

Risk Factors



The Board of Directors realizes that its operations may face many risks, including economic, social, political, financial, innovation, technological, and climate changes. Currently, Thaicom Public Company Limited's business operations consist of 3 core areas: (1) Satellite and Related Services (2) Internet and Media Services and (3) Telephone Business Abroad. There are various risk factors, both internal and external, associated with each of the Company's areas of business operation.

The Board of Directors has established a Risk Management Committee to manage risks which affect the Company. The Risk Management Committee will evaluate both general and specific risk factors quarterly, summarizing and reporting all risks to the Board of Directors for consideration, review and determination of risk prevention procedures.

The following information describes significant risk factors which might affect the Company's operations, financial status, or business performance. However, the Company has already prepared plans to deal with and mitigate the risks outlined below.

Strategic Risk

1. Risk from unclear government policy on the regulation of communications satellite.

The company was notified by the Ministry of Digital Economy and Society (MDES) that the MDES has delayed the submission of satellite network filings for the THAICOM 9 satellite to the ITU after the MDES had already submitted the filing documents to the ITU. Later, the MDES withdrew the filing from the ITU system, arguing that the MDES was in the process of setting a policy. At present, the government is still working to set up a national policy for orbital slots use. As a result, all satellite operators in Thailand which have been granted a telecom license cannot start a new satellite project for about 2 years.



If the government does not come to a conclusion in the regulatory framework by 2018, it will impact on the satellite industry, which is the key to driving the country into security, prosperity and sustainability. The results can be summarized as follows.

- (1) Impact on an operator: It is not possible to build a new satellite to replace the current one that nearly expires in time, resulting in the loss of customers because there is no capacity to serve both domestic and foreign customers continuously. In the past year, the company has been affected by the fact that foreign customers who have signed contracts to use the THAICOM 9 satellite in advance around more than 1 billion baht have canceled their contracts and moved to use foreign satellites due to the delay of Thaicom 9 even it received a license from the NBTC. The delay was due to the fact that MDES had withdrawn the filing for THAICOM 9 from the ITU system, arguing that the ministry is still in the process of setting the policy.
- (2) Impact on business continuity in both domestic and international customers who use satellite transponders: Usually, the satellite business (both service providers and users) have to plan ahead of time because they require a high investment and take time to complete.

(3) Affect countries (states and peoples)

- 3.1 Thailand shall lose the right of orbital slot to another country in accordance with ITU rules.
- 3.2 Impact on the security of foreign satellites
- 3.3 Impact on economy and loss of foreign currency income if customers transfer to foreign satellites instead of Thai satellites.

To prevent and reduce the impact of such risks, the Company has prepared the following framework.

- 1) Management of all customers using Thaicom satellite services by allocating all transponders to accommodate and satisfying all customer needs as much as possible.
- 2) Providing additional satellite capacity with international business partners.
- 3) Negotiate with the MDES in order to continue operating Thaicom satellites under the concession agreement after the concession end under the Clause 40 Renewal of the contract shall be “before the expiration of this Agreement if the Company wishes to continue its business under this Agreement. The company will propose a new agreement with the MDES within the 25th year from the date of signing this contract from September 11, 2015 to September 10, 2016”. The Company submitted a proposal for a new agreement to the Ministry on August 15, 2016, within the framework of the contract period. The Ministry has issued a letter to the Company on November 1, 2016, acknowledging the proposal of the company. The ministry is currently considering the proposal.

However, the Company has submitted an additional proposal for the new agreement after the end of concession to the MDES on December 14, 2017. The company will negotiate with the MDES to get the conclusion soon.

2. Status of THAICOM 7 and THAICOM 8

The Company is currently operating THAICOM 7 and THAICOM 8 under a telecommunications license granted by NBTC in accordance with the

currently applicable laws, namely Telecommunications Business Act B.E. 2544 and the Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E. 2553. The Ministry of Information and Communications Technology (currently the Ministry of Digital Economy and Society, or Ministry) notified NBTC that authorization to use the orbital slots had been granted for the two satellites in question and NBTC then referenced said authorization in the license granted to the Company.

Subsequently, the Ministry entered into considerations for the establishment of a new framework for granting authorization to use orbital slots. The Ministry proposed both a long-term and transition framework for governing the communications satellite business in Thailand to the Prime Minister’s Cabinet. The transition period would last until the end of the current concession, which is 10 September 2021. Under the proposed framework, any satellites operating during said transition period, including THAICOM 7, THAICOM 8, and any new satellites launched before the end of the concession, must be operated under the concession. After the end of the transition period, satellites would then be operated under a licensing system with terms and conditions to be agreed upon with the government.

