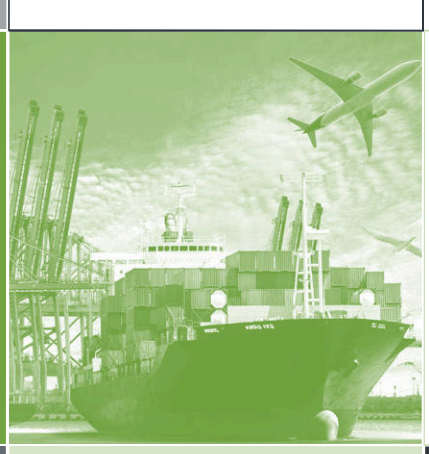
THAICOM

EXPAND THE HORIZON



Annual Report 2018

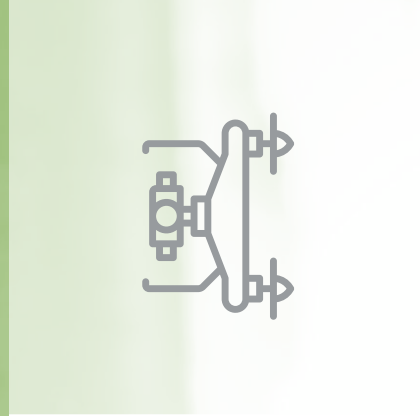
Partnership Model

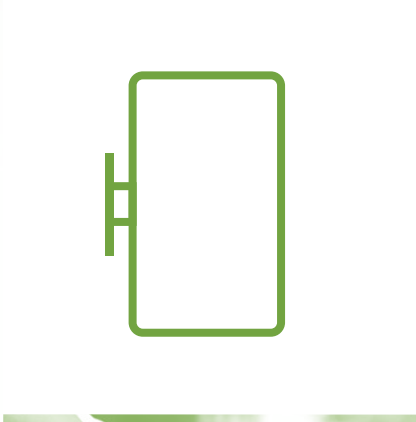


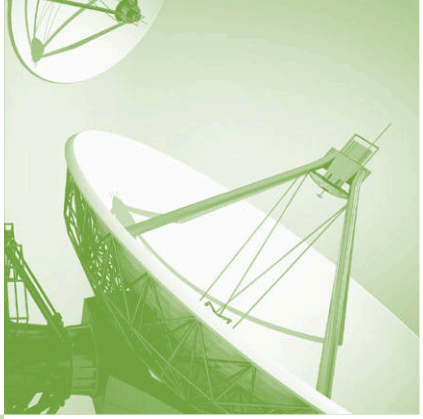










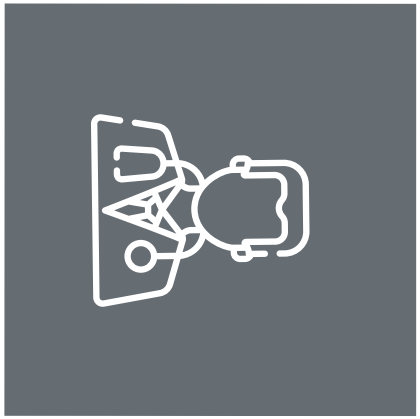




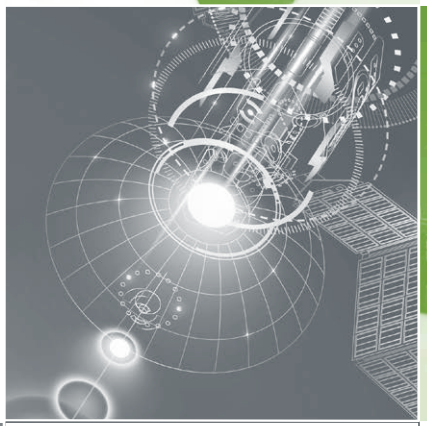


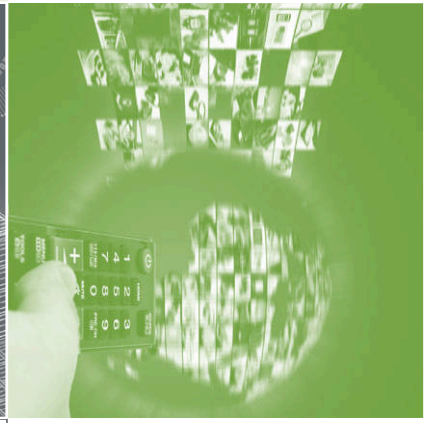


Products & Services

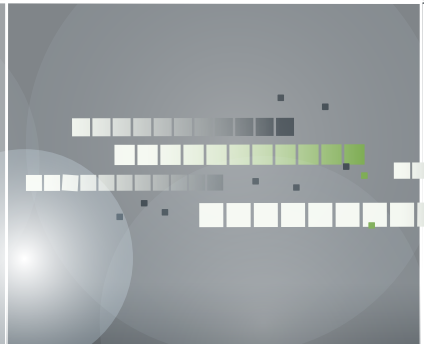


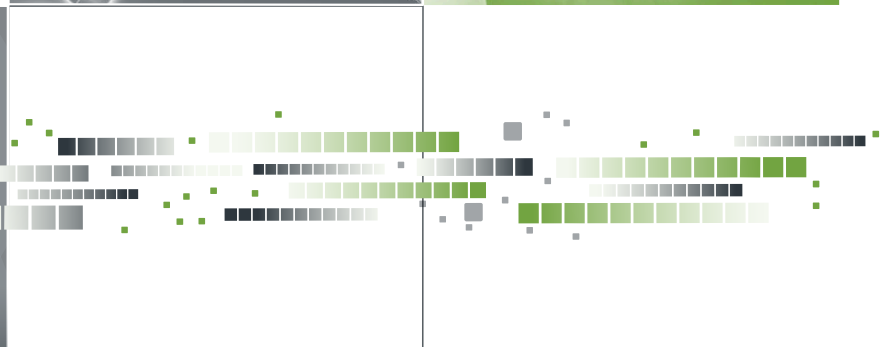












Partnership Model

Business Model

EXPAND THE HORIZON

Organization & People

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Message from the Chairman of the Board of Directors and Chief Executive Officer



Mr. Prasert Bunsumpun
Chairman of the Board of Directors

Mr. Anant Kaewruamvongs
Chief Executive Officer

Dear Shareholders,

In 2018, the Board of Directors extensively reviewed the overall business and competitive landscape, including key market and technology drivers, to determine the long-term sustainable strategy of the Company as follows:

1. **Satellite Business:** To continue the core business by not only relying on Thailand's policy and regulatory framework regarding the licensing and concession, but also seek international satellite licenses that are more cost-effective. In addition, to utilize next generation satellite technology together with joint investment with our international partners to reduce investment risk and reliance on Thailand's concession scheme.

2. **Adjacent Business:** To leverage our marketing and technical strengths to develop businesses that are adjacent to the satellite business, such as (i) Providing broadband services for commercial vessels and ships, (ii) Satellite consultancy services in the areas of satellite construction, teleport services, sales and marketing, and (iii) System integration of satellite and related communication networks.

3. **New Business:** To establish a new business unit dedicated to develop new businesses in the field of digital or future technology to diversify the Company's portfolio and reliance on the satellite business in the future.

In order to prepare the Company for a sustainable future, the Board of Directors placed emphasis on restructuring the organization to make it fit for the digital world by ensuring that it is fast and flexible. As such, innovative training programs, such as Design Thinking and Social Lab were introduced to the employees to learn new customer-centric concepts. In addition, a new cost management policy was implemented to ensure that the Company is continuously running more efficiently.

The Board of Directors not only places importance on business but equally so on good corporate governance and long-term sustainability. The Company was awarded the ASEAN Corporate Governance Award as the "Top 50 ASEAN PLCs" two consecutive times, recognizing that Thaicom, as a Thai publicly listed company, meets the international standards of corporate governance.

The Company has also retained the "5-star CG" status on CG Report of listed companies by the survey from the Stock Exchange of Thailand (SET) for six consecutive years (2013- 2018), as well as being recognized by the Thailand Sustainability Investment (THSI) for four consecutive years (2015-2018). In addition, the Company strictly adheres to anti-corruption practice. Thaicom has been recertified as the member of Thailand's Private Sector Collective Action against Corruption (CAC) by the Thai Institute of Directors (IOD) for the second term after receiving the first certification in 2015. These awards reflect the Company's strong commitment to operate under the principle of good corporate governance both in Thailand and the region.

On behalf of the Board of Directors and management team, we would like to sincerely thank all stakeholders for your continued support. The Board is committed to overseeing the Company through good governance, pursuing a strategic direction that maximizes the benefits of stakeholders and shareholders.

Board of Directors and Company Secretary



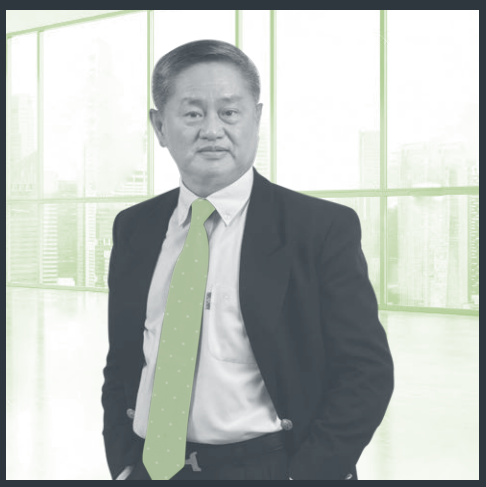
1. Mr. Prasert Bunsumpun
Chairman of the Board of Directors
and Independent Director



2. Mrs. Patareeya Benjapolchai
Independent Director
Chairman of the Audit Committee
Member of the Governance and Nomination Committee



3. Mrs. Charintorn Vongspootorn
Independent Director
Member of the Audit Committee
Chairman of the Compensation Committee



4. Prof. Samrieng Mekkriengkrai
Independent Director
Member of the Audit Committee
Member of the Compensation Committee
Chairman of the Governance and Nomination Committee



5. Mr. Kwek Buck Chye
Director
Member of the Executive Committee
Member of the Governance and Nomination Committee



6. Mr. Anek Pana-Apichon
Director
Chairman of the Executive Committee
Member of Compensation Committee



7. Mr. Somprasong Boonyachai
Director



8. Mr. Anant Kaewruamvongs
Director
Member of the Executive Committee



9. Ms. Yupapan Panclurbthong
Company Secretary

Management Team



1. **Mr. Anant Kaewruamvongs**
   Chief Executive Officer



2. **Mr. Anuwat Sanguansappayakorn**
   Chief Financial Officer



3. **Mr. Patompob Suwansiri**
   Chief Commercial Officer



4. **Mr. Wichai Kittiwittayakul**
   Chief Audit Executive



5. **Mr. Ekachai Phakdurong**
   Head of Regulatory Affairs Department
   Head of Platform and Services Business Department



6. **Mrs. Pannee Nivasnanda**
   Head of Finance Department



7. **Dr. Sakon Kittivatcharapong**
   Head of Marketing and Business Development Department

Annual Audit Committee Report for 2018

To: Shareholders of Thaicom Public Company Limited

The Audit Committee of Thaicom PLC was appointed by a resolution of the Board of Directors ("the Board") and consists of three independent directors. Mrs. Patareeya Benjapolchai was appointed as the Chairperson of the Committee while Mrs. Charintorn Vongspootorn and Professor Samrieng Mekkriengkrai were appointed as members. During this year, Professor Hiran Radeesri retired from the position of Chairman of the Audit Committee, due to completion of the term. The Secretary to the Committee is Mr. Wichai Kittiwittayakul, who also serves as the Chief Audit Executive. All the Committee's members meet the qualifications set by the Stock Exchange of Thailand. Mrs. Patareeya Benjapolchai and Mrs. Charintorn Vongspootorn have considerable knowledge and experience of both finance and accounting.

The primary responsibility of the Committee is to assist the Board in reviewing the accuracy of the Company's financial reports, along with the adequacy and effectiveness of the internal control and risk management systems, as well as compliance with all the laws and regulations pertaining to the Company's business operations. The Committee also oversees the performance of both the internal auditor and external auditor, and carries out its duties in accordance with the defined roles and responsibilities set forth in the Audit Committee Charter approved by the Board. This charter can be viewed on the Company's website at: www.thaicom.net

During the year 2018, the Committee held a total of twelve (12) meetings with the Company's management, the Head of Internal Audit, and the external auditor. All the Committee's members attended these meetings. The Committee reported its performance to the Board every quarter and made recommendations for necessary actions to be taken by the Company. The Committee's significant activities have been summarized below.

1. **Financial Statements:** The Committee reviewed the Company's quarterly and annual financial statements for the year 2018, including the disclosure of information in the attached notes, which had already been reviewed and audited by the external auditors. In addition, the Committee, the management and the external auditors discussed the estimates and judgments applied to the financial statements, the impact from the revised accounting standards that had led to changes in the Company's accounting policies, significant accounting issues, and key audit matters highlighted in the external auditor's report.

2. **Internal Controls and Risk Management:** The Committee reviewed the effectiveness of the Company's entity-level internal control system, using guidelines from the Office of the Securities and Exchange Commission and COSO - Internal Control Integrated Framework, which had been prepared by the management. The Committee also reviewed the results of internal audits conducted on various key business processes every quarter, along with the issues and recommendations listed in the management letter from the external auditor. Moreover the Committee reviewed the risk management result which had been prepared by the risk management committee every quarter.

3. **Internal Audit:** The Committee approved the audit plan for 2018. The plan focuses on risk-based proactive audit, including emerging risks of the organization such as cyber security and digitalization system. In addition, the Committee also reviewed Internal Audit Department's independence, direction, strategy and resource sufficiency. The Committee also agreed to adjust the Internal Audit Charter to be in line with the International Professional Practices Framework.

In addition, the Committee also reviewed the performance of the Internal Audit Department on a quarterly basis, evaluated the annual performance of the Head of Internal Audit, and held a meeting with the internal audit team without the presence of management in order to independently discuss matters that had arisen.

4. **Regulatory Compliance:** The Committee held a meeting with the legal, compliance and other relevant departments to review the Company's compliance with the law on securities and exchange, the Stock Exchange of Thailand's regulations, and the laws pertaining to the Company's business operations.

   Moreover, the external auditor did not report any suspicious circumstances in which a director, executive or other person responsible for the Company's operations might be suspected of committing an offense under Section 89/25 of the Securities and Exchange Act during 2018.

5. **Corporate Governance:** The Committee reviewed the Company's governance practices by applying the principles stipulated in the Securities and Exchange Commission's Corporate Governance Code, along with other best practice guidelines such as the Stock Exchange of Thailand's Principles of Good Corporate Governance for Listed Companies, the Thai Institute of Directors' Corporate Governance Criteria, and the ASEAN Corporate Governance Scorecard. The Committee also reviewed the Company's compliance with its Corporate Governance Policy. For the year 2018, the company's corporate governance of listed company was evaluated to be "Excellence", which is the 6th consecutive year (2013 - 2018) from the Thai Institute of Directors Association (IOD). Moreover, the company received "TOP 50 ASEAN PLCs" prize from ASEAN Corporate Governance Awards as Thai listed company for 2 consecutive years. The company has been evaluated for good corporate governance in accordance with the ASEAN CG Scorecard standard, which is considered to be core principle for evaluating and rating corporate governance of listed companies in order to raise the standards of corporate governance of listed company in ASEAN countries

6. **Whistle-blowing:** The Committee reviewed the quarterly whistle-blowing reports covering all the companies in the group, which contained complaints that had been made through various reporting channels such as E-mail or Ethics Hotline in Internet and the company's Intranet. During 2018, there are seven complaints relating to the company's employee. Four cases were completely investigated and processed in accordance with the Company's defined procedures. Three cases are still in process of investigation. The Audit Committee recommended that the results from the investigation should be used to improve work process, define prevention and practices guidelines. In addition, the committee reviewed Misconduct & Fraud Investigation policy to be in line with the company's operations. The committee also agreed to adjust whistle blowing procedure through Ethics Hotline as specified in the Whistle-blowing policy.

7. **External Auditor:** The Committee considered the selection of the Company's external auditor and concluded that the auditors from Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd., a leading international audit firm, were independent with considerable expertise and reasonable fees. Deloitte's performance in the previous year had also been satisfactory. The Committee consequently recommended that the Board propose the re-appointment of external auditors from Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd. for another year at the Annual General Meeting of Shareholders for 2018. The audit fee is amount to 1.86 million baht, which is equal to last year. The committee also reviewed non-audit service policy. During 2018, the company engaged non-audit service from the external auditor, amounting to 180,000 baht.

   In addition, the Committee held a meeting with the external auditors without the presence of the Company's management to discuss issues and concerns that had arisen while performing their duties.

8. **Connected Transactions:** The Committee reviewed the reasonability and the benefits of connected transactions and transactions that might have led to a conflict of interest, including the accuracy and adequacy of disclosures to ensure that they complied with Stock Exchange of Thailand's laws and regulations.

9. **Anti-Bribery and Corruption:** The committee reviewed anti-corruption self-assessment form for re-certification from the Thailand's Private Sector Collective Action Coalition Against Corruption after being certified in 2015. The company has completed re-certification of the membership of the Thailand's Private Sector Collective Action Coalition Against Corruption on August 21, 2018. In addition, the committee also encouraged the company to participate in various activities of the Thailand's Private Sector Collective Action Coalition Against Corruption.

10. **Audit Committee Self-Assessment:** The Committee conducted a self-assessment to review and evaluate its performance by benchmarking it against the Audit Committee Charter and best practice guidelines. The review concluded that the Committee had been effective in carrying out its duties and had followed the terms of reference in the charter. The Committee also reviewed, and made amendments to, the Audit Committee Charter in order to align it with best practice guidelines, and submitted it to the Board for approval.

In conclusion, the Committee believes that it completely discharged its duties in the year 2018 using its knowledge and expertise, with the utmost care and independence. The Committee also believes that the Company's financial statements were presented fairly, in all material respects, in accordance with Thai Financial Reporting Standards. Moreover, all disclosures of information were adequate and reliable, while all connected transactions were reasonable and beneficial to the Company. The Company's internal control and risk management systems are both adequate and effective. Furthermore, the Company had complied with all related laws, regulations and good corporate governance principles without material flaw throughout the year.



(Mrs. Patareeya Benjapolchai)
Chairperson of the Audit Committee
On behalf of the Audit Committee
February 8, 2019

Compensation Committee Report for 2018

To: Shareholders of Thaicom Public Company Limited

The Board of Directors Meeting No. 4/2018 held on 28 March 2018 passed a resolution to approve the appointment of Mr. Anek Pana-Apichon as Member of the Compensation Committee, replacing Mr. Prasert Bunsumpun and effective from 28 March 2018.

Therefore, the Compensation Committee is composed of 3 members. Mrs. Charintorn Vongspootorn as chairman of the committee, Professor Samrieng Mekkriengkrai and Mr. Anek Pana-Apichon as members. Ms. Yupapan Panclurbthong, the Company Secretary, serves as the secretary of the committee.

The Compensation Committee has performed its duties as stipulated in its charter and as assigned by the Board of Directors diligently and independently for benefit of the Company and Shareholders.

During the year 2018, the Committee held a total of 5 meetings. Their major activities can be summarized below:-

- Considered and reviewed the Company's policy on remuneration of directors in 2018 and resolved to maintain the existing remuneration structure that consists of monthly remuneration, meeting allowances, annual remuneration, per diem allowances, life insurance and an annual health insurance in consistent with the Group's Policy.
- Reviewed and allocated the budget for director remuneration in 2018 at 22 million baht, which was lower than last year's amount of 25 million baht. The Committee has carefully considered the directors' remuneration and concluded that it is equitable with the market and industry standards, and commensurate with each member's responsibility and performance. The approved new remuneration should be attractive enough to retain the qualified directors to continue to perform duties for the Company.
- Reviewed the allocation of remuneration for the directors in 2018. In this year, the total amount of all types of remunerations for directors was 15,753,299 Baht which did not exceed the amount approved by the shareholders at the annual general shareholders' meeting.
- Reviewed and conducted the assessment of the CEO's performance, including the annual salary increase and bonus for the CEO and senior executives.
- Reviewed and considered the Company's annual salary increase and bonus payment.
- Reviewed the Compensation Committee's Charter which was found that it was still appropriate and in line with the committee's performance of its duties as well as with relevant policies and procedures.
- Conducted self-assessment and performance evaluation, which resulted in the agreement that the Committee's structure and composition was appropriate and the Committee had performed the duties completely and effectively on continuing basis.

On behalf of the Compensation Committee,

Charintorn Vongspootorn

(Mrs. Charintorn Vongspootorn)
Chairman of the Compensation Committee

Corporate Governance and Nomination Committee Report for 2018

To: Shareholders of Thaicom Public Company Limited

The Board of Directors Meeting No. 4/2018 held on 28 March 2018 passed a resolution to approve the appointment of Professor Samrieng Mekkriengkrai as Chairman of the Corporate Governance and Nomination Committee, replacing Mrs. Patareeya Benjapolchai and effective from 28 March 2018.

Therefore, the Corporate Governance and Nomination Committee is composed of 3 members. Professor Samrieng Mekkriengkrai is the chairman of the Committee, while Mrs. Patareeya Benjapolchai and Mr. Kwek Buck Chye serve as members. Ms. Yupapan Panclurbthong, the company secretary, serves as the secretary of the committee.

The Corporate Governance and Nomination Committee has performed its duties as stipulated in its charter and as assigned by the Board of Directors diligently and independently for benefit of the Company and Shareholders.

The main responsibility of the Corporate Governance and Nomination Committee is to develop and oversee the Company to ensure that it operates according to corporate good governance principles so that it can grow sustainably. The committee also seeks out and considers qualified candidates for positions as directors and high-level executives within the Company. In 2018, the Corporate Governance and Nomination Committee had a total of 4 meetings, the major results can be summarized below.

1. Nomination

- Considered and appointed new director from the Ministry of Digital Economy and Society, Mrs. Arthidtaya Sutatam to fill the directorship reserved for the Ministry's representative on the Company's Board of Directors. The Board of Directors approved the appointment, effective from 31 January 2018.
- Considered the retirement by rotation plan of 4 directors, namely Mr. Paron Israsena, Professor Hiran Radeesri, Mr. Kwek Buck Chye, and Mr. Anek Pana-Apichon.

  However, Mr. Paron Israsena has submitted a letter of resignation from his positions as Chairman of the Board of Directors and Independent Director to the Company, effective from 24 March 2018, and Prof. Hiran Radeesri has informed the Company that he will not seek reappointment as Independent Director.

  Therefore, only Mr. Kwek Buck Chye and Mr. Anek Pana-Apichon were considered for reappointment. The Committee's recommendation for these reappointments was presented for approval to the Board of Directors and at the Annual General Meeting of Shareholders.
- Considered the position of Chief Executive Officer (CEO) in accordance with the guidance and criteria of selection by nominating Mr. Anant Kaewruamvongs to be the CEO, replacing Mr. Paiboon Panuwattanawong who resigned, and proposed to the Board of Directors for approval. The Board of Directors had appointed Mr. Anant Kaewruamvongs to be the new CEO, effective from 1 May 2018.
- Reviewed the succession planning of high-level executives, starting from senior executives who report directly to the CEO, to ensure business continuity and to adequate preparation for the successor's readiness in the event that a high-level executive retires or is otherwise unable to perform duties.
- Reviewed the structure of the Board of Directors and the replacement of directors on the boards of subsidiary companies to ensure that the board structure and composition is appropriate and aligned with the strategies and business environments of each company, while also ensuring that the Company appropriately oversees and follows up on the operations of its subsidiaries in accordance with the law and corporate governance principles.
- Restructured the organization to accommodate changes in the business, plans, and strategies of the Company, and recommendations of the restructuring were presented to the Board of Directors for approval.

- Considered the Board Skills Matrix as a part of the effort to review the structure, composition and expertise of the company's Board and committees and to use the Board Skills Matrix to select qualified director candidates and to identify necessary skills which may be lacking on the Board.

- Organized orientation program by the Company Secretary and executives on the Company's management, business, and governance practice for new directors.

2. Corporate Governance

- Reviewed the Corporate Governance policy and proposed it to be revised and updated by the Board of Directors to ensure that it is in line with principle of Corporate Governance Code for listed companies 2017, published by the Securities and Exchange Commission, and its compliance is regularly monitored.

  Additionally, the Company has promoted strict compliance to corporate good governance through the company's policy communications channels to its employees such as training and e-learning courses. The training and e-learning programs included such topics as Code of Conduct, the Corporate Governance Policy, and Anti-Corruption Policy, all of which are intended to promote employee understanding and compliance to the Company's rules and policies.

- Reviewed Corporate Governance and Nomination Committee's Charter and found that the charter was still appropriate and aligned with the committee's performance of its duties as well as with relevant policies and procedures.

- Conducted self-assessment and performance evaluation and viewed that the structure and composition of the Committee were appropriate and the Committee was able to perform its duties fully and continuingly.

In 2018, the Company was also recognized through the following honors for consistently making corporate governance a priority:

- In 2018, according to the Listed Companies' Corporate Governance Report, issued by the Stock Exchange of Thailand, Thaicom was rated "excellent", or 5 stars CG for sixth consecutive years (2013-2018).

- Thaicom received the ASEAN Corporate Governance Awards for the Top 50 ASEAN publicly listed companies category for two consecutive years.

- In 2018, Thaicom has been listed as Thailand Sustainability Investment (THSI) shares list based on SET's annual sustainability assessment. This recognition awarded to Thaicom for four consecutive years.

- Thaicom has been certified as the member of Thailand's Private Sector Collective Action against Corruption (CAC) for second term after the first certification in 2015.

The above awards and certificates that Thaicom has received reflected the Company's long-term and strong commitment to operating the Company under the principle of the good corporate governance, which creates confidence in effective management of the Company among shareholders, investors and all stakeholders. The Company will adhere and maintain our good practice in corporate governance to support our stable and sustainable growth.

On behalf of the Corporate Governance and Nomination Committee,



(Professor Samrieng Mekkriengkrai)
Chairman of the Governance and Nomination Committee

Executive Committee Report for 2018

To: Shareholders of Thaicom Public Company Limited

In 2018, the Company continued to face many challenges in business operation and rapid changes in geosocial media that affected our business, including a downturn in the satellite industry that led to high competition. In addition, an advanced in the development of ground technologies, which can be used in replace of some satellite services. Changes in Government's regulations on satellite business has also been closely monitored by the Company. The Executive Committee has been assigned with the policies and strategies by the Board of Directors to operate the Company and to closely follow up on each matter. The Executive Committee also worked closely with the Management in order to be able to adjust the strategy to be in line with the rapid changes and the circumstance. The followings are policies that have been assigned to the Executive Committee:-

1) To manage the existing assets for maximum benefit, i.e., to accelerate the sales of existing satellite transponder services.

2) To increase revenue from satellite related business

3) To develop and initiate new businesses

4) To improve organization structure and develop personnel capability to be in line with the changes.

5) To monitor and prepare for new regulations to be issued by the Government to control satellite business in the future.

Important activities implemented by the Executive Committee in 2018, deemed informative to the shareholders are as follows:

1. The appointment of Mr. Anek Pana-Apichon as Chairman of Executive Committee to replace Mr. Prasert Bunsumpun by the Board of Directors, effective on 24 March 2018.

2. The appointment of Mr. Anant Kaewruamvongs as Member of Executive Committee by the Board of Directors, effective on 24 March 2018.

3. Mr. Paiboon Panuwattanawong has tendered his resignation from the position of the Member of Executive Committee, effective from 1 May 2018.

Therefore, the Executive Committee consists of 4 members as follow:

1. Mr. Anek Pana-apichon	Chairman
2. Mr. Kwek Buck Chye	Member
3. Mr. Anant Kaewruamvongs	Member
4. Mr. Patompob Suwansiri	Member

Ms. Yupapan Panclurbthong, the company secretary, serves as the secretary of the committee.

In addition, the Board of Directors has appointed Mr. Mark Chong as an Advisor to Executive Committee. His role is to provide support and guidance to the Committee and the Management in terms of business direction, international marketing and new technology in accordance with the strategy for new business initiative. His appointment became effective on 10 May 2018.

The Executive Committee has performed its duties as stipulated in its charter and as assigned by the Board of Directors diligently for benefit of the Company and Shareholders.

The main responsibility of the Executive Committee is to manage and oversee the Company's business operations to ensure that they are aligned with vision, strategies, policies, regulations, and the Board resolutions. The committee is also responsible for screening matters that require Board's approval.

During the year 2018, the Committee held a total of 13 meetings and the following important activities have been considered and implemented:

- Considered and formulated the Company's strategy, direction, policies, goals, business plan and budget, as well as those of the Company's subsidiaries to be proposed to the Board for approval. They were also followed up to ensure that their compliance with the plan and budget allocation.
- Followed-up on the policy implementation and other aspects of management as well as budget spending to ensure that they are carried out as assigned by the Board.
- Considered and approved the implementation of projects, investments, and other normal business transactions under the limits or annual budget approved by the Board and within the limits of authority delineated in the Company's Approval Authority Table
- Considered and monitored the Company's business operational performance, including the business and financial operation, as well as changes in foreign exchange rate and cash flow management on monthly basis.
- Considered and monitored the progress on regulatory matters related to the Company's business operations, including the pending litigation.
- Considered and reviewed the Company's risk management and internal control systems.
- Considered and reviewed the Executive Committee's charter and found the it is still appropriate and enable the Committee to fully and effectively perform its duties.
- Conducted self-assessment and performance evaluation and agreed that the structure and composition of the Committee was appropriate and enable the Committee to fully and effectively perform its duties.

On behalf of the Executive Committee,



(Mr. Anek Pana-Apichon)
Chairman of the Executive Committee

Vision

To become a leader in satellite and digital platform business in Asia

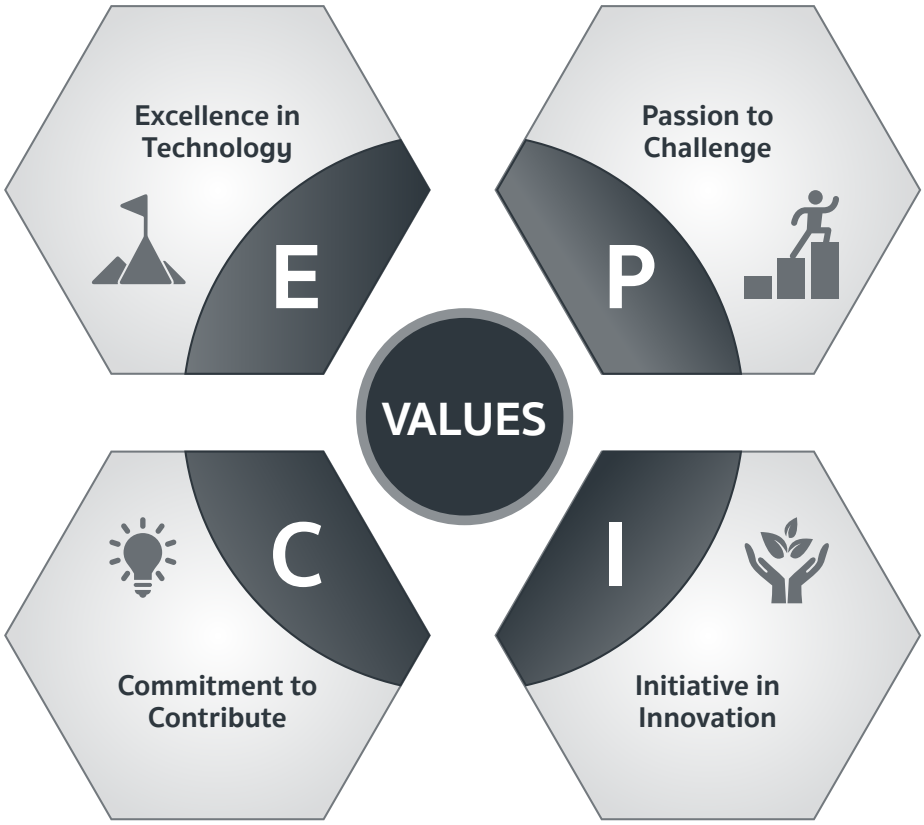
Thaicom has set a goal to become one of the world's leaders in communications network operator with a strong sense of responsibility over its products and services and adherence to development of personnel and corporate governance in order to support economic growth and to cultivate social and environmental sustainability.



Missions

- To be a learning organization
- To deliver superior services and innovations that are responsive to life styles in digital age.
- To operate the business that creates benefits for the shareholders under the principle of corporate governance.
- To create social value for sustainable development

Values: EPIC



Operational Strategies

The company has developed business policies intended to engage all departments in the company's core strategic direction and to maintain profitable and sustainable growth. The Company's key operational strategies include:

(1) Main Businesses Strategy

The Company formulates its business strategy as a framework to deliver products and services in response to customer demand, to enhance competitiveness and to ensure sustainable growth. The company's strategies cover the following 3 areas of business operation.

1. Core Services

Broadcast Service: The Company recognizes the importance of developing satellite TV broadcast service to upgrade the Thai broadcast industry by offering state-of-the-art services to support high definition and ultra-high definition TV broadcasting as well as value-added services to enhance the capabilities of satellite TV operators and deliver a quality viewing experience to people across Thailand, Greater Mekong Sub-Region, and South Asia. For the African market, our strategy is to differentiate ourselves from competitors by targeting specific countries and segments. The Company will adapt our expertise and experience to this market and form strategic partnerships with regional operators to provide comprehensive broadcast services in response to the needs of the customers.

Broadband Service: The Company recognizes the importance on enhancing bandwidth efficiency, for both the IPSTAR platform and business partners' platforms, to increase the bandwidth utilization of THAICOM 4 (IPSTAR), especially in Thailand, India, and China. The Company is also diversifying its broadband business into new segments of market and downstream businesses in potential markets where the Company has competitive advantages. With regards to a long term plan, together with potential business partners, the Company is conducting a study on a Very High Throughput Satellite for providing next generation broadband services at low unit cost.

2. Strategy for Innovative Services

The Company aims to develop services that are platforms for communications by leveraging satellite's unique ability to reach users anytime and anywhere and integrating it with the internet and the strength of the Company in technology innovations to create value-added services to meet customers' needs. The Company provides services such as the NAVA platform for high-speed connectivity with value-added-services at sea, and the TV solution platforms (LOOX TV and TV Head-end) that provide end-to-end solutions for customer. The Company aims to provide services both in Thailand and in the region.

3. Business Diversification

The Company recognizes importance on both vertical and horizontal business expansion on a regional scale. Vertically, the Company is to expend its services downstream in the value chain through areas such as retail broadband internet and maritime services. Horizontally, the Company will focus on digital technology-related businesses, such as Data Analytic, and IOT etc. The Company has established this business expansion plan in both dimensions to enhance its competitiveness and ensure sustainable growth.

(2) Human Resources Strategy

As a Thai company that operates both in Thailand and overseas and focuses its efforts to create sustainable business strength and growth, Thaicom strongly believes that quality human resource is the important factor to lead the Company to sustainable growth and success and the key indicator of our competitive advantage in the current age. The Company, therefore, determines to look after our personnel force and to maintain the cost at an efficient level by recruiting and retaining qualified and capable personnel creating the sense of attachment to the organization. The Company also prepares all level of employees to have knowledge and capability by enhancing their working potential so that they are competitive in the digital world while being ethical as well as to provide new opportunities and challenges in order to encourage them to maximize their potential and to transfer and promote their adherence to organizational value.

(3) Sustainable Development Strategy

To achieve Thaicom Sustainability Goals under the "Connectivity for Sustainability" framework which aim to create opportunities and future to sustainable development, Thaicom continually places priority on effective management through the 4 areas of our Sustainable Development Framework through strategies to Thaicom Sustainability Goals. The following is the framework of Sustainable Development that aligned with the business operation:

1. Connectivity

Develop and provide satellite network service and adequately maintain continuity of communications system in all situations in order to create stability and well-being to all stakeholders and economic growth both in normal and critical situations.

1.1 Communications Networks for Sustainable Development

1.2 Emergency Communications Capabilities for All Situations.

2. Responsibility for sustainable society

Responsibility over products and services by offering quality and high value products and upgrading the quality of services by taking into account reduction of environmental impacts and promotion of sustainable society.

2.1 Responsible Service and products

2.2 Support for a Sustainable Society

2.3 Environmental Resource Management and Impact Mitigation

3. Innovation

Innovate novel products and services that are responsive to the need of diverse target groups, i.e., individual, household, organization and government agencies and to provide cooperation to educational institutions including innovation in business operation and space resource management.

3.1 Product and Service Design Innovation

3.2 Business Strategic Innovation

3.3 Business Process Innovation

4. Corporate Governance

Regard the importance of management under corporate governance principle throughout the entire business chain and focus on personnel development and promotion of transparency, honesty and fairness for all stakeholders in order to drive the organization toward sustainability.

4.1 Fairness throughout the Value Chain

4.2 Human Resources Management

In addition, the Company operates on the basis of good corporate governance, maintaining and strictly adhering to a number of policies including its Anti-Corruption Policy. As a result, the Company has consistently received outstanding scores on corporate governance assessments at the national and ASEAN levels, building trust amongst investors and all shareholders alike.

