to the toll collection system, and the communication and traffic control systems

which are important to the Company's operations, the Company has provided the preventive maintenance as well as the data backup system, the standby power system and the management of purchase of spare materials. Regarding the toll collection equipment, which has a risk in obsolete technology, making it difficult to procure spare equipment, the Company has thus conducted a study on information and planned to install the replacement equipment and installed the new technology of Electronic Toll Collection system, which is available from several manufacturers. Furthermore, the Company also employed specialists to give advice on technology to ensure modern and quality equipment and system, which would build up all relevant parties' confidence, and cooperated with EXAT to conduct the study on the Electronic Toll Collection system to facilitate the Chalerm Mahanakorn Expressway, the Si Rat Expressway and the Chalong Rat Expressway, for the convenience of the services, which would alleviate traffic congestion at the front of the toll plazas, and encourage more motorists to use the Expressways.

### **1.7 Risk from Serious Accidents and Natural Perils**

In case there is an event or external factor which results in an emergency, namely, peril, serious accident, earthquake and such events which may be caused by terrorism or sabotage as bombing and riot, including gathering of activities for inciting public unrest, the Company requires all units to have emergency plans in response to any events which may suddenly occur and arrange for staff training to ensure that the staff in charge would be able to immediately take actions to resolve such emergency, as well as establishing a unit for monitoring, warning and coordinating with relevant agencies to prevent the occurrence of any serious accident. The Company has controlled and monitored for strict compliance with the relevant laws; for example, transportation of chemical substances and passenger trucks without roof are prohibited from accessing the Expressways, and transport trucks need to have complete truck coverings. Moreover, the Company further established the measure for inspection of the routes and their surrounding areas, including cooperation with police officers responsible for the areas around the routes. The Company also adjusted positions and added equipment and tools installed on the Expressways to enhance the capacity of control and surveillance, such as, CCTV cameras, lighting, traffic signboards and information signboards.

However, in order to prevent the impact from possible damage, the Company and the Subsidiary took out insurance against the Property Damage of the Si Rat Expressway and the Udon Rattahaya Expressway, and Business Interruption, including the Public Liability, on a yearly basis.

### **1.8 Risk from Economic Uncertainty**

The current economic fluctuations, such as, increased prices of oil and consumer goods, both government and private investment slowdown, termination of employments, and overseas financial institution crisis, are key factors that affect people's consumption, thereby causing the purchasing power to decline. According to past records, the volume of use of Expressways is partially affected, which is considered at a low level, as the Expressways are considered one of the essential public utilities and a better alternative than using the at-grade roads which always encounter traffic congestion, as well as facilitating convenient, rapid and safe traveling and transport of goods. However, in order to minimize the potential risk, the Company has arranged for a specific unit having duties to closely monitor data and analyze the tendency and consequences from economic condition, to set up preventive guidelines and action plans in response to future changes, as well as revising the investment plan in line with the situation and investing in such projects which generate maximum return to the Company.

### **1.9 Risk from Government and Politics**

The Company's business operation is under the supervision of EXAT, a government agency depending upon the political uncertainty and changes in government administration from the political party in charge, which may result in changes in policies, relevant laws or regulations, thereby rendering EXAT to be unable to perform its obligations under the Agreement or may require the Company to proceed beyond those specified in the Agreement or undertaking. In order to minimize such effect, the Company has established a joint operation system with the government agencies both at the administrative and operation levels, by means of sharing of sufficient information to ensure good understanding towards each other, as well as closely and regularly monitoring the political situations and changes in policies, especially those relating to the Company's business, and reviewing the strategy and operation plan reasonably suitable for the situations and for their mutual interest in the long run.

## 1.10 Risk in respect of Personnel

The Company has realized the significance and value of personnel towards the Company, as they are 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. The Company has continuously held staff training courses to provide and improve knowledge, skills and abilities in various fields necessary for performance of work based on each staff's position and designated duties, in order to enhance the potential and opportunity, and to encourage the staff. The consideration of remuneration payment and welfare is appropriate and fair. The operation process and work system are reviewed and revised to ensure preparedness at all times, as well as arranging for a succession plan and established a working group comprising high-level executives to set up guidelines in the selection to ensure the availability of personnel, both in the executive and supervisor levels, in order to prevent the risk from 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 prevent error from work process, the Company has adopted several quality event systems in its work operations, namely, 5S Activity, QCC Activity, Suggestion Event, including ISO 9001:2000 Quality Management System, in respect of which the Company has been passing the quality surveillance since 2000, so as to ensure that the Company's work operation system meets the standards, and all events which are significant to the provision of service to Expressway users are controlled by using the Key Performance Indicators (KPI) in monitoring and evaluation, and ISO 14001:2004 Environmental Management System, which the Company has been receiving the certification since 2008, in order to ensure our corporate social and environmental responsibility by minimizing and limiting pollutions caused by the operations.

## 2 Nature of Business Operations

### 2.1 Background and Significant Events in 2009

#### 2.1.1 Background

Bangkok Expressway Public Company Limited was founded on 23 December 1987 with registered capital of Baht 100,000. Since the Thai government wished to have the private sector to jointly invest in the development of the national transportation system, including the expansion of expressway network, EXAT therefore invited interested parties to submit proposals for construction and operation of the Si Rat Expressway (Second Stage Expressway Project) to connect to the Chalem Mahanakorn Expressway (First Stage Expressway Project), with the result that the Company's proposal was accepted by EXAT and also adopted by the Council of Ministers on 20 September 1988. On 22 December 1988, the Company entered into the Second Stage Expressway Agreement with EXAT for the construction and operation of the Si Rat Expressway and its extensions, including related businesses under said Agreement for a period of 30 years from 1 March 1990, and the Agreement for the Extension of Second Stage Expressway System, sector D, for a contract period of 30 years from 17 April 1997.

In 1994, the current major shareholder, namely, Kumagai Gumi Company Limited, withdrew itself from the management, and thereafter, the group of local banks and CH. Karnchang Group entered into the management and accepted to purchase all shares held by Kumagai Gumi Company Limited. The Company went public on 23 June 1994 and its ordinary shares were registered as listed securities for trading on the Stock Exchange since 31 August 1995. The Company's present registered capital amounts to Baht 8,000 Million, Baht 7,700 Million of which has been paid up.

On 25 September 1996, the Company established Northern Bangkok Expressway Company Limited ("Subsidiary"), with 99.99 percent of its registered capital of Baht 3,000 Million held by the Company. On 27 September 1996, the Subsidiary entered into the Bang Pa-in - Pak Kret Expressway Agreement with EXAT for the construction and operation of the Udon Rattaya Expressway for a period of 30 years from 27 September 1996 until 26 September 2026. Thereafter, the Subsidiary's registered capital was increased by Baht 3,000 Million on 19 March 2003. Therefore, the Subsidiary's present registered capital amounts to Baht 6,000 Million, Baht 5,160 Million of which has been paid up. The Company's shareholding percentage therein remains 53.33 percent of the registered capital.

On 17 April 1997, the Company entered into the Agreement for the Extension of the Second Stage Expressway, Sector D, for a period of 30 years, with EXAT for the construction and operation of Sector D of the Si Rat Expressway (Rama IX - Srinagarindra) from 17 April 1997.