However, in the Cabinet meeting on 30 August 2016, the following resolution was recorded:

“Regarding the proposed framework for governing the communications satellite business both in the long-term and during the transition period, the Ministry should proceed to ensure that policies are fair, place priority on national interests, and comply with all relevant laws, namely the Private Investment in State Undertaking Act B.E.2556 and The Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E. 2553.”

On 17 November 2016, in response to the Cabinet resolution, the Minister of Digital Economy and Society appointed a working group composed of

representatives from relevant agencies, legal experts, and technical specialists to review the framework for governing the communications satellite business. The Company has since engaged with the working group by sharing information and perspectives on the background of the two satellites in question, current competitive conditions in the global communications satellite industry, future outlooks for the industry and including the Company's proposal for State's benefits. Such information can support the Ministry in establishing a governing framework which is in line with the Cabinet's aforementioned resolution and will serve to maximize the benefits to all parties.

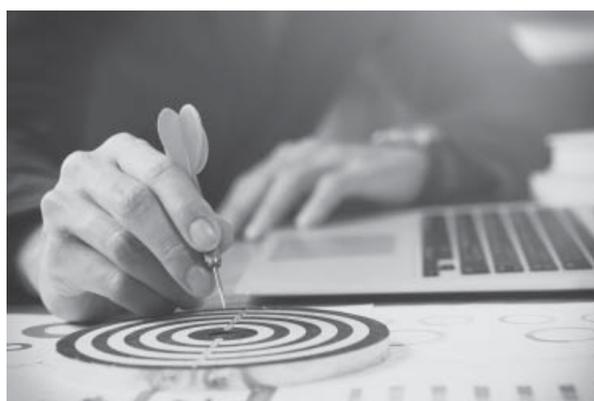
Since the Company provided such information and the state benefit proposal for the overall communications satellite business, the Company has not been receiving the consideration result responding to the Company's proposal. In vice versa on August 7, 2017, the Ministry officially informed the Company that THAICOM 7 and THAICOM 8 are the satellites under the Concession Agreement and invited the Company to discuss the approach for compliance with the Concession Agreement. The Company attended the meeting and provided Company's opinion by insisting that THAICOM 7 and THAICOM 8 are not the satellites under the Concession Agreement. However, in order to settle and solve the problem, the Company has proposed another approach (not the concession) which will bring the maximum benefit to the country for the Ministry to consider.

The Company has not receive any notice from the Ministry responding to the proposed resolution until 5 October 2017, the Ministry sent a letter again confirming that THAICOM 7 and THAICOM 8 were under the concession and accelerates the Company to comply with the agreement such as the transfer of ownership, delivery of assets, preparation of backup satellites, payment of concession fee and also property satellite insurance.

In this regard, the extraordinary meeting of the Board of Directors No. 11/2017 dated 24 October 2017 at 17.00 was arranged to consider this agenda together with the legal consultant cautiously and

carefully. The Company has concluded that THAICOM 7 and THAICOM 8 are not the satellites under the Concession Agreement since the operation of both satellites are under the license framework granted by the NBTC. Also, the Company has complied with the terms and conditions of the Concession Agreement completely with the different perspective between the Ministry and the Company. The meeting resolved that the Company has submitted a formal letter to argue that the Ministry opinion by confirming that the THAICOM 7 and THAICOM 8 operate under the license framework. Therefore, the Company has the right to use the article no. 45.1 of the Concession Agreement by bringing the matter into arbitration to be the judge. The Company filed its dispute with the Thai Arbitration Institute on 25 October 2017, as a black case no. 97/2560.

According to Clause 45.6 of the Concession Agreement, in the event that the dispute is pending arbitration, the parties still have to comply with the terms of the Concession Agreement. Therefore, while the dispute is pending arbitration, the Company has no duties in compliance with the opinion of the Ministry referred to above until the arbitral award.



Operational Risk

1. Service life of satellites

Although satellites generally have no less than 15 years of service life, there are some factors that may decrease their life expectancy. These factors include the spacecraft quality, the sturdiness and durability of spacecraft components, the launch vehicle and

efficiency of the launch process, satellite fuel consumption, and the operator's skill in controlling the satellite under different conditions. The Company might lose customers and revenue if the Company's satellites have shorter service lives than expected and the Company cannot launch replacement satellites in a timely manner. Therefore, the Company's satellite engineering team regularly calculates the remaining service life of our satellites. If a satellite nears the end of its service life, the responsible department will be informed, and plans for a replacement satellite will be drawn up based on careful study of budget requirements, the source of financing, and the return on investment.

In addition, to mitigate risk from shortened satellite service life, the Company has recruited professional staff and implemented operating procedures to maximize asset utilization. Even so, satellite operation requires technical know-how and expertise. The Company provides a comprehensive training process of at least 6 months to 1 year to ensure that its employees have the required skills and abilities to control and operate the satellites. However, there remains the possibility of human error. As such, the Company has pre-established procedures for dealing with engineering problems in the event an error should arise in sending commands to the satellites.