Financial Highlight

Unit : million Baht, except per share values in Baht

	2017	2018
Operating Results		
Total Revenue	7,228	8,174
Revenues from Sale of Goods and Rendering of Services	6,689	6,008
Gross Profit	1,398	1,789
Operaing Profit (Loss)	(3,594)	(1,981)
Profit (Loss) Attributable to Owner of the Company	(2,650)	230
EBITDA	(699)	(52)
Financial Position		
Total Assets	25,939	22,202
Total Liabilities	10,659	9,065
Total Equity	15,280	13,137
Financial Ratio		
Current Ratio (Times)	3.22	2.39
Net Borrowings to Equity Ratio (Ttimes)	0.49	0.53
Gross Profit Margin	21%	30%
Operating Profit Margin	(54%)	(33%)
EBITDA Margin	(10%)	(1%)
Net Profit Margin	(40%)	4%
Return on Asset	(9%)	1%
Return on Shareholders' Equity	(15%)	2%
Earning per share (Baht)	(2.42)	0.21
Book Value per Share (Baht)	13.94	11.99

Operating Results

Total Revenue



2018	8,174 million Baht
2017	7,228 million Baht

Profit (Loss) Attributable to Owner of the Company



2018	230 million Baht
2017	(2,650) million Baht

Normalized profit



2018	140 million Baht
2017	20 million Baht

Financial Position

Total Assets



2018	22,202 million Baht
2017	25,939 million Baht

Total Liabilities



2018	9,065 million Baht
2017	10,659 million Baht

Total Equity



2018	13,137 million Baht
2017	15,280 million Baht

* Normalized profit = Profit (loss) attributable to owner of the Company

- Profit from the sale of CSL's share + Net impairment loss

Major Shareholders

1) List of top 10 major shareholders of Thaicom Public Company Limited as at the latest book closing date on 5 April 2018 as follows:

Name	Number of Shares	% of shareholding
1. INTOUCH HOLDINGS PLC.	450,870,934	41.13
2. STATE STREET EUROPE LIMITED	81,100,166	7.40
3. THAI NVDR Co., Ltd.	45,310,799	4.13
4. Mr. Narit Jia-Arpa	17,613,000	1.61
5. SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	16,322,577	1.49
6. CITIBANK NOMINEE SINGAPORE PTE LTD-LEMBAGA TABUNG HAJI-ASIA PACIFIC	15,520,000	1.42
7. CREDIT SUISSE AG, SINGAPORE BRANCH	8,281,500	0.76
8. NORTRUST NOMINEE LTD-CL AC	6,839,500	0.62
9. Miss Sunan Ngamakarakul	5,733,700	0.52
10. Mr. Kitti Ngammaharat	5,657,000	0.52
Total	**653,249,176**	**59.61**

Source: Thailand Securities Depository Company Limited

2) The major shareholders whose behaviours have had a significant influence on the operational policies or management of the company.

- Thaicom Public Company Limited held by Intouch Holdings Public Company Limited ("INTOUCH") in the amount of 450,870,934 shares, or 41.13% of the Company's paid-up capital (as of 5 April 2018). INTOUCH is a holding company, its operation is investment in telecom, media, and technology. There are presently three principal business units: Wireless Telecommunications, Satellite and International Businesses, and Other Businesses. Major shareholder of INTOUCH as of 17 August 2018 are as follows:

Name [1]	No. of Shares	% of shareholding
1. SINGTEL GLOBAL INVESTMENT PTE. LTD.[2]	673,348,264	21.00
2. THE HONGKONG AND SHANGHAI BANGKING CORPORATION LIMITED	509,766,840	15.90
3. THAI NVDR COMPANY LIMITED	381,063,676	11.88
4. SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	137,520,271	4.29
5. ASPEN HOLDINGS LIMITED [3]	102,130,520	3.19

Remarks:

(1) The latest register book closing date of the Company as of 17 August 2018 prepared by Thailand Securities Depository Co., Ltd. (Registrar).

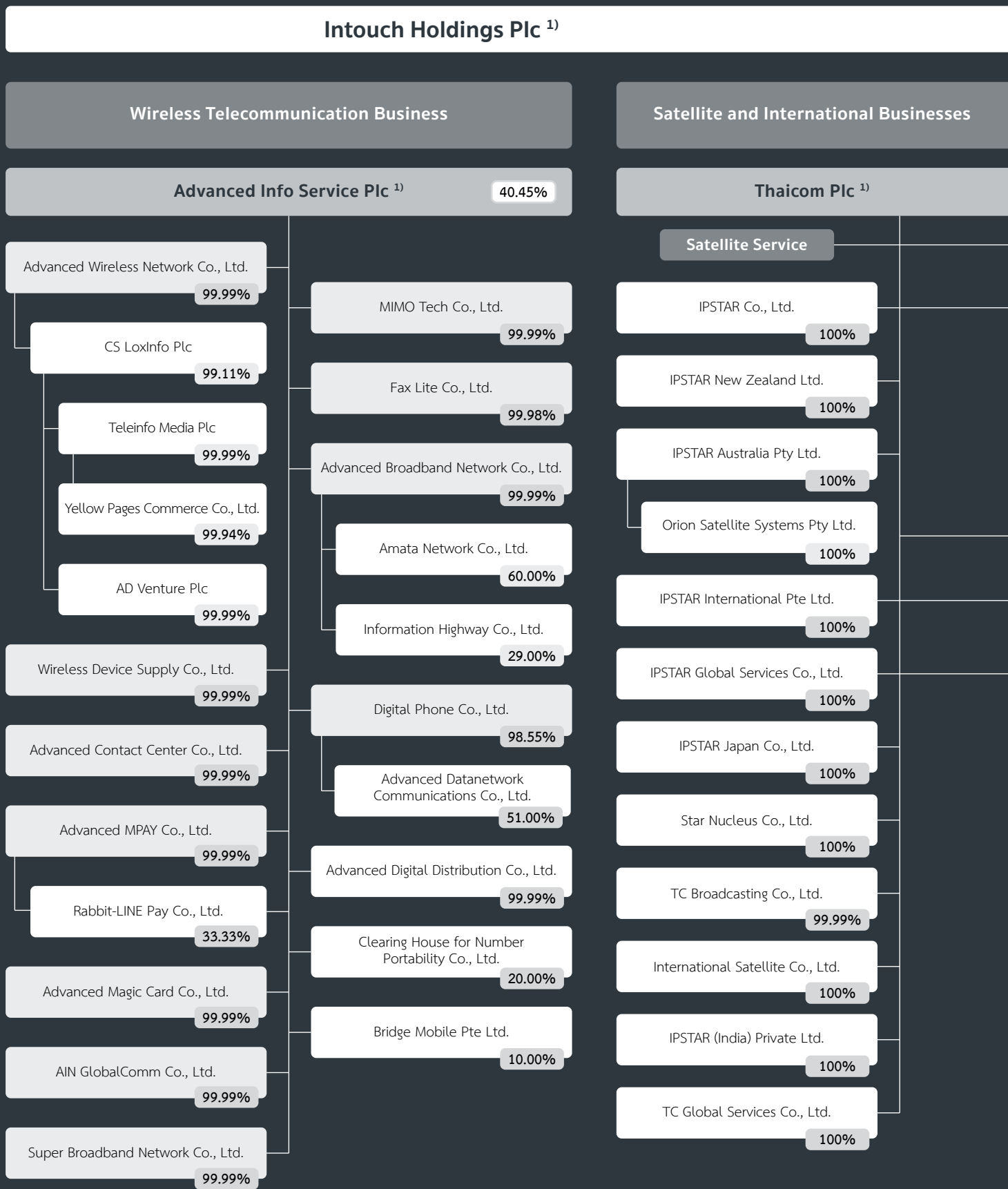
(2) SINGTEL GLOBAL INVESTMENT PTE LTD is an indirect subsidiary of SINGAPORE TELECOMMUNICATIONS LTD.

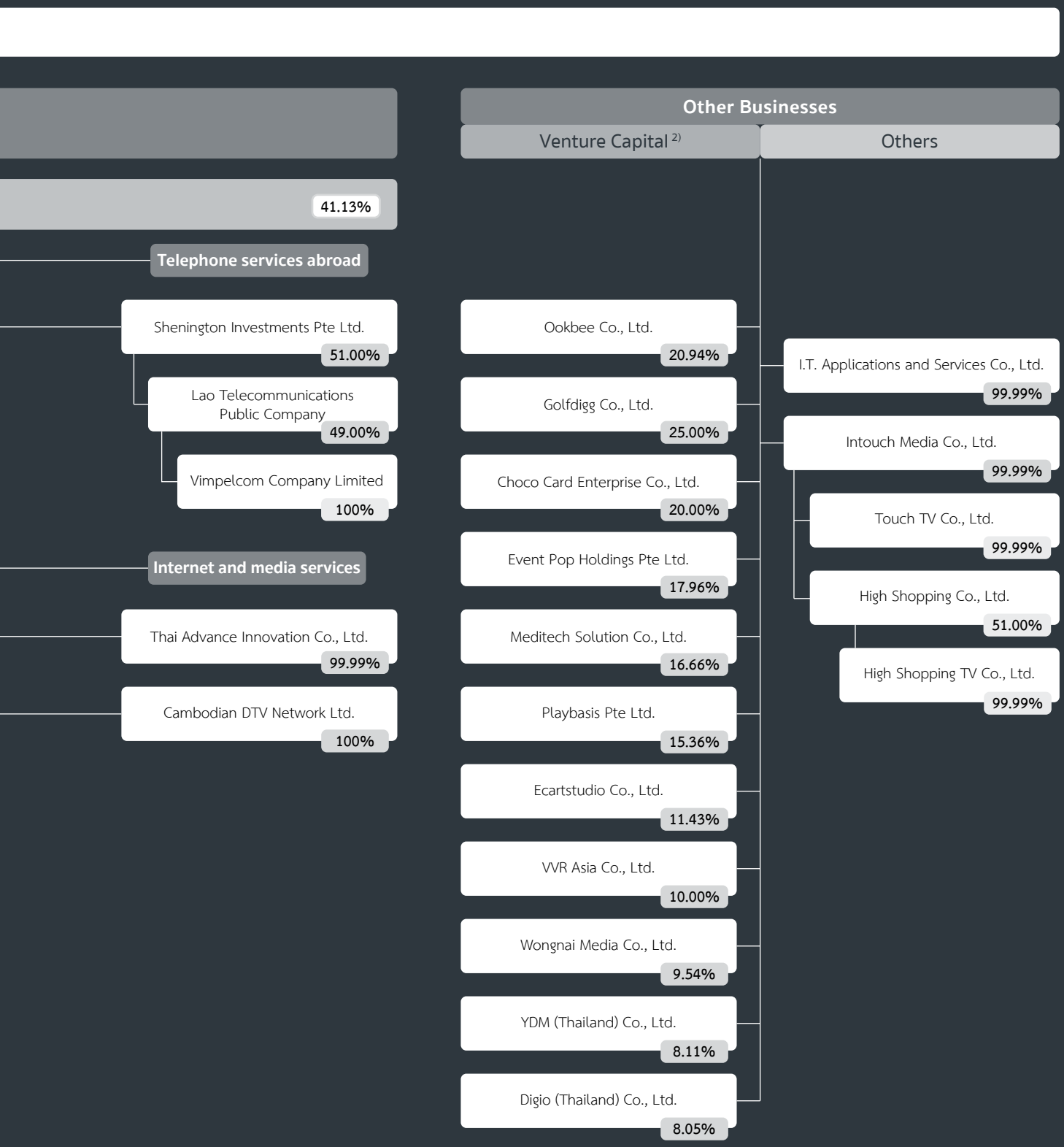
(3) Information from the Department of Business Development, Ministry of Commerce, as of 3 January 2018, ASPEN HOLDINGS LIMITED is a company incorporated in Thailand and 99.99% owned by ANDERTON INVESTMENT PTE, SINGAPORE.

3) Agreement among major shareholders

- None -

INTOUCH Group's Investment Structure





Remark :

1) Listed Company on the Stock Exchange of Thailand
2) Excluded investment in debt security
3) INTUCH has a stake of 52.92% in ITV, which ceased operations, and there are ongoing disputes with the Permanent Secretary of the Office of the Prime Minister.
4) LTC entered into Sale and Purchase Agreement to acquire Vimpelcom Company Limited, from the government of Lao PDR in January 2019

General Information and Other Information

1) General Information

1.1) General Information of Thaicom Public Company Limited

Company's Name	:	Thaicom Public Company Limited
Symbol	:	THCOM
Industry	:	Technology
Sector	:	Information and Communication Technology
Type of Business	:	The Company operates 3 different main sectors as follows: 1. Satellite and Related Services 2. Internet and Media Services 3. Telephone Business Abroad
Company's Registration Number	:	0107536000897 (formerly number Bor Mor Jor. 163)
Registered Office	:	414 Phahonyothin Road, Samsen Nai Sub-District, Phaya Thai District, Bangkok 10400
Branch Office	:	(1) 63/21 Rattanathibet Road, Bang Kraso Sub-District, Mueang Nonthaburi District, Nonthaburi Province 11000 (2) 50 Moo 1, Bo Ngoen Sub-District, Lat Lum Kaeo District, Pathum Thani Province 12140
Registered Capital	:	5,499,884,200.00 Baht, Divided into ordinary share at 1,096,101,954 shares (as of 31 December 2018)
Paid-Up Capital	:	5,480,509,770.00 Baht, Divided into ordinary share at 1,096,101,954 shares (as of 31 December 2018)
Par Value	:	Baht 5 per share
Telephone Number	:	(66) 2596 5060
Fax	:	(66) 2591 0705
Company's Website	:	www.thaicom.net

1.2) Information of juristic persons in which the Company held more than 10% of fully paid-up capital[1]

Name and Details of Company	Type of business	Registered Capital	Number of shares issued	Par Value	Paid-up Capital	% of Shareholding
Satellite and Related Services						
IPSTAR Company Limited (IPSTAR) Trident Chambers, P.O. Box 146, Road Town, Tortola, British Virgin Islands	Providing THAICOM 4 transponder services	USD 2,000,000	200,000,000 shares	USD 0.01	USD 2,000,000	100
IPSTAR New Zealand Limited (IPNZ) 24 Unity Drive North, Abany, Auckland 0757, New Zealand Tel. (649) 414 5920 Fax (649) 414 5922	Providing THAICOM 4 transponder services and sale of user terminal of THAICOM 4 in New Zealand	NZD 3,196,133	3,196,133 shares	NZD 1	NZD 3,196,133	100
IPSTAR Australia Pty Limited (IPA) 5 George Place, Artarmon, NSW 2064, Australia Tel. (612) 8458 0500 Fax (612) 8006 5592	Providing THAICOM 4 transponder services and sale of user terminal of THAICOM 4 in Australia	AUD 6,950,000	6,950,000 shares	AUD 1	AUD 6,950,000	100
Orion Satellite Systems Pty Limited (OSS) (100% shares held by IPA) Level 2, 231 Adelaide Terrace, Perth, WA 6000, Australia Tel. (61) 8 9225 7800 Fax (61) 8 9225 7811	Providing satellite communication services and business solutions	AUD 13,374,571	1 share 5,960,354 share	AUD 7,414,217 AUD 1	AUD 13,374,571	100
IPSTAR International Pte Limited (IPIN) 8 Marina Boulevard #05-02, Marina Bay Financial Centre, Singapore 018981 Tel. (65) 6338 1888 Fax (65) 6337 5100	Providing THAICOM 4 transponder services and sale of satellite equipment of THAICOM 4	SGD 20,000	20,000 shares	SGD 1	SGD 20,000	100

Name and Details of Company	Type of business	Registered Capital	Number of shares issued	Par Value	Paid-up Capital	% of Shareholding
IPSTAR Global Services Limited (IPGS) Intercontinental Trust Limited, Suite 802, St. James Court, St. Denis Street, Port Louis, Mauritius Tel. (230) 213 9800 Fax (230) 210 9168	Providing THAICOM 4 transponder services	USD 20,000	20,000 shares	USD 1	USD 20,000	100
IPSTAR Japan Company Limited (IPJ) 1231-1 Hio, Oganomachi, Chichibu-gun, Saitama, Japan	Providing THAICOM 4 transponder services and sale of user terminal of THAICOM 4 in Japan	JPY 100,000,000	10,000 shares	JPY 10,000	JPY 100,000,000	100
IPSTAR (India) Private Limited (IPI) 208, II FLOOR, ABW TOWER, M.G. ROAD, IFFCO CHOWK, GURGAON - 122002, Haryana, INDIA	Sale of satellite equipment and providing technical support in relation satellite business	30,000,000 Rs.	30,000,000 shares	1 Rs.	30,000,000 Rs.	100
Star Nucleus Company Limited (STAR) Trident Chambers, P.O. Box 146, Road Town, Tortolar, British Virgin Islands	Providing engineering and development services, technology and electronics	USD 50,000	10 shares	USD 1	USD 10	100
TC Broadcasting Company Limited (TCB) 414 Phaholyothin Road, Samsen Nai Sub- istrict, Phaya Thai District, Bangkok Tel. (66) 2596 5060	Providing broadcasting, television and telecommunication services	THB 1,000,000	100,000 shares	THB 10	THB 250,000	99.99
International Satellite Company Limited (ISC) Intercontinental Trust Limited, Level 3, Alexander House, 35 Cybercity, Ebene, Mauritius	Providing THAICOM 7 and THAICOM 8 transponder services	USD 50,000	50,000 shares	USD 1	USD 50,000	100
TC Global Services Company Limited (TCGS) 12th Floor, Standard Chartered Tower, 19, Cybercity, Ebene, Mauritius	Providing technology services	USD 50,000	50,000 shares	USD 1	USD 12,500	100

Name and Details of Company	Type of business	Registered Capital	Number of shares issued	Par Value	Paid-up Capital	% of Shareholding
Internet and Media Services						
Thai Advance Innovation Co., Ltd. (Thai AI) (formerly named DTV Service Company Limited) 414 Phaholyothin Road, Samsen Nai Sub-District, Phaya Thai District, Bangkok Tel. (662) 950-5005 Fax (662) 591-0708 Website www.dtvservice.net	Sale of direct television equipment, providing system integration consultancy service for broadband network and broadband content services	THB 398,791,470	39,879,147 shares	THB 10	THB 398,791,470	99.99
Cambodia DTV Network Limited (CDN) 9A, Street 271, Tomnup Teuk quarter, Chamkar Mon district, Phnom Penh, Kingdom of Cambodia Tel. (855) 023 305 990 Fax (855) 023 994 669 Website www.cdn.com.kh	Sale of direct television equipment in Cambodia	Riels 2,400,000,000 (USD 600,000)	1,000 shares	Riels 2,400,000	Riels 2,400,000,000 (USD 600,000)	100
Telephone Business Abroad						
Shenington Investments Pte Limited (SHEN) 8 Marina Boulevard #05-02, Marina Bay Financial Centre, Singapore 018981 Tel. (65) 6338 1888 Fax (65) 6337 5100	Holding company for investment in international telecommunications	SGD 14,658,000	14,658,000 shares	SGD 1	SGD 14,658,000	51
Lao Telecommunications Public Company (LTC) (49% share held by SHEN) Lanexang Avenue 0100, Vientiane, Lao People's Democratic Republic Tel. (856) 2121 6465-6 Fax (856) 2121 9690	Providing fixed line, mobile phone, public phone, public international facilities and Internet services in Lao PDR.	USD 96,840,000	96,840,000 shares	USD 1	USD 96,840,000	24.99
Vimpelcom Company Limited [2] (BEELINE) (100% share held by LTC) 23 Singha Road, Phonexay Village, Saysettha District, Vientiane Capital, Lao People's Democratic Republic Tel. (020) 7780 0700 Fax (020) 7780 0701	Providing fixed line, mobile phone in Lao PDR	USD 500,000	500,000 shares	USD 1	USD 500,000	100

Remarks:

[1] Information as of 31 December 2018

[2] LTC entered into Sale and Purchase Agreement to acquire Vimpelcom Company Limited, from the government of Lao PDR in January 2019.

2) Other Information

- None -

Background and Significant Milestones

General Background

The Company was established on 7 November 1991 by Intouch Holdings Public Company Limited (INTOUCH) (formerly known as Shin Corporation Public Company Limited), and was granted a 30-year Domestic Communications Satellite Operating Agreement by the Ministry of Transport and Communications (currently transferred to the Ministry of Digital Economy and Society). The Agreement expires in 2021. The Company has the right to build, launch and operate satellites with a requirement that the Company pay the Ministry of Digital Economy and Society (MDE) an agreed percentage of the Company's annual gross revenue earned from the transponder business, or a minimum remuneration, whichever is higher. Under the Agreement, the Company must transfer ownership of the satellites, satellite control station, and all related operational equipment to the MDE once the construction and installations are completed.

On 17 December 1991, His Majesty King Bhumibol Adulyadej officially bestowed the name "THAICOM" on the first of the Company's satellites. Abbreviated from "Thai Communications," the name is symbolic of the linkage between Thailand and modern communications technology. Since its inception, the Company has launched 8 satellites, THAICOM 1, 2 and 3 (now all de-orbited), THAICOM 4, 5, 6, 7 and THAICOM 8

In 1997, the Company expanded its business operations to telephone services and DTV satellite television dish sales operations were added in 2000, and 2007 respectively.

The Company became a listed company on the Stock Exchange of Thailand on 18 January 1994. Intouch Holdings Public Company Limited, which is the Company's major shareholder, holds 41.13% of the Company's shares.

Significant Changes and Developments within the Group during the past 3 years

2018

In 2018, the company has restructured its subsidiary company, DTV Service Company Limited, by changing the company's name to Thai Advanced Innovation Company Limited in order to prepare for new business related to advanced technologies to reinforce Thaicom's core business.

In addition, the company has significant developments in relation to corporate governance. The company has received the renewed certification of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC). The company was certified for the CAC membership for the first time in 2015.

The company has also been selected for the 2018 Thailand Sustainability Investment (THSI) list based on SET's annual sustainability assessment. This recognition, awarded to Thaicom for the fourth consecutive year reflects a balance of outstanding performance across financial, environmental, social and governance (ESG) dimensions, which are the powerful mechanisms for sustainable development.

The company received a corporate governance rating of excellent, or 5 stars for 6th consecutive year (2013-2018) from the Stock Exchange of Thailand (SET), based on an adherence to the principles of corporate governance (CG) and anti-corruption in all areas of business operation.

The company was awarded the ASEAN Corporate Governance Award for TOP 50 ASEAN PLCs for the second time as a Thai listed company, evaluated in accordance with the ASEAN CG Scorecard standard, which is considered as a central criterion for evaluating and ranking corporate governance of listed companies in order to raise the standards of corporate governance of listed companies in ASEAN countries.

2017

In 2017, at the Extra-Ordinary General Meeting of Shareholders (EGM) No. 1/2017 on 30 November 2017, the shareholders approved the sale of all ordinary shares that DTV Service Company Limited (DTV), a subsidiary of the Company, held in CS Loxinfo Public Company Limited (CSL) a total of 250,099,990 shares or equivalent to 42.07% of all the total issued and paid-up shares of CSL to Advanced Wireless Network Co., Ltd. (AWN), which is a subsidiary of Advanced Info Service Public Company Limited (AIS), at the offering price of Baht 7.80 per share, totaling Baht 1,950.78 million. The sale of the ordinary shares of CSL will commence upon the making of the Conditional Voluntary Tender Offer by AWN.

2016

On 28 May 2016 (Thailand local time), the Company successfully launched the THAICOM 8 satellite into orbit on Space Exploration Technologies Corporation's Falcon 9 rocket from Cape Canaveral, Florida, USA. THAICOM 8 is part of the Company's strategy to create capacity and expand business to serve customer demand in both Thai and overseas markets by providing additional transponders, supporting the technological transition to High Definition (HD) and Ultra-High Definition (Ultra HD) broadcasting.

In the same year, the company has restructured the company and its subsidiaries as follows;

- The company has increased the issuance of 1,074,300 ordinary shares at the par value of Baht 5 per share, in the total of Baht 5,371,500, as reserve for the exercise of warrants. The Company registered the increased share capital with the Ministry of Commerce on 16 May 2016.

- Establishment of 2 subsidiaries to expand its satellite service business

  - The Company incorporated IPSTAR (India) Private Limited. The authorized share capital is INR 30 million, divided into 30 million ordinary shares of INR 1 par value. The capital is fully paid up. The Company holds 30 million shares, equivalent to 100% shareholding.

  - The Company incorporated TC Global Service Limited. The authorized share capital is USD 50,000, divided into 50,000 ordinary shares of USD 1 par value. The capital is fully paid up. The Company holds 50,000 shares, equivalent to 100% shareholding.

- Restructured its subsidiaries for the appropriateness of continuing business operations

  - A capital reduction in IPSTAR New Zealand from NZD 8.51 million to NZD 3.20 million and the reduction capital of NZD 5.32 million was paid to its shareholders.

  - The liquidation of Spacecode LLC, a subsidiary of the Company which whose operation is related to THAICOM 4 broadband business. The Company has restructured the operational process within the group by transferring such business operation to another subsidiary in order to reduce duplicated operational structure.

Nature of Business and Income Structure

Business Overview

Thaicom business comprises 3 main business operations, i.e., (1) Satellite and Related Services, (2) Internet and Media Services and (3) Telephone Business Abroad. The Company concentrates on ling-term investment and takes into account the basic factors surrounding the target company, including the trends of that business. Moreover, the Company also has the policy to invest in a proportion, large enough to enable the Company to have managerial authority to set business direction in that subsidiary or associated company.

1. Satellite and Related Services

The Company has a 30-year Domestic Communication Satellite Operating Agreement with the Ministry of Information and Communication Technology (currently Ministry of Digital Economy and Society, or the "Ministry"), expiring in 2021, to operate the national satellite communications project. Since its inception, the Company has launched 8 satellites, THAICOM 1, 2, and 3 (all now de-orbited), THAICOM 4, 5, 6, 7 and 8.

The Company was also granted the following licenses from the National Broadcasting and Telecommunications Commission ("NBTC"):



- Telecommunications Business Type I License [(1)], valid for 5 years from 16 August 2016 to 15 August 2021

- Telecommunications Business Type III License [(2)] to provide satellite network operator services in satellite transponder leasing, valid for 20 years from 26 June 2012 to 25 June 2032

- Internet Services Type I License to provide mobile Internet services and Co-location services without own network under the scope of Internet Services Type I License, valid for 5 years from 7 May 2015 to 6 May 2020

Remarks

(1) Type I License: a license granted to the telecommunications business operator who operates without his or her own network for telecommunications services which are deemed appropriate to be fully liberalized.

(2) Type III License: a license granted to the telecommunications business operator who operates with his or her own network for telecommunications services intended for general public, or services which may cause a significant impact on free and fair competition or on public interest, or a service which requires special consumer protection.

The Company has established the following subsidiaries, associates, and joint ventures to operate and provide satellite and related services:

Name	Type of Business
IPSTAR Company Limited	Providing THAICOM 4 transponder services
IPSTAR New Zealand Company Limited	Providing THAICOM 4 transponder services and sale of user terminals for THAICOM 4 in New Zealand
IPSTAR Australia Pty Limited	Providing THAICOM 4 transponder services and sale of user terminals for THAICOM 4 in Australia
Orion Satellites Systems Pty Limited	Providing satellite communications services and business solutions
IPSTAR International Pte Limited	Providing THAICOM 4 transponder services and sale of satellite equipment for THAICOM 4
IPSTAR Global Services Company Limited	Providing THAICOM 4 transponder services
IPSTAR Japan Company Limited	Providing THAICOM 4 transponder services and sale of user terminals for THAICOM 4 in Japan
IPSTAR (India) Private Limited	Sale of satellite equipment and providing technical support in relation satellite business
Star Nucleus Company Limited	Providing engineering and development services, technology and electronics
TC Broadcasting Company Limited	Providing broadcasting, television and telecommunications services under following licenses granted by the NBTC: 1. License to operate network services to provide satellite TV broadcasting as a network provider without the use of frequency at the national level, valid for 15 years from 4 March 2013 to 3 March 2028 2. Telecommunication Services Type II License to provide network and services, valid for 15 years from 10 November 2015 to 9 November 2030
International Satellite Company Limited	Providing THAICOM 7 and THAICOM 8 transponder services
TC Global Services Company Limited	Providing technology services

2. Internet and Media Services

Name	Type of Business
Thai Advance Innovation Company Limited[1]	Sale of direct television equipment, providing system integration consultancy services for broadband networks and broadband content services under the following licenses granted by the NBTC: 1. Internet Services Type I License, to provide internet services without their own network, valid for 5 years from 18 October 2014 to 17 October 2019 2. License to operate network services, to provide satellite TV broadcasting network not requiring the use of frequency at the national level, valid for 15 years from 21 January 2013 to 20 January 2028 3. License to operate TV satellite services - TV channel
Cambodian DTV Network Limited	Sale of direct television equipment in Cambodia

Remarks

(1) DTV has changed its name to Thai Advance Innovation Company Limited, registered on 27 November, 2018.

3. Telephone Business Abroad

The Company provides telephone services through an investment in Shenington Investments Pte Ltd. (SHEN), a joint venture of the Company. SHEN is a holding company for investment in international telecommunications. Currently, SHEN invested in Lao Telecommunications Public Company, a joint venture company with the government of the Lao People's Democratic Republic, this company has a 25-year license expiring in 2021. The government of Lao PDR and SHEN signed a new joint venture agreement to extend the concession another 25 years, from 2021 to 2046

Name	Type of Business
Lao Telecommunications Public Company	Providing fixed line, mobile phone, public phone, public international facilities and Internet services
Vimplecom Company Limited [1]	Providing mobile phone services under the brand "BEELINE"

Remarks

(1) LTC entered into Sale and Purchase Agreement to acquire Vimpelcom Company Limited, from the government of Lao PDR in January 2019

Revenue Structure

The revenue structure of the Company and its subsidiaries for the year 2017 - 2018 is as follows:

Unit: Million Baht

Type of Business	Operating Company	2018		2017	
		Revenue	%	Revenue	%
Satellite and related services	Thaicom, TC Broadcasting, and IPSTAR Group	5,850	71.57	6,475	89.58
Media services	Thai Advance Innovation and Cambodian DTV Network	229	2.80	299	4.14
Segment elimination		-71	-0.87	-85	-1.18
Net foreign exchange gain (loss)		6	0.07	152	2.11
Gain from sale of investment		1,950	23.86	-	-
Other revenues		210	2.57	387	5.36
Total revenue		**8,174**	**100.00**	**7,228**	**100.00**

Sales and services revenue by geographic area for the years 2017 - 2018:

Unit: Million Baht

Country	2018	2017
Thailand	3,225	3,377
China	1	217
India	650	686
Japan	663	834
Myanmar	180	365
Others	1,289	1,209
Total	**6,008**	**6,689**

Nature of Business Operation

Thaicom's business operations can be divided into three main sectors as follows:

1. Satellite and Related Services

1.1 Satellite Communications and Related Services by Thaicom Public Company Limited and IPSTAR Group

THAICOM satellites

Thaicom's satellite fleet can be divided into 2 types: Conventional Satellite and Broadband Satellite (or High Throughput Satellite, HTS)

- **Conventional Satellite**

  A conventional satellite is a satellite that provides fixed satellite services (FSS), whereby a signal is transmitted from an earth station, amplified, and retransmitted down to the other earth station(s) anywhere under the satellite's footprint - allowing broadcasters and telecommunications operators to benefit from the satellite's nationwide and cross-regional coverage.

- **Broadband Satellite**

  A broadband satellite or High Throughput Satellite (HTS) is primarily designed to provide broadband Internet access services (point-to-point). Through high level frequency re-use and spot beam technology, HTS usually provides much more total throughput than a conventional satellite for the same amount of allocated orbital spectrum, thus significantly reducing cost per megabit per second (Mbps). In addition, HTS can offer services to government and enterprise markets, as well as to terrestrial cellular network operators.

The Company currently operates four conventional satellites THAICOM 5, 6, 7 and 8 and one broadband satellite THAICOM 4. The specifications of Thaicom's satellite fleet are as follows:

	THAICOM 4	THAICOM 5	THAICOM 6	THAICOM 7	THAICOM 8
Satellite Type	Broadband High Throughput Satellite (HTS)	Conventional	Conventional	Conventional	Conventional
Orbital Slot	119.50° East	78.50° East	78.50 East	120° East	78.50° East
Manufacturer	Space Systems Loral, (USA)	Aerospatiale (France)	Orbital Sciences Corporation (USA)	Space Systems Loral (USA)	Orbital ATK (USA)
Model	LS-1300S	Spacebus 3000	Star 2.3	LS-1300	Star 2.4
Design Life*	12 years	12 years	15 years	15 years	15 years
Launch Date	August 2005	May 2006	January 2014	September 2014	May 2016
Capacity / Transponder	84 Ku-Spot Beams 8 Ku-Spot Beams (Augment) 3 Ku-Shaped Beams 7 Ku-Broadcast Beams	25 C-band transponders 15 Ku-band transponders	24 C-band transponders 9 Ku-band transponders	14 C-band transponders	24 Ku-band transponders

	THAICOM 4	THAICOM 5	THAICOM 6	THAICOM 7	THAICOM 8
Coverage Area	14 countries: Australia, Cambodia, China, India, Indonesia, Japan, Malaysia, Myanmar, New Zealand, Philippines, South Korea, Taiwan, Thailand and Vietnam	C-band: Thailand, Greater Mekong Subregion, South Asia, Asia, Europe, Africa and Australia Ku-band: Thailand and Greater Mekong Subregion	C-band: Southeast Asia and Africa Ku-band: Southeast Asia	C-band: Thailand, Greater Mekong Subregion and Asia	Ku-band: Thailand, Greater Mekong Subregion, South Asia

*Design Life does not take into account any concessions or licenses for satellite operation.

Nature of Product or Service

(1) Broadcast & Media

(1.1) Contribution Distribution

The Company provides end-to-end video distribution services in standard definition, high definition, and ultra-high definition formats to customers such as terrestrial TV operators, satellite TV operators and content providers, allowing them to transmit television programs or content to receiving stations under Thaicom's coverage area. Our distribution services are the perfect choices for operators to transmit television programs and content to various destinations in the country and in the region or in the required continents including repeater stations, Digital Terrestrial TV multiplexes and cable TV operators.

(1.2) Digital Channel Broadcast Service

The company provides one-stop-shop Multi-Channel Per Carrier (MCPC) Broadcast Platform. This allows TV operators and content providers to distribute their digital channels to viewers. Our satellites ensure seamless C- and Ku-band coverage of Asian, European, Middle Eastern and African countries.

(1.3) Direct-to-Home (DTH)

The Company provides effective end-to-end Direct-To-Home (DTH) broadcasting services in standard definition, high definition, and ultra-high definition formats to pay-TV broadcasters and satellite TV operators, giving them direct access to DTH viewers using small satellite antennas. In addition, to enhance our customers' capabilities and competitiveness, the company provides a variety of value-added services and channel options, including pay-per-view, video-on-demand, electronic program guides, advertising and home shopping.

Ground System (Teleport and DTH Center)

A teleport or telecommunications port is a centralized location that provides access to advanced bandwidth services with a comprehensive range of broadcasting and telecommunications services. Certified under ISO 9002 and ISO 9001:2000, the Thaicom Teleport and DTH Center are equipped with state-of-the-art facilities to support any domestic and international satellite broadcasting requirement. Through the Thaicom Teleport and DTH Center, the Company offers end-to-end services by bundling transponder bandwidth with value-added services such as satellite downlink, tape playout, digital signal compression in standard definition, high definition and ultra-high definition formats, satellite uplink, signal monitoring and logging as well as a new over-the-top (OTT) platform.

Thaicom also cooperates with a subsidiary company: TC Broadcasting Co. Ltd., who provides multiplexing, encoding, uplinking, and downlinking services for Thai content channels.

(2) Broadband & Data

(2.1) IPSTAR Retail

The Company enables Internet Service Providers (ISPs) to deliver satellite broadband services to a group of residents and small businesses in remote or rural areas in Asia-Pacific. IPSTAR Retail has been entrusted by service providers in many countries for its nationwide uniform quality of service (QoS) and cost advantages when compared to conventional satellite. The service allows ISPs to gain a competitive edge over rivals and to drive nationwide expansion of their subscriber base and residential and small business users.

(2.2) IPSTAR Carrier

The Company provides cost-effective, end-to-end satellite broadband services allowing mobile operators to backhaul their mobile traffic via satellite in the areas where terrestrial networks cannot reach. IPSTAR Carrier solutions can support Base Transceiver Stations (BTS) of all sizes—from macro cells and micro cells to small cells, or IP-Node-Bs. IPSTAR Carrier can provide nationwide mobile network coverage to accommodate higher voice and data traffic loads or to cover more geographic areas quickly and economically.

(2.3) IPSTAR Business

IPSTAR Business allows small businesses and enterprises, who require dependable broadband connectivity to run or safeguard their operations against network failure and stay ahead of the competition. Whether you are an oil and gas company with multiple locations nationwide, a large retailer in need of an uninterrupted backup for vital online business applications, or a bank that requires a reliable network for credit and debit card transactions, IPSTAR Business provides a reliable service regardless of the number of business sites connected to the network.

(2.4) IPSTAR Government

Government agencies in Asia-Pacific countries can depend on IPSTAR. IPSTAR Government service lets government administrations extend their reach nationwide and enables universal access to broadband Internet and cost-effective government sector communications. IPSTAR is a proven solution for governments to extend their communications reach on a nationwide scale, whether it is disaster recovery and emergency communications for crisis-affected areas, distance learning for schools, community broadband Internet, or reliable VPN networks for broadband Internet and e-Government services.

(2.5) Mobility

To adapt to changing of consumer behavior, which seeks greater access to information and communication anywhere anytime, the Company has developed mobility services, In-Flight Connectivity (IFC) and Maritime Service, in the air and at sea for commercial airlines and shipping companies to offer passengers broadband internet access for social media, web service, and email on board.

IPSTAR Gateway

IPSTAR gateways have been designed to facilitate a variety of applications to enable broadband communications for corporate users, Internet Service Providers (ISP) and individual subscribers. IPSTAR is capable of delivering broadband Internet, intranet networks, video conferencing, multimedia broadcasting and multicasting, online transactions, and telephony. The services are supported by a wide-band forward link from the IPSTAR gateway to the IPSTAR user terminal and a narrow-band return link from the IPSTAR user terminal to the IPSTAR gateway. Currently, there are 15 active IPSTAR gateways in 10 countries in Asia-Pacific.

(3) Consultancy and Satellite System Design Services

In 2018, Thaicom initiated consultancy and satellite system design services to target satellite service providers from government and private sectors who want to establish their satellite business and service. Thaicom provides comprehensive consultancy services to be offered by Thaicom that include, for example, orbit use planning and frequency coordination, license application, satellite system design, business, market development, financial and investment and etc. With local and international expertise and experience in satellite industry for more than 27 years, Thaicom is confident to deliver successful consultancy services for customers to gain satellite business insight to run their business professionally and efficiently.

Industry Outlook, Competition and Strategies in 2019

(1) Broadcast and Media Industry Outlook

According to Northern Sky Research (NSR) on Global Satellite Capacity Supply and Demand Study, 15th Edition, it is expected that the demand for broadcast service stay strong and drive the biggest share of the transponder demand worldwide both for C-Band and Ku-Band which contributing 53% of total demand in the next decade. The video contribution and distribution services are expected to contribute 33%, and Direct-to-Home (DTH) service is expected to contribute 20% of demand.

Asia-Pacific

The C-Band demand on distribution will grow because of an increase in number of channels as well as the trend of transition from standard definition to high definition. The Ku-Band demand will be driven by DTH service which may have new service providers and the existing service providers still want to increase channels and want to migrate from standard definition to high definition.

In Thailand, satellite TV operators are required to apply for broadcasting licenses from the NBTC. This regulation encourages satellite TV operators to improve their content quality and creates a level playing field among broadcasters, which promotes sustainable growth and advancement in the Thai broadcast industry

Africa

The ongoing massive digitization in Africa, the second largest and second most-populous continent in the world, offers numerous opportunities to operators and media distributors to reach new markets and bring new services to the end users. Due to the continent's huge size, rugged terrain, and vast areas beyond the reach of terrestrial infrastructure, satellites will continue to play an important role to fulfill growing demands in this region. The demand for video contribution and distribution service will see consistent growth throughout the period of time because channels that are still on standard Definition will migrate to high definition in the future and the increase in number of channels will generate growth in demand for the service.

Competition in Conventional Satellite Industry

Asia-Pacific

In the Asia-Pacific region, Thaicom's major competitors include Asia Satellite Telecommunications (Asiasat), APT Satellite (Apstar), and Asia Broadcast Satellite (ABS) from Hong Kong, Eutelsat from France, Intelsat and SES Astra from Luxembourg, Measat Satellite Systems from Malaysia, and Vietnam Posts and Telecommunications from Vietnam. While the market remains competitive, the Company believes that the effect from the competition will be minimal due to our long-term reputation, relationships with the customers, and the Company's approach in selecting the customers and TV channels on THAICOM satellites. Such approach enabled Thaicom to attract new customers. In Thailand, at present, there are approximately 25.9 million households (or 62% of total population) receiving satellite and cable TV through our satellites located at 78.5 degrees East. For international markets, the Company still holds the leading position in market share in the Greater Mekong Subregion and as one of the major satellite operators in

South Asia. Over the past year, the Company has strengthened our positioning in those regions from broadcasting more satellite TV channels.

Africa

There are many players who are interested and have found opportunities to expand into target markets in Africa. Some of the major competitors of the Company in this market include Arabsat from Saudi Arabia, Eutelsat from France, and Intelsat and SES Astra from Luxembourg. Intelsat, Eutelsat and SES are the dominated players with over 50% of the market share. Such market structure has created stiff competition and the customers and satellite service users have many choices. And this has affected the price of satellite. However, Africa is full of quantitative potential in terms of demand, as it is the second largest continent in the world, with high population density but a low penetration rate for telecommunications technology. The Company believes that it can still compete in the market by focusing on selected target markets including broadcasting and telecommunications services and added more value to the end customer with our expertise and long experience in the industry. Moreover, we will focus on building cooperation with strategic partners in order to respond to the demands of prospective customers effectively.

Strategies in 2019

The Company will continue to drive the strategy to strengthen our popular satellite service with high number of subscribers and satellite TV channels on the platform at 78.5 degrees East where the THAICOM 5, 6, and 8 satellites are co-located. Last year, the number of satellite TV channels increased from 1,003 channels to 1,024 channels (with 148 HD channels), up (Information as of December 31, 2018).

Moreover, the company also has the strategy to collaborate with our regional partners in order to further strengthen our leadership in broadcast industry both in Thailand and in Asian region.

In realizing the importance of satellite broadcast TV service development, the Company offers state-of-the-art solutions to support high definition and ultra-high definition broadcasting and value-added services to enhance the capabilities of satellite TV operators. Moreover, the Company plans to expand our broadcast services in high potential emerging markets, especially in the Greater Mekong Subregion and South Asia with the focus on providing high quality satellite TV service directly to the viewers' homes and high power DTH broadcasting services to serve demands in the regions.

For the African market, our strategy is to differentiate ourselves from competitors by targeting specific target countries, to adapt our expertise and experience to this market and to form strategic partnerships with regional operators to provide comprehensive service in response to the needs of the customers with emphasis on satellite TV broadcast, mobile network linkage, VSAT service and internet connection service. Moreover, the Company also joined hands with our European teleport partners to bring more European channels on Africa platform.

(2) Broadband and Data Industry Outlook

The Global Satellite Capacity Supply and Demand Study, 15th Edition Report, issued by Northern Sky Research (NSR) projected the global broadband service demand on GEO High Throughput Satellite (GEO-HTS) to increase exponentially in the next decade, with Asia-Pacific being the region with the second highest demand after North America, and having a compound annual growth rate of 44%.

Broadband service demand in Asia-Pacific is expected to increase mainly from the retail (broadband access) and business markets, each contributing to 63% and 30% of total demand, respectively. Meanwhile, the mobility market has the highest compound annual growth rate, at 50%, followed by the retail market at 46%

Competition in Broadband Satellite Industry

In the past year, the broadband satellite industry has become more competitive as major broadband Geostationary Orbit satellite operators with extensive global network Australia's national broadband satellite (NBN Co. Limited)—have entered into the market. Additionally, operators such as O3B, who owns a Medium Earth Orbit High Throughput Satellite constellation, have added unique services to the market. However, the major operators serve different market segments, and require technical testing, and must obtain landing rights in each country in order to provide services locally. Meanwhile, NBN Co. Limited provides services in Australia only. Hence, THAICOM 4 (IPSTAR) will likely maintain its competiveness as the first mover, with landing rights in more than ten countries in the region.

Broadband Service Strategies in 2019

The Company places importance on enhancing bandwidth efficiency, for both the IPSTAR platform and business partners' platforms, to increase the bandwidth utilization of THAICOM 4 (IPSTAR), especially in Thailand, India, and China. The Company is also diversifying its broadband business into new segments and downstream in potential markets where the Company has competitive advantages. With regards to a long term plan, together with potential business partners, the Company is conducting a study on a Very High Throughput Satellite for providing next generation broadband services at low unit cost.

In regards to adjacent new services, to cater to changing of consumer behavior, the Company continues to provide service by developing mobile data connection platforms, with the focus on maritime services and smart platforms as well as Over-The-Top (OTT) services to deliver video and other media to viewers over the Internet anywhere, anytime.

1.2 Radio or Television Broadcasting Network Services not using radio frequencies and operated by TC Broadcasting Company Limited (TCB)

Nature of Products or Services

The radio or television broadcasting network services offered by TCB will consist of gathering content from different sources, including such content as public announcements, news, programs or public information, multiplexes from providers of audio or television broadcasting contents, and the provision of encryption services for clients who have specific requirements for channel reception by end-users such as Conditional Access (CA) or BISS Key encryption before the broadcasting of the radio or television signals to receiving apparatus through the permitted satellite broadcasting network. In addition, TCB has also expanded radio and TV broadcast network services for non-subscription frequency via IP networks, with service coverage in all areas of Thailand.

Type of Income

1. Income from the provision of multiplex services
2. Income from the provision of encryption services, such as Conditional Access (CA) and BISS Key encryption services.
3. Income from the provision of IPTV Network services (Transcoding & Streaming services)

Future Service Plan

TCB has developed a business plan for radio or television broadcasting network services which are able to offer comprehensive services in standard definition, high definition and ultra-high definition via satellite and internet in addition to the current services, in order to enable audiences with satellite receiving kit or internet to views the programs in standard definition, high definition all over the country. In addition, TCB has also developed business plans to offer the services via other communication channels including mobility satellite solutions for land, sea and air in order to upgrade the quality of TV channel, viewing access and future growth.

Business Privilege and Restrictions

TCB was granted a license by the NBTC to operate a radio or television broadcasting network that does not use the radio frequencies at the national level for a period of 15 years, starting on 4 March 2013 and continuing until 3 March 2028. At present, TCB has expanded the scope from providing services to those who were granted the license to operate broadcast operation or TV that does not use national level frequency and radio or television broadcast network to provide service for the Free Television Broadcasting via Satellite according to the notification of the NBTC on criteria for free television broadcasting. TCB has also been permitted to provide additional broadcast network or TV services for subscription operation that does not use frequency via IP networks.

1.3 Telecommunications network and service provision operated by TC Broadcasting Company Limited (TCB)

Nature of Products or Services

Telecommunications network and service provision offered by TCB consists of:

1) Satellite uplink/downlink service as transmission platform
2) Satellite uplink/downlink service
3) Satellite uplink/downlink service with hub station
4) Public very small aperture terminal (VSAT) service
5) Satellite Internet service with own hub station
6) Wholesale service of 1) - 5)

Through these services, users can access information in different formats such as audio, video, and data feeds, via satellite network without geographical limitations.

Types of Incomes

1) Income from the provision of satellite uplink/downlink service as transmission platform
2) Income from the provision of satellite uplink/downlink service
3) Income from the provision of satellite uplink/downlink service with hub station
4) Income from the provision of public very small aperture terminal (VSAT) service
5) Income from the provision of satellite Internet service with hub station
6) Income from the provision of public wholesale service of 1) - 5)

Future Service Plans

TCB has developed business plans to provide telecommunications leasing services for broadcasting network service providers, telecommunications service providers, and one stop shop by preparing to provide services to radio and TV broadcasting network, telecommunication service providers and general public, including a plan to provide data connecting service through mobility solutions for land, sea and air in order to support service users and technological changes in the future.

Business Privilege and Restrictions

TCB was granted a type III license by the NBTC to operate telecommunications network and as network Provider and service provider for a period of 15 years, starting from 10 November 2015 and continuing until 9 November 2030.



2. Internet and Media Services

2.1 Media Services and Related Services by DTV Service Company Limited (DTV) (DTV has changed its name to Thai Advance Innovation Company Limited, registered on 27 November 2018)

Nature of Products or Services

(1) DTV Satellite Dish Sales

Nature of Product

DTV's satellite signal receiving kit consists of satellite dishes and IRD boxes to receive signals from Ku-band transponders on THAICOM 5 and THAICOM 6. It is a compact in size and relatively inexpensive and customers may buy the equipment as a full set (dish and box) or opt for only the IRD box. The dish offers viewers an opportunity to clearly view a wide variety of TV channels, including free-to-air and education channels and entertainments. The equipment is sold through satellite dish installation shops, electrical appliance shops and some shopping malls nationwide. The sales prices might cover equipment fees only or include an installation fee as well.

Type of Income

1. Income from the sale of DTV satellite dishes (full set) and/or IRD Boxes only.
2. Income from the sale of DTV equipment including accessories e.g. remote controls and LNB

Future Service Plans

Focusing on after-sale service, to enable customers to have access to DTV's outstanding satellite TV channels and programs, including news, documentaries, movies, cartoons, music, and several education channels continuingly. As part of its marketing channel-building effort, DTV will also provide training to its installation technicians nationwide.

(2) Comprehensive Broadband Installation and System Integration Consultancy Services

Nature of Service

This is a system design and installation services according to the needs of the customer with an emphasis on using satellite communications and Internet media formats. Solutions provided are as follows:

1. Platform services such as: IPTV, VDO Conference, Data Transfer, and Multimedia Online
2. System integration to service network and software

2.1 Broadband Network Services

In response to the customer's demand for network connections to transfer data in different formats for both one-way and two-way transactions. DTV also arranges training to meet customer requirements.

Customer Group - Business organizations or government agencies, state enterprises, and private business operations with nationwide branches, direct sales businesses, or cooperatives where in-house conferences, trainings, or seminars are held regularly, including various industrial sectors, such as tourism, news agencies, TV stations, or major program producers.

2.2 Internal TV Network Services

This service is offered in response to the needs of customers who install internal TV network in residential building both in the free of charge and monthly fee basis.

Customer Group - Owners or operators of buildings such as hotels, apartment buildings, condominiums, that want to provide an in-house TV network to serve customers in their own building.

Type of Income

- Broadband Network Services
  1. Service charges collected for data transfer service team, broadcast service
  2. Income from sales of signal receiver kits
  3. Bandwidth fees per use or monthly
  4. Software fees calculated on a per use or monthly basis
  5. System installation fees

- Internal TV Network Service
  1. Service charges on a one-time or monthly charge basis
  2. Income from sales of signal receiver kits in case of one-off sale
  3. Rental fees for equipment and bandwidth charged in case of monthly service
  4. Revenue from PC server to control 'right to view' in case of a monthly agreement
  5. System installation fees

(3) Platform Service

Nature of Services

These services include selling and leasing of platforms, or providing marketing services, or systems developed by DTV, such as IPTV Channel (Internet TV channel) and Multimedia Streaming Platforms used for broadcasting video or audio content via Internet networks (e.g. television or radio broadcast via Internet). The platforms and applications developed are ideal for broadband Internet application. This service also includes development of particular services to match customers' specific demands.

Type of Income

1. Income from individual sales of IPTV Channel Platforms, Video Streaming, or the purchase of various accessories
2. Monthly income realized from the leasing of the platform service on a monthly basis
3. Income from sale of equipment and installations for MDU/Digital TV Head End solutions
4. Income from managing marketing activities on platform, e.g. in case of LOOX TV Application

Competition and Marketing

(1) Industry Outlook and Competition

- **DTV Satellite Dish Sales Service**

At present, a wide variety of TV receivers is available in the market, including satellite dishes, local cables, and Digital TV antennas. This availability creates stiff competition, especially in pricing and new very low-cost alternatives enter the market. Nevertheless, DTV remains competitive with regards to price as well as in comparison to indirect competition from products such as AIS Playbox and AIS Fibre which connect to the Internet via routers.

- **System Integration Service**

  Currently there are several operators providing broadband network system integration services, each with their own particular technical expertise. DTV has placed emphasis on IP file transfer technology using the IPSTAR broadband satellite for in-house education and training. For master antenna TV network services, there are competitors in the market who provide TV channels via satellite just as DTV does, while others provide TV channels via cable TV networks. DTV focuses on reaching new buildings, especially condominiums. DTV also focuses on the installation of TV networks with HDTV boxes inside customers' buildings, which will provide viewers with higher quality viewing than regular boxes do. Additionally, DTV will also market its DTV-IP Gateway Box to local cable operators to convert existing cable TV networks from analogue to digital.

- **Platform Service**

  DTV continues to provide services to its current customer group with earnings being realized from existing equipment. The customer base has not been actively expanded, as similar platform services are widely available at low cost through other vendors, so customers are able to choose services, choose to invest on their own, or do it by themselves. In addition, DTV provides marketing services to support the sale of services, platforms, or applications for customers.

(2) Marketing and Sales

Marketing and sales can be divided into 2 groups as follows:

1. Direct Sales Group - This group comprises system integration services where the emphasis is on direct contact with customers to give product descriptions, gather customers' needs, demonstrate products, or design network systems for buildings such as hotels, condominiums and apartment buildings. The majority of customers are organizations. This group is not likely to use mass media advertising, focusing instead on training seminars to teach about product knowledge and solutions.

2. Sales through Distributors - This group consists mainly of distributors of full DTV sets. Marketing activities are undertaken through point of sale support, training seminars for building operators such as hotels, condominiums and apartment buildings and cable TV operators, and promotion of new products or sales support through social media marketing channels. There are also mass media campaigns from time to time and incentives for high-volume distributors. At present, however, the sales and marketing focus is increasingly on solutions for hotels, condominiums and apartment buildings as well as system integration.

Description of Customers and Relationship between DTV and its Customers

- Sales of DTV Satellite Dishes - Customers consist of distributors of electrical appliances or satellite dishes, including modern trade, end users, buildings, and other organizations nationwide. Customers in this group receive such after sales services as service delivery, marketing support, and technical and logistical advice, including equipment repair services.

- System Integration and Platform Services - Customers in this group include government agencies, state enterprises, and private organizations with branches nationwide or institutions, direct sales businesses where conferences, in-house training, or seminars are regularly organized, including various industrial sectors, such as the tourism and hospitality segments. Other potential customers include condominiums, apartment buildings, or hotels which require the design and installation of in-building TV systems whether through satellite TV or IPTV. Therefore, the market plan will focus on system integration (SI) services for potential customers, including hotels, condominiums, and apartment buildings, in order to manage cost and investment efficiently. The relationship with the customers is a service user/service provider relationship with an emphasis on direct sales in project and other services leading to annual contracts.

Business Operating Rights and Restrictions

- **Right to operate as an Internet service provider, Internet Service Type I License** - DTV was granted a type I license by the NBTC to provide Internet services for 5 years from 18 October 2009 to 17 October 2014. DTV has already submitted an application requesting the extension of the licenses for an additional 5-year period commencing on 18 October 2014 and expiring on 17 October 2019. If the licensee does not materially or severely breach the conditions of the license, the NBTC will renew the license promptly.

- **Right to operate Satellite TV Services, License to Operate Network Service** - DTV was granted a license by the NBTC to operate a voice or TV broadcasting network not requiring the use of frequency at the national level. The license was granted for a period of 15 years, commencing on 21 January 2013, and expiring on 20 January 2028.

- **Right to operate Satellite TV Services, Broadcasting Operation License** - DTV was granted the Broadcasting Operation Licenses by the NBTC to provide TV broadcasting services - License to operate TV Broadcasting for D-Channel, valid for 5 years from 28 January 2016 to 27 January 2021.

2.2 Sales of Satellite Receiver Sets and Related Services by Cambodia DTV Network Ltd. (CDN)

CDN sells satellite receiver sets (dishes and IRD boxes), satellite television platform services, and transponder leasing services for satellite TV operators in Cambodia.

Nature of Products or Services

(1) Sales of Satellite Receiver Sets

Nature of Service

The Company sells satellite TV reception sets (dishes and set-top boxes) to receive broadcast signals from THAICOM 8 Ku-band transponder which can be sold as a full set or as a set-top box (IRD Box) alone. With high satellite signal quality, customers can watch Cambodian TV channels clearly, especially free Cambodian TV and entertainment channels which are only broadcast via satellite. CDN sells all products through an established dealer network with many distribution outlets across Cambodia, including satellite shops, electrical appliance stores, and department stores.

Types of Income

1. Income of sales of CDN satellite receiver dishes sold separately (IRD Box) or as full sets
2. Income of sale CDN of satellite receiver accessories or spare parts such as remote controls and LNB units

(2) Lease of Satellite Channel for Television and Radio Service in Cambodia

Nature of Service

Leasing services are provided for television broadcasting or satellite radio via THAICOM 8 to satellite broadcasters in Cambodia for both standard definition (SD) and high definition (HD) content.

Types of Income

1. Income from service payments for transponder leasing on a per-use basis for broadcasts of irregular programs e.g. live broadcasts of events
2. Monthly income from the leasing of satellite transponders for television and radio services on a yearly contract basis

Future Service Plan

CDN will continue to target households located in urban and rural areas. CDN plans to offer more interesting channels, such as news, documentary, movie, cartoon, music and other channels, to make the platform stand out further. In 2013, CDN became the first broadcast provider to offer high definition (HD) channels in Cambodia. Currently, CDN broadcasts signal from THAICOM 8 satellite which covers 100% of Cambodia. With the advent of the ASEAN Economic Community, CDN also plans to expand its business into Thailand, Lao and Vietnam.

In 2019, when satellite TV reception business becomes more competitive CDN will be ready to collaborate with local TV and cable TV operators to produce special and exclusive channels to strengthen and leverage our platform to be more attractive compare to the competitors. Other than that, CDN is interested in partnering with TV ratings operators in order to deliver real-time data and behaviour of TV viewers in Cambodia. CDN is also considering providing TV access for home viewers in high rise residential buildings.

Competition and Marketing

(1) Industry Outlook and Competition

- **Satellite Receiver Set Sales** - Competition within the Cambodian market is very high, with several different receiver sets competing for customers. The TV broadcasters, including cable, satellite, and terrestrial TV, are competing based on pricing and the number of channels each can provide. In 2018, CDN has negotiated with set-top-box manufacturers to produce a new model of satellite receiver which the features met a market requirement, the quality was well maintained and the cost was lower. The consequence is that CDN was able to give more discount to its dealer to increase a competitiveness its product.

- **Lease of Satellite Channels Service** - Currently CDN has been broadcasting on DVB-S2 MPEG 4 platform in order to support TV business expansion in Cambodia, especially for HD TV channels—the key strength that differentiates CDN from its competitors.

(2) Marketing and Sales

The marketing and sales activities can be divided into 2 service groups in line with the following service categories:

- **Satellite Receiver Set Sales** - CDN maintains distribution of satellite receiver sets through its distributors who have many outlets and installation teams located in every province in Cambodia. CDN also supports marketing and sales promotions to increase sales volume. In 2018, CDN had a total of 28 dealer outlets to cover more areas and generate sales growth.

- **Lease of Satellite Channels Service** - CDN will focus on direct communication with TV operators (terrestrial, satellite and cable), and also focus on new content providers who would like to broadcast their content via our satellite, especially operators needing to broadcast in HD.

Description of Customers and Relationship between CDN and its Customers

- **Satellite Receiver Set Sales** - Customers include distributors of electrical appliances or satellite dishes as well as modern trade and end users.

- **Satellite Television Platform Service** - Customers are television operators in Cambodia.

3. Telephone Business Aboard

Lao Telecommunications Public Company (LTC)

Nature of Products or Services

(1) Nature of Service

LTC has been granted a license to operate the following telecommunications services in the Lao PDR

- Digital Phone Service (GSM 900/1800/WCDMA 2100, LTE 1800, 2300 & 2600 MHz)
- Public Switched Telephone Network (PSTN)
- Fixed Wireless Local Loop - GSM
- Broadband Internet: both fixed broadband and mobile broadband services such as leased line, DPLC and IPLC), IP Transit, ADSL, FTTH, Internet SIM Card and MBB in monthly mobile service and pre-paid service
- International Roaming Service
- Value-added services for mobile phones

(2) Type of Income:

- Local and international telephone service charges
- Monthly subscription fees
- Income from sales of handsets (Fixed Wireless Local Loop - GSM) and SIM cards

- Monthly Internet service charges, leased line service charges, prepaid Internet cards
- International Roaming (IR) charges and Inter-Connection Charge both Domestic and International
- Value-added service charges

Competition and Marketing

(1) Industry Outlook and Competition

Currently, there are 3 fixed-line operators in Lao PDR namely LTC, ETL, and UNITEL and 4 cellular phone operators namely LTC, ETL, BEELINE, and UNITEL. LTC holds the top rank in market share while UNITEL ranks second, ETL ranks third, and BEELINE ranks fourth. ETL was 100% government-owned, but in the fourth quarter of 2016 it officially announced a joint venture with Jiafu Holdings Limited, a Chinese company, in which Jiafu will hold 51% and the Government of Lao PDR (GoL) will hold 49% of shares in ETL. The agreement was completed in the third quarter of 2017. Meanwhile, UNITEL is a joint venture between the government and Viettel, a Vietnamese company. BEELINE was a private company, owned by VIMPELCOM, a Russian company. In January 2019, Lao Telecommunications Public Company entered into Sale and Purchase Agreement to acquire 100% shares of Vimpelcom Company Limited.

In addition to telephone services, there are six major Internet service providers in the Lao PDR, namely: LTC, ETL, Planet Online, UNITEL, BEELINE, and Sky Telecom, with LTC holding over 50% of the market share.

Telecommunications systems in the Lao PDR have developed and improved extensively over the past few years, with the introduction of state-of-the-art technology on par with global trends. LTC was the first mobile operator to provide 3G and 4G cellular phone service in Lao PDR, with the network now covering all provinces of the country and network quality continuing to improve. In particular, mobile broadband services underwent significant system improvement to allow for higher data usage by customers and high data business growth in 2017 LTC has developed data core network and expanded 4G cellular phone service including 4.5G in the city. In 2018, LTC continued to expand service coverage and capacity across the country by owning 2,492 of 3G transceiver stations and 2,336 of 4G transceiver stations. LTC has a total of 1,540,683 mobile phone subscribers *(Source: LTC information as of the end of December 2018 estimated).*

For fixed wireless service, the current technology and system were developed to be used on the same network as Mobile GSM, separating the prefix number and numbering plan, and also limiting the coverage area within each province. As a result of fixed wireless tariffs which were typically lower than the postpaid and prepaid mobile service tariffs, and affordable handset prices offered to customers, customers only needing to use voice services switched to fixed wireless instead of mobile, particularly in provincial and suburban areas. LTC has a total of 350,002 fixed wireless subscribers *(Source: LTC information as of the end of December 2018 estimated).*

Meanwhile, the Mobile Broadband Service (MBB) saw significant growth on the part of Internet SIM Cards, both in terms of subscribers and revenue in 2018. LTC has a total of 1,181,970 MBB subscribers

Overall, wireless services consist of:
- Digital phone service
- Fixed Wireless local loop - GSM
- Mobile broadband Internet - Internet SIM

LTC has a total of 3,043,601 wireless subscribers *(Source: LTC information as at end of December 2018 estimated.).*

The Ministry of Posts, Telecommunications and Communication (MPTC) maintains strict control over tariffs on telecom services and did not allow operators to give away free airtime to customers. However, operators were allowed to offer half-price promotions on domestic tariffs for periods of no longer than 7 consecutive days and no more than 90 cumulative days in any one calendar year. However, the MPTC has once again reiterated that all wireless subscribers must be officially registered, and the government recognized the importance of competition in service quality for the benefits of the consumers.

In 2018 the business environment in the Lao PDR became more competitive, while the country's economy grew less rapidly than earlier forecasts. Several natural disasters and dam burst also affected the business and the heavy rainfalls also resulted in severe flooding in several provinces caused damage to the Company's mobile phone station.

LTC has maintained its ARPU rates (average revenue per user), especially in non-voice service which saw a continuing growth in 2018 at 65% of total revenue. Total number of customers in this market for mobile phone and wireless land line service is about 4 million numbers (Customers who used the service and created incomes only) while more than 94% of all mobile customers used pre-paid service.

(2) Marketing

As competition grew stronger in the market, LTC placed greater emphasis on network expansion to ensure nationwide coverage and on high service quality and continued creation of Partner Relationship Management and Customer Relationship Management, including efficient distribution channel management and expansion of customer service and call centers throughout the country to facilitate customer base growth for all services.

LTC has focused its marketing activities on specific customer segments while promoting the main brand, MPHONE. Localized marketing campaigns offer service packages tailor-made to customer lifestyles; other activities are aimed at new target groups, such lower than 14 year old group and organizational customers. LTC has also focused on increasing data service usage. Internet network service systems were improved to support corporate customers who need high-speed Internet and home Internet services through leased line and fiber-to-the-home (FTTH) technology, IP Transit, and Total Telecommunication Solutions, as well as through service convergence for solutions that best serve customers' particular needs. LTC has also implemented a business support system and has set up a Network Operation Center (NOC) to monitor systems and ensure network efficiency. LTC has also implemented a business support system and has set up a Network Operation Center (NOC) to monitor systems and ensure network efficiency and a Service Operation Centre (SOC) was established to monitor services and resolve customer issues since year 2014.

Description of Customers and Relationship with Customers

LTC's customers include the general public, international business organizations, general corporate users, government organizations, and internal and overseas partnerships. LTC places importance on all customers, from individual customers to large organizations, continually implementing Customer and Partner Relation Management programs.

Business Privileges and Restrictions

LTC is a joint venture with a 25-year license from the Joint Venture Agreement for Telecommunications Business Operation in the Lao PDR valid from 1996 to 2021. In the third quarter of 2015, the government of Lao PDR and SHEN signed a new joint venture agreement to extend the concession another 25 years, from 2021 to 2046. Under the new joint venture contract, at the expiration of the 25-year term, SHEN is required to transfer all of its shares in LTC to the government of Lao PDR without any charges or compensation.



Risk Factors

The Board of Directors realizes that its operations may face many risks, including economic, social, political, financial, innovation, technological, all of which can affect all areas of the Company.

The Board of Directors has, therefore, 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 Risks

1. Risk during the transition period in the communications satellite business from the concession system to the telecommunication license system and the services continuity after the expiration of the concession.

At present, the satellite regulation is in the transition period from the concession regime to the telecommunication license regime. The government agencies such as the National Institute of Standards and Technology (NIA), Ministry of the Digital Economy and Society (Ministry), Office of the Broadcasting Commission Television National Broadcasting and Telecommunications Commission (NBTC) are working on an orbital management approach, satellite operator permission criteria and practical guideline. The draft of the NBTC Act 2010 (No. 3) has been revised in defining rules and procedures for the satellite filing management, and implementing the market access policies to open of the market for foreign satellites operator to provide service with equal competition etc.

The company has participated in this process by supporting the information needed to set the criteria, such as International practice to build understanding of the satellite industry to the public continuously.



The company also considers other business opportunities with the business partners in foreign countries to develop Satellite business and services such as renting the satellite to provide additional services abroad, collaboration in the acquisition of telecommunication rights in foreign countries to expand the opportunities to do business.

2. Risks Related to 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 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 specified the said authorization in the license granted to the Company.

The extraordinary meeting of the Board of Directors No. 11/2017 dated 24 October 2017 was arranged to consider this agenda cautiously and carefully with the legal consultant. 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 2016, 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 final decision is made by the arbitrator.

3. Risk from regulatory changes of the national frequency allocation to accommodate additional spectrum for 5G technology

In response to the government's strategy of Thailand 4.0, formulated to promote the development of nation-wide digital infrastructure, led by the applications of 5G technology, NBTC has initiated its consideration to revise the country's frequency master plan as well as the national frequency allocation in order to accommodate additional spectrum to 5G within year 2020. In this matter, the C-band and Ka-band portions which have been currently operated by the fixed satellite service (FSS) are among those to be considered.

Since losing the satellite spectrum will cause impacts to the satellite service in Thailand, the Company therefore has addressed our concerns to the NBTC for their understanding of the impacts so as not to include the satellite spectrum in C and Ka bands in this 5G's additional spectrum allocation. Besides, the company also participated in all relevant discussions with the NBTC and a working group assigned in this regard as well as providing comments and information in meetings for the NBTC's plan and roadmap of a frequency recall. At present, the NBTC is considering a field trial on the use of C-band and Ka-band for 5G in order to study the feasibility of the impacts of the allocation of frequencies in that spectrum to 5G technology. The study is expected to be conducted in 2019 in order to find a conclusion within 2020.

In this regard, the company has provided all information and clarifications as relevant to convince the NBTC and others government bodies to re-consider this 5G's spectrum allocation plan due to the adverse impacts caused to Thailand as well as the satellite service in the country. Nevertheless, since the 5G implementation is largely supported and taken as an urgent mission for all the government units to consolidate their efforts for successful implementations, the company's attempt in protecting the satellite spectrum may not be totally achieved at the end. Therefore, the company has already considered and will conduct some measures as appropriate in order to alleviate and cope with such adverse impacts from the 5G spectrum allocation.

Operational Risks

1. Shorter Service life of satellites

Although satellites generally have no less than 15 years of service life, there are some factors that may decrease their service life such as the structural quality, the sturdiness and durability of spacecraft components, the performance of the launch vehicle to deliver satellite to the correct orbit, 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 approaches the end of its service life, the responsible department will be informed to plan for preventive measures such as the leasing of satellite from other operator or make an investment on new satellite to replace the one whose service life approaches the end.

2. Risks from 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 space environment in order to maintain international standard reliability. 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 possible temporary leasing of transponders for service continuity.

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 and 1 year renewable insurance period. This means that the Company can immediately make a claim from the insurer 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.

3. Failure to extend THAICOM 5 service life

The Company has considered extending the service life of THAICOM 5 satellite by launching another satellite to dock it and to supplement the amount of propellant. Technically, the on-board electrical equipment has service life longer than 15 years. The service life of a satellite in geosynchronous orbit mainly depends on the amount of propellant in tanks. Once the satellite propellant is depleted, the satellite will not be serviceable but all of the on-board equipment still functional. Some vendors in the industry has introduced their offer to extend the service life of in-orbit satellite by launching another small-size satellite with enough propellant, specifically designed for the life extension service, to the orbit and dock it to the nearly expired satellite. This allows the nearly expired satellite to use the propellant from the small-size satellite for life extension.

The vendor is developing and building this specific satellite for launching to the space. However, there is a risk associated in using the life extension service such as the timely launch and readiness of the service at the required timeline. Therefore, the Company has closely monitored and tracked the progress of the satellite construction and launching including the backup plan in case it is not completed as planned.

The additional risk of this service is the success of docking operation and its performance during the service period in orbit. The Company has planned to review the design and to test the satellite and docking algorithm with the vendor to ensure its compliance with the requirement. The Company is also planning to procure the in-orbit insurance to protect THAICOM 5 satellite from all risks during the period of this life extension in the same way as of the existing insurance of THAICOM 5.

4. Risks as a result of the use of information technology

The Company may be exposed to risks if its computers and IT data receive threats from outside due to its computer system and internet connection, which could be detrimental to its business.

In view of this risk exposure, the Company sets up a committee to manage IT risks. The committee is responsible for prescribing guidelines and policies, and assessing and managing risk. The committee annually assesses its IT system's environment, status, and risk management so that it is flexible enough to keep up with changes in technology, information, and communication, and to lower risks to an acceptable level at an appropriate cost.

The company also has Business Continuity Management and ISO 22301: 2012 Business Continuity Management. In addition, the company has insured both Commercial Crime Insurance to prevent financial damage and Cyber Insurance to reduce the damage from cyber threats.

Financial Risks

1. Currency exchange risk

Thaicom offers both domestic and international services. Therefore, the Company faces the risk of currency exchange fluctuations in its accounts payable and accounts receivable, as well as any foreign currency loan. These fluctuations could affect the Company's financial statements as well as cash flows.

The Company has a hedging policy to manage such risk by controlling the net exposure of foreign-currency-dominated transactions, i.e., the risk is managed by balancing the revenue and expense structure in foreign currency to maintain a currency balance. In the event of an imbalance, the Company may use several hedging approaches such as foreign exchange forward, foreign exchange options and cross currency and interest rate swap.



2. Potential loss of major customers

The major source of the Company's revenue comes from only a few major customers, most of whom provide telecommunications and broadcast services. Some major customers may cancel their services or may not renew contracts with the Company. This could affect the Company's financial results. The Company, therefore, 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. In addition, the company continues to expand into new markets and acquire new customers in order to mitigate its reliance on major customers.

Compliance Risks

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., whose name has been changed to Intouch Holdings Public Company Limited. Intouch Holdings Plc is the major shareholder of the Company.

Risks related to such agreement may be divided into 2 main areas as follows:

(A) Shareholding ratio

According to 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 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 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.

Later on, the Supreme Court of Justice's Criminal Division for Persons Holding Political Positions deliberated and made rulings on some facts regarding the amendment of agreement in order to 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.

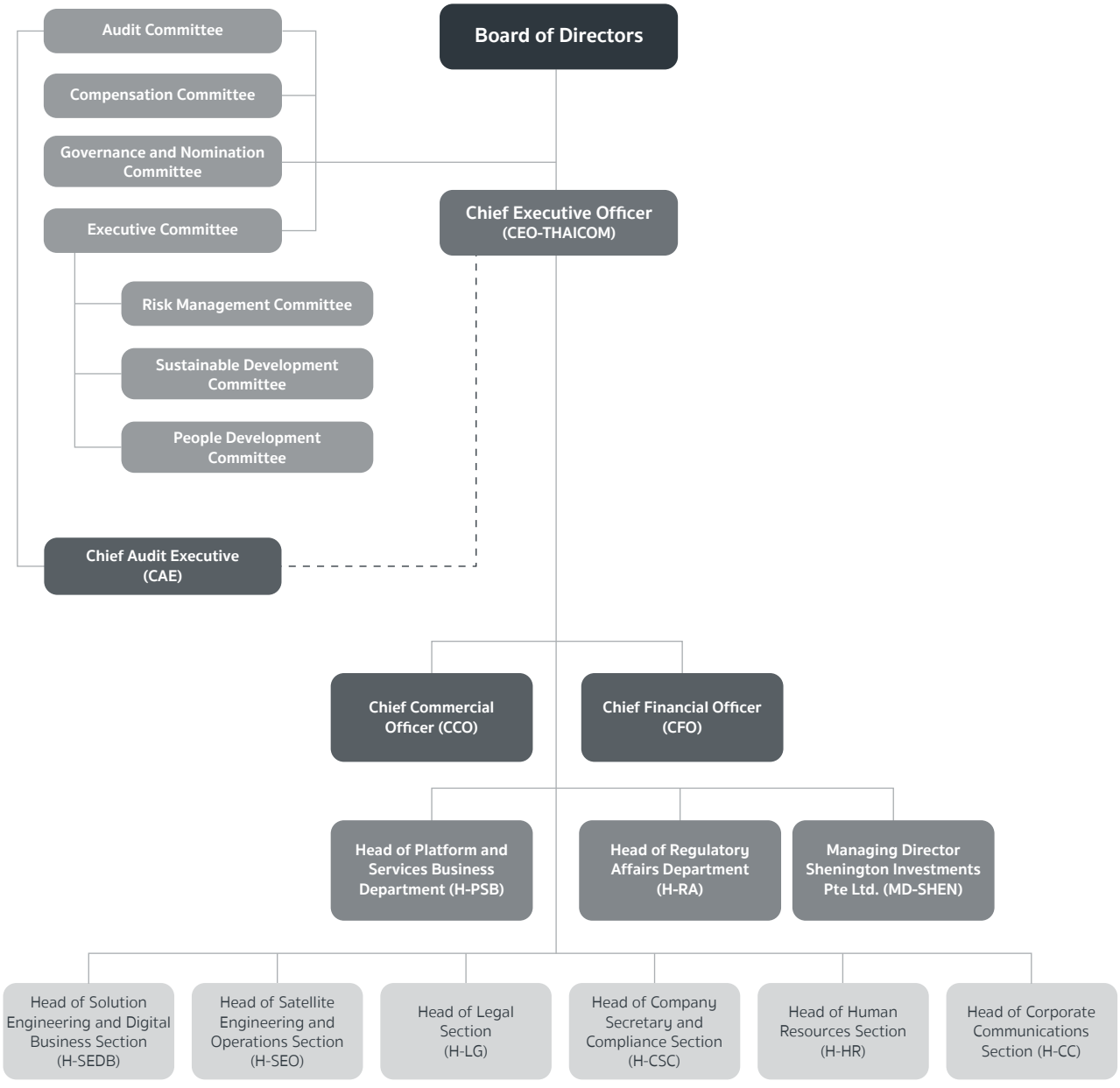
(B) Back-up satellite

According to the Domestic Communications Satellite Operating Agreement, the satellites built and delivered under the agreement 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.