2. In-orbit failure

The satellite is a state-of-the-art piece of technology and engineering which, once launched into orbit, is subject to risk from possible system failure, solar discharges, or collision with other objects in space. These damages can affect the Company's services to its customers, temporarily or permanently degrading the satellite's ability to uplink and downlink signals. The Company may lose current customers and/or may not acquire new customers while replacing the damaged satellite.

However, all satellites are designed to withstand a certain amount of damage. The probability of satellites suffering severe damage to the point of complete failure is very low. Thaicom maintains a contingency plan to minimize the adverse effects on customers in the case of severe damage to the satellites. These plans include transferring as many customers as possible to available transponders on the remaining Thaicom satellites. The Company has also discussed agreements with other satellite operators for temporary leasing of transponders until the launch of a replacement satellite. Normally, the construction of a new satellite takes approximately 24 to 30 months depending on the complexity and size of the satellite.

The Company is aware of the potential risks to satellites in geostationary orbit; therefore, it minimizes such risks by fully insuring the Thaicom satellites. Under the Domestic Communications Satellite Operating Agreement, the Ministry of Information and Communication Technology (currently Ministry of Digital Economy and Society, MDE) and Thaicom are co-beneficiaries on the insurance policy for Thaicom satellites. The Ministry is the owner of the satellite assets while the Company owns the right to operate them. The insurance policy is for full coverage with partial loss, meaning that the Company can immediately make a claim when the satellite is partially damaged. To make a claim, the Company has to submit a Notice of Loss and Proof of Loss to the insurers. After the insurers are in agreement with the Proof of Loss, the claim under the policy will be paid.

The insured value of each satellite is equal to the satellite's book value on the date the insurance takes effect. However, the insured value does not cover compensation for the loss of revenue to the Company or its customers due to the satellite's damage. This could possibly affect the Company's operational performance.

However, the insurance policy shall not cover the damages to or the loss of the satellite caused by/or resulting from:

1. War, invasion, defense, acts leading to war made by the government, or military action
2. Anti-satellite equipment, atomic bomb, or nuclear-related equipment
3. Rebellion, uprising, riot, strike, revolution, civil war, or terrorism
4. Seizure by government agencies
5. Nuclear reaction or radiation from radioactive waste, which, directly or indirectly, causes loss of/damage to the satellite, except for radiation naturally occurring in the space environment
6. Electromagnetic or radio frequency interference
7. Intentional or willful acts of the insured or the authorized person(s) that cause loss of or failure of the satellite.



Financial Risk

1. Non-compliance with the undertaking and Terms and Conditions required in the Loan Agreement and Debentures

Currently, the Company is financed through both Long Term Loan and Unsecured Debentures. As per undertakings as well as terms and conditions, the Company has to comply as required in the Loan Agreement and Debentures in order to avoid any breach that may lead to event of default, triggering the call options of Loan and Debentures.

Risk from non-compliance with the terms and conditions required in the agreements may occur when the Company fails to perform any of its financial covenants, undertaking, obligations or non-payment of principal and interest on due date, including any event or any circumstance occurs which might have a material adverse effect or material adverse change on any operations or business of the Company. To be declared or accelerated of all indebtedness by the lenders may affect the Company's financial position, liquidity, and cash flow if the Company cannot find the new financing to repay the called loan and debentures in time.

However, the Company mitigates the risk by closely monitoring and controlling the conditions of Loan and Debenture in order to avoid any breach. Currently, the Company maintains the debt to equity ratio lower than the covenant required in the Loan Agreement, healthy financial position, and cash flow. The Company also has available short-term credit lines which can be used in case of the declaration or acceleration of Loans and Debentures are exercised. During the year, the Company had also partially prepaid the Long-Term Loans to minimize this risk.

2. Potential loss of major customers

The major source of the Company's revenue comes from several customers who provide telecommunications and broadcast services. If major customers face financial problems or have been approached by other satellite operators, they may cancel their services or may not renew contracts with the Company. These factors can affect the Company's financial results, as it usually takes time to attract new customers. However, the Company's major customers usually make their payments on time, as they must broadcast their programs for their viewers. In addition, changing to other satellites will bring technical hurdles as it requires relocating or repositioning the customer's antennas from their previous configuration for Thaicom's satellites, which can be very costly

undertaking. The Company usually signs long-term contracts with its major customers, offering high-quality services with flexible technical and business solutions to help customers grow. Moreover, the Company consistently maintains good relationships with its customers to ensure customer satisfaction and win-win cooperation, as well as regularly conducts a customer health report of its major customers.