However, THAICOM 4 was approved by the Ministry and launched as a subordinate or back-up satellite and the technical specifications are not the same as those of THAICOM 3. There is question, therefore, as to whether or not the THAICOM 4 satellite should be considered a back-up satellite for THAICOM 3. The Supreme Court of Justice's Criminal Division for Persons Holding Political Positions has made ruling on some facts regarding 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 and have 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.

Management and Corporate Governance

Management Structure*
Thaicom Public Company Limited



*Management Structure as of 1 November 2018

1. Management Structure

1.1 Board of Directors

The Articles of Association of the Company specifies that the Company must have a Board of Directors which consists of no less than 5 persons with proper qualifications under the law. No less than half of the Board of Directors shall have residency in the Kingdom of Thailand. The Board of Directors shall perform their duties in conformity with the law, the Company's objectives and the Articles of Association as well as the resolutions of shareholder meetings.

As of 31 December 2018, the Company's Board of Directors comprises the following 8 members:

Name of Directors	Position	Date of Appointment [1]
1. Mr. Prasert Bunsumpun [2]	Chairman (Independent Director)	1 October 2015
2. Mrs. Patareeya Benjapolchai [3]	Independent Director and Chairman of the Audit Committee, and Member of the Governance and Nomination Committee	30 March 2016
3. Mrs. Charintorn Vongspootorn	Independent Director, Member of the Audit Committee, and Chairman of the Compensation Committee	8 December 1988
4. Prof. Samrieng Mekkriengkrai [4]	Independent Director, Member of the Audit Committee, Member of the Compensation Committee, and Chairman of the Governance and Nomination Committee	10 August 2007
5. Mr. Somprasong Boonyachai	Director	11 August 2006
6. Mr. Kwek Buck Chye	Director, Member of the Governance and Nomination Committee, and Member of the Executive Committee	27 March 2015
7. Mr. Anek Pana-Apichon [5]	Director and Chairman of the Executive Committee, and Member of the Compensation Committee	1 July 2017
8. Mr. Anant Kaewruamvongs [6]	Director, Member of the Executive Committee	1 May 2018

Remarks

(1) Date of Appointment means the first date appointed as a Director of the Company.

(2) Mr. Prasert Bunsumpun was appointed as Chairman of the Board of Directors in replacement of Mr. Paron Isarasena who resigned, by the resolution of the Board of Directors Meeting No. 3/2018 held on 19 March 2018, effective from 24 March 2018.

(3) Mrs. Patareeya Benjapolchai was appointed as Chairman of the Audit Committee in replacement of Prof. Hiran Radeesri, by the resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018

(4) Prof. Samrieng Mekkriengkrai was appointed as Chairman of the Governance and Nomination Committee in replace ment of Mrs. Patareeya Benjapolchai, by the resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018.

(5) Mr. Anek Pana-Apichon was appointed as Member of the Compensation Committee in replacement of Mr. Prasert Bunsumpun, by the resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018.

(6) Mr. Anant Kaewruamvongs was appointed as Director in replacement of Mr. Paiboon Panuwattanawong, by the resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018.

Authorized Directors of the Company

The directors who are authorized to sign on behalf of the Company are Mr. Anant Kaewruamvongs and Mr. Anek Pana-Apichon, who must jointly sign and affix the Company's seal.

Board of Directors' Attendance

In 2018, the Board of Directors (Board) held 9 regular and extra meetings, 1 meeting between Independent Directors (ID) and 1 meeting between Non-Executive Directors (NED), with the details of attendance for each director shown below:

Name of Directors	Meeting Attended / Total Meetings (Times)				Remarks
	AGM 2018	BOD Meeting	ID Meeting	NED Meeting	
1. Mr. Prasert Bunsumpun	Present	9/9	1/1	1/1	
2. Mrs. Charintorn Vongspootorn	Present	9/9	1/1	1/1	
3. Prof. Samrieng Mekkriengkrai	Present	9/9	1/1	1/1	
4. Mrs. Patareeya Benjapolchai	-	8/9	1/1	1/1	
5. Mr. Somprasong Boonyachai	Present	8/9	-	1/1	
6. Mr. Kwek Buck Chye	Present	9/9	-	1/1	
7. Mr. Anek Pana-Apichon	Present	9/9	-	1/1	
8. Mr. Anant Kaewruamvongs	Present	5/9	-	-	Started on 28 March 2018
9. Mrs. Arthidtaya Suthatham	-	3/9	-	0/1	Started on 31 January 2018 and Resigned on 20 December 2018

1.2 Management

According to the Company's Management Structure as of 1 November 2018, the Company's management as defined by Notification of the Securities and Exchange Commission, consists of the following 7 executives:

Name of Executive	Position
1. Mr. Anant Kaewruamvongs [1]	Chief Executive Officer
2. Mr. Anuwat Sanguansappayakorn [2]	Chief Financial Officer
3. Mr. Patompob Suwansiri	Chief Commercial Officer
4. Mr. Wichai Kittiwittayakul [3]	Chief Audit Executive
5. Dr. Sakon Kittivatcharapong	Head of Business Development Department

Name of Executive	Position
6. Mr. Ekachai Phakdurong	Head of Platform and Services Business Department and Head of Regulatory Affairs Department
7. Mrs. Pannee Nivasnanda	Head of Financial Department

Remark

(1) Mr. Anant Kaewruamvongs was appointed as Chief Executive Officer in replacement of Mr. Paiboon Panuwattanawong, who resigned, by resolution of the Board of Directors Meeting No.4/2018 held on 28 March 2018, effective from 1 May 2018.

(2) Mr. Anuwat Sanguansappayakorn was appointed as Chief Financial Officer (previous was Acting Chief Financial Officer), effective from 1 November 2018.

(3) Mr. Wichai Kittiwittayakul was appointed as Chief Audit Executive of Thaicom, by resolution of the Board of Directors Meeting No. 6/2018 held on 1 August 2018, effective from 1 August 2018.

1.3 Company Secretary

Ms. Yupapan Panclurbthong has been serving as Company Secretary since being appointed by the Board of Directors on 12 November 2012. She has completed a company secretary training program and other relevant courses, and she is an expert in good corporate governance, compliance, and secretarial functions, with many other qualifications which support the Company Secretary function.

The Company Secretary reports to the Board of Directors, sub-committees, and the Chief Executive Officer. Her duties include matters related to Board meetings, shareholders meetings, and the provision of support in monitoring the Company's adherence to good corporate governance guidelines.

The Company Secretary's responsibilities include:

(1) Present any resolutions from the Board of Directors and shareholders to management for their acknowledgement; consult with and propose basic information to the Board of Directors and management on Company regulations and corporate governance guidelines.

(2) Prepare and file documents including, but not limited to the following: Directors list, Board of Directors meeting invitations, shareholder meeting invitations, Board of Directors meeting minutes, shareholders meeting minutes and the Company's annual report.

(3) File mutual benefits reports created by directors, executives, and other relevant persons as prescribed by law; keep records of the said documents; and forward copies to the Chairman of the Board and the Chairman of the Audit Committee.

(4) Organize and arrange the meetings of the Board of Directors and other Committees as established in accordance with the law, Company Articles of Association, and the rules and governance guidelines of the Board of Directors and other Committees.

(5) Disclose information and present reports within relevant areas of responsibility to the related authorities.

(6) Communicate with shareholders to inform them of their rights as a shareholder.

(7) Serve an administrative function for the Board of Directors and cooperate with executive management to provide information and news to the Board of Directors on events related to the Company's operations.

(8) Arrange the evaluation process for the Board of Directors and sub-committees, including separate individual evaluations and proposal of the evaluation results to the Board.

(9) Other operations as defined by the Securities and Exchange Commission and relevant regulations.

1.4 Remuneration of Directors and Executives

The Company established a remuneration scheme for directors and executives based on the following criteria:

1. Compensation of Board members is determined based on their duites, responsibilities and performance. The Chaiman of the Board of Directors and Chairman of the Audit Committee have received additional compensation according to their duties and responsibilities. The compensation is compared with directors' compensation at other listed companies of similar type and size. The level of compensation shall be set to motivate and retain quality directors on the Company's Board.

2. The Company has formulated a remuneration policy for the Chief Executive Officer and executives which consists of salary, bonus, provident fund and other fringe benefits and is linked to the short-term and long-term performance of the Company, performance of each executive, and best practices among business leaders.

3. Non-monetary remuneration: The Company has implemented a project to allocate warrants to directors and employees. This is a long-term policy divided into 4 projects with a period of 5 years for each project. The policy was started in 2013 to provide employees with performance incentives.

1.4.1 Monetary Remuneration

(A) Directors' Remuneration

The directors of the Company shall be entitled to receive remuneration, such as monthly allowance, meeting allowance, per diem allowance while traveling for the Company's business, bonuses, and life insurance which shall be approved at the shareholders meeting.

At the 2018 Annual General Meeting of Shareholders, held on 28 March 2018, the shareholders approved total remuneration for the Board of Directors and sub-committees in an amount not exceeding 22 million Baht.

The policy of monetary remuneration for the Chairman, Independent Directors, and Non-Executive Directors includes monthly allowances, meeting allowances, annual remuneration, and other benefits as follows:

Position	Monetary Remuneration for 2018 (Baht)		
	Monthly Allowance	Meeting Allowance (per meeting)	Annual Remuneration
Board of Directors			
Chairman	250,000	✗	✓
Director	50,000	25,000	✓
Audit Committee			
Chairman	25,000	25,000	✓
Member	✗	25,000	✓
Executive Committee			
Chairman	25,000	25,000	✓
Member	✗	25,000	✓

Position	Monetary Remuneration for 2018 (Baht)		
	Monthly Allowance	Meeting Allowance (per meeting)	Annual Remuneration
Other Sub-Committee			
Chairman	10,000	25,000	✓
Member	✗	25,000	✓

Remark

(1) The Chairman of the Board of Directors is not entitled to receive an allowance for Board of Directors or sub-committee meetings and also is not entitled to receive a monthly allowance for duties as Chairman of any sub-committees.

(2) The Chairman of the Board of Directors has received other benefits which include an office car with driver.

(3) Directors who are executives of the Company are not entitled to receive any allowance for their duties as Director.

(4) Each member of the Board is eligible for a per diem allowance while traveling for the Company's business, at the rate determined by the Company.

(5) Directors, except the Chairman of the Board, shall receive life insurance and an annual health insurance.

For 2018, the total monetary remuneration consisting of monthly allowances, meeting allowances, annual remuneration and other benefits for the Chairman, Independent Directors and Non-Executive Directors totaled 15,753,299 Baht. Executive Directors of the Company do not receive any remuneration for their duties as Company Director. The table below summarizes payments made to each individual:

Directors	Monthly and Meeting Allowances (Baht)							Annual Remuneration	Total
	Board of Directors	Audit Committee	Compensation Committee	Governance and Nomination Committee	Executive Committee	Independent Directors Meeting	Non-Executive Directors Meeting		
1. Mr. Prasert Bunsumpun[1]	2,713,710	-	-	-	-	-	-	953,096	3,666,806
2. Mrs. Patareeya Benjapolchai[2]	800,000	526,935	-	130,000	-	25,000	25,000	829,233	2,336,168
3. Prof. Samrieng Mekkriengkrai[3]	825,000	300,000	125,000	191,290	-	25,000	25,000	675,000	2,166,290
4. Mrs. Charintorn Vongspootorn	825,000	300,000	245,000	-	-	25,000	25,000	675,000	2,095,000
5. Mr. Somprasong Boonyachai	800,000	-	-	-	-	-	25,000	675,000	1,500,000
6. Mr. Kwek Buck Chye	825,000	-	-	100,000	325,000	-	25,000	675,000	1,950,000
7. Mrs. Arthidtaya Sutatam[4]	476,613	-	-	-	-	-	-	205,890	682,503
8. Mr. Paron Israsena[5]	553,333	-	-	-	-	-	-	219,041	772,374
9. Prof. Hiran Radeesri[6]	225,000	150,000	-	-	-	-	-	209,158	584,158
Total									**15,753,299**

Remark

(1) Mr. Prasert Bunsumpun was appointed as Chairman of the Board of Directors in replacement of Mr. Paron Israsena who resigned, by the resolution of the Board of Directors Meeting No. 3/2018 held on 19 March 2018, effective from 24 March 2018.

(2) Mrs. Patareeya Benjapolchai was appointed as Chairperson of the Audit Committee in replacement of Prof. Hiran Radeesri who retired by rotation in AGM 2018, by the resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018

(3) Prof. Samrieng Mekkriengkrai was appointed as Chairman of the Governance and Nomination Committee in replacement of Mrs. Patareeya Benjapolchai, by the resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018.

(4) Mrs. Arthidtaya Sutatam was appointed as Director, by the resolution of the Board of Directors Meeting No. 1/2018 held on 31 January 2018 and she resigned from her position with effective from 20 December 2018.

(5) Mr. Paron Israsena resigned from Chairman of the Board of Directors and Independent Director with effective from 24 March 2018.

(6) Prof. Hiran Radeesri retired by rotation in Annual General Meeting of Shareholders for 2018 on 28 March 2018.

In 2018, Mr. Prasert Bunsumpun, Independent Director of the Company, also holds a position of Independent Director at Intouch Holdings Public Company Limited (Intouch), which is the Company's parent company. He received remuneration from Intouch in the amount of 3,970,500 Baht.

(b) Management Remuneration**

In 2018, the total remuneration for the 7 members of the Company's executives was 34,410,127.21 million Baht, consisting of salary and bonus which are based on the Company's operations and performance as well as each individual's performance.

Remark

**Executives means the executives as defined by the Notification of the Securities and Exchange Commission i.e. Chief Executive Officer, Chief Financial Officer, Chief Commercial Officer, Chief Audit Executive, Head of Business Development Department, Head of Platform and Services Business Department/Head of Regulatory Affairs Department, and Head of Financial Department.

1.4.2 Other Remuneration for Directors and Management

(A) Warrants program to purchase the Company's ordinary shares for directors and employees of the Company and/or its Subsidiaries (Warrants Program)

The Company issued and offered warrants for the purchase of the Company's ordinary shares to directors and employees of the Company and its Subsidiaries as part of a Performance Share Plan to motivate employees and retain valuable personnel to ensure continued advantage and sustainable growth for the Company and its Subsidiaries. The program only allows designated members of the Company's management and staff to allocate a certain amount of their annual bonus to request warrants for the Company's shares. Warrants are allocated on pre-set criteria, as are bonus payments to employees, depending on the conditions, criteria, and targets set by the Company. The Company has allocated warrants under the aforementioned scheme 4 times, the details of which are as follows:

Director and Executive[1]	Number of Allocated Warrants in 2013 (Grant 1)		Number of Allocated Warrants in 2014 (Grant 2)		Number of Allocated Warrants in 2015 (Grant 3)		Number of Allocated Warrants in 2016 (Grant 4)	
	Units	%	Units	%	Units	%	Units	%
1. Mr. Anant Kaewruamvongs [2]	-	-	-	-	-	-	-	-
2. Mr. Patompob Suwansiri	32,111	4.71	116,400	9.72	97,611	8.99	96,738	9.00
3. Mr. Anuwat Sanguansappayakorn [3]	-	-	-	-	-	-	-	-
4. Mr. Wichai Kittiwittayakul [4]	-	-	-	-	-	-	-	-
5. Dr. Sakon Kittivatcharapong	31,933	4.68	48,200	4.02	35,335	3.26	35,019	3.26
6. Mr. Ekachai Phakdurong	18,022	2.64	53,000	4.43	38,849	3.58	38,502	5.58
7. Mrs. Pannee Nivasnanda	12,633	1.85	23,000	1.92	23,622	2.18	21,282	1.98

Remark

(1) Executives means the executives as defined by the Notification of the Securities and Exchange Commission, and in accordance with the new organization structure as of 1 November 2018.

(2) Mr. Anant Kaewruamvongs was appointed as Chief Executive Officer in replacement of Mr. Paiboon Panuwattanawong, who resigned, by resolution of the Board of Directors Meeting No.4/2018 held on 28 March 2018, effective from 1 May 2018.

(3) Mr. Anuwat Sanguansappayakorn was appointed as Acting Chief Financial Officer of Thaicom in replacement of Mr. Vuthi Asavasermcharoen who resigned, effective from 1 September 2560, and was Chief Financial Officer, effective from 1 November 2018.

(4) Mr. Wichai Kittiwittayakul was appointed as Chief Audit Executive of Thaicom, by resolution of the Board of Directors Meeting No. 6/2018 held on 1 August 2018, effective from 1 August 2018.

(B) Provident Fund

The Company has implemented a Provident Fund. In 2018, the Company paid a total of 2,047,230.50 million Baht into the provident fund for 7 executives**.

Remark

**Executives means the executives as defined by the Notification of the Securities and Exchange Commission i.e. Chief Executive Officer, Chief Financial Officer, Chief Commercial Officer, Chief Audit Executive, Head of Business Development Department, Head of Platform and Services Business Department/Head of Regulatory Affairs Department, and Head of Financial Department.

1.5 Personnel

As of 31 December 2018, the Company and its affiliated companies had a total of 3,420 employees divided by type of business as follows:

Type of Business	Number of Employees (Persons)
Internet and Media Services	43
Satellite Transponder Services	502
Telephone Services	2,875
Total	**3,420**

The remuneration for employees of the Company and its subsidiaries includes salary, provident fund contributions, and other benefits. In 2018, compensation paid to the Company's employees totaled 1,028.37 million Baht.

Human Resources Development Policy

Thaicom PLC, or Thaicom ("the Company"), is a Thai company that operates in Thailand and strives to act and grow sustainably. We strongly believe that human resources are our most valuable asset and the key indicator of our competitive advantage. The role our employees play in the organization is even more important now in our drive towards sustainable growth and success. Our goal is to effectively utilize manpower planning and labor cost by strengthening employee engagement, competency, and business ethics in order to leverage staff capabilities, drive business growth, and enhance competitiveness. We aim to recruit, retain, motivate, and develop the most talented people we can find. We also strive to create sustainable success and maximize individual capabilities to compete in digital world while promoting the organization's corporate culture and values.

The Human Resources Policy ("this Policy") has been drawn up to align the recruitment, retention, and development of all employees throughout the organization with the Company's current business strategy and both short- and long-term goals. In addition, anti-corruption measures have been adopted as a part of the Company's human resources management.

This Policy contains twelve sections, as detailed below.

1) **Organization Structure and Manpower**

The structure of the organization, position titles, job grades, and manpower are reviewed every year in order to ensure alignment with the Company's business direction and strategy, and respond to any changes. Additional reviews may be conducted from time to time if required.

2) **Fair Recruitment and Selection**

Employee selection is based not only on job profile and specifications, but also on individual capability and future potential to develop. In order to implement this policy fairly and efficiently, various assessment tools are used, and verification of each applicant's information is undertaken to ensure that the applicant's background does not show association

with any wrongdoing, particularly corruption, and the results are considered by a selection committee. This ensures that the best people for the positions, who are most likely to fit into the Company's culture, are hired

3) Equal Opportunities

The Company is an equal opportunity employer, and all staff members are provided opportunities for development and advancement based on their capability, commitment, and achievement. To promote diversity and allow people to perform at their maximum potential, the Company does not discriminate based on personal characteristics such as race, nationality, religion, sex, age, marital status, or disability.

4) Human Rights

The Company has Policy on Respect of Law and Principles of Human Rights. According to this policy, employees shall thoroughly understand and strictly obey the law relating to one's own duties and responsibility. If in doubt, seek advice from legal department or a legal adviser. Avoid acting based on one's own interpretation and when working aboad, study the law, customs, traditions, and cultures of that country before undertaking any activity concerning the Company's business so as not to violate the law, traditions, and culture of that country. The Company promote and respect the protection of human rights, and ensure that the Company's business is in line with human rights concerning forced labor or child labor and respect and provide fair treatment to all stakeholders based on fairness, human dignity, Non-discrimination of origin, race, gender, age, skin color, religion, physical state, status, or birth. In addition, the Company promote compliance with human rights within the Company and encourage subsidiary companies, investors, business partners, and all stakeholders to observe the international standard of the principles of human rights and protect the rights of stakeholders affected by the violation of their right as a result of the Company's operation by considering compensation no lower than the rate stipulated by law.

5) Freedom of Association

The Company respects the rights of its employees to associate freely and join workers' associations or other organizations established in accordance with applicable laws and regulations for the benefit of people, society, or the nation, as long as this does not involve any unauthorized use of the Company's intellectual property and time, disclosure of proprietary information, any outside personal interests, or any additional sources of remuneration which may impair the employee's independence in performing their duties.

6) Employee Privacy

The Company respects the privacy of all its employees and will not disclose any personal information such as salaries, medical records, or family data to anyone who does not have a right to that information unless required to do so by law.

7) Merit Compensation

The Company has implemented a job evaluation system to determine the value or worth of a particular job in relation to other jobs within the organization in order to provide merit compensation. Regular salary and benefit surveys are conducted to benchmark the Company against the market, while the cost-of-living index is taken into account to ensure that compensation packages and rewards are reasonable and competitive. The Company considers it a high priority to provide equitable rewards through a meritocratic system and ensure that compensation is in line with the market by using the following "3P" principle (Position, Performance and Person):

i. Pay for Position - based on fair comparisons to create internal equity by determining the value of a particular job and job benchmarking against the external market.

ii. Pay for Performance - based on individual, team, and organization performance and rewarded through an annual merit-based salary increase and bonus.

iii. Pay for Person - based on each employee's knowledge, skills, required skills, professional qualifications, and level of competency.

The Company also uses a performance management system, which aims to align business objectives at all levels and help employees understand their value and contribution to the organization. This system also reinforces individual accountability for achieving goals, tracks individual and organizational performance results, and facilitates feedback and coaching to develop competencies and improve performance.

Performing work with honesty is a significant factor in performance appraisal, rewards and promotion consideration. The Company will not compromise with an employee proven to have any behavior associated with corruption.

8) Employee Well-being

The Company places consistent priority on employee well-being. In addition to providing a safe and healthy working environment as required under occupational health, safety, and environment legislation, the company also aims to improve overall quality of life for its employees by adhering to international standards for workplace health and safety, providing ergonomic office equipment, and offering facilities and programs to encourage wellness among all employees.

In order to provide knowledge and improve health quality for our employees, in 2018, the company initiated integration health program named "Thaicom Young Fit" to build employee's awareness and to provide opportunity to targeted employees to join health camp. And the company also support budget to Thaicom 's club activities, prepare luncheons, provide hospital rooms as well as insurance to help and support excess medical expense to our employees such as cancer and etc.

And the Company has also set up a provident fund, run by a professional fund management company certified by the Securities and Exchange Commission, to help employees prepare for financial security in retirement.

9) Employee Development

The Company supports and invests in continuous employee development throughout the organization with a systematic approach whereby managers must consistently plan, review, and report on staff development activities that are aligned with their business direction. This development covers managerial knowledge and skills, leadership, professional/functional knowledge & skills, critical thinking skills, and global perspectives. The Company provides a career path for continual advancement, supported by a succession plan and a talent development program, in order to achieve objectives, maintain a culture of good corporate governance, and fulfill commitments to all stakeholders.

To ensure that the employees are aware of the importance of and fully understood the anti-corruption policy, the Company has added anti-corruption practices into the content of the onboarding program for new employees. All employees will be trained and required to take an annual test to review their knowledge concerning the anti-corruption policy.

The Company strives to be a Learning Organization, encouraging employees to learn how to learn, think about thinking, and appreciate learning for the sake of learning. Every person is challenged to actively seek out all kinds of new knowledge about their respective functions through self-learning, project-based learning, and other experiences, so they can advise or coach other people in the organization and apply their knowledge and experience for the benefit of themselves, their colleagues, the organization, and society at large.

The Company also nurtures budding innovators, encouraging employees to show initiative and providing channels for them to communicate suggestions and new ideas that will improve business processes and overall competency. The Company provides scholarships for higher education and supports research and development that will benefit the organization, society in general, and the environment.

The Company places importance on training and development which allows employees to enhance their knowledge and abilities in the performance of their duties. In 2018, the Company set out development plans appropriate for employees at various levels, covering managerial & leadership skills as well as professional skills. Trainings were facilitated by experienced and knowledgeable internal trainers as well as by outside experts.

Employee Level	Objective	Courses
All levels	Comply with Law & Regulation and support excellence in functional performance	• Advanced Fire Fighting Program • Basic firefighting Program • First Aid Program • Constructionism Program • Enhancing Employee Engagement Program • People Intelligence Program • Writing & Speaking Development • Good Governance for business management
Staff	Provide specialized skills and readiness for individuals' professional growth	• Acunetix Program • OpenStack and DevOps Program • Adjacent Business Ideation Program • Charismatic Presentation Skill • Self-Leadership Development • Outward Mindset Development • IDP Workshop & Psytech Assessment • Digital Life - DLTV Project • Benten - Maritime Back office • iPECS-UCP • Loox Training Program • USO Installation Support Program
Management and Senior Executives	Develop stronger management skills and provide opportunities to exchange ideas with leaders in Thailand and abroad as well as Provide opportunities to make professional connections	• Business Coaching • StengthFinder Assessment • Decentralized world- Non-Linear Business Opportunity • Development First Line Manager Program • Talent Development by Manchester Business School • Learn. Link. Launch Program • Leadership Development Program by Harvard Business School

To support continual self-learning, the Company created an e-learning platform through which employees can learn about compliance-related issues, such as the Corporate Governance Policy, IT security, and fraud risk. Employees can learn from easy-to-understand multimedia modules and then take a test to check their understanding and show that they have acknowledged the Company's major policies.

In addition to short courses, the Company also supports higher education by providing select employees with scholarships for masters-level study at leading institutions both in Thailand and abroad. Scholarships are focused on those wishing to study less common fields which are related to the Company's current and future business needs, such as Satellite Communications Engineering or System Design and Management.

10) Succession Planning

The Company has implemented a systematic succession plan and has appointed a committee to nominate successors and monitor their development in order to ensure that the plan is effective and transparent, providing career advancement along both professional and management tracks. This plan covers all senior management across the group, down to the assistant vice-president level, and aims to mitigate inherent business continuity risks by retaining and developing leaders while strengthening relationships within the organization in order to ensure the Company's long-term growth and sustainability.

11) Management Role

The Company encourages managers at all levels of the organization to undertake the following human resource management roles:

- Strengthen the understanding between the Company and its employees by building good relationships between management and staff.
- Build motivation among staff by listening to employees, responding to their concerns, and providing helpful advice through a variety of communication channels.
- Treat employees who encounter personal difficulties in a fair and humane manner as long as any assistance provided is in accordance with the law, the Human Resources Rules & Regulations, and the Corporate Governance Policy.

In 2018, the Company provided training for employees throughout the year. The number of training hours averaged 23.75 hours per person.

Year	2018	2017	2016	2015
Training hours/person/year	23.75	32.09	24.95	27.94

The Company also places importance on the environment and provides both internal and external environmental training opportunities for employees. Environmental trainings have also been added as a fixed part of the yearly training plan. In 2018, the following relevant courses were provided:

Course Name	Employees Attending (persons)	Note
Energy Conservation Awareness	31	External Course
Encouragement of Efficient Energy Conservation Awareness	27	Internal Course

2. Corporate Governance

2.1 Corporate Governance Policy

The Board of Directors (Board) realizes the importance of the principles of good corporate governance as a crucial factor and a foundation of the Company's sustainable growth, with professionally in operating the Company to be a transparency and accountability organization, and as it firmly believes, the long-term maximization of value and returns to shareholders and all stakeholders, as well as to create a value to the society and nation. The Board therefore considered that this is one of our key mission to regularly review and revise Corporate Governance Policy to be up to date and in line with rapidly changed of environment, in order to be ensure the alignment of all stakeholders, and to serve the Company's current and future directions.

Additionally, the Board also follows up to ensure that the Management has implemented according to the policy by assigned the Governance and Nomination Committee to oversee and report annually. Besides, the Company has determined implementation of corporate government policy as one of corporate KPI.

Year 2018 is another year that Thaicom received a score of "excellent", or 5 stars CG for sixth consecutive years from CG Report on listed companies conducted by the Stock Exchange of Thailand, and Thai Institute of Directors. Moreover, the Company also received the ASEAN Corporate Governance Awards for the Top 50 ASEAN publicity listed companies category for second consecutive years.

Formulation of the Corporate Governance Policy

The Board has approved the latest revision of Corporate Governance Policy on 30 October 2019, which revised to comply with the principle of CG Codes 2017, launched by the Securities and Exchange Commission of Thailand, by focusing on the role and responsibilities of the Board for each aspect of governance, it will be used as a guideline for directors, executives and staff for the best practice of the Company. The Policy upholds the good corporate governance principles and the Stock Exchange of Thailand's (SET) best practices on corporate governance, covering the following five areas:

1. The Board of Directors
2. Rights and Equitable Treatment of Shareholders
3. Role of Stakeholders
4. Disclosure and Transparency
5. Risk Management and Internal Control

Communication of the Corporate Governance Policy

The Company also issued a Corporate Governance and Code of Business Ethics Handbook. The handbook consists of 3 main parts—Part 1 Corporate Governance Policy, Part 2 Code of Conduct, and Part 3 Anti-Corruption Policy—communicated to all directors, executives, and staff as guidelines to be strictly followed in the performance of duties. Each recipient is required to sign an acknowledgement form stating that they will adhere to the Company's Corporate Governance Policy, Code of Conduct, and Anti-Corruption Policy. All new employees are also given the handbook and required to sign the acknowledgement form stating that they will adhere to the policies and guidelines presented in the handbook. *(For further information please visit the Company's website at www.thaicom.net under the tabs for Sustainability > Corporate Governance > Good Corporate Governance of Thaicom > Corporate Governance Policy)*

In 2018, the Board remains committed to ensuring that the Company will strictly comply with corporate governance policies and best practice guidelines. The Board will continue to focus on developing and improving corporate governance to ensure international compliance, particularly with the corporate governance requirements of the ASEAN region. This compliance will also ensure that the Company can maintain its goal of sustainable growth and contributions to its shareholders and stakeholders in all sectors. Focusing on maintaining standards and improving governance, as well as promoting a corporate culture of good governance, the Company has taken the following actions:

- Created and published a Corporate Governance and Code of Business Ethics Handbook for employees to read and pledge to follow. This has continued since 2013 and is helpful in allowing new employees to develop a better understanding of the Company as they pledge to follow the code.

- Arranged a new employee orientation to provide advice and information on corporate culture and governance, as well as the Code of Conduct and the purpose of the Company's Anti-Corruption Policy.

- Arranged e-learning courses for employees' study and taking the quiz online on corporate governance and anti-corruption, in order to encourage executives and employees to understand and aware the importance of the Company's Corporate Governance Policy and Anti-Corruption Policy, also they can follow these policies as correctness and maintain sustainable growth.

- Announced the application of guidelines for suppliers to promote mutual understanding between the Company and suppliers that these guidelines will be used when conducting business. These guidelines will be used as an essential element when selecting and evaluating suppliers for the Company. The Company has notified all suppliers of these guidelines and requested that each supplier sign in acknowledgement and agreement to follow these guidelines as a mutual standard.

- A channel for communicating law, regulations, and Company policies to employees by publishing an e-magazine entitled "Keeping Up with Compliance" to ensure employees of all level receive up-to-date compliance information.

- Required that all employees complete a report on conflicts of interest which they, their family members, or any related juristic person may have. Employees are also required to report any changes to said conflicts of interest in a timely manner to ensure that all Company transactions are carried out transparently, reasonably, and with primary consideration for the highest benefit of the Company.



Corporate Governance Awards

In 2018, the Company was recognized for its excellence in Corporate Governance as follows:

- The Company's 2018 Annual General Meeting of Shareholders was evaluated by the Thai Investors Association under the AGM Assessment Program and was awarded a perfect score of 96 points.

- In the Corporate Governance Report of Thai Listed Companies 2018 (CGR 2018) conducted by the Thai Institute of Directors (IOD), the Company received a score of **"Excellent"** for the 6th year in a row (2013-2018).

Adherence to Corporate Governance Best Practice Policy

A review of the Corporate Governance Policy in 2018 by the Board showed strict compliance with the relevant policies and guidelines. However, some principles held by the Company are different from the Principles of Good Corporate Governance for Listed Companies 2012 recommended by the Stock Exchange of Thailand. The differences are detailed as follows:

Principles/guidelines from Stock Exchange of Thailand	Company statement
The company has limited the term of office of independent directors to a maximum of 3 consecutive 3-year terms, or 9 years. If the board of directors sees it necessary that certain independent directors, who have served on the board for 3 consecutive terms, or 9 years, should continue to hold the position, the board of directors has the right to extend the term of offices of said independent directors.	As the satellite business requires special expertise, directors have to clearly understand the Company's business operation and administration, management of investments that requires large funds, and the varying social and political climates for business operations abroad. The Company believes that long-term involvement supports all directors' responsibilities. Furthermore, the Company conducts a director evaluation process every year and in the year 2015, the Company began using a professional search firm for the director evaluation process to confirm that there are not any conflicts of interest and also that the director selection process has been considered and approved by the Governance and Nomination Committee. In 2018, the Board has approved to revise the Corporate Governance Policy, in item 7) Age limit for directors, at 72 years of age or older at the time of appointment shall not be nominated as a director. When this policy becomes effective, current directors who are 72 years old of age or older may still hold their positions for their remaining term of office.
The nomination committee should consist entirely of independent directors.	On 31 December 2018, independent directors constituted 66.7% of the Governance and Nomination Committee. The Board believed that was the appropriate portion for the business and the Company's structure.

The details of Corporate Governance Policy 2018 are as follow:

Section 1: The Board of Directors

The Board of Directors closely adheres to good corporate governance guidelines for listed companies in performing its various duties to ensure maximum benefits and returns to the Company's shareholders and other stakeholders with fairness as it is the key factor to create the value of the Company in long-term for its sustainability.

1. Composition of the Board of Directors

1.1 The Board shall be composed of experts with a wide range of experience in various fields. The Company has to additionally consider knowledge, ability, experience, and management expertise of that person (Board Diversity). There shall be sufficient directors to govern and supervise the corporation not less than five (5) directors (as required by law) and not more than twelve (12) shall sit on the Board. The Board shall have one Chairman and the remaining members shall be directors. At least one director shall be experienced in the area of telecommunication, and at least one director shall be experienced in the area of finance and accounting.

1.2 Independent and non-executive directors must constitute a majority of the Board, and at least one-third of the member and not less than three (3) persons must be independent directors, in order to ensure balance between executive and non-executive directors and can express their opinion freely.

As of 31 December 2018, the Board of Directors, as per affidavit of the Company, consisted of the following 8 members; including 4 independent directors or 50% of the entire the Board of Directors, which can divided into 1 executive directors and 6 non-executive directors.

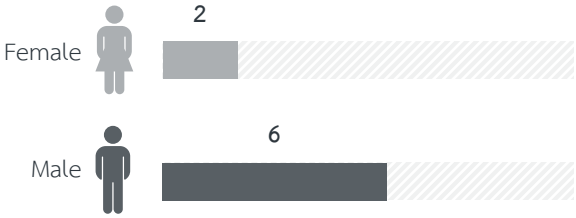
Proportion of Independent Directors (ID)



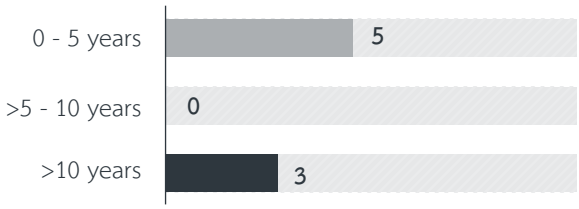
Proportion of Non-Executives Directors



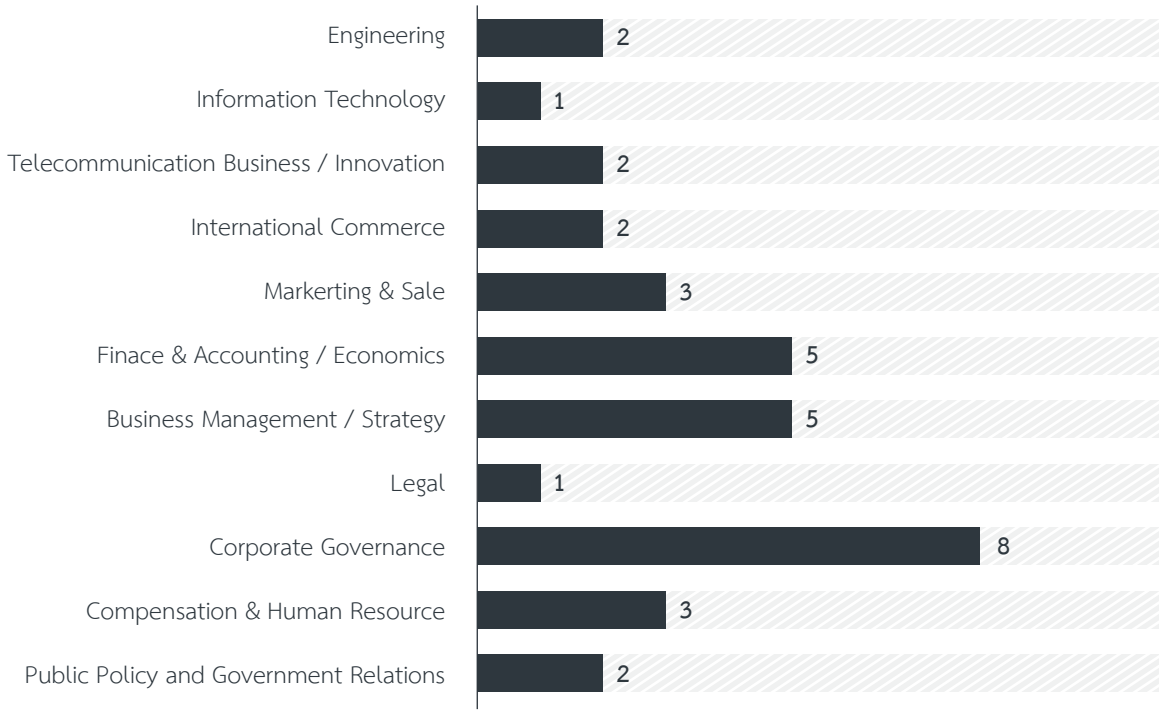
Female / Male



Length of Directors' Tenure



Skills and Experience of Directors



1.3 The Board shall be representative of all shareholders, not of a particular group of shareholders

1.4 The Board has policy whereby the controlling shareholders of the Company are proportionally represented

2. Qualification of Directors

2.1 The Company's directors must hold qualifications and shall not have the prohibited characteristics pursuance to laws on public limited companies.

2.2 The Company's directors shall not have characteristics indicating a lack of appropriateness in respect to trustworthiness in managing a business whose shares are held by public shareholders pursuance to laws on securities and exchange.

2.3 The directors must have knowledge, ability, experience, and management expertise, including demonstrated capability, integrity, and ethical business practices.

2.4 The directors must have adequate time and devote their knowledge and abilities to performing duties for the Company.

3. Qualification of Independent Directors

Independent directors shall have all the qualifications stipulated by the Capital Market Supervisory Board. Independent directors have a duty to protect the interests of every shareholder in a fair and impartial manner in order to avoid any conflicts of interest that may arise. They shall be able to attend board meetings and independently express their comments and opinions.

The Independent Directors shall hold the following qualifications.

(1) Holds no more than 0.1% of total voting stocks of the Company, its parent company, its subsidiaries, its associated companies, major shareholder or controlling persons who may have conflicts of interest, including stocks held by connected persons of the independent director;

(2) Is not or has never been an executive director, employee, staff, advisor who receives salary of a controlling person of the Company, its parent company, its subsidiaries, its associated companies, same-level subsidiaries, a major shareholder or controlling persons who may have conflicts of interest unless the foregoing status has ended for more than 2 years before the date of appointment as independent director. The above restrictions do not apply to the appointment of an independent director who was a Government official or civil servant or consultant to a Government entity which was a major shareholder in the Company or which had a control over the Company;

(3) Is not a person related by blood or legal registration, such as father, mother, spouse, sibling and child, including spouse of the children, management, major shareholders, controlling persons, or persons to be nominated as management or controlling person of the Company or its subsidiaries;

(4) Does not have or has not had a business relationship with the Company, its parent company, its subsidiaries, its associated companies or controlling persons who may have conflicts of interest, in a manner that may interfere with his independent judgment, or is not or has never been a major shareholder or controlling persons of any person having business relationship with the Company, its parent company, its subsidiaries, its associated companies a major shareholder or controlling persons who may have conflicts of interest unless the foregoing relationship has ended for more than 2 years prior to appointment as independent director;

The term 'business relationship' aforementioned under paragraph one includes any normal business transaction, rental or lease of immovable property, transaction relating to assets or services or grant or receipt of financial assistance through receiving or extending loans, guarantee, providing assets as collateral, including any other similar actions, which result in the applicant or his counterparty being subject to indebtedness payable to the other party in the amount of 3 percent or more of the net tangible assets of the applicant or 20 million Baht or more, whichever is lower. The amount of such indebtedness shall be calculated according to the calculation method for value of connected transactions under the Notification of Capital Market Supervisory Board concerning Rules on Connected Transactions. The combination of such indebtedness shall include indebtedness taking place during the course of 1 year prior to the date on which the business relationship with the person commences;

(5) Is not or has never been an auditor of the Company, its parent company, its subsidiaries or its associated companies who may have conflicts of interest and is not a major shareholder, or partner of an audit firm which employs auditors of the Company, its parent company, its subsidiaries, its associated companies, a major shareholder or controlling persons who may have conflicts of interest unless the foregoing relationship has ended for more than 2 years prior to appointment as independent director;

(6) Is not or has never been any professional advisor including legal or financial advisor who receives an annual service fee exceeding 2 million Baht from the Company, its parent company, its subsidiaries, its associated companies, a major shareholder or controlling persons who may have conflicts of interest, and is not a major shareholder, controlling persons or partner of the professional advisor unless the foregoing relationship has ended for more than 2 years appointment as independent director;

(7) Does not represent the Company's or its major shareholder's board member or a shareholder who is related to the Company's major shareholder;

(8) Is not an entrepreneur in any business similar to or materially competing with the Company or its subsidiaries or not being the material partner in partnership, executive director, employee, staff, advisor who receives salary or holds more than 1% of total voting stocks of the company similar to or materially competing with the Company or its subsidiaries;

(9) Has no characteristics which make him/her incapable of expressing independent opinions with regard to the Company's business.

After appointment as a director in accordance with the above 9 qualifications, independent directors may be tasked by the Company's Board to make collective decisions on the activities of the Company, its subsidiaries or associated companies, its major shareholder or other controlling interest of the Company through a collective decision process.

The Company may appoint a person who has or used to have business affair or professional service exceeding the amount specified in item 4 or 6 as Independent Director if through careful consideration, the Board agrees that an appointment of such person has no effect on performing duty and expressing independent opinion. This information shall be disclosed in an invitation letter of AGM in the agenda of appointment of Independent Director.

a. Characteristics of the person's business affairs or professional services which might cause the disqualification of such a person

b. Reason and necessity for maintaining or appointing such person as Independent Director.

c. Opinion of the Board on nominating such person as Independent Director.

4. The Selection and Appointment of Directors

4.1 The Governance and Nomination Committee is responsible for identifying and selecting qualified candidates to be proposed through the Board for election at the shareholder' meeting or appointed by the Board according the Company's articles of association.

4.2 The Governance and Nomination Committee is responsible for reviewing, on an annual basis, the skills and characteristics required of directors in the light of the Board's composition and the Company's current and future business and strategic directions. The committee must develop a skill matrix to identify gaps in the Board's current profile and make recommendations accordingly. In conducting this review, the committee will also consider diversity in terms of skills, knowledge, independence, age and gender.

4.3 In determining whether to recommend a director for re-election, the Governance and Nomination Committee will consider relevant factors such as the director's performance, history of attendance at and participation in meetings, and other contributions to the activities undertaken by the Board.

4.4 To identify director candidates, the Governance and Nomination Committee may use the following sources:

(1) The directors may propose a candidate

(2) An external consultant

(3) The Thai Institute of Directors (IOD) list of Chartered Directors in line with the qualifications identified by the Securities and Exchange Commission, and the Stock Exchange of Thailand

(4) Allow minority shareholders to propose a qualified person through the Company's website in accordance with the criteria and procedures specified by the Company.

4.5 The appointment of members of the Board shall comply with the Company's articles of association and all relevant laws in Thailand. Selection of the directors shall be transparent and clear, and processed through the Governance and Nomination Committee.

5. Chairman of the Board, Chairman of the Executive Committee and Chief Executive Officer

The Company has a policy on segregation of duties between the Chairman of the Board, the Chairman of the Executive Committee and the Chief Executive Officer, that they shall not be the same person, in order to maintain a balance of power between direction and management functions.

5.1 The Chairman of the Board of Directors is an independent director and is a leader of directors. The Chairman of the Board is responsible for monitoring and supervising management functions of the Executive Committee in accordance with the approved business plan. The Chairman also acts as the Chairman of the Board at Shareholders meetings.

5.2 The Chairman of the Executive Committee is the head of the Executive Committee and responsible in supervising the Executive Committee to carry out the duties that were assigned by the Board. The Chairman is also responsible for considering each agenda item before proposing it to the Committee and also to approve the procedures of the Company's ordinary business operations.

5.3 The Chief Executive Officer (CEO) is the head of the Company's management team, responsible to the Board to achieve the approved business plan, and reports the business performance to the Executive Committee and the Board (if any). The assignment shall be done by designate of the Board.

6. Directors' Terms

6.1 The term which directors will serve is based on the Company's Articles of Association. In every Annual General Meeting of Shareholders, one-third of the directors must retire; moreover, if this number is not a multiple of three, then the number nearest to one-third. The directors who have been longest in office shall retire. The directors who have completed their terms may be re-appointed.

6.2 Independent directors shall not hold office continuously for more than 3 consecutive terms or 9 years, whichever is longer, unless the Board considers it necessary for such independent directors to continue in office, in which case the Board can extend the term.

7. Age limit for directors

7.1 It is the Board's policy that an individual who will be 72 years of age or older at the time of appointment shall not be nominated as a director. When this policy becomes effective, current directors who are 72 years old of age or older may still hold their positions for their remaining term of office.

7.2 The Board may approve the nomination for re-appointment of directors who will be 72 years of age or older at the time of appointment for only one more time.

8. Roles, Duties and Responsibilities of Board of Directors

8.1 The Board govern the operations of the Company in accordance with the previsions of the law, the Company's objectives and articles of association, resolutions of the shareholders, meeting and this Policy. In governing the Company, the directors must exercise their business judgment and act in a way that they reasonable believe to be in the best interests of the Company, consistent with their statutory duties.

8.2 The Board has delegated specific authority to various sub-committee, the CEO and other members of the

management team, as defined in each sub-committee charter and the Company's Approval Authority Policy and Designation of Authorized Signatory Policy. However, the Board has reserved some significant matters for its consideration and approval.

8.3 The Board shall set the right tone from the top, and all the directors should lead by example and ensure that good standards of behavior permeate all levels of the organization.

8.4 The Board of Directors has the following duties and responsibilities:

(1) Provide leadership and set strategic objectives for the Company that promote sustainable value creation, responsible business and good corporate citizenship.

(2) Review and approve the Company's vision and mission statements, organizational culture, core values and ethical standards.

(3) Review and approve the Company's strategies, business plan, budget and key performance indicators (KPIs), and monitor the implementation of the approved strategies, along with the performance against business plan, budget and KPIs.

(4) To consider and approve major transactions related to the business operations of the Company and subsidiaries, such as new business investments, project investments, levels of authority, asset acquisition and disposal, major capital expenditure, and other issues as required by law.

(5) To approve and/or agree to all connected transaction or acquisition or disposition of asset transaction of the Company and its subsidiaries in compliance with the relevant notifications, regulations and guidelines of the Stock Exchange of Thailand.

(6) Appoint the Chief Executive Officer and the other senior executives, assess their performance, determine appropriate remuneration, and replace them if necessary.

(7) Approve the Company's Remuneration Policy and Framework.

(8) Oversee the Company's process for making timely and balanced disclosure of all material information.

(9) Ensure that the Company has appropriate and effective risk management and internal control framework, and setting the Company's risk appetite.

(10) Oversee the integrity and reliable of the Company's accounting and reporting systems, including external audit.

(11) Ensure avoidance of conflicts of interest amongst the Company's stakeholders.

(12) Annually review this Policy, and assess its effectiveness along with due compliance.

(13) Ensure that this Policy is extended to, and accepted by, all the Company's subsidiaries, associates and joint ventures.

(14) Prepare a report title "The Board of Directors' Responsibility for Financial Reporting" to be disclosed in the annual report along with the audited financial statements. This report covers key issues according to the Policy Statement and the Stock Exchange of Thailand's Code of Best Practices for Directors of a Listed Company.

(15) Evaluate performance of all Committees and individuals at least once a year.

9. Board of Directors Meetings

9.1 Number of and Schedule of Meeting

(1) The Board's meetings are officially scheduled throughout the year and well in advance. Board members are informed of these meeting in advance.

(2) The Board shall meet at least eight (8) times a year. Extraordinary meetings are allowed if they are required.

9.2 Agenda

(1) The Chairman of the Board in consultant with the Chief Executive Officer and the Company Secretary will set the agenda for each meeting.

(2) Any director may suggest agenda items and other matters to be discussed.

9.3 Distribution of Materials

The Board secretary's duty is to make meeting appointments, prepare all meeting documents, and submit those documents along with invitation letters at least 7 days before the meeting date so that Board members have sufficient time to read and study the materials ahead of the meeting.

9.4 Meeting Attendance

The Board expects each director to make a reasonable effort to attend all meeting of the Board and board committee on which they serve. Although the Board recognizes that, on occasion, circumstances may prevent directors from attending meetings, they are expected to ensure that other commitment do not materially interfere with the performance of their duties. All directors are expected to attend a minimum of 80% of regularly schedule board and committee meeting.

9.5 Quorum and Meeting

(1) At least two-thirds of the directors must be present at the meeting to constitute a quorum.

(2) A minimum quorum of the meeting requires at least 2/3 of members for Board decisions.

(3) In the Board meeting, the Chairperson shall allocate sufficient time for Management to propose documents and information to discuss significant problems and for the Board to discuss important issues adequately. All members of the Board can express their opinions and propose agenda items for meetings independently.

(4) Directors who have a personal interest in an agenda item must not be present in the meeting when such agenda item is discussed.

9.6 Board Minutes

(1) The secretary is also responsible for recording minutes in writing, submit them to the Chairman of the Board for review, and then circulate them to each board member within 14 days of the meeting. The minutes must contain all the meeting resolutions along with sufficient background information, and be prepared in accordance with relevant laws.

(2) The Company Secretary shall keep all minutes and all relevant materials for filing and future verification.

9.7 Executive Sessions for Non-Executive Directors

The non-management directors shall have an internal meeting without the presence of executive director at least once a year. This is to give opportunity to discuss any problems related to the Company's business operations or management which attracts attention, and then inform the Chairman of the Board and the Chief Executive Officer about the results of meeting.

10. The Sub-Committees

The Board has established 6 Committees to study and screen tasks and reduce the workload of the Board. Each of these committees has a clear scope of duties, responsibilities and authority as follows:

10.1 Audit Committee

The Audit Committee consists of at least 3 directors, all of which must be independent directors who all meet the criteria set out by the Securities and Exchange Commission or the Stock Exchange of Thailand. At least one director shall have sufficient knowledge and experience in accounting or finance to be able to audit the reliability of financial statements. The term for directors serving on the Audit Committee is three years, with the possibility for reappointment, but not exceeding three

consecutive terms, unless the Board views that it is necessary to retain a person as a member of the Committee. The duties and authority of the Audit Committee are included in the Audit Committee Charter.

Committee members shall hold 3-year terms and may be reappointed at the end of their term, but for no more than 3 consecutive terms unless the Board of Directors considers it necessary for the member to continue in office.

As of 31 December 2018, the Audit Committee consists of 3 members, all of whom are independent directors:

Committee Members	Position
1. Mrs. Patareeya Benjapolchai [1] [2]	Chairman of the Audit Committee
2. Mrs. Charintorn Vongspootorn [2]	Member of the Audit Committee
3. Prof. Samrieng Mekkriengkrai	Member of the Audit Committee

Remark:

[1] Mrs. Patareeya Benjapolchai was appointed as the Chairman of Audit Committee effective on 28 March 2018,

[2] Mrs. Charintorn Vongspootorn and Mrs. Patareeya Benjapolchai have the prerequisite knowledge and experience to review and audit the Company's financial statements.

According to the its charter, the Audit Committee shall meet at least 8 times a year and not less than one-half of the Committee shall constitute a quorum for the transaction of business. In 2018, the Committee met 12 times and presented subsequent proposals to the Board of Directors (Please see details in the section "The meetings of the sub-committees in the year 2018").

Authority, Duties and Responsibilities of Audit Committee

The Committee has been given the following authority, duties and responsibilities:

1.1 Review the accuracy of the Company's financial reports in accordance with financial reporting standards, and ensure there is adequate disclosure.

1.2 Oversight development of internal control over financial reporting to be accurate and reliable, and ensure that system for information security and confidentiality, maintaining information integrity and availability are in place including management of information that may impact securities price.

1.3 Review the Company's internal control system and internal audit system to ensure that they are suitable and efficient.

1.4 Review the Company has in place preventive operation system and beneficial to the Company to enhance operating effectiveness and efficiency.

1.5 Evaluate the performance of internal audit department is according to internationally accepted approaches and standards. Determine and approve the internal audit plan. Determine the adequacy of resource and the independence of internal audit unit, as well as, approve the appointment, rotation, termination, performance appraisal and remuneration of the head of internal audit unit or any other department responsible for internal audit.

1.6 Review the Company's compliance with the laws on securities and exchange, the regulations of the Stock Exchange of Thailand (the "SET"), the Securities and Exchange Commission (the "SEC"), and the laws and regulations related to Company's business.

1.7 Review the efficiency and effectiveness of the information technology system relating to operations, financial reports and compliance with the Laws and regulations including recommendation to improve and makes system security up to date.

1.8 Consider, select, nominate and terminate an independent person to be the Company's auditor, propose the auditor's remuneration, and attend a non-management meeting with auditor at least once a year.

1.9 Review the auditor's independence, and consider a policy on the engagement of audit firm to provide non-audit service to the Company.

1.10 Review all connected transaction or transactions that may lead to conflicts of interest in order to ensure that they are in compliance with related laws and the regulations of the SET, are reasonable and bring the highest benefit to the Company.

1.11 Review the acquisition and disposition transaction of asset that is significant in order to ensure that they are in compliance by laws and regulations of the SET and review the disclosure of information of the Company in case that there is a connected transaction or transaction that may lead to conflict of interest and acquisition and disposition transaction of asset so as to ensure the accurateness and completeness.

1.12 Review the anti-corruption policy and measures to ensure that the Company performs in accordance with prescribed legal and ethical obligations including review the accuracy of supporting documents and Self-Evaluation Tool for Countering Bribery form according to Thailand's Private Sector Collective Action Coalition against Corruption that has been verified by internal audit department to provide assurance that there are appropriate anti-corruption systems being in line with the report made in the Self-Evaluation Tool.

1.13 Review the risk management system to ensure it is appropriate and effective, and include assessment results of internal controls system and risk management of subsidiaries and related companies into overall Company's risk consideration.

1.14 Review that the Company has established the Whistle Blower process to serve as a channel for staff and stakeholders to lodge complaints regarding misconduct, fraud and irregularities of financial reporting, review the summary report of fraud and misconduct audit, and review the established internal preventive measures.

1.15 Prepare the Committee's reports to be signed by the Chairman of the Committee and disclosed in the Company's annual reports. These must contain the following information:

1.15.1 An opinion on the accuracy, completeness and reliability of the Company's financial reports;

1.15.2 An opinion on the adequacy and review of the efficiency of the Company's internal control and risk management systems;

1.15.3 An opinion on the compliance with the law on securities and exchange, the regulations of the SET and the laws relating to the Company's business;

1.15.4 An opinion on the suitability of the external auditor;

1.15.5 An opinion on connected transactions or transactions that may lead to conflicts of interest and fraud;

1.15.6 An opinion on prevention of fraud and misconduct and report on review of fraud and misconduct audit result

1.15.7 The number of Committee meetings held and the member's attendance;

1.15.8 Any comments or opinions received by the Committee regarding its performance in accordance with this charter;

1.15.9 Any other transaction which, according to the Committee's opinion, should be known to shareholders and general investors, subject to the scope of duties and responsibilities assigned by the Board.

1.16 Report the Committee's performance to the Board at least four (4) times a year.

1.17 Undertake an annual self-assessment program to evaluate the Committee's scope of work and performance both individually and as an entire group.

1.18 If, during the performance of its duties, the Committee finds or suspects any of the following situations which may have a material impact on the Company's financial condition or operation results, it must report these to the Board for rectification within a period of time the Committee deems appropriate:

1.18.1 A transaction which causes a conflict of interest;

1.18.2 Any act of fraud, irregularity, or material defect in an internal control system;

1.18.3 An infringement of the law on securities and exchange, the regulations of the SET, or any law relating to the Company's business.

If the Board or management fails to rectify the situation within the period of time stipulated by the Committee, any member of the Committee may report this situation to the Office of the Securities & Exchange Commission or the SET

1.19 Investigate any circumstances reported by the external auditor where a director, executive or other person responsible for the Company's operations, is suspected of committing an offense under the specified laws. The committee shall report the results of the preliminary investigation to the office of the Securities and Exchange Commission and the external auditor within thirty (30) days from the date reported by the external auditor. The type of suspicious circumstances that must be reported and the procedures for obtaining information pertinent to these are listed in and must comply with notifications of the Capital Market Supervisory Board.

1.20 All members of the Committee should undergo continual training and enhance their knowledge of matters related to their duties.

1.21 Perform other tasks requested by the Board, which the Committee agrees to, with the authority delegated in the other policies announced of the Company.

Under the scope of authority, the Audit Committee have the authority to invite management team, executives, head of department or employees to discuss and answers the questions of the Audit Committee, and have authority to hire advisors or external personnel in line with the Company's regulation to make comments or give advice as necessary.

The Audit Committee performs duties within the scope of authority and responsibility as instructed by the Board of Directors. The Board of Directors is responsible the Company's operations directly to the shareholders, stakeholders and general public.

The details of performance of the Audit Committee for 2018, can be found in attachment no. 5: Report of the Audit Committee for 2018.

10.2 Compensation Committee

The Compensation Committee shall consist of at least 3 members, of which more than one-half must be independent directors, and the Chairman of the Committee must be an independent director appointed by the Board of Directors. The term of the Compensation Committee is three years and members may be reappointed, but not exceeding three consecutive terms, unless the Board views that it is necessary to retain a person as member. The duties and authority of the Compensation Committee are included in the Compensation Committee Charter.

The members of the Compensation Committee shall hold office for a term of 3 years and may be reappointed at the end of their term, but for no more than 3 consecutive terms unless the Board of Directors considers it necessary for the member to continue in office.

As of 31 December 2018, the Compensation Committee consists of the following 3 members:

Committee Members	Position
1. Mrs. Charintorn Vongspootorn	Chairman of the Compensation Committee
2. Prof. Samrieng Mekkriengkrai	Member of the Compensation Committee
3. Mr. Anek Pana-Apichon [(1)]	Member of the Compensation Committee

Remark:

(1) Mr. Anek Pana-Apichon was appointed as Member of the Compensation Committee in replacement of Mr. Prasert Bunsumpun, by resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018.

The Compensation Committee shall meet at least twice a year. At a meeting of the Compensation Committee more than half of the Committee members shall be present to form a quorum. In 2018, the Committee met 5 times and presented results to the Board (Please see details in the section "The meetings of the sub-committees in the year 2018").

Roles, Duties, and Responsibilities of the Compensation Committee

The Compensation Committee performs its duties in accordance to the Compensation Committee Charter which is regularly reviewed by the Board of Directors. The Charter is presented below:

- Fix appropriate remuneration, both monetary and non-monetary, in order to be an incentive for members of the Board, the Committee, and high level executives to remain with the Company;
- Prescribe criteria and policy for determining the remuneration of the Board and executives for the Board' or the shareholders' consideration, as the case may be;
- Consider and approve the annual remuneration of directors and submit its recommendation to the Board and for the shareholder meeting for approval;
- Review the Company's performance in order to determine the KPI bonus and merit-based increase in salary for executives (above 15th Grade) and propose to the Board for approval;
- Review the special bonus adjustment requisition for executives (above 15th Grade) and propose to the Board for approval;
- Consider and approve the EV Bonus Plan (Economic Value Bonus Plan) and prescribe criteria for implementation of the EV Bonus Plan, including consideration and the allocation of annual EV Bonus to the Company's executives and submit its recommendations to the Board for approval;
- Supervise the implementation of the EV Bonus Plan and to give final determination in case there are problems or controversies in the implementation of the EV Bonus Plan and report to the Board;
- Consider and approve the evaluation of performance for determining the annual EV Bonus and salary increase for the Company's CEO and submit its recommendation to the Board for approval;
- Review the salary structure and remuneration package for executives (above 15th Grade) and propose to the Board for approval;
- Consider and give consent for the early retirement program for executives (above 15th Grade) and propose to the Board;
- Consider and give consent for employment and remuneration adjustment for executives (above 15th Grade) which includes hiring, personal grade adjustment, salary and remuneration package adjustment and propose to the Board for approval;
- In the event there is a proposal to issue new shares (or stock option), to be made part of the director and employee remuneration package, the Compensation Committee should consider and propose guidelines so that will be attractive for directors and employees to work in the long-term interest of the Company's shareholders, and to ensure that valuable employees will remain with the Company, while at the same time being just to the Company's shareholders. Furthermore, if a member of the Board or an employees is to be awarded more than 5% of the total stock option to be issued, the Compensation Committee should review the appropriateness of such a decision and recommend the approval or disapproval of such a decision. Under no circumstances should one of the Committee's members have a say or vote on the issuance of stock options if that particular Committee member stands to receive more than 5% of the total stock option to be issued;
- The Compensation Committee is responsible to the Board of Directors and has a duty to provide reasons/ answers relating to the remuneration of directors at the shareholder meeting;

- Engage consultants or independent persons to give opinions or advice as necessary and in accordance with the Company's regulations;
- Review and assess the adequacy of the Charter of the Compensation Committee and recommend to the Board if any change or amendment is needed;
- Report the performance of important tasks to the Board on a regular basis and important issues for the Board' knowledge;
- To report the Committee's activities of previous year, in accordance with the Committee Charter, and to include such a report in the Company's Annual Report and to answer shareholders' questions at the Annual General Meeting. The Committee is also responsible for disclosing policies governing the directors' remuneration in the Company's Annual Report;
- Annually review its performance
- The Committee has the authority to require the management, executives or concerned persons to give opinions, provide information, or participate in meetings;
- Carry out any other duties assigned by the Board.

The details of performance of the Compensation Committee for 2018 can be found in attachment no. 6: Report of the Compensation Committee for 2018.

10.3 Governance and Nomination Committee

The Governance and Nomination Committee consists of at least 3 members and not less than 50 percent of the quorum is Independent Directors. The term of office is three years, with the possibility for a reappointment, but not exceeding three consecutive terms, unless the Board views that it is necessary to retain a person as member. The duties and authority of the Governance and Nomination Committee are presented in the Charter of the Governance and Nomination Committee.

The members of the Committee shall hold office 3-year terms and may be reappointed, but shall not serve more than 3 consecutive terms unless the Board of Directors considers it necessary for the member to continue in office.

As of 31 December 2018, the Governance and Nomination Committee consists of the following 3 members:

Committee Members	Position
1. Prof. Samrieng Mekkriengkrai [(1)]	Chairman of the Governance and Nomination Committee
2. Mrs. Patareeya Benjapolchai	Member of the Governance and Nomination Committee
3. Mr. Kwek Buck Chye	Member of the Governance and Nomination Committee

Remarks:

(1) Prof. Samrieng Mekkriengkrai was appointed as Chairman of the Governance and Nomination Committee in replacement of Mrs. Patareeya Benjapolchai, by resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018.

The Governance and Nomination Committee shall meet at least twice a year. The presence of more than half the total number of members shall constitute a quorum. In 2018, the Committee met 4 times and made subsequent presentations to the Board (Please see details in the section "The meetings of the sub-committees in the year 2018"). Roles, Duties, and Responsibilities of the Governance and Nomination Committee

The Committee shall have the following authorities, duties, and responsibilities:

Consideration and Selection

- To establish the criteria and policy for Board membership including Board membership of subsidiaries.

- To evaluate and propose candidates to the Board and shareholders for election as members of the Board as well as for re-election or removal. The GNC may use professional or recruiter services and/or search from among the IOD chartered directors.

- Consider qualified candidates to be Chairman of Executive Committee and Chief Executive Officer (CEO) in relevant vacant positions and present for the Board's consideration and appointment.

- Nominate qualified persons to be directors and chairmen of sub-committees for the Board's consideration;

- Nominate qualified persons to be appointed as directors of the subsidiaries, affiliates, and joint ventures for the Board's consideration.

Corporate Governance

- Set policy on compliance with good corporate governance, annually review the Company's Corporate Governance Policy and recommend any amendments or revisions for the Board's consideration.

- Arrange an orientation for new directors and encourage all directors to attend seminars to develop their skills to increase capability to perform their duties efficiently.

- Consider and specify the criteria of the succession plan for executive management (UC Level) that report directly to the Chief Executive Officer (CEO) and further propose to the Board for consideration and approval annually.

- Carry out the annual evaluation of the performance of the Board, the Board's committees (including its own performance) and of each member of the Board, review the results of the evaluation of each of the Board's committees and report to the Board.

- Carry out the annual evaluation of the Chief Executive Officer (CEO) and report results to the Board.

- Engage consultants or independent persons to give opinions or advice as necessary and in accordance with the Company's regulations.

- Review and assess the adequacy of this charter and recommend to the Board if any change or amendment is needed.

- Report the performance of important tasks to the Board on a regular basis and bring up important issues for the Board's knowledge.

- To perform such other duties and responsibilities enumerated in and consistent with this Charter.

The details of performance of the Governance and Nomination Committee for 2018 can be found in attachment no. 6: Report of the Governance and Nomination Committee for 2018.

10.4 Executive Committee

The Company's Executive Committee consists of at least 4 qualified and experienced members appointed by the Board of Directors. A member of the Committee shall vacate office upon death, resignation or being retired from office by a Board resolution. The Committee shall report its performance to the Board, and the duties and authority of the Executive Committee are presented in the Charter of the Executive Committee.

The Executive Committee members must be knowledgeable, capable, and honest, with business ethics and sufficient time to devote their knowledge and capability to the Company's business operations, and must not have any disqualifications as prescribed by the Public Limited Companies Act. In addition, no member shall be a partner in any ordinary partnership or hold a position in the juristic entity of the same nature as or in competition with that of the Company, whether for his own benefit or that of others, unless receiving approval from the Board of Directors.

As of 31 December 2018, the Executive Committee consists of the following 4 members:

Committee Members	Position
1. Mr. Anek Pana-Apichon [1]	Chairman of the Executive Committee
2. Mr. Kwek Buck Chye	Executive Director
3. Mr. Anant Kaewruamvongs [2]	Executive Director
4. Mr. Patompob Suwansiri	Executive Director

Remark:

[1] Mr. Anek Pana-Apichon was appointed as the Chairman of the Executive Committee in replacement of Mr. Prasert Bunsumpun, by resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018.

[2] Mr. Anant Kaewruamvongs was appointed as Member of the Executive Committee, by resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018.

The Executive Committee shall meet at least once a month. A majority of the members comprising the Committee shall constitute a quorum for the transaction of business. In 2018, the Committee met 13 times and made subsequent presentations to the Board (Please see details in the section "The meetings of the sub-committees in the year 2018").

Roles, Duties, and Responsibilities of the Executive Committee

The Executive Committee performs its duties in accordance with the Executive Committee Charter which is regularly reviewed by Board of Directors. The Charter is presented below:

- Formulate the Company's goals, strategic direction, management structure, and annual business plan and budget for the Board of Directors' approval; guide and control the Company's business operations to ensure that they are in keeping with the overall vision, commitments, strategies and policies of the Company's Board of Directors, related laws, regulations and Articles of Association of the Company;

- Develop and manage the direction of the Company's business operations to ensure the Company's growth and development is in keeping with the vision, commitments, strategies, policies and decisions of the Board of Directors;

- Supervise and monitor the operating results and financial standing of the Company and report the business performance, along with the remedial actions to be taken in case the business performance of the Company fails to meet the target, to the Board of Directors every month;

- Identify and evaluate new business opportunities;

- Review and make recommendations to the Board of Directors regarding the Company's dividend policy;

- Review and approve all transactions concerning investments and disposal of assets, human resources management, finance and treasury, general administration and any other transactions related to the Company's business within the limits of authority granted by the Board of Directors;

- Appoint Company management members to fill all necessary management areas within the Company per the Human Resources Authority Table, and screen potential candidates for appointment as UC-level management team members, the first appointment of which requires the approval of the Board of Directors;

- Review matters that require the Board of Directors' approval and make appropriate recommendations with the exception of activities that have been delegated to other Board sub-committees;

- Consider and review the Company's risk management and control system;

- The Committee may delegate its authority to any member of the management or staff as it deems appropriate. However, such authority does not permit the Committee or appointed persons to approve any transaction between them or related persons having mutual benefits or conflicts of interest (as prescribed in the Company's Articles of Association and Notifications of the Securities Exchange Commission). The approval for transactions shall be in accordance with the policies and principles already determined by the Board and regulatory bodies;

- Engage consultants or independent persons to provide opinions or advice if necessary;

- The Committee may ask members of the management or other persons to attend its meetings or provide pertinent information as necessary;

- Report to the Board of Directors on a monthly basis regarding the material actions taken by the Committee under the Chief Executive Committee Report agenda;

- Annually review its own performance and assess the adequacy of the charter of the Executive Committee, which may be done in conjunction with the annual evaluation of the Board and its other committees, conducted under the oversight of the Governance and Nomination Committee;

- Take any other action or assume any other powers and responsibilities that may from time to time be assigned or delegated to the Committee by the Board.

The details of performance of the Executive Committee for 2018 can be found in attachment no. 8: Report of the Executive Committee for 2018.

10.5 Risk Management Committee

The Risk Management Committee consists of not less than 7 members and not more than 15 members who chosen from among directors and executives who are knowledgeable, capable, honest, and dedicate can adequate time to their position on the Committee in order to achieve the Company's goals. The Committee is appointed by the Board of Directors, and a member of the Committee shall vacate office upon death, resignation, retirement from position as Chairman of the Executive Committee, Chief Executive Officer, senior management or being retired from office by a Board resolution. The Committee is tasked with developing proper procedures and guidelines for analyzing and mitigating risks for the Company. The Committee must also regularly review the Company's policies in relation to risk management to ensure that they are sufficient and cover all areas. Additionally, the Committee is responsible for overseeing all risk management activities as tasked by the Company's Board of Directors.



As of 31 December 2018, the Risk Management Committee consists of the following 12 members:

Committee Members	Position
1. Mr. Anant Kaewruamvongs[1]	Chairman of the Risk Management Committee
2. Mr. Patompob Suwansiri	Member of the Risk Management Committee
3. Mr. Anuwat Sanguansappayakorn	Member of the Risk Management Committee
4. Mr. Teerayuth Boonchote[2]	Member of the Risk Management Committee
5. Mr. Wichai Kittiwittayakul	Member of the Risk Management Committee
6. Mr. Theerawat Kusalanggoorawat[3]	Member of the Risk Management Committee
7. Mr. Pramook Chaiwongwutthikul[4]	Member of the Risk Management Committee
8. Mr. Ekachai Phakdurong	Member of the Risk Management Committee
9. Ms. Yupapan Panclurbthong	Member of the Risk Management Committee
10. Mr. Salil Charuchinda	Member of the Risk Management Committee
11. Mr. Komson Seripapong	Member of the Risk Management Committee
12. Mr. Jiroj Srinamwong[5]	Secretary of the Risk Management Committee

Remarks:

(1) Mr. Anant Kaewruamvongs was appointed as Chairman of the Risk Management Committee in replacement of Mr. Paiboon Panuwattanawong, effective from 9 May 2018.

(2) Mr. Teerayuth Boonchote was appointed as Senior Advisor, effective from 1 November 2018.

(3) Mr. Theerawat Kusalanggoorawat retired from the Company, effective on 1 January 2019.

(4) Mr. Pramook Chaiwongwutthikul was appointed as Senior Advisor, effective from 1 November 2018.

(5) Mr. Jiroj Srinamwong was appointed as Senior Advisor, effective from 1 November 2018.

The Risk Management Committee shall meet at least once a quarter as well as upon request. The presence of more than half the total number of members shall constitute a quorum. In 2018, the Risk Management Committee held 4 meetings in total and subsequent reports were presented to the Board (Please see details in the section "The meetings of the sub-committees in the year 2018").

Roles, Duties, and Responsibilities of the Risk Management Committees

The Risk Management Committees' scope of duties is set in writing under the authority of the Risk Management Committee Appointment, approved by the Board of Directors as follows:

- To establish rules, policies, and procedures to assess and manage the risks which affect the Company and annually review the adequacy of risk management policy and risk management process;
- To provide risk assessment, risk prioritization, establishment guidelines and strategies for risk management to ensure that risks are in the risk appetite, and manage the risk with appropriate cost;
- To manage and monitor the operations according to the Risk Management Policy, and follow the guidelines and policies which are approved by the Board;
- To encourage top management and employees to understand and acknowledge their role in the Risk Management;

- Report to the Board, Audit Committee, and Executive Committee regularly about the management, operations, Company's risk status, various changes, and the improvement and corrective actions in accordance with the defined policies and strategies;

- To review the authority and responsibility annually and propose changes the the Board of Directors for approval.

10.6 Sustainable Development Committee

The Sustainable Development Committee consists of at least 5 members, chosen from among the directors and executives who are knowledgeable, capable, honesty and dedicate adequate time to their position on the Committee in order to drive the Company's sustainable development goals in alignment with the Company's business direction. The committee is appointed by the Board of Directors, and a member of the Committee shall vacate office upon death, resignation, retirement from position as Chairman of the Executive Committee, Chief Executive Officer, senior management or being retired from office by a Board resolution. The Committee shall report its performance to the Board. The duties and authority are presented in the Charter of the Sustainable Development Committee in keeping with the Company's directions and the guidelines form the Stock Exchange of Thailand on Sustainable Development.

As of 31 December 2018, the Sustainable Development Committee consists of the following 8 members:

Committee Members	Position
1. Mr. Anant Kaewruamvongs[1]	Chairman of the Sustainable Development Committee
2. Mr. Anuwat Sanguansappayakorn	Member of the Sustainable Development Committee
3. Mr. Patompob Suwansiri	Member of the Sustainable Development Committee
4. Mr. Teerayuth Boonchote[2]	Member of the Sustainable Development Committee
5. Dr. Supoj Chinveeraphan[3]	Member of the Sustainable Development Committee
6. Mr. Pavit Ngansamrej[4]	Member of the Sustainable Development Committee
7. Ms. Yupapan Panclurbthong	Member of the Sustainable Development Committee
8. Ms. Piyanuch Sujpluem	Member and Secretary of the Sustainable Development Committee

Remarks:

(1) Mr. Anant Kaewruamvongs was appointed as Chairman of the Sustainable Development Committee in replacement of Mr. Paiboon Panuwattanawong, effective from 1 May 2018.

(2) Mr. Teerayuth Boonchote was appointed as Senior Advisor, effective from 1 November 2018, the Company is under the process of consideration the replacement.

(3) Dr. Supoj Chinveeraphan resigned, effective from 1 November 2018, the Company is under the process of consideration the replacement.

(4) Mr. Pavit Ngansamrej resigned from the Company effective July 15th, 2018. The Company is under the process of consideration the replacement.