Compliance Risk

1. Domestic Communications Satellite Operating Agreement

The Company provides satellite communications services under the Domestic Communications Satellite Operating Agreement, dated 11 September 1991. The agreement was originally between the Ministry of Transport (currently the matter is under the supervision of the Ministry of Digital Economy and Society) and Shinawatra Computer and Communications Co., Ltd., now named Intouch Holdings Public Company Limited (Intouch Holdings Plc). Intouch Holdings Plc is the major shareholder of the Company. Risks related to allegations of breach of the terms of the Domestic Communications Satellite Operating Agreement may be divided into 2 main issues and summarized as follows:

(A) Shareholding ratio

Per the Domestic Communications Satellite Operating Agreement, Clause 4, Intouch Holdings Plc has to establish a new company (currently Thaicom Plc) to operate the satellite business under the agreement. This new company has to have a registered capital of no less than Baht 1 billion, and Intouch Holdings Plc must not hold less than 51% of the shares in this new Company. In 2005, the Company had to raise capital through a Public Offering (PO) of new shares, so Intouch Holdings Plc's proportional percentage of shareholding would have dropped below 51%. Before issuing the new PO, the Company consulted with the Ministry of Information and Communications Technology (currently Ministry of Digital Economy and Society) and asked it to review the agreement and adjust the shareholding ratio from at least 51% to at least 40%. Subsequently, the Ministry submitted the matter to the Cabinet for consideration, but the Secretary General of the Cabinet notified the Ministry that the matter did not need to be submitted to the Cabinet. Furthermore, the Cabinet was working to decrease the number of matters to be considered by the Cabinet, subject to the Regulations of the Office of the Prime Minister, Section 22. The regulations did not specify any further procedure once a matter has been rejected for consideration. As the matter was not deemed to be an issue for consideration by the Cabinet, it was returned to the Ministry. The Ministry further requested the opinion of the Juridical Council (the Council of State) on this issue twice. The Juridical Council informed the Ministry that as the Secretary General of the Cabinet had informed the Ministry that the matter did not need to be considered by the Cabinet, the Ministry could make the final decision in the case. Previously, the Juridical Council had given the opinion that the Domestic

¹ Intouch Holdings Public Company Limited, changed its name from Shin Corporation Public Company Limited

Communications Satellite Operating Agreement could be amended, per the Company's request, because, regardless of the shareholding ratio, Intouch Holdings Plc still retained the same rights, duties, and obligations under the agreement. Further, although Intouch Holdings Plc's shareholding ratio might be reduced, its duties and commitments would remain in place, and the reduction in shareholding would not affect the benefits to be returned to the Ministry under this agreement. Furthermore, the reduction in Intouch Holdings Plc's shareholding in the publicly listed company, Thaicom, from 51% to 40% of total shares issued, would also negate the classification of Intouch Holdings Plc as a controlling entity according to Section 247 of the Securities and Exchange Act B.E. 2535.

In consideration of cases brought before it under the charge of Criminal Activity by Persons Holding Political Positions, the Supreme Court deliberated and made rulings regarding the change in Intouch Holdings Plc's shareholding ratio. However, the Company was not a party in the said court case, hence the final judgement of the Court is not binding and cannot be enforced on the Company. Regarding any amendments to the agreement, the Company proceeded properly in compliance with all its contractual and legal obligations, having received Ministry approval.

The Ministry later appointed a committee under Article 72 of the Private Investment in State Undertaking Act B.E. 2556, in order to find a proper solution to this issue. The Company has coordinated with the Ministry and the recently established committee regarding further procedure.

(B) Back-up satellite

According to the Domestic Communications Satellite Operating Agreement, the satellites provided under the obligation shall be agreed upon by the Ministry and the Company. This agreement will include the technical

specifications of the satellites. Under this agreement any subsequent satellite shall not be of lower specifications than the initial main satellite. However, the number of transponders and frequency on the satellites will depend on the joint consideration of the Ministry and the Company.

Where the issue of THAICOM 4 is concerned, the Company performed in strict accordance to its obligations under the agreement. THAICOM 4 was approved by the Ministry and launched as a subordinate or back-up satellite. There is question as to whether or not the THAICOM 4 satellite should be considered a back-up satellite for THAICOM 3 since the technical specifications are not the same as those of THAICOM 3. In the Supreme Court's consideration of cases brought before it under the charge of Criminal Activity by Persons Holding Political Positions, there was mention of some facts related to THAICOM 4. However, the Company is not a party in the said court case, hence the final judgement of the Court is not binding and cannot be enforced on the Company. Regarding the Company's THAICOM 4 operations, the Company proceeded properly in compliance with all its contractual and legal obligations, having received Ministry approval. The Ministry has since appointed a committee under Article 72 of the Private Investment in State Undertaking Act B.E. 2556 to consider the most appropriate course of action. The Company has coordinated with the Ministry and the recently established committee regarding further procedure.