The Sustainable Development Committee shall meet at least twice a year as well as upon request. The presence of more than half the total number of members shall constitute a quorum. In 2018, the Sustainable Development Committee held 2 meetings in total and subsequent reports were presented to the Board (Please see details in the section "The meetings of the sub-committees in the year 2018").

Roles, Duties, and Responsibilities of the Sustainable Development Committees

The Sustainable Development Committees' scope of duties is set in writing under the authority of the Sustainable Development Committee Appointment, approved by the Board of Directors as follows:

- Review and set the Company goals, policies, strategies and an action plan for sustainable development to align with the business direction of the Company economically, socially, and environmentally;
- Clearly define time frame and people responsible for tasks;
- Monitor implementation of the sustainable development policies, strategies, and action plans through the Sustainable Development Working Group;
- Define materiality and provide appropriate recommendations regarding sustainable development policies aligning with the Company's guidelines for good corporate governance to the Board of Directors for approval;
- Authorize requests for other persons to attend its meetings or provide pertinent information as necessary;
- Authorize appointments to the Sustainable Development Working Group (SWG) in order to take responsibility for and drive sustainable activity that shall require the further approval of the Board of Directors;
- Review, provide recommendations for, and approve the Sustainability Report, which shall require the further approval of the Board of Directors;
- Report the performance to the Board of Directors at least once a year and provide an annual performance report at the end of the fiscal year;
- Evaluate its own performance and the overall performance of the Committee, including assessment of the adequacy of this charter, annually; and
- Perform such other duties and responsibilities as to ensure success of sustainable development goals and carry out any duties assigned by the Board of Directors.

11. Remuneration of Directors and Management

11.1 The Board has in place the Remuneration Policy and framework for the Company's directors and executives.

11.2 The compensation framework for directors reflect their duties, responsibilities and contribution, and is comparable to the industry standard and companies of a similar size in order to be sufficient to attract and retain competent directors. Additional, remuneration is also provided when directors must assume additional duties as sub-committee members.

11.3 The directors' remuneration as defined in the Company's articles of association comprises of monthly retainer, meeting fee, perdiem and annual bonus. The Compensation Committee will determine the annual remuneration budget, and propose to the Board and the shareholders for approval.

11.4 Directors who are staff or hold executive management positions within the Company have no right to receive any perdiems, meeting or allowances or remuneration in the performance of their duties as directors or subcommittee members

11.5 The executive compensation framework is based on the following key guiding principles:

- Ensure that the interests of executives and share holders are aligned.
- Foster a performance-based culture.
- Be sufficient to attract, retain and motivate talented employees.

- Reflect business life cycles and strategic priorities.

11.6 The remuneration of executives comprises salary, bonus, provident fund, and other benefits which are linked to the performance of the Company and criteria for executives

11.7 The Compensation Committee is responsible for annually review the Remuneration Policy and framework.

12. Directorships in other Companies

12.1 Directors can hold the position of board member in no more than 6 listed companies simultaneously unless the Board grant specific approval, provided that these appointments do not interfere or cause conflicts of interest with their performance and duties for the Company.

12.2 It is the Board's policy that executive directors and the Chief Executive Officer shall not serve on the boards of any other public companies (excluding the Company's subsidiaries or associates) unless the Board grant specific approval.

13. Evaluation of the Board of Directors

13.1 A formal performance evaluation of the Board as a whole and the individual directors is conducted annually. The results are used as basis for strengthening the effectiveness of the Board and developing its members. The Board will engage an independent outside consultant to undertake the evaluation of the Board every three years. A consultant can set up criteria and provide recommendation for transparency and reliable evaluation.

13.2 Each board committee shall conduct an annual evaluation of its performance and report the results to the Board.

13.3 The Governance and Nomination Committee has tasked the Company Secretary with distributing the Self-Assessment forms to the members of the Board and member of sub-committee to complete the Self-Assessment forms and is framework for review their performance during the past year. The evaluation forms used are those developed by the Stock Exchange of Thailand.

13.4 After collecting all evaluation forms, the Company Secretary Department will summarize all scores, including criteria and processes of evaluation, and present the results to the Governance and Nomination Committee for consideration. The Governance Committee will then present the findings to the Board.

In addition, the Company will engage and independent outside consultant to undertake the evaluation of the Board every 3 years. A consultant can set up criteria and provide recommendation for transparency and reliable evaluation. In 2015, the Company engaged AON Hewitt, an external advisor, to evaluate the entire Board for the first time.

In 2018, the Company Secretary sent the entire board performance evaluation form and the individual self-evaluation form to the Board and all subcommittees for individual self-evaluation for the year 2018. The criteria and results are detailed as follows:

Type of Committee and Type of Evaluation Form	Evaluation Result
Board of Directors	
Entire board evaluation Criteria of the evaluation consist of 7 topics (1) Board Policy (2) Structure and Characteristics of Board (3) Role and Responsibilities of the board (4) Board meeting preparation and procedure (5) The board's performance of duties (6) Relationship with management (7) Self-development of Directors and Executives Development	3.57 / 4.00

Type of Committee and Type of Evaluation Form	Evaluation Result
Individual self-evaluation Criteria of the evaluation consist of 5 topics (1) Background of the Board's Duty (2) The Organization Knowledge (3) The Boards' Meeting (4) Relationship with Director and Executive (5) Individual Personal Performance as a Board Member	3.71 / 4.00
Audit Committee	
Entire committee evaluation Criteria of the evaluation consist of 2 topics (1) Role of the Audit Committee (2) Duty of the Audit Committee with consists of (2.1) To review company's financial report (2.2) To review Internal Control and independent of Corporate Audit Department (2.3) To review rules and regulations of the company (2.4) To consider, select and nominate an independent person to be auditor of the company (2.5) To consider connected transaction or conflict of interest accordance with rules and regulations (2.6) Disclose audit committee report in annual report.	2.98 / 3.00
Individual self-evaluation Criteria of the evaluation consist of 3 topics (1) Committee structure and qualifications with consists of (1.1) Knowledge and experience of a member is fit with business (1.2) knowledge and experience are appropriate to the assigned duties and responsibilities (2) The committee meeting with consists of (2.1) A member prepares and studies information prior to the meeting (2.2) Opinions of a member are useful for the business (2.3) Particular member does not attend the meeting and abstains from voting on a particular agenda in which he or she has a conflict of interest (2.4) Chairman or an assigned person can conduct efficient meetings (3) Roles, duties and responsibilities of the Committee with consists of (3.1) A member complies with related rules, laws and charter, and performs his duty well (3.2) A member devotes time for his duties (3.3) A member does not intervene the normal operation carried out by management team (3.4) A member properly supervises and monitors management's operation (3.5) A member is enthusiastic about continuous development	3.67 / 4.00
Compensation Committee	
Entire committee evaluation Criteria of the evaluation consist of 5 topics (1) Preparation of the Committee (2) Policy Determination and Consideration of Procedure (3) Monitoring and Evaluation (4) The Meeting of the Compensation Committee (5) Roles and Responsibilities of the Committee	2.90 / 3.00
Individual self-evaluation Criteria of the evaluation consist of 10 topics (1) Overall performance of the Committee (2) Understanding of the Committee's roles and responsibilities as specified in the charter (3) Clearly defined in the Committee's role and responsibilities (4) Have a good working relationship with other Committee members (5) Have an appropriate procedure in considering the compensation for directors and top executives, which also in line with the Company's performance and same industry group (6) Have an appropriate for evaluation the Chairman of Executive Committee (7) Allocate sufficient time in considering the procedure and related criteria on Compensation matters (8) Allocate sufficient time in solving-problem, in case the matter is not in line with the criteria (9) Study and prepare for the meeting in advance (10) Each member can express their opinion freely	4.47 / 5.00

Type of Committee and Type of Evaluation Form	Evaluation Result
Governance and Nominations Committee	
Entire committee evaluation Criteria of the evaluation consist of 5 topics (1) Preparation of the Governance and Nominations Committee (2) Policy Determination and Consideration of Procedure (3) Monitoring and Evaluation (4) The Meeting of the Governance and Nominations Committee (5) Roles of Chairman of the Committee	2.88 / 3.00
Individual self-evaluation Criteria of the evaluation consist of 9 topics (1) Overall performance of the Committee (2) Understanding of the Committee's roles and responsibilities as specified in the charter (3) Clearly defined of the Committee's role and responsibilities (4) Have a good working relationship with other Committee members (5) Have an appropriate procedure in selecting, nominating and appointing directors and top executives, which also in line with the Company's requirements (6) The Committee has review Corporate Governance policy and other related policies on regularly basic (7) Allocate sufficient time in considering the policies and related criteria on Corporate Governance (8) Study and prepare for the meeting in advance (9) Each member can express their opinion freely	4.89 / 5.00
Executive Committee	
Entire committee evaluation Criteria of the evaluation consist of 4 topics (1) Composition and qualification of the Executive Committee (2) Meeting arrangement (3) Roles, duties and responsibilities (4) Knowledge and skill in specialized analysis	3.28 / 4.00
Individual self-evaluation Criteria of the evaluation consist of 14 topics (1) Overall satisfaction of the performance of the Executive Committee (2) Satisfaction with the Executive Committee's management of problems (3) Understanding of the Committee's roles duties and responsibilities as specified in the charter (4) Understanding the Company's Strategy (5) Have a good relationship with other Committee members (6) Clearly defined of the Committee's role and responsibilities (7) The Performance Assessment of the Committee has an appropriated procedure (8) Spend sufficient time on considering the policy and direction of the Company appropriately (9) Spend sufficient time on considering the Company's operational appropriately (10) Spend sufficient time on considering in direction of problem-solving if undefined with determined direction appropriately (11) Study and prepare for the meeting in advance (12) Independently to express opinion freely (13) Impartial to express opinion (14) Chairman has given the opportunity and encourage all member to express opinion independently	3.48 / 4.00
Risk Management Committee	
Entire committee evaluation Criteria of the evaluation consist of 5 topics (1) Composition and Quality (2) Understanding the business and associated risks (3) Process and Procedure (4) Monitoring Activities (5) Communication Activities	3.39/ 4.00

Type of Committee and Type of Evaluation Form	Evaluation Result
Individual self-evaluation Criteria of the evaluation consist of 12 topics (1) Overall satisfaction of the performance (2) Satisfaction the process of problem-solving (3) Understanding of the Committee's roles duties and responsibilities as specified in the charter (4) Understanding the Company's Policy on Enterprise Risk Management (5) Relationship among the Committee (6) Clearly defined of the Committee's role and responsibilities (7) Appropriate for the criteria of performance evaluation (8) Spend sufficient time on considering the risk assessment of the company appropriately (9) Spend sufficient time on considering the company's risk, treatment plan appropriately (10) Spend sufficient time on considering in direction of problem-solving if undefined with determined direction appropriately (11) Preparation before the meeting (12) Independently to express opinion freely.	4.29 / 5.00
Sustainable Development Committee	
Entire committee evaluation Criteria of the evaluation consist of 6 topics (1) Preparation of the Sustainable Development Committee (2) Determination and Consideration of the Company's Strategy (3) Risk Management (4) Sustainable Development Framework (5) The Meeting of the Sustainable Development Committee (6) Roles Duties and Responsibilities of the Chairman of the Sustainable Development Committee	2.74 / 3.00
Individual self-evaluation Criteria of the evaluation consist of 14 topics (1) Overall satisfaction of the performance (2) Satisfaction the process of problem-solving (3) Understanding of the Committee's roles duties and responsibilities as specified in the charter (4) Understanding of the Sustainable Development strategy (5) Relationship among the Committee (6) Clearly defined of the Committee's role and responsibilities (7) Appropriate for the criteria of performance evaluation (8) Spend sufficient time on considering the policy and direction of the company's sustainable development appropriately (9) Spend sufficient time on considering the sustainable development report and other performance results appropriately (10) Spend sufficient time on considering in direction of problem-solving if undefined with determined direction appropriately (11) Preparation before the meeting (12) Independently to express opinion freely (13) Independently to express opinion without bias (14) Chairman has given the opportunity and encourage all member to express opinion independently	4.11 / 5.00

14. Company Secretary Office

The Company appointed the Company Secretary according to the laws on Securities and Exchange in order to take a responsible for safekeeping documents and minutes of meetings, including reports on interests of directors and executives and other relevant issues. The Company Secretary shall advise to the Board regarding relevant laws and regulations, and arrange the meetings of the Board of Directors, its sub-committees and shareholders. The Company Secretary shall perform his or her duty with responsibility, due care and loyalty, and shall comply with all laws, objectives; the Company's articles of association. The Company Secretary responsible for follow up to comply with the Board's resolutions and the shareholders' resolutions. The decision to appoint or remove the Company Secretary shall be formally resolved by the Board.

15. Orientation and Knowledge Development of Board of Directors and Management

15.1 All new-appointed directors must participate in the Company's director orientation program in order to be adequately briefed on the Company's information, code of conduct, policy and business information prior to assuming their responsibilities.

15.2 The Company provides directors and executives with opportunities to attend special training courses and seminars related to their specific duties, particularly those seminars and training sessions organized by the Thai Institute of Directors (IOD) or the Stock Exchange of Thailand so that they may familiarize themselves with their duties and the manner of performing those duties efficiently.

In 2018, directors and executives applied for and participated in the following courses and seminars:

Directors / Executives	Courses/Seminar
1. Mr. Prasert Bunsumpun Chairman (Independent Director)	- Group Networking - SingTel/Intouch/AIS/Thaicom - AIS Academic for THAIs
2. Mrs. Charintorn Vongspootorn Independent Director, Member of Audit Committee, and Chairman of Compensation Committee	- Group Networking - SingTel/Intouch/AIS/Thaicom - AIS Academic for THAIs - Deloitte AC Forum "Anti-Bribery & Anti-Corruption"
3. Mr. Somprasong Boonyachai Director	- Group Networking - SingTel/Intouch/AIS/Thaicom - AIS Academic for THAIs
4. Professor Samrieng Mekkriengkrai Independent Director, Member of Audit Committee, and Chairman of Governance and Nomination Committee	- Group Networking - SingTel/Intouch/AIS/Thaicom - AIS Academic for THAIs - Deloitte AC Forum " Anti-Bribery & Anti-Corruption - Seminar under the topic of Internal control measures for juristic persons to prevent the risk of bribery of government officials by Intouch
5. Mr. Anek Pana-Apichon Director, Chairman of Executive Committee, and Member of Compensation Committee	- Group Networking – SingTel/Intouch/AIS/Thaicom - AIS Academic for THAIs - Harvard Leadership Development Program By Harvard Business Publishing (2017 - 2018)
6. Mrs. Patareeya Benjapolchai Independent Director, Chairman of Audit Committee and Member of Governance and Nomination Committee	- Group Networking – SingTel/Intouch/AIS/Thaicom - AIS Academic for THAIs - Ethical Leadership 2018 By IOD - Audit Committee Forum - Topic"Learn, unlearn and relearn - Audit Committee in the Age of Disruption" By IOD
7. Mr. Anant Kaewruamvongs Director, Member of the Executive Committee and Chief Executive Officer	- Group Networking - SingTel/Intouch/AIS/Thaicom - AIS Academic for THAIs - Harvard Leadership Development Program By Harvard Business Publishing (2017 - 2018)
8. Mr. Kwek Buck Chye	- A Seminar on corporate governance and ethics on anti-corruption, Singapore - SID Director Conference 2018 "Rebooting Globalization and Governance in an Era of Disruption, Singapore - SID CG Roundup 2018, Singapore

Directors / Executives	Courses/Seminar
9. Ms. Yupapan Panclurbthong Company Secretary	- Group Networking Lunch: SingTel Intouch/AIS/Thaicom - AIS Academic for THAIs - Thaicom - MBTI Quotation from MindDojo - Sharing: Decentralized World - The Non Linear Business Opportunity - Intouch Executive Orientation for Newly Promoted: Learn how to transition effectively between different leadership roles - Thaicom CG for Thaicom (By Dr. Bandid Nijathaworn - President and CEO of the Thai Institute of Directors
10. Mr. Patompob Suwansiri Chief Commercial Office and Member of Executive Committee	- Harvard Leadership Development Program By Harvard Business Publishing (2017 - 2018)
11. Mr. Anuwat Sanguansappayakorn Chief Financial Officer	- Harvard Leadership Development Program By Harvard Business Publishing (2017 - 2018)
12. Dr. Sakon Kittivatcharapong Head of Marketing and Business Development Department	- Harvard Leadership Development Program By Harvard Business Publishing (2017 - 2018)

16. Evaluation of Chief Executive Officer

The Board, excluding executive directors or members of the Compensation Committee, should assess the performance of the Chief Executive Officer annually in keeping with pre-agreed standards and performance criteria covering the Company's financial performance as well as other strategic objectives.

The evaluation criteria are divided into 7 parts:

Part 1 Evaluation of Leadership Competency

Part 2 Evaluation of Financial Management

Part 3 Evaluation of Skills and Attitudes

Part 4 Evaluation of successful completion of important tasks over a period of time longer than the last 12 months

Part 5 Evaluation of decision making on significant mat ters in the last twelve months.

Part 6 Evaluation of preparation to meet significant new challenges in the future.

Part 7 Evaluation of any other related criteria.

The results of the evaluation will be used to formulate a compensation package for the CEO for the following year.

17. Contact with Management and access with Independent Advisors

17.1 Directors are entitled to request and receive additional information they consider necessary in order to make information decisions.

17.2 All directors shall allowed direct access to the management and the Company Secretary. However, this access and communication should not interfere with or interrupt the Company's normal business operations.

17.3 The Board supports the participation of the top executives in meetings of the Board.

17.4 The Board and its committee have the power to engage experts or advisors, including independent legal counsel at the Company's expense.

18. Management Succession Plan

18.1 A succession plan for the Company's Chief Executive Officer and senior executives must be developed in order to maintain the confidence of shareholders and other stakeholders and allow business operations to continue without interruption when these positions become vacant.

18.2 The Governance and Nomination Committee is responsible for considering the succession plan and nominating candidates of Chairman of the Executive Committee, the Chief Executive Officer and senior management from EVP level upwards who report directly to the CEO. The succession plan must be reviewed on an annual basis and an updated version submitted to the Board.

Section 2
Rights and Equitable Treatment of Stakeholders

Shareholders own the company, controlling it by appointing the Board of Directors (Board) to act as their representatives. Shareholders are eligible to make decisions on any significant corporate change. Therefore, the Board's policy is to encourage, promote and facilitate shareholders in exercising their rights. The Company shall treat each and every shareholder equally regardless of gender, age, disability, race, nationality, religion, belief, or political opinion.

1. To encourage, promote and facilitate shareholders in exercising their basic rights as follows:

    - Right to buy, sell, or transfer shares of the Company;
    - Right to receive correct, adequate and timely information regarding the Company's operations and activities. Furthermore, the Company has a policy to prevent obstruction of communication between shareholders and/or the Company;
    - Right to attend shareholders' meetings, express his/her opinions, give recommendations, and be involved in decision making for significant matters;
    - Right to appoint and remove directors at shareholders meetings;
    - Right to appoint Company Auditors and set their remuneration;
    - Right to acquire profit of Company in the form of dividend;
    - Right to acquire share certificate, transfer share, and return share on the Company's behalf;
    - The right to stipulate, change, add, or delete clauses from the Company's Articles of Association;
    - Other rights as prescribed by law and the Company's Articles of Association and other relevant regulations.

2. To support and facilitate all shareholders to participate and vote in the meeting:

    2.1 All meeting shall be conducted in accordance with related laws and guidelines prescribed by regulatory.

    2.2 The Company has granted minor shareholders the right to propose items for inclusion on the agenda and to propose suitable candidates for selection as Directors at least 3 months in advance of the AGM. The Company provided the guidelines and procedures on how to propose items for inclusion on the agenda and directors for nomination on the Company's website.

    2.3 The Company provides shareholders, in advance of meetings, with date, time, venue, and all agenda items with objective, rationale and Board opinions for each agenda item as well as any other relevant information required in the notice of shareholders meeting.

    2.4 The Company encourage and support all shareholder and institution investor participation and voting in the shareholder meeting.

2.5 Set the date, time, and place of the meeting by considering the interest of shareholders for convenient and easy to reach.

2.6 The Company prepares and discloses the Company's notice of shareholder meetings in both Thai and English so that all shareholders can access information equally.

2.7 To send out the notice of the shareholders, meeting and related papers to all shareholders by postal at least 21 days before the meeting and posted on the Company's website at least 30 days before the meeting. This provided shareholders enough time to acknowledge and study the information in advance.

2.8 To ensure that the Company does not through its meeting attendance requirements or prerequisite prevent attendance by or places an undue burden on shareholders.

2.9 The Company allows shareholders to send their questions to the Company prior to the meeting date. Shareholders are clearly informed in advance of the determined criteria for accepting advance questions and the process for submitting them on the Company's website.

2.10 The Company supports shareholders who are unable to attend the meeting in person by allowing them authorize another representative as a Proxy for Shareholders, to submit their votes. The Company encloses a Proxy Form on which shareholders are able to specify their votes with the AGM invitation letter. The Company appointed at least one independent director as a proxy for shareholders who cannot attend.

2.11 The Company uses secure, fast, precise, and accurate technology in the shareholders meeting, including in recording attendee registration, printing ballots and processing voting results.

2.12 To promote the use of ballots for voting on resolutions proposed at the shareholders' meeting, and to disclose such voting results at the meeting by identifying the number of "approve", "disapprove" and "abstain" votes. The voting results for each proposed resolution should be included in the minutes of the meeting in order to transparency and easy to verify. Also, multiple votes should not be bundled into the same vote.

2.13 All directors and executives are required to attend the shareholders' meeting in order to answer any queries the shareholders might have. The Company's external auditor shall be invited to answer any questions about the Company's financial reporting.

2.14 The Company designate an independent party to count or to audit the voting results for each resolution in the meeting, and disclose such voting at the meeting and record in the minutes of the meeting.

2.15 Before starting the meeting, the Company informs shareholders of the number and proportion of shareholders and share represented at the meeting in person and through proxies, the meeting procedures, and voting criteria and vote counting methods.

2.16 The Chairman of the Board is responsible for compliance with applicable legal requirement and the Company's articles of association, allocating sufficient time for consideration and debate of agenda items, and providing opportunity to all shareholders who wish to share their opinions or ask question related to the Company.

2.17 The Company will provide the opportunity for shareholders to appoint the directors individually. The Company will also use ballots to vote for and appointment directors individually.

2.18 The Company will not add items to the meeting agenda or change significant information without prior notice to the shareholders.

2.19 To ensure that the Company discloses the results of voting on proposed resolutions at the shareholders' meeting through the designated Stock Exchange of Thailand channels and through the Company's website by the next business day.

2.20 The Minutes of the shareholders' meeting is submitted to the Stock Exchange of Thailand within 14 days from the shareholders' meeting date, and posted on the Company's website. The minutes of the shareholders' meeting should be included the following information:

(1) Attendance of directors, executives, and the proportion of attending directors;

(2) Voting and vote counting methods, meeting resolutions, and voting results ("approve", "disapprove", and "abstain") for each proposed resolution; and

(3) Questions asked and answers provided during the meeting, including the identity of the persons asking and answering the questions.

3. Directors, executives and employees must not use any material inside information about Thaicom Group's securities that has not been generally disclosed to the public and is material to the change of price or the value of Thaicom Group's securities, for their own or any other person's benefit.

4. All directors, executives and employees who wish to trade Thaicom Group's securities must comply with the Company's Securities Trading Policy.

5. Directors and executives must declare their own or related person's interest in accordance with the Company's rules and procedures in order to prevent any possible conflict of interest. Any directors or executives with a conflict of interest in a transaction involving the Company is prohibited from participation in or approval of this matter. All transactions will proceed according to the Company's approval process for related transactions.

6. In case of transactions between related companies, the Board will consider the benefits of the Company to be of foremost importance, and the principles and process in their approval shall be followed accordingly.

Section 3: Role of Stakeholders

The Company and its Board take into account the rights of all stakeholder groups and consistently abide by corporate governance principles, best practices, and other supporting guidelines, including our Code of Conduct, to ensure equal and proper treatment of all stakeholders. This takes into account, although not exclusively, employees, shareholders, customers, business partners, competitors, creditors, communities in which we operate, society as a whole, and the environment. Furthermore, the Company abides by international human rights principles and anti-corruption guidelines to promote the development of society as follows:

1. Responsibility to shareholders

The Company takes into account the rights and equitable treatment of stakeholders in line with the Company's Corporate Governance Policy and Code of Conduct. The Company is determined to operate its businesses in a manner that ensures the greatest shareholders satisfaction. This includes long-term growth in the Company's value, consistent returns, and transparent and trustworthy disclosure of data to shareholders.

2. Responsibility to customers

The Company has a quality policy as well as the ISO 9001:2008 quality system dedicated to creating customer satisfaction and trust that they are receiving high quality products and services at reasonable prices. The Company aims to maintain good customer relations and is dedicated to ensuring that any customer complaints are dealt with fairly and efficiently. The Company will also safeguard any customer data that should not be divulged, unless such customer information must be disclosed to third parties according to the Sustainable Development Policy and Code of Conduct on responsibility to customers.

3. Responsibility to business partners and creditors

The Company complies with the Policy on fairness and responsibilities towards business partners and/or creditors which identifies good practice in the fairness of business partner selection and maintaining long-term relationships. All transactions must be based on equality and mutual benefit. The Company firmly observes contractual

agreements and strictly follows the conditions of such agreements, including the repayment of loans and interest or other charges due to creditors. As well as to avoid a situation which can give rise to conflict of interest or damage to the Company's reputation or illegal as follows:

- The Company shall do its best to endeavor to comply with any contract, agreement, or various conditions concluded with business partners and/or creditors. If compliance with the conditions cannot be achieved, the Company shall promptly inform business partners and/or creditors within a reasonable time in order to determine sound and reasonable remedial actions.

- The Company shall provide business partners and/or creditors with adequate data, and shall not provide any false, distorted, or incomplete data which, in turn, can cause business partners and/or creditors to have a misunderstanding and impact decisions.

- The Company shall conduct financial management in a way that business partners and/or creditors shall have confidence in its financial status and ability to pay Company debt.

- The Company shall by no means, ask for, receive, or grant any trade benefits to business partners and/or creditors with dishonesty. If dishonest behavior occurs, the Company shall notify business partners and/or creditors of all details and cooperate with them to correct the problem with speed as well as take measures to prevent recurrence.

- Deals with business partners and/or creditors shall be conducted in a good manner without damage to the Company's reputation or any illegal activity. Conduct should be on a basis of equality, fairness, and mutual benefits.

The Company has disclosed its policy on fairness and responsibilities towards business partners and/or creditors on www.thaicom.net in the Section of Sustainability > Corporate Governance > Good Corporate Governance of Thaicom > Other Policy

4. Responsibility to community and society

The Company believes in the idea if creating a shared value between the business and social sectors and implements this belief as a guideline for business conduct, to maintain sustainable growth. The Company has a policy to provide educational support and access to technology and learning, crate jobs, and develop potential and investment for the benefit of society with regard to the involvement and unique characteristics of each community. Being publically-minded, the Company aims to reduce environmental impact and improve of life across society in the long term, but especially in the field of telecommunications. The Company plays an important role in strengthening cooperation in developing and maintaining quality of communication, both in normal circumstance as well as in disaster situation in order to assist communities, disadvantaged individuals, and victims to receive timely assistance at the first possible opportunity as described in the Sustainable Development Policy and Code of Conduct.

5. Responsibility to environment

The Company has policy to emphasize environmental sustainability and conservation of resources by nurturing a corporate culture which encourages environmental restoration and care activities, prevents and reduces pollution, uses resources efficiently, and promotes sustainability. The objectives are to reduce global warming, promote living and working in harmony with nature, and foster cooperation among organizations, including community involvement as described in the Sustainable Development Policy and Code of Conduct.

6. Responsibility to Staff

Our employees are our most valuable asset. Therefore, there are policies to foster advancement of employees driven by procedures for human resource improvement including the provision of both professional and general improvement training courses on a regular basis. Also, the Company values equal and fair treatments of its employees. Other policies exist to determine the appropriate remuneration and other benefits for employees in line with the Company's performance both in the short and long terms. The Company is also focused on creating a strong corporate culture and providing a good atmosphere and safe working environment for all employees. The Company strictly complies with labor laws as addressed in the Sustainable Development Policy and Code of Conduct.

7. Human rights

The Company supports and respects human rights and will operate its business based on the principles and intention of the Universal Declaration of Human Rights under the auspices of the United Nations. Under no circumstance will the Company take part in any action which is against the principles of human rights. The Company has also specified compensation measures in its "business ethics" manual for cases where the stakeholders incur damage from a violation of stakeholders' legal rights as addressed in the Sustainable Development Policy and Code of Conduct.

8. Competition in business

The Company has a policy to support and promote free and fair competition in business. It has no policy to resort to competition in business in any form that would acquire information from competitors in an unlawful or unethical manner as further referenced in the Code of Conduct.

9. Anti-corruption practices

The Company opposes all forms of corruption and complies with all anti-corruption laws in Thailand as well as in any other countries or territories where the Company may have business interests or operations. The Company has an Anti-Corruption Policy and put in place an internal compliance and control program to prevent and monitor corruption risk which all directors, executives, and employees must acknowledge and adhere to strictly. The Company has also outlined activities that encourage and promote all staff to follow the policy.

The Anti-Corruption Policy exists for the following purposes:

- To demonstrate the Company's position against fraud of all kinds.
- To set up rules and guidelines that prevent the Company and employees from violating anti-corruption law.
- To establish procedures for monitoring and determining compliance with the policy.
- To encourage employees to observe and report any fraud through secure communication channels.

According to this policy, fraud refers to the abuse of power acquired through position and any act of giving, accepting, receiving, or authorizing assets or benefits to and from government officials, state agencies, private officials, or private agencies to allow them to seek personal gain from Thaicom, unless they are not prohibited by the provisions of laws, customs, or traditions. Fraud also refers to bribery and corruption.

In 2013, the Company agreed to sign the declaration of Thailand's Private Sector Collection Action Against Corruption ("CAC") with the Thai Institute of Directors (IOD) to realize transparency of business operations and ensure that there are regulatory audits.

Moreover, the Board of Directors meeting on 17 December 2014 called for the submission of a self-evaluation form. The Board of Directors had reviewed the data and participated in the verification of the members of the private sector alliance in an attempt to combat fraud in the fourth quarter of 2014. The Company was certified by the Private Sector Collective Action Coalition Against Corruption Council on 16 January 2015.

In 2017, the Board of Directors' Meeting No. 14/2017 held on 13 December 2017 has considered and approved the re-certification of a member of the Private Sector Collective Action Coalition Against Corruption. In addition, the Company complied with the Anti-Corruption Policy through the following:

1. The Company implemented the policy strictly. The Board of Directors assigned the Audit Committee to the Anti-Corruption Policy to ensure the Company's compliance with the laws and Code of Conduct.

2. The CG Committee is responsible for implementing the aforementioned policy and communicating such policy to all employees as well as following up on its outcomes. All directors are required to ensure that their subordinates understand such policy. The Company shall also provide adequate training for employees regularly.

3. Every executive is responsible for ensuring that each person who reports to them is aware of and understands this Policy through adequate and regular training.

4. Employees must perform their duties in accordance with this Policy. Anyone who suspects or discovers a violation of this Policy must report it to a supervisor or through the channels prescribed under the Company's Whistle-blowing Policy.

5. The Company has also set guidelines for disbursement procedures to comply with the Anti-Corruption Policy. The employees must fill out the following application forms through the request system:

   (1) Charity and/or sponsorship

   (2) Recreation or entertainment

   (3) Giving or receiving gifts

   The employees must provide details such as the names of recipients of donation or sponsors, recreational activity participants, gift receivers, and nature of business relationships. Once the forms are completed, the system will send them to the authorized person for approval.

   In addition, the Company can summarize a report from the aforementioned data, in which such report may be utilized as a guideline to evaluate the anti-corruption efforts. The report and the evaluation results shall then be proposed to the Board for their consideration quarterly.

6. The Compliance Office is responsible for regularly monitoring its executives and employees to evaluate the work under their responsibilities and whether they are in compliance with the Anti-Corruption Policy.

7. The Company also regularly provides training and communication of its Anti-Corruption Policy and guidelines to its employees. The Company arranged e-learning courses for employees' study and taking the quiz online and has electronic magazines "Keeping up with Compliance" on such topics which are also available to ensure that all employees have the same understanding of the Anti-Corruption Policy.

8. The Company has established the Risk Management Committee. They consider the assessment process, monitor and control risks for the organization, including fraud risk which had been identify the risk may incurred from administration procedure operation that would be result of fraud risks.

9. The Company determined the fraud risk in order to determine appropriate plans to control, prevent, monitor and verify risks, including evaluating the effectiveness of any criteria to ensure that risk management processes are performed and further propose to management, the Audit Committee and the Board of Directors.

10. The Company also specified principles of corporate governance with an internal compliance and control program to prevent and monitor corruption risk.

11. The Company requires all directors and executives, as defined by notification of the SEC, to report on conflicts of interest as ordered by the law, and has extended this requirement to all employees to prevent conflicts of interest which they, their family members, or any related juristic person may have to ensure that all Company transactions are carried out transparently, reasonably, and with primary consideration for the highest benefit of the Company.

12. The Company has communicated the Anti-Corruption Policy to directors, management, and staff for acknowledgement in a variety of ways:

    - Addressed the Anti-Corruption Policy via the Company's intranet and website.

    - Developed e-learning courses for employees and executives in order to provide them with access to and education on the Company's Anti-Corruption Policy.

    - Arranged a new employee orientation to provide advice and information on the Company's Anti-Corruption Policy.

    - Added a channel for communicating Anti-Corruption Policy to directors, executives and employees by publishing an e-magazine entitled "Keeping Up with Compliance" to ensure employees of all level receive up-to-date compliance information monthly.

- Conducted a training course in the topic of "Catching up with HQ" to ensure employees working overseas have a common understanding of anti-corruption practice.

- Announced Gift Guidelines to prevent and avoid the exchange of inappropriate gifts with respect to the Anti-Corruption Policy.

- Communicated the Anti-Corruption Policy to country representatives abroad in order to inform country representative heads to communicate the Anti-Corruption Policy to suppliers, service providers and contractors for acknowledgement and commitment on a best effort basis to ensure that anti-corruption procedures are aligned across the Company.

- Arranged a seminar in the topic of "Thaicom Open House for sustainable business No. 1" in order to promote mutual understanding between the Company and suppliers and to operate the Company's business with transparency and equitable according to the corporate governance principles.

13. The Company has announced a 'No Gift Policy' of refraining from accepting gifts from business partners and suppliers during the New Year season.

14. The Company has notified all suppliers of its Supplier Charter and Anti-Corruption Policy and requested that each supplier sign in acknowledgement and agreement to follow these guidelines as a mutual standard.

15. The Company has revised the Human Resources Policy in order to incorporate anti-corruption measures as a part of the Company's human resources management such as fair recruitment and selection, merit-based compensation, and equal promotion opportunities.

Then, in 2018, the Company has recertified as the member of Thailand's Private Sector Collective Action against Corruption (CAC) for second term after received the first certification in year 2015.

The Company has also promoted activities that encourage all staff to follow the policy. The Company has disclosed an Anti-Corruption Policy on www.thaicom.net under Sustainability > Corporate Governance > Good Corporate Governance of Thaicom > Anti-Corruption.

10. Observance of the law, rules and regulations:

Directors, executives and staff must operate the business in agreement with the Company's Articles of Association, applicable laws, rules, and regulations. They must not, under any circumstances, knowingly participate in or take any action that is in violation of these regulations.

11. Political activities:

The Company has an Unbiased Political Policy for acknowledgment and strict adherence by directors, executives, and employees and staff of the group in accordance with the sections of the Anti-Corruption Policy related to political sponsorship, as well as in accordance with the Company's Code of Conduct.

12. Conflict of interest:

The Board of Directors realizes that working for the Company can lead to situations whereby personal interests of directors, executives and staff may be in conflict with the Company's interests. Such conflicts may come in many forms and make it impossible to act in a manner that ensures fairness to partners, stakeholders or entities. Therefore, the Board has considered and approved the Conflict of Interest Policy contained in the Company's Code of Conduct.

13. Protecting and looking after company assets:

Directors, executives and staff at every level have a duty and responsibility to safeguard the Company's assets for the best interest of the Company. They must appropriately control confidential data and sensitive information that they may possess or become aware of as part of their responsibilities. They must not communicate such information to other work units or outsiders and must store confidential documents as addressed in the said policy and the Code of Conduct.

14. Intellectual property rights

The Company emphasizes respect and not infringing on other people's intellectual property and has set guidelines for intellectual property in the Intellectual Property Policy and Code of Conduct.

15. Giving information or interviews to the press or the public

Any information about the Company to be supplied to outside sources must be factual and accurate, and presented with care. This policy has been included in the Code of Conduct. Those who do not have relevant duties or assignments cannot give information or interviews to any press or public in reference to the Group in any way. This prohibited action can give rise to undesirable impacts on the reputation and business operations of the Company.

In 2018, the Company held the following press conferences and activities for shareholders:

Meeting with Shareholders and Analysts	Frequency (per year)
Analyst Meeting	2
Opportunity Day	4
Company Visit	1

16. Whistle-blowing

The Company operates its business with adherence to the principles of corporate accountability, authenticity and transparency so the Company is committed to protecting its business operation and property from the risk arising out of any conduct which violates the code of conduct and any fraud which affects the reputation or the value of the shareholders of the Company. The Board has approved the Company's Whistle-blowing Policy in order to provide the channels for reporting and to encourage directors, executives, employees and stakeholders to report any information on misconduct and/or fraud occurring in the Company. This Policy has set a procedure to manage all complaints and reports of misconduct of fraud, protection of whistle-blower and confidentiality.

Channels for making a complaint or reporting misconduct or fraud

1. If an employee has any cause for concern over matters relating to misconduct or fraud, they must immediately report their concerns to their immediate line manager verbally or in writing. If the line manager ignores or dismisses the concerns raised, the employee must report their concerns to the next level manager.
2. If the employee suspects any Company supervisor or manager is involved in misconduct or fraud, the Employee can report any concerns through the following channels:

   2.1 Head of Internal Audit: Tel. +662 596 5001 or E-mail: wichaik@thaicom.net

   2.2 People Strategy Manager: Tel. +662 596 5060 - 8436 or E-mail: monteainn@thaicom.net

   2.3 Ethics Hotline; on the company's Intranet. Any information is passed directly to the Chairman of the Audit Committee, the Head of Internal Audit and the Head of Human Resources.

   2.4 Chairman of the Audit Committee or the Board of Directors at the following address:
   Thaicom Public Company Limited
   63/21 Rattanathibet Road,
   Muang Nonthaburi District, Nonthaburi,
   Thailand 11000
   E-mail: comsec@thaicom.net

3. If an employee suspects a senior manager at the department head-level or above, the Head of Internal Audit, or the Head of Human Resources is involved

in misconduct or fraud, the Employee should notify the Chairman of the Audit Committee or the Chairman of the Board of Directors.

4. Responsible executives noted in Article 1 and 2, upon receiving notification of misconduct or fraud, must report to the Internal Audit Department of the Company within (seven) 7 working days.

5. For external parties, complaints or reports can be lodged on www.thaicom.net under the section "Sustainability" > "Corporate Governance" > "Whistle Blowing". Their complaints or reports will be sent directly to any of the following:

   5.1 Chairman of the Audit Committee

   5.2 Head of Internal Audit

   5.3 Head of Human Resources

The Company's response

1. When the Company receives a complaint or report of misconduct or fraud via any channel, the Company must complete the evaluation and verification of the primary information within thirty (30) days from the date of receiving the complaint or report of misconduct or fraud.

   - If finds that the information received indicates that misconduct or fraud has occurred, a request must be submitted to the Ethic Committee and an authorized person to appoint an Investigation Committee.

   - If finds that the information received indicates that misconduct or fraud has not occurred, Internal Audit or the assigned department must be notified that no evidence can be found and the case has been closed.

2. The Investigation Committee must interview each person accused of committing misconduct or fraud along with his or her supervisor and any other related persons, and complete the investigation within forty-five (45) days from the date of appointment. If the investigation cannot be completed within this time, the Investigation Committee must report the cause of the delay to the person who appointed the committee and request an extension not exceeding thirty (30) days each time.

3. When the investigation is completed, the Investigation Committee must prepare an investigation report and submit this to the person who appointed the committee. A copy of this report must also be submitted to the chairman of Executive Committee, the Chief Executive Officer, the Head of Finance, the Head of Accounting, the Head of Internal Audit, the Head of Human Resources, the Head of Legal, other relevant parties as the case may be, and the Disciplinary Committee (in case of misconduct or fraud that is characterized as a disciplinary violation).

4. If the person who appointed the Investigation Committee and/or the Head of Internal Audit finds that the material facts are unclear or incomplete, the person who appointed the committee must either instruct it to conduct a further investigation or appoint a new committee as deemed appropriate.

Disciplinary Action and Legal Proceeding

1. The Disciplinary Committee must consider the nature of misconduct or fraud that occurred and determine the disciplinary action. The matter must then be submitted to the authorized persons for approval within thirty (30) days of receiving the investigation report.

2. When a decision has been made to take disciplinary action, Human Resources must issue a notification of disciplinary action and submit it to the authorized person stipulated in the Approval Authority Policy, report the disciplinary action and obtain a written acknowledgement from the recipient(s).

3. If a case of misconduct or fraud has occurred and caused damage to the Company's property, reputation or image, or violated relevant laws or regulations, the Disciplinary Committee must submit the matter to the Company's authorized persons as stipulated in the Approval Authority Policy to consider the legal proceedings (civil and/or criminal) to be taken. The matter may be considered in consultation with the Head of Legal or any other related department.



Communication with Whistle-Blowers

The Company will inform the whistle-blowers who have disclosed their names and contact details of the progress of investigations and their outcome. However, the Company may not provide details of the investigation process or any disciplinary action taken if these are deemed to be private and confidential.

Protection of Employees

1. The Company will not tolerate any intimidation of employees who provide information for misconduct or suspected fraud, including those employees who cooperate with or assist in the investigation with honest intent. The company will provide protection and not allow Company executives to threaten, take any disciplinary action against, or dismiss employees who provide information during the investigation. The Company will take disciplinary action against any violation of Company employees.
2. If an employee is threatened or intimidated in any way, he or she has the right to request the necessary protection. The Company may provide additional protection as required and determined by the severity and importance of the complaint(s). In the event that an employee is threatened, the employee must report the incident to the Head of Human Resources immediately, and the Head of Human Resources will serve as a protection officer for the employee.
3. In the case of an investigation where the Company conducts an investigation and finds no evidence of wrongdoing, any employee who has provided information with honest intent will not be subject to any disciplinary action. However, if the investigation finds that an employee made unfounded complaints, or provided false information or facts that were disparaging or made with willingly intent to cause harm to the Company or its employees, the company will consider appropriate disciplinary action and consequent penalties against the employee concerned, including, but not limited to, a verbal or written warning, dismissal from the Company or legal prosecution.

Confidentiality

1. All related persons must keep the fraud information and the investigation confidential and disclose details to anyone other than those who have a legitimate need to know.

2. The Investigation Report may not be disclosed to anyone in order to avoid damaging the reputation of an employee suspected but subsequently found innocent of any fraud, and to avoid potential civil liability.

Section 4
Information Disclosure and Transparency

The Company values accurate, complete, timely, and transparency disclosure of both financial and non-financial through easy-to-access channel that are fair and trustworthy.

1. The Company issued its Market Disclosure Policy in accordance to the regulations of the Stock Exchange of Thailand (SET) and the Securities and Exchange Commission (SEC). The objective of the policy to ensure that all stakeholders can access to the Company's information easily and equally.

2. The Investor Relations Department has been established to represent the Company and communicate useful information to shareholders, investors, securities analysts, and other related person.

3. To disclose of financial reports, annual report and Form 56-1 that reflect its accurate financial status and performance accurately, and to promote the inclusion of the Management Discussion and Analysis (MD&A) in quarterly financial reports in order to provide to investors more complete and accurate information about the Company's true financial status, performance and circumstances.

4. Prepare a report title "Board of Directors' Responsibility for Financial Reporting" to be disclosed in the annual report along with the auditor's report.

5. To disclose of auditing fees and other service fees paid to its auditors in Form 56-1 and the annual report.

6. To disclose of roles and responsibilities of the Board and subcommittees, number of meetings, attendance of each member, as well as trainings and knowledge development activities of the Board in Form 56-1 and the annual report.

7. To disclose of remuneration policy for directors and executives that correspond to the contributions and responsibilities of each person, indicating forms and types of remuneration, in Form 56-1 and the annual report.

8. The Company has a policy requiring directors to disclose/report security trading/holdings in the Company every quarter and/or every time there is a change in their holdings.

9. In addition to disclosing information as specified in regulation through the SET, the Company has disclosed important Company's information, both in Thai and English, to the public on the Company's website. All disclosed information is up-to-date and includes the following:

   (1) The Company's vision and mission

   (2) Nature of business

   (3) List of the Company's Board of Directors, subcommittees and executives

   (4) Financial statement and Management Discussion and Analysis (MD&A) (current and least one prior year)

   (5) Downloadable version of Form 56-1 and annual report

   (6) Shareholders structure and the Company structure

   (7) List of major shareholders

   (8) Invitation letter for shareholder meetings, other relevant documents and minutes of shareholder meetings

(9) The Company's articles of association and affidavit

(10) Corporate Governance Policy, Code of Conduct, Anti-Corruption Policy, Enterprise Risk Management Policy, and other policy

(11) Charters of sub-committees

(12) Contact information for Investor Relations

(13) Other information and documents for analysts, fund manager, and mass media

Section 5
Risk Management and Internal Control

The Board values the effective and appropriate risk management and internal control systems that are aligned with the Company's objectives, goals and strategies and comply with applicable law and standards.

1. Risk Management

1.1 The Company has drawn up the Risk Management Policy and framework to identify and manage risk on an ongoing basis. The aim is to protect the Company's value and capitalize on opportunities to create more value.

1.2 The Risk Management Committee, the CEO and other management are responsible for the design and implementation of the framework, and ensuring that the Company operates within the risk appetite set by the Board.

The Company identifies and manages risk when formulating and choosing its business strategies, executing the chosen strategies, marketing investment decisions, and conducting daily operations.

The Audit Committee will assist the Board by reviewing the Risk Management Policy and framework on an annual basis in order to ensure that the Company has a sound and effective risk management system.

2. Internal Control

2.1 The Company has adopted international standards and guidelines issued by the SEC in developing and implementing its internal control system in order to ensure that the following objectives can be achieved:

- Reliability, timeliness and transparency of both internal and external financial and non-financial reporting.
- Compliance with applicable laws and regulations.
- Safeguarding of the Company's assets.
- Efficiency and effectiveness of business operations.

2.2 The CEO and other management are responsible for the design and implementation of a sound internal control system.

2.3 The Board has delegated its responsibility for reviewing the effectiveness of the internal control system at least once a year to the Audit Committee. The latter will submit the results and its opinions to the Board for approval before they are reported to the shareholders.

3. Internal Audit

The Internal Audit department has been established as an independent unit in the Company. The Head of Internal Audit reports directly to the Audit Committee to ensure that his or her role is independent and objective. The internal audit activities help the Company accomplish its objectives by bringing a systematic, disciplined approach to evaluating and improving the effectiveness of the risk management, control and governance process.

The meetings of the sub-committees in the year 2018

Committee Member	Attendance of Meeting/Total of Meetings (Times)					
	Audit Committee	Compensation Committee	Governance and Nomination Committee	Executive Committee	Risk Management Committee	Sustainable Development Committee
1. Mr. Prasert Bunsumpun [1]		2/5		3/10		
2. Mrs. Patareeya Benjapolchai	12/12		4/4			
3. Prof. Samrieng Mekkriengkrai [3]	12/12	5/5	4/4			
4. Mrs. Charintorn Vongspootorn	12/12	5/5				
5. Mr. Somprasong Boonyachai						
6. Mr. Anek Pana-apichon [2]		3/5		13/13		
7. Mr. Anant Kaewruamvongs [3]				10/13	3/4	2/2
8. Mrs. Arthidtaya Sutatam						
9. Mr. Patompob Suwansiri				13/13	3/4	1/2
10. Mr. Anuwat Sanguansappayakorn					3/4	2/2
11. Mr. Wichai Kittiwittayakul					3/4	
12. Mr. Teerayuth Boonchote [4]					1/4	2/2
13. Mr. Theerawat Kusalanggoorawat					3/4	
14. Mr. Ekachai Phakdurong					4/4	
15. Mr. Pramook Chaiwongwutthikul [5]					1/4	
16. Ms. Yupapan Panclurbthong					4/4	1/2
17. Mr. Salil Charuchinda					4/4	
18. Mr. Komson Seripapong					4/4	
19. Ms. Piyanuch Sujpluem						2/2

Remarks:

(1) Mr. Prasert Bunsumpun was appointed as the Chairman of the Board in replacement of Mr. Paron Israsena, who resigned, by resolution of the Board of Directors Meeting No. 3/2018 held on 19 March 2018, effective from 24 March 2018. Therefore, he is not a member of any sub-committees according to the Company Policy.

(2) Mr. Anek Pana-Apichon was appointed as Member of the Compensation Committee in replacement of Mr. Prasert Bunsumpun, by resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 28 March 2018.

(3) Mr. Anant Kaewruamvongs was appointed as Member of the Executive Committee and Director, by resolution of the Board of Directors Meeting No.4/2018 held on 28 March 2018, effective from 28 March 2018.

(4) Mr. Teerayuth Boonchote was appointed as Senior Advisor, effective from 1 November 2018.

(5) Mr. Pramook Chaiwongwutthikul was appointed as Senior Advisor, effective from 1 November 2018.

2.3 The Selection of Directors and Management Executives

(1) The Selection of Independent Directors

The criteria to propose and to elect independent directors and the qualifications required for such directors can be found in Section 5: The Role and Responsibility of the Board of Directors, Item 1 Structure and Composition of the Board of Directors > 1.3 Qualification of Independent Directors

(2) The Selection of Directors and Management

The Selection of Directors

The Board of Directors has appointed the Governance and Nomination Committee, which consists mainly of independent directors, to select and screen the nominees for selection and appointment to positions on the Board under the Company's director selection policy. In the selection stage, appropriate ratio, number, and diversity of Board members are considered in a variety of areas, including skills and specific expertise needed and alignment with the Company's strategic directions. Board members should be prepared to dedicate their time to fully performing their role on the Board and not possess any characteristics which would disqualify them under the law. Good corporate governance for registered companies includes selection policies and committee selection procedures as follows:

1. **Selection criteria** - the Governance and Nomination Committee can use the Board Skill Matrix in order to nominate qualified people for the post of director based on their qualifications and by considering other skills they may possess which may be lacking on the Board and are aligned with the Company's strategic directions.

2. **Selection procedures** - Candidates for director may be selected via the following methods:

    - Directors may propose a candidate.

    - Minority shareholders may be allowed to propose a qualified person through the Company's website prior to the AGM pursuant to the rules specified by the Company.

    On 15 January 2019, the Company notified the Stock Exchange of Thailand that at the expiration of the period for proposing directors by minority shareholders, no proposals had been received from shareholders.

    - An external professional search firm may be used to pre-select qualified candidates.

    - The Company Secretary will present the list of qualified candidates per the qualifications identified by the Securities and Exchange Commission, the Stock Exchange of Thailand, and the Thai Institute of Directors (IOD) Chartered Directors guidelines.

3. **Selection** - The Governance and Nomination Committees will assess the initial qualifications of the nominated applicants and select the ones considered appropriate.

4. **Appointment** - The Governance and Nomination Committees will propose a list of qualified candidates to the Board of Directors' meeting for concurrence before presenting the list in the shareholder meeting for a vote on each individual, when appointing new directors in place of directors whose terms have expired.

    If a Board seat is vacant because of reasons other than term expiration, the matter of re-appointment should be proposed in the Board of Directors' meeting.

    Director selection must follow the rules and regulations specified in the Articles of Association of the Company as follows:

    1. According to the Articles of Association, the term of one third of the directors shall end at every Annual General Meeting of Shareholders. The longest serving directors shall be due first, and may be re-elected to resume duty.

    2. At the Annual General Meeting of Shareholders, directors should be chosen in the following manner:

        2.1 Each shareholder shall have a number of votes equal to the number of shares held.

2.2 Each shareholder may exercise all the votes he/she has under item 1 to elect one or several persons as director or directors. If several persons are to be elected as directors, the shareholder may not allocate his/her votes in different numbers to different persons.

2.3 The candidates shall be ranked in order descending from the highest number of votes received to the lowest, and shall be appointed as directors in that order until all of the directorships are filled. When there is a tie in the votes cast for candidates in descending order, which would otherwise cause the number of directors to exceed the limit, the Chairman is entitled to cast the deciding vote.

3. In case of vacancy or vacancies due to other reasons, the Board of Directors, by a vote in which three-fourths of its members agree, shall elect someone who has the prerequisite qualifications and is not subject to prohibited conditions according to clause 68 of the Public Companies Act, B.E. 2535 (1992). The Board of Directors can thereby appoint him/her as a director in the next Meeting. An exception is the case of a term with less than 2 months remaining, where the term of the newly appointed director shall expire at the same time as the preceding director.

The Selection of Management

The selection of management is disclosed in Section 5: The Role and Responsibility of the Board of Directors, Clause 11 Selection of Management Executives

2.4 Corporate Governance Concerning Subsidiaries and Associated Companies

The Board of Directors uses its authority to oversee and manage the Company's subsidiaries and joint venture companies according to the Company's objectives and Articles of Association, as well as in compliance with any resolutions passed at shareholder meetings. This management and oversight is performed through the appointment of management executives, or by authorizing a sub-committee or any other persons if necessary, to perform the business operations in compliance with the directions set by the Board of Directors to ensure good corporate governance and maximum benefits for the Company.

The Company will authorize directors and/or management to be its representatives in subsidiaries or joint venture companies. The authorization of such persons shall be approved by the Company's Board of Directors. The Board of Directors will authorize the Governance and Nomination Committee to select eligible persons for such positions, and propose them to the Board of Directors for consideration and approval.

The nominated person shall operate and/or oversee the activities of the subsidiary or joint-venture Company in keeping with the Company's policies and in line with Corporate Governance Best Practices as outlined by the Securities and Exchange Commission and the Stock Exchange of Thailand, and the Company's own Code of Conduct to ensure to maximum profit for shareholders.

2.5 Internal Control Information

The Company is committed to carrying out its business with customers, partners, and shareholders in an ethical manner with integrity and honesty. A Code of Conduct has been developed and issued to all employees to guide corporate behavior at all levels. Disclosure of inside information by employees or management to others or for their own interest or involvement in activities that may lead to conflicts of interest is considered severe misconduct and may subject them to the highest disciplinary action.

In addition, the Company prohibits employees and management who work in a department or business unit that has access to inside information from buying or selling the Company's securities for a period of one month prior to the disclosure of financial statements to the public.

The Company also educates directors and management on their duties to report their, as well as their spouse or minor children's, holdings or changes in holdings of the Company's securities to the Securities Exchange Commission (SEC) in accordance with Section 59 of the Securities and Exchange Act B.E. 2535, and the SET regulations. Regarding the sharing of supporting data or documents within the group of companies, data rules have been issued to prevent the leak of information. These rules include requesting a letter of confidentiality or non-disclosure agreement, and the prohibition of making photo copies without permission.

In 2018, the Company revised its Information Security Management Regulations to be in line with the Information Security Management Regulations of the Stock Exchange of Thailand and the Securities and Exchange Commission, including to build confidence in the Company's business operations among investors, shareholders, business partners and stakeholders. This regulation complied with the ISO 27001 by adapted to the Company's context. In addition, the Company also utilized the Policy Statement on the Security of the Information System in its principles alongside the Information Security Management Regulations.

2.6 Auditor Fees

In 2018, the Company and its subsidiaries paid auditor fees as detailed below:

(1) Audit Fees

The Company and its subsidiaries paid auditor fees to Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd. as folloes:

Company	Audit Fees (Million Baht)
Thaicom Public Company Limited	1.86
Subsidiaries and associates	7.73
Total audit fees	9.59
Out-of-pocket	0.16
Total audit fees and out-of-pocket	9.75

(2) Non-Audit Fees

The Company paid other compensation for special audit and consultant service which not related to audit to Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd. in the amount of 180,000 Baht.

3. Internal Control and Risk Management

3.1 Summary of the Board of Directors' Opinion towards the Internal Control System of the Company.

For 2018, the Board of Directors has evaluated the effectiveness of internal control systems through the Evaluation Form developed by The Office of the Securities and Exchange Commission (SEC) and Internal Control Evaluation Form developed by The Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Board has concluded that the internal control was appropriately and adequately undertaken and risk management measures were appropriately developed. The Audit Committee discloses their opinion on this matter in "Annual Audit Committee Report for 2018"

Internal Control and Internal Auditing

The Company has established the internal control systems according to the standards set by SEC, the Stock Exchange of Thailand and COSO Internal Control Integrated Framework. The Internal Control Framework has five components, which are as follows:

1) **Control Environment:** The Company has separated duties between the Board of Directors and Management and has reserved clear authorization for the Board of Directors. The management has appropriately set up clear organization structure, reporting line, authorization and responsibility to support achievement of company's objectives under oversight duty of the Board of Directors which is based on basis of good corporate governance, integrity & ethics and business code of conduct including anti-all types of corruption. In addition, the company has continually implemented talents' retention and development program including succession planning for key positions.

2) **Risk Assessment:** The Company has formed a Risk Management Committee and developed a risk management system based on the Enterprise Risk Management Integrated Framework of COSO, by customizing to align with the Company's business, assessed risk and managed risk continuously which include fraud risk assessment. For the year 2017, the company has already implemented risk assessment and risk management process to cover all company's subsidiaries overseas for conformity throughout organization and has also started review risk assessment and management of related companies as part of overall risk management.

3) **Control Activities:** The Company has developed control mechanisms for management and executives by adopting the Quality Management System of the ISO for the effectiveness and efficiency of operations and other control activities which emphasized the reliability and security of information, safeguarding of assets and compliance with rules and regulations internally and externally. Moreover, the company has appropriately and sufficiently established and implemented internal controls for accounting & finance, operations, corporate governance and information technology.

4) **Information and Communication:** The Company upholds the importance of its information system and the distribution of information both internally and externally through its internal and external website for stakeholders in case of reporting suspicion of fraud and corruption. The company has reliable and quality information to support execution of internal controls as per defined objectives.

5) **Monitoring:** Management has followed up the performance according to the plan approved by the Board of Directors and reported on a quarterly basis. Internal Auditing Office conducted the audit plan based on company's risk and report to the Audit Committee on a quarterly basis as well. In case of any fraud indicators suspected with a total value of more than Baht one million, the internal auditor has to report immediately.

The Audit Committee and The Board of Directors has assessed sufficiency of company's internal control system using five various measures which composed of, control environment, risk assessment, control activities, information systems and communication, and monitoring including its 17 principles substantiated by reasons and explanations as well as reporting from internal and external auditors, thus, concluded that the Company has sufficient and effective control system, particularly the management control system to safeguard Company's assets from improper usage and unauthorized sales or disposal, and undertake transactions in accordance with approval authority and recorded properly to ensure reliability and accuracy of financial statements. The Company maintained documentary systems for information to be readily available for auditing processes by external auditors and regulatory authorities.

Furthermore, to assure the internal control system and important document filing is effective and developed continuously, the Company has established an independent Internal Auditing Office directly reporting to the Audit Committee with an approved internal audit charter. The Internal Audit Charter specifies duties and responsibilities of Internal Audit Office clearly and is reviewed annually in conformance with current situations. The Internal Auditors were certified by internationally accepted internal auditing, auditing institutions or associations such as Certified Internal Auditors (CIA), Certified Information System Auditor (CISA) and Certified Public Accountant (CPA). The Internal Auditing Office has unlimited access to information, personnel and all departments to achieve auditing activities, and report its results to the Audit Committee, Board of Directors and Chairman of Executive Committee and CEO for corrective and preventive actions, as well as continuous improvement in a timely manner.

In 2018, the Internal Auditing Office combined result of risk management from management and internal auditing assessment as a basis of information to prepare its risk-based audit plan for 2019, which covered the reliability of accounting and finance information, operational efficiency and effectiveness, effective use of resources, regulatory compliance, safeguarding of assets, information technology, corporate governance and anti - fraud and corruption.

Moreover, Internal Audit Office provided consultancy service for the improvement of work process and information system that management could implement to improve efficiency and effectiveness in achieving the business objective. For instance, system development under ISO requirements for subsidiaries, risk assessment and risk management, control self - assessment system, corporate governance and anti – fraud & corruption activities, review and update of Misconduct & Fraud Investigation Policy, Adjustment of whistle blower process to be aligned with Whistle-Blowing Policy, investigation and support for fraud and misconduct cases, review and update of Internal Audit Charter, improvement of internal audit and reporting process and etc. In addition, the Internal Auditing Office encouraged and trained internal auditors to continuously obtain more qualifications in line with the Institute of Internal Auditors standards. The result of internal auditing performance, thus, indicated that audit issues raised by internal and external auditors have been corrected and closed as per target due to the cooperation of management.

Risk Management

The Company has adopted the INTOUCH Group's Risk Management Policy to correspond with the Company's environment. In 2018, the Company conducted trainings and workshops, and established Risk Management Committee which is composed of the Chief Executives Officer and management from various business units.

The Risk Management Committee designed risk management guidelines in line with COSO Framework, the Securities and Exchange Commission and the Stock Exchange of Thailand, and the Company's business operations. The risk management policy was applied in defining the Company's vision by analysing internal and external factors affecting the company's vision, determining its mission and objectives, formulating strategies and key performance indicator of operations at all levels, analysing potential risk and significance of impact, planning of risk mitigation and improving of internal control. In the year 2018, the Company emphasized the Enterprise Risk Management (ERM) system to be effective by requiring evidence for confirming its treatment plan as well as introducing lessons learned from any key risks that were successfully or unsuccessfully mitigated to the Risk Management Committee. This is in order for the management to control and manage the risk effectively and efficiently, and to monitor process to report to the Executive Committee, the Audit Committee and Board of Directors properly. In conclusion, the Company's risk management process has been supported continuously by all levels.

In 2018, all Company's subsidiaries which have operations in overseas had been conducted and completed risk assessment and risk management. The Company also reviewed the risk assessment and management of related companies that THAICOM holds at least 20% share, i.e., Lao Telecommunications Public Company; this is to be in line with group risk management methodology in order to enhance effectiveness of Enterprise Risk Management.

3.2 Internal Audit and Auditors Opinion

The Internal Audit Office and Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd, the auditor who certified the Company's Financial Statements for the Year 2018, found no significant deficiencies and weaknesses in the control of Company documents or internal control over financial reporting. The Auditors found that the Company had sufficient and effective internal control systems in place.

3.3 Information on the Head of Internal Audit and Head of Compliance

(1) The Head of the Internal Audit Office is Mr. Wichai Kittiwittayakul, whose official position is Chief Audit Executive. Mr. Wichai Kittiwittayakul holds a Master's Degree in Accountancy from Thammasat University. He is Certified Internal Auditor (CIA) and Certified Information Systems Auditor (CISA), also an expert in corporate governance, compliance, internal control, internal audit and risk management. In addition, he is a former director of the Thai Company Secretary Club and held the position of Chairman of the Institute of Internal Auditors of Thailand. The Audit Committee has concurred that the appointed head of internal audit is eligible person with the proper education, professional qualifications and work experiences to effectively perform the duties required of this position.

Head of the Compliance Office is Ms. Yupapan Panclurbthong, whose official position is Head of Company Secretary and Compliance Section.

(2) The Audit Committee Charter addresses the proper procedure for appointments, removals, transfers, and evaluations the Head of Internal Audit or related departments being responsible for internal audit of the company that must be agreed and approved by the Audit Committee under scope and authorities as set forth in the charter. The Audit Committee Charter shall be reviewed annually to ensure relevance and conformity with current situations. (Details of the Audit Committee Charter could be accessed at www.thaicom.net under topic sustainability > corporate governance > charter)

Related Transactions

During the year 2018, the Company and its subsidiaries have the following lists of related transactions with connected persons. Details of related transactions are as follows:

Related Companies/ Relationship	Transactions	Value of Related Transactions For the year ended December 31, 2018 (Million Baht)	Reason and Necessity of Transaction
		Consolidated	
Intouch Holdings Public Company Limited ("INTOUCH") / The major shareholder hold 41.13% shares of the Company with joint directors. - A holding company acquiring the controlling interest in various companies.	1. Revenue - Internet service revenue	0.09	A subsidiary had revenue from providing internet service to INTOUCH.
	2. Expense - Application maintenance services	0.78	The Company was provided application maintenance services by INTOUCH for conducting to the policy of the company group.
	3. Other account receivable	0.03	
	4. Trade account payable	0.07	
CS LoxInfo Public Company Limited ("CSL") / a subsidiary of AIS group - Provides internet data center service and satellite uplink-downlink services	1. Revenue - Revenue from providing TV signal uplink services	4.27	TCB, a subsidiary, provided TV signal uplink services. Service fee was charged under normal contracts and conditions on an arm's length basis.
	2. Expenses - Application development service	2.67	The Company used application development service under ordinary course of business. Service fee was charged under normal contracts and trade conditions on an arm's length basis.
	- The Company paid for internet service charges and other expenses	0.42	The Company used internet services and other services under ordinary course of business. Service fee was charged under normal contracts and trade conditions on an arm's length basis.
	3. Trade accounts receivable and accrued income	0.90	
	4. Trade accounts payable	1.79	

Related Companies/ Relationship	Transactions	Value of Related Transactions For the year ended December 31, 2018 (Million Baht)	Reason and Necessity of Transaction
		Consolidated	
IT Applications and Services Co., Ltd. (“ITAS”) / INTOUCH holds 99.99% shares. - Provides system software and related services.	1. Expenses - The Company used accounting software and consultancy service	5.69	The Company used software programs for accounting data processing including consultancy service, which supported the ordinary course of business. Service fee was charged at prices close to those of other companies that conduct the same nature of business.
	2. Trade accounts payable and accrued expenses	0.26	
Shenington Investments Pte Ltd (“SHEN”) / The Company and Asia Mobile Holdings Pte Ltd. (AMH) jointly hold shares in SHEN at 51%: 49%. - A holding company investing in telecom service business	1. Other income - Interest income	101.60	The Company provided financial support in the form of shareholder loan. The interest rate was charged at the actual cost of financing plus margin on an arm’s length basis.
	- Income from providing consultancy services. SHEN paid consultancy and service fees on a monthly basis. Service fee was charged based on the cost of executives and employees providing the service in order to support business course of the Company	7.72	This is the Company’s supervision policy on subsidiaries to enable maximum benefits over the supervision.
	2. Long term loan	1,924.90	
	3. Accrued income	0.35	
	4. Other receivables	42.37	
Lao Telecommunication Public Company (“LTC”) / SHEN and Lao People’s Democratic Republic jointly hold shares at 49%: 51%. - Provides telecom services in Lao People’s Democratic Republic.	1. Expenses - Gateway operation and maintenance service fee	5.32	IPIN, a subsidiary, paid for gateway operating fee and maintenance service fee for IPSTAR gateway in Lao. The service was under ordinary course of business and charged under normal contracts and trade conditions on an arm’s length basis.
	2. Other receivables	0.08	
	3. Trade account payable	0.45	

Related Companies/ Relationship	Transactions	Value of Related Transactions For the year ended December 31, 2018 (Million Baht)	Reason and Necessity of Transaction
		Consolidated	
Advanced Wireless Network Co., Ltd. (AWN) / a subsidiary of AIS group Provides telecommunication and network services	1. Revenue - Revenue from sale satellite equipment	46.02	The Company is the service provider of transponder leasing under ordinary course of business. Service fee was charged under normal contracts and trade conditions on an arm's length basis.
	- Revenue from system integration	18.24	The Company had revenue from system integration under ordinary course of business, equipment and service fee charged under normal contracts and trade conditions on an arm's length basis.
	- Revenue from providing TV signal uplink services	8.77	TCB, a subsidiary, provided TV signal uplink services under ordinary course of business. Service fee was charged under normal contracts and trade conditions on an arm's length basis.
	2. Expense - The Company paid for mobile phone services and others for its executives and employees	3.32	The Company used mobile phone services to support the ordinary course of business. Service fee was based on market price on an arm's length basis.
	- Other expenses	0.19	
	3. Trade accounts receivable and accrued income	26.87	
	4. Trade accounts payable and advance receipt and accrued expenses	8.50	

Related Companies/ Relationship	Transactions	Value of Related Transactions For the year ended December 31, 2018 (Million Baht)	Reason and Necessity of Transaction
		Consolidated	
High Shopping Co., Ltd. ("High Shopping") / INTOUCH and Hyundai Home Shopping Network Corporation (Hyundai Home Shopping) jointly hold shares in High Shopping at 51%: 49% - Operates a home shopping business in Thailand.	1. Revenue - Providing the broadcasting service and TV guide service	11.33	DTV, a subsidiary, provided the broadcasting service and TV guide service. Service fee was charged under normal contracts and trade conditions on an arm's length basis.
	- Other income	2.84	
	2. Trade accounts payable and advance receipt	1.08	
	3. Other current liabilities	2.04	
Other related parties	1. Revenues - Other income	22.62	The Company was provided consulting and management service fees to support the ordinary course of business. Service fee was based on market price on an arm's length basis.
	2. Expense - Royalty, consulting and management service fees	22.22	
		1.52	
	3. Trade accounts receivable	16.85	
	4. Trade accounts payable and advance receipt and accrued expenses	0.16	
	5. Other current liabilities		

Necessity and Justification of Transactions

In 2018, Thaicom Plc. and its subsidiaries ("the Company") had related transactions as shown in Note 4 of the 2018 audited financial statements. The related transactions stated that those transactions which the Company had undertaken with INTOUCH group and Singtel group e.g. its subsidiaries, Joint venture, executives and other businesses on which INTOUCH, Singtel and the Company had significant influence, whether directly or indirectly, were shown as related transactions.

The Company set the sale and purchase prices for goods and services with related parties under normal contracts and trade conditions on an arm's length basis. Crucial transactions required adhering to the rules set forth by the Securities Exchange Commission (SEC) and the Stock Exchange of Thailand (SET) had been examined and approved of justification and necessity to the Company by the Audit Committee.

Methods of Related Transactions

Thaicom Plc. is a listed company in the Stock Exchange of Thailand. Its business target is to create maximum benefits to its shareholders with a policy to sufficiently disclose information to investors and abide by the rules, regulations and laws of the country where the Company undertakes business. To enable transparent proceedings on related transactions, lessen conflicts of interest and conform with good governance principles as well as the laws, rules and regulations of such related supervisory units as the Stock Exchange of Thailand (SET) and the Office of the SEC in order to provide sufficient information for investment decision, the Company has set up criteria for related transactions as follows:

The Company proceeds related transactions with connected persons on an arm's length basis for the Company's maximum interest under fair prices and business conditions which shall not create conflicts of interest. Where there is doubt whether related prices are based on an arm's length basis or not, the Company is required to submit such transactions to the Audit Committee for approval prior to the proceeding.

The Company has authorized its executives a certain limit of budget for endorsement in accordance with their ranks. Nevertheless, the approval authority is prohibited to those directors and executives who have stakes or may have personal conflicts of interest over the transactions. Additionally, these directors and executives, having no voting right shall not attend meetings related to the transactions. The Audit Committee shall examine the related transactions of the Company and its subsidiaries with connected persons to ensure the conformity with the rules and regulations of the Stock Exchange of Thailand. However, the related transactions between the Company and related parties with less than 10% of shares will not be examined by the Audit Committee pursuant to the Notification of the Stock Exchange of Thailand Re: Disclosure of Information of Related Transactions.

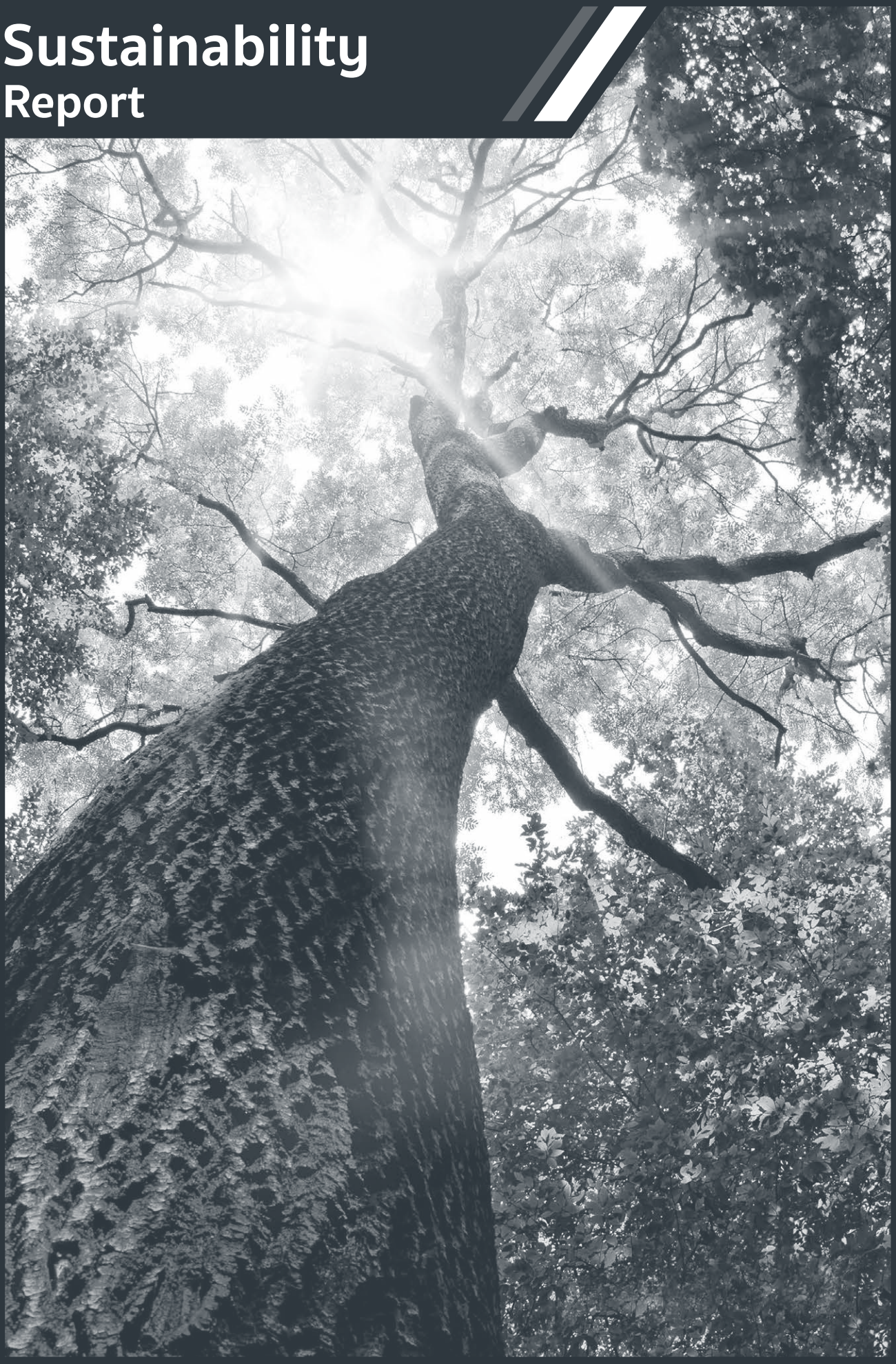
The related transactions shall be conducted as usual since they are practiced under normal course of business and in accordance with trade conditions on an arm's length basis with prices or remuneration fees within the rate approved in accordance with the Company's financial practices. The vendor selection process is required to be regularly reviewed to ensure fair competition from outside vendors who may offer greater benefits to the Company and also serve as external sources for comparison of price and trading terms.

The Company discloses information on related transactions in compliance with Article 24 (revised 2016) of the Thai Generally Accepted Accounting Principles regarding disclosure of information on related parties, and in accordance with the regulations of the Office of the Securities Exchange Commission and the Stock Exchange of Thailand. The Legal and Compliance Department and the Accounting Department shall submit the related transactions or those which may cause conflicts of interest to the Audit Committee for examination and comments on necessity and justification for the Company's maximum benefits before forwarding to the Board of Directors. In addition, related transactions shall be submitted by the Accounting Department on a monthly basis to comply with the rules and regulations of the Stock Exchange of Thailand (SET) and the Office of the Securities Exchange Committee (SEC).

Future Policy or Trends of Related Transactions

In the future, the Company may have to do related transactions through both customary and non-customary business transactions under reasonable prices and conditions that yield maximum benefits to the Company. Further, the Company will fully abide by the laws on securities and stock exchange, as well as rules, notifications, orders or regulations of the Stock Exchange of Thailand (SET) including regulations and practices relevant to disclosure of related transactions, acquisition or disposal of major assets of listed companies and subsidiaries. The related transactions will be disclosed in the notes to the financial statements audited by the auditor.

Sustainability Report



Business Sustainability

Thaicom recognizes that in order to achieve and maintain its goals in a sustainable manner, the Company must strive for and focus on good business governance and operations that respond to and reduce negative impacts on the economy, society, and the environment. The Company, therefore, has determined and set goals for sustainability that will continue to create value and growth for the economy and will likewise continue to work unceasingly to create value both for society and the environment. We aim to deliver real results and respond to the needs of all our stakeholders by reaching the Thaicom Sustainability Goals under the concept of "Connectivity for Sustainability". Thaicom conducts all its business operations, therefore, with a focus on and consideration for all sustainable business practices as mentioned above.

Policies to Promote Sustainability

For continued, steady growth and as an organization that is recognized and trusted by its stakeholders for its good corporate governance, the Company has established clear policies on a variety of issues. These have been defined in order to promote development in accordance with good corporate governance principles and have been announced clearly in writing and published on the Company's website for general information and awareness as follows:

- **Sustainable Development Policy**
  1) The Company adheres to the principles of good corporate governance as laid out in the Corporate Governance Policy.
  2) The Company operates its business fairly and ethically, promoting free trade competition and corporate social responsibility throughout the value chain.
  3) The Company is against corruption of all kinds. Our expectations in this regard extend to relationships with all relevant stakeholders, which we take into consideration for collaborations and the development of our business network as a matter of risk management.
  4) The Company respects human rights and protects human dignity without discrimination.
  5) The Company regards its employees as its main resource. The Company employs people without discrimination, supporting their training and knowledge development.
  6) The Company delivers quality products and services and provides continuous customer and consumer relations management, with a focus on respect for consumer rights.
  7) The Company believes in and implements the idea of creating shared value between business and social sectors as a guideline for business conduct to promote mutual sustainable growth. The Company has a focus on providing educational support and access to technology and learning, career and skill building, and developing potential and investment for the benefit of society.
  8) The Company believes in its potential and ability to innovate, which is an essential component for business operations and sustainable growth. The Company encourages employees to develop products and services and to participate in technological, work process, and business model innovation, either to create change or to bring about further development. Our objectives are to achieve positive creativity and product improvement.
  9) The Company conducts its business with an emphasis on environmental sustainability and the conservation of resources by nurturing a corporate culture which encourages environmental restoration and care activities and behavior.

- **Corporate Governance Policy**

  This Corporate Governance Policy has been formulated in accordance with the best practices accepted at both domestic and international levels as outlined in the Principles of Good Corporate Governance of the Organization for Economic Cooperation and Development (OECD) and the Corporate Governance Code for Listed Companies 2012 provided by the Stock Exchange of Thailand. This policy serves as a manual to be adhered to by the Company's directors, management, and employees in performing their duties. The policy is reviewed regularly and not less than once per year to ensure its continued relevance and to update and include any new best practice guidelines in response to the expectations of the Company's shareholders, investors, and stakeholders.

- **Anti-Corruption Policy**

  The Company is committed to conducting its business with integrity and transparency in accordance with good corporate governance principles. The Company is opposed to all forms of corruption, as unethical behavior erodes free and fair competition, harms society, and impedes economic development. In 2013, the Company became a signatory to Thailand's Private Sector Collective Action Coalition against Corruption (CAC). In 2015 the Company was certified by the Private Sector Collective Action Coalition against Corruption Council and recertified for the second term in 2018. This Anti-Corruption Policy constitutes a part of the Company's Code of Conduct.

- **Whistle-Blowing Policy for Misconduct and Fraud Reporting**

  The Company operates its business with adherence to the principles of corporate accountability, authenticity, transparancy, and in accordance with the specified Good Corporate Governance Policy of the Company. The Company believes that employees of the Company must be treated fairly and expects that its employees will behave professionally, with integrity, and in strict compliance with the Code of Conduct of the Company. Thus, the Company will not tolerate any wrongdoing or fraud in the Company and will enforce disciplinary proceedings and actions against wrongdoers. For this reason, the Company has set up channels for reporting wrongdoing and encourages all employees to report any information on misconduct and/or fraud that have occured involving the employees, suppliers of goods and/or services, creditors, debtors, customers, business partners, shareholders, directors, and other stakeholders who have any kind of business relationship with the company. The Company provides protection to employees who provide information, cooperation, or any kind of assistance to the Company with regard to misconduct and fraud.

- **Policy on Fairness and Responsibilities Towards Business Partners and/or Creditors**

  The Company is committed to conducting its business in a manner that builds trust for its partners and/or creditors, especially with regard to financial management, treating all business partners and/or creditors with equality and fairness and with a consideration for mutual benefits. The Company will avoid any situations which can give rise to conflict of interest or cause damage to the Company's reputation or that are illegal. The Company complies with any contract, agreement, or various conditions concluded with business partners and/or creditors. This also applies to compliance with anti-corruption policies, such as requesting, receiving, or granting any trade benefits to business partners and/or creditors with dishonesty.

- **Policy on Respect of Law and Principles of Human Rights**

  The Company promotes and respects the protection of human rights and ensures that the Company's business is not involved in any human rights abuses. The Company also respects and provides fair treatment to all stakeholders based on fairness and human dignity. The Company adheres to non-discrimination of origin, race, gender, age, skin color, etc. Additionally, Company employees must thoroughly understand and strictly adhere to the laws related to their duties and responsibilities. As the Company conducts business in many different countries, this also applies to employees of the Company working abroad, who are required to study the laws, customs, traditions, and cultures of that country before undertaking any activity concerning the Company's business so as not to cause problems or violate laws with regard to human rights.

- **Intellectual Property Policy**

  As the Company conducts its business operations both domestically and internationally, the protection and respect of the intellectual property rights of others is considered an important factor in sustainable business operations. The Company recognizes and places great importance on such matters and shall not support any actions which represent a violation of the intellectual property of others. The Company shall carefully check the use of data, documents and various printed materials, including any other works which have intellectual property rights, to ascertain and ensure that the Company is legally entitled to use said work prior to using it.

- **Policy on Occupational Safety, Health, and Work Environment**

  The Company considers the management of safety, health, and environmental conditions to be of utmost importance to successful business operations in today's world, where great focus is placed on creating sustainability in all aspects, whether they be economic, social, or environmental. Therefore, every employee throughout all levels of the company is responsible for maintaining proper safety, health, and environmental conditions by cooperating to ensure the safety of life and property. The administration of occupational safety, health and work environment procedures is carried out in accordance with all applicable laws, regulations, and other relevant provisions throughout the company's business operations. The Company regularly reviews, evaluates, and follows up on these policies and procedures.



Materiality

The Company has identified key sustainability issues based on data analysis, trends, business direction and goals for sustainable development both in national and international domains, while also taking into account the business plan of the Company. This ensures that the Company generates economic value in its business operations, benefiting both society and the environment while also appropriately meeting the expectations of the stakeholders under the Company's Materiality principles, as per the GRI-G4 process guidelines as follows:

Step 1: Identification of key issues relevant to the organization and its stakeholders

The Company compiles important information and data from a variety of sources and factors: internal (business goals and plans), which are gathered from management brainstorming, operational meetings, strategic meetings and analysis of risks associated with the sustainability of the organization; and external (trends in sustainability and expectations of shareholders), which are gathered by reviewing global Sustainable Development Goals, polls, meetings and seminars as deemed appropriate.

Step 2: Prioritization

Issues and topics compiled in step 1 are compared for consistency with issues and indicators as per the GRI-G4 guidelines and are considered, tested, and prioritized accordingly.

Step 3: Validation

It was found that important issues identified during analysis and approval of the Sustainability Development Committee (SDCOM) were similar to those presented in the previous year. These are also in line with the expectations of various stakeholders which showed no significant shift. Some issues also require prolonged response measures, and, as such, key sustainability issues for this year have not changed. These can be summarized as follows:

Economic

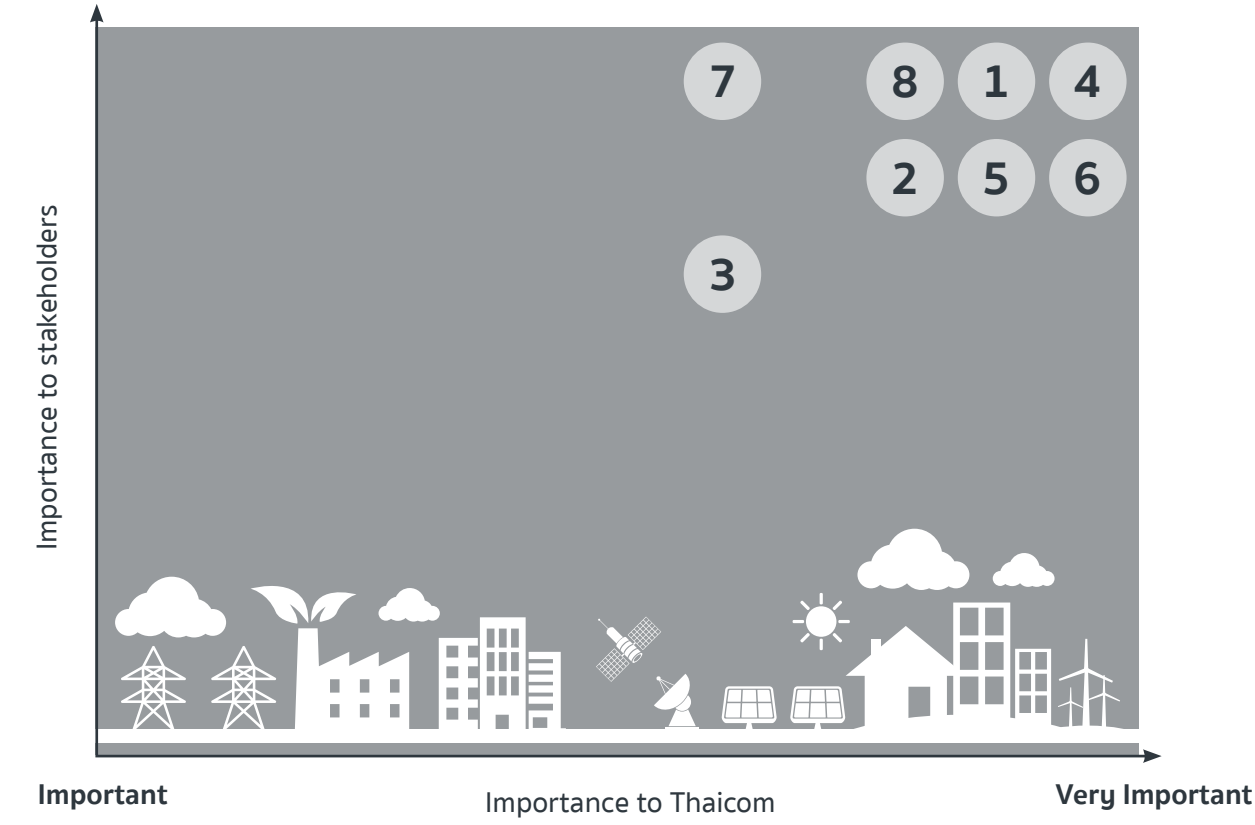
1. Clear, consistent strategy and business plans
2. Steady growth and profit

Environmental

3. Energy conservation

Social

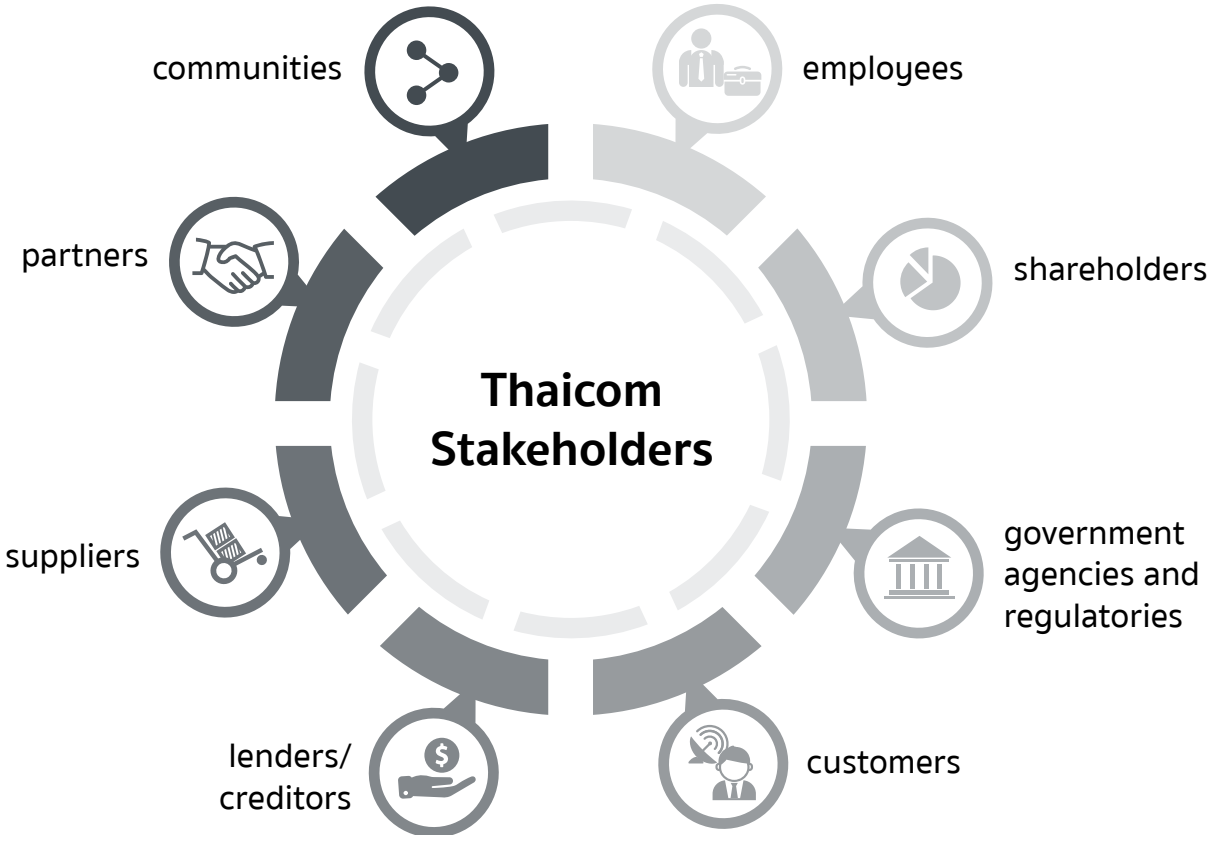
4. Anti-corruption
5. Compliance with rules, regulations, and laws
6. Improved service / maximum customer satisfaction
7. Improved occupational health and safety
8. Reduce disparity and provide equal opportunities



Sustainable Development Framework and Consistency with Key Issues in Global Society

Stakeholder Engagement

The Company regards all stakeholder groups to be of importance, whether directly or indirectly. Stakeholders' classifications are made with great attention paid to all stakeholders and are based upon the impact of business operations on the stakeholders to ensure that all actions and responses to the expectations of stakeholders are carried out in a fair and appropriate manner.



The Company has determined protocols regarding Stakeholder Engagement and these are stipulated in the Code of Conduct, as well as the Good Corporate Governance Manual and the Company's Handbook on Ethics, which are distributed to all Company officers and published on the Company's website. These serve to emphasize the rights of all stakeholders and promote stakeholder participation in order to understand their needs and to respond to each group of stakeholders effectively. These can be summarized as follows:



Stakeholders	Expectations / Demands	Response	Channel / Method
Employees	- Suitable remuneration and welfare - Standardized and fair performance evaluation - Stability and career progression - Knowledge and job skill development - Leadership and management skill development - Good working environment - Occupational health and safety - Equality and fundamental rights - System development and workflow improvement	- Proper treatment under strict adherence to labor laws - Regular training programs to develop specialized skills and other expertise - Encourage career progression - Provide fair remuneration and welfare comparable to other leading companies - Provide a safe and encouraging workplace environment that is conducive to efficient work - Promote the setting of annual targets for individuals / teams mutually agreed upon by supervisors and employees	- Annual Employee Meeting (at least twice per year) - Two-way performance appraisal - Intranet system for internal communications - CEO Roundtable - Ethics Hotline - Announcements - Social media (Facebook, YouTube, Instagram) - Website - Recommendations and feedback - Various types of training programs - Team-building activities - Annual employee opinion survey - TC Mobile App usage
Shareholders	- Maximize satisfaction - Constant satisfactory performance - Good return on investment - Environmentally friendly - Disclosure, transparency, and auditability - Risk and crisis management	- Conduct business in accordance with Corporate Governance Policy and Ethics Handbook within the Sustainable Development Framework - Respect shareholders' rights - Establish ISO 22301 Business Continuity Management Systems (BCMS) standard	- Annual General Meeting of Shareholders 1 time/year - Opportunity Day - Analyst/Investor/Fund Manager meetings - Recommendations and feedback - Annual Report and Sustainability Report - Ethics Hotline - Website - Company visits

Stakeholders	Expectations / Demands	Response	Channel / Method
Government agencies and Regulatory bodies 	- Adherence to laws/ regulations - Cooperate in providing information and supporting projects or activities	- Adherence to various laws/ regulations - Cooperate with government agencies for the benefit of the public - Provide accurate and useful information to relevant government agencies in a precise and timely manner - Control, monitor, and maintain the quality and efficiency of operations that may affect the environment to be better than or equal to the standard/legal requirements	- Meet and greet - Cooperation in various projects as requested - Company visits - Provide lecturers on space and satellite communications - Communications and telecommunications academic seminars - Thaicom Space & Satellite Pavillion - Ethics Hotline - Annual Report and Sustainability Report - Recommendations and feedback
Customers 	- Customer satisfaction with world-class quality products and services - Competence and speed in problem-solving - Listen to recommendations and feedback - Offer products and services that meet the needs of the modern Digital Era - Risk and crisis management	- Emphasize reliable, quality products and services that meet the needs of customers - Develop workflow to help employees provide efficient service - Have a quality control policy and ISO 9001:2008 quality management system to create maximum satisfaction for customers - Establish ISO 22301 Business Continuity Management Systems (BCMS) standard - Have business ethic-oriented policies, demonstrating responsibility to customers in a variety of matters, such as strict confidentiality and anti-corruption practices	- Recommendations and feedback - Website - Social media (Facebook, YouTube, Instagram) - Satisfaction and feedback surveys - Annual meetings/seminars/training programs - Annual team-building activities - Customer Support unit - Call Center (DTV) - Ethics Hotline - Annual Report and Sustainability Report
Lenders / Creditors 	- Adherence to terms and conditions - Risk and crisis management	- Strict adherence to credit facility terms and conditions - Establish ISO 22301 Business Continuity Management Systems (BCMS) standard	- Analyst/Investor meeting - Ethics Hotline - Annual Report and Sustainability Report - Website - Recommendations and Feedback

Stakeholders	Expectations / Demands	Response	Channel / Method
Suppliers 	- Adherence to terms and conditions - Risk and crisis management - Equality, fair treatment and transparency in business operations - Transparent, auditable and punctual procurement system - Compliance with terms of contracts or agreements	- Regular and thorough communication of business operations to suppliers as per the principles of good corporate governance - Comply with the Sustainable Development Policy for dealings with suppliers and business partners, as these contain guidelines for fair treatment, both for fair partner selection in accordance with partner business practices, and to maintain lasting business relationships, taking into account mutual benefits and business growth - Adhere to contracts and comply with agreed-upon terms and conditions to preserve Company credibility and to comply with the Company's Code of Conduct - Cooperate in the development or improvement of goods/product and service quality	- Supplier Charter - Green Procurement Guideline - Ethics Hotline - Annual Report and Sustainability Report - Website - Recommendations and Feedback - Meetings and seminars - Company visits - Supplier satisfaction or participation surveys
Partners 	- Ethical and transparent business conduct - Compiliance with mutually agreed-upon terms of contracts or agreements	- Support the exchange of knowledge and communication for the understanding of business trends in the satellite industry and to stimulate and enhance the country's satellite communications industry - Cooperate in the development or improvement of goods and product quality	- Business negotiations - International Seminar of Satellite Industry Enterprises - Ethics Hotline - Annual Report and Sustainability Report - Website - Recommendations and Feedback - Meetings and seminars - Company visits
Communities 	- Ethical and transparent business conduct - Compiliance with mutually agreed-upon terms of contracts or agreements - Provide support and assistance for social activities - Conduct business operations with transparency, auditability, and without fraud - Environmentally friendly	- Actively and continuously promote activities to provide educational opportunities and protect the environment - Survey needs and enhance the quality of life of communities surrounding the Company - Promote and create awareness for participation in employee social and community development via a variety of Company projects	- Ethics Hotline - Annual Report and Sustainability Report - Website - Recommendations and Feedback - Company visits - Provide lecturers on space and satellite communications - Thaicom Space & Satellite Pavillion - Quality of life and environment improvement activities in communities - "Thai Kids, Thaicom" project



Summary table illustrating consistency between strategies, operations, and stakeholders for sustainability

Area	SD Framework	SDG	Materiality	Strategy / Operations	Stakeholders

Economic	• Connectivity
	• Innovation
	• Responsibility
	• Corporate Governance
		9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
		11 SUSTAINABLE CITIES AND COMMUNITIES
			• Good business strategy/plan
			• Growth and good performance
			• Provide the best customer service, quality/satisfaction
				• Have a good, thorough, satisfactory communications network for every situation
				• Excellence in products and services
				• Create product, service and business strategy innovation
				• Develop products and services with a focus on customer needs
				• Participate with suppliers and partners to develop potential and find new joint business opportunities
				Actions undertaken:
				  • NAVA
				  • LOOX TV
				  • Expand the market, continually providing innovative broadcasting services in Africa by partnering with Media Vision clients
				  • Provide staellite business consultancy to Bangladesh clients
				  • Partner with clients to connect communications and broadcasting businesses in the Philippines and Myanmar
					• Shareholders
					• Customers
					• Lenders/ creditors
					• Suppliers
					• Partners
					• Government agencies and regulatory bodies
					• Employees

Area	SD Framework	SDG	Materiality	Strategy / Operations	Stakeholders
Environmental	• Responsibility • Innovation	 	• Energy Conservation	• Manage resources and mitigate environmental impacts • Develop business process innovation Actions undertaken: • Environmental policy • Energy conservation policy • Energy conservation • Finding alternative energy sources to solar energy • Carbon footprint assessment and registration with the Greenhouse Gas Management Organization • Application to join as a pilot organization in support of the domestic carbon market • Waste and waste water management in the organization • Together with the relevant municipal authorities, find ways to manage waste water for the Khlong Bang Sue Noi community	• Shareholders • Government agencies and Regulatory bodies • Employees • Communities • Suppliers
Social	• Connectivity • Innovation • Responsibility • Corporate Governance	 	• Anti-corruption • Comply with rules/ regulations • Occupational health and safety • Differences and equality	• Develop and manage human resources efficiently • Respect human rights • Fair treatment and practices throughout the business chain Actions undertaken: • Became a signatory to Thailand's Private Sector Collective Action Coalition against Corruption or the CAC • Regular improvement of Corporate Governance Policy and Anti-Corruption Policy • Design a comprehensive and continuous employee care program-the Wellness Program • Establish a positive relationship between employees and the organization and create incentives using new methods, such as the TC Mobile App • Participation in the country's human resource development	• Shareholders • Customers • Lenders/ Creditors • Suppliers • Partners • Employees • Government agencies and regulatory bodies • Communities

Economic Performance

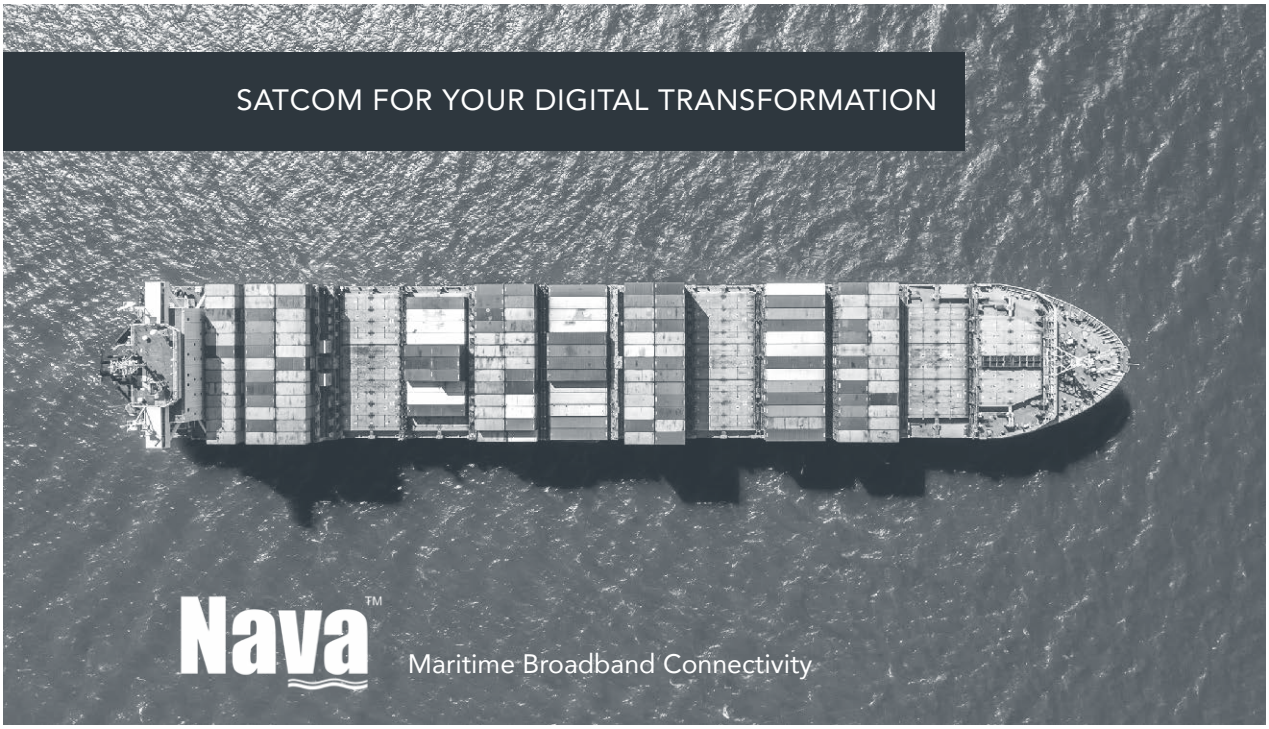


Innovative Communications Network for Sustainable Development

In this era of digital economy and society, rapid changes in telecommunications and technology not only influence our everyday lifestyles and access to information, but also cause shifts in consumer behavior and demands. In addition to emphasizing the foundation and improving communications and telecommunications network quality, creating business innovation through various media, and producing high quality products and services that answer the lifestyle needs of consumers, Thaicom sees the development of media and information technology alongside striking digital content as an important driving force for the economy at large, the communications industry, and the telecommunications business.

- **Mobility Platform with "NAVA™"**
  Today, the satellite communications market in the maritime industry is witnessing significant growth, with a global value of approximately USD 2.01 Billion in 2015 and an estimated growth of around USD 3.10 Billion in 2020. CAGR growth is estimated to be in the region of 9%, with the Asian satellite market accounting for 20% of the global market. Thaicom sees this as an opportunity to expand our business under the principles of equal access to information and communication in all circumstances. Thaicom seeks to develop communications networks that are accessible by all, responding to the communications behaviors and media consumption of modern consumers by creating a basic maritime communications network to accommodate Thailand's natural gas exploration and production, while also enhancing the communications of fisheries, shipping, and ocean travel sectors.

Nava™
A THAICOM BRAND



In 2017, the Company expanded its services to commercial vessels with the Digital Ship innovation, creating opportunity for our development and growth as a market pioneer using the advantages rendered by the Fiber-to-Ship ™ satellite communication technology. This is crucial for improvement in the efficiency of the Thai maritime transport sector and in preparation for greater competition in the global market, while still nurturing a safer, more energy-friendly and efficient maritime transport industry. These improvements will inevitably play an important part in equipping the Thai maritime industry to become a center of maritime transportation in accordance with the Eastern Economic Corridor (EEC) policy of the Thai government and the Belt and Road Initiative (BRI); also known as the One Belt One Road or OBOR initiative) of the Chinese government. The BRI is an infrastructure development and investment strategy project, covering both overland and sea routes, which will contribute to the development of the global economy and trade. Thailand's location not only allows it to be a transportation hub for both rail and sea transportation systems, but also, thanks to the Company's available infrastructure for high-speed satellite communications, makes it possible to reap the benefits and advantages as a service provider for shipping and sea transport activities envisioned as part of the Maritime Silk Road route.

In 2018, the Company launched its maritime service platform known as "NAVA™", providing a wide variety of services. The Nava™ Connect service provides high-speed internet connectivity of satellite communications between ships and land, both for use in vessel operation and for crew and passengers to maintain contact with their families. The Nava™ Media service is a system providing both entertainment and training by using high-speed internet via satellite. This allows those on board to watch educational and entertainment content, as well as various distance training courses while on board. These services also provide solutions that help to support and meet the needs of customers. For example, the Nava™ Ship Manager service is a solution to help manage a ship's operation systems, including asset and engine monitoring, fuel advice, and maintenance planning to improve operational efficiency. For those in the maritime industry, basic communication is incredibly important in allowing them to perform their duties safely and satisfactorily, with the knowledge they can communicate with their loved ones and families at any time, resulting in better quality of life.

In the initial phase, the target market for the NAVA™ service is Thailand and Japan. This is because the Company has a strong maritime communications marketing base and high growth potential in these locations, with plans to expand the market to additional countries in the future. In addition, the Company is also cooperating with its business partners to expand to additional services. At present, NAVA™ services are available to the Oil and Gas maritime sector in the Gulf of Thailand, with more than 65 ships using the service and the ability to provide direct communication services to more than 2,100 individual subscribers (information as of December 31, 2018), with an average income of USD 24,000 per year per ship.

Thus, it can clearly be seen that the NAVA™ service is the direct result of satellite technology utilization in the development of services that meet the needs of customers, allowing for effective communication even from the middle of the ocean. Not only that, but it provides an avenue to create new business opportunities for the Company in markets where these types of communication were previously unavailable. One of the key features of the NAVA™ service is its customer data security, an aspect on which the Company has placed great importance. Additionally, it is also a highly flexible network that supports a variety of applications, with a team on-hand to provide customer support 24 hours a day every day.

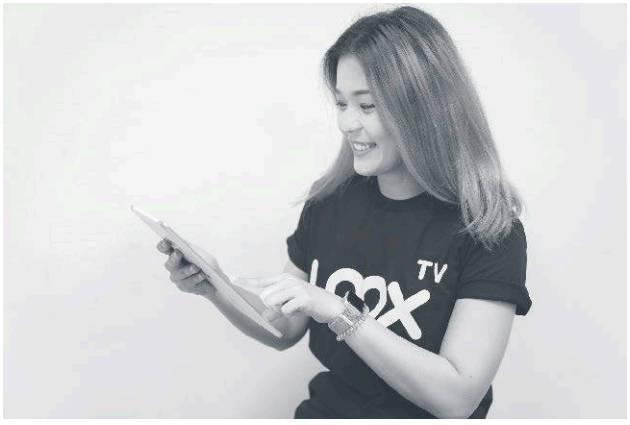
In addition to our response to customer needs, throughout 2018, the Company continued to develop equipment for use in the NAVA™ service to create growth throughout the business chain. For example, initiating concepts and encouraging cooperation with partners in the design and development of satellite dishes for installation on ships not only supported the development of the satellite dish production industry in Thailand, but also resulted in reducing the price of NAVA™ services, allowing us to expand our services to those in the smaller fishing vessel sector so that they too can have access to these same services at less expensive prices. Comprehensive connective communications are a major mission of Thaicom, while we also support the growth and forward movement of our business partners alongside us. At present, the development of satellite dishes as described above remains in the process of development and testing according to International Telecommunications Union standards.

- **LOOX TV Platform Application**

  Thaicom, as a provider of national telecommunications services through satellite broadcast for more than 27 years, recognizes the importance of creating sustainability in the television media industry of the 4.0 era. The Company therefore developed an application under the name "LOOX TV" as a comprehensive source of TV media content, including digital, cable, and satellite TV, creating a new television viewing experience for users by connecting mobile devices with a satellite reception device, making content accessible, convenient, and easy to view at any time. This is a community for TV lovers which serves as a new and exciting alternative, supporting television media growth from upstream to downstream, and creating a host of benefits for viewing audiences, content producers, media outlet owners, and advertising businesses.

  Within the space of just 1 year, LOOX TV has seen over 1 million downloads and continues to see an increase in channel partners, as well as the addition of the DLTV educational channel of the Distance Learning Foundation as a means of reducing the educational gap for Thai youth. We have also collaborated with organizations providing viewing statistics surveys, allowing channels and programs to use said viewer statistics for processing in combination with their other viewing channels, thus ensuring greater accuracy of achievement measurements for TV programs and advertising companies alike.





- **Leader in Comprehensive Satellite Telecommunications Services in Africa**

  In 2018, Thaicom continued to expand its broadcasting services in Africa according to its business strategy. This included engaging in a memorandum of understanding with Mediavision Limited, a European-based content delivery specialist, in order to upgrade the broadcasting service platform using the Thaicom 6 satellite, offering our innovative solution for broadcasting services. This Multi-Channel Per Carrier (MCPC) broadcast platform for satellite TV channels is a cost-effective, highly efficient distribution solution, allowing programmers and service providers in Africa to easily access the Thaicom satellite TV broadcasting platform, to expand their broadcast network to countries in the southern part of the Sahara Desert in Africa, as well as to enjoy the benefits of access to integrated solutions for linear and non-linear content distribution, including Mediavision's Internet Protocol TV (IPTV).

- **Consultant for Bangladesh Satellite Business Development-Expanding the Potential for Integration of Knowledge and Capabilities in the Satellite Business**

  Based on Thaicom's longstanding depth of experience in launching and developing satellite capabilities, as well as its expertise in providing ground network services, in order to reduce communications gaps in the Asia Pacific region, the Company is helping to enhance the business success of the Bangabandhu-1 satellite. In 2018, Thaicom entered into a multi-year agreement to provide its services as a business and marketing consultant to the Bangladesh Communication Satellite Company Limited (BCSCL), a Bangladesh government-owned company. The agreement seeks to improve the services of the Bangabandhu-1 satellite, Bangladesh's first geostationary communications satellite, helping to narrow the connectivity gap and promote Bangladesh's transition process into the digital age. The satellite will be used to broadcast television and telecommunications broadcast signals, not only in Bangladesh, but also in other Asian countries, as well as for use in rescue missions and disaster relief, management and recovery. Thaicom's involvement as a consultant in the project, bringing its wealth of experience and potential to help this client develop their satellite business, will inevitably result in greater development and expansion of the satellite communications business in the region, and thus, mutual sustainable growth.



- **Thaicom Provides Satellite Resources and Services to CANAL+ for TV Channel Broadcasting in Myanmar**

  Thaicom entered into a multi-year contract to provide broadcasting services via the Thaicom 6 Satellite to CANAL+ Myanmar, a subsidiary of CANAL+ (which is part of France-based Vivendi SA, one of the world's largest media companies), a TV broadcast service provider both in Myanmar and in various other countries. The CANAL+ broadcast group has leased four transponders on the Thaicom 6 satellite and broadcast platform on Ku-band to deliver a viewing bouquet initially comprising 80 channels.

- **Thaicom Teams up with WIT to Provide Broadband Services in the Philippines**

  We Are IT (WIT) Philippines Inc. will use the entire Thaicom's IPSTAR satellite capacity of both spot and broadcast beams, increasing the capacity of what is currently the 3rd largest telecommunications company in the country. The agreement aims to provide high-speed internet connectivity and communication services for the rollout of nationwide enterprise and government broadband projects, supporting the current needs of the Philippine market. It also provides market verticals in the Philippines, including broadcasting, telecoms, mobile network operators, and maritime users with the opportunity to see firsthand Thaicom's strategy for business partnership with service providers in various countries, bringing the business strengths and potential of the Thaicom satellites in combination with Thaicom's local market expertise to enhance competition in those countries' markets.



Continued Cooperation with Business Allies to Encourage Innovation in the Communications Industry

- **Thaicom Partners with the Royal Thai Navy and Top Engineering to Develop UAV, Expanding Exploration in the Gulf of Thailand**

  Thaicom has taken part in the signing of a Memorandum of Understanding on the development of "Command, Control and Communication of Unmanned Aerial Vehicles (UAV) in the Gulf of Thailand" with the Royal Thai Navy and TOP Engineering Corporation Co., Ltd. The main purpose of this MOU is to establish mutual collaboration on UAV research, knowledge sharing and initiatives in all state-of-the-art innovations in order to enhance and expand UAV operations by using satellite capabilities. All research results will be passed on to the Royal Thai Navy for the benefit of future national security.

- **Thaicom Joins Up with AIS and GISTDA to Test 4G LTE Signal Strength for Drone Control for the First Time in Thailand**

  Thaicom is forever seeking new, advanced technologies that can be further developed and integrated with satellite systems for a variety of communication applications. In 2018, Thaicom partnered with Advance Info Service Public Co., LTD.; the Geo-Informatics and Space Technology Development Agency (GISTDA); and the Strategic and Operational Aerospace Research Center (SOAR). The purpose of the partnership was to test 4G LTE high-speed wireless network signals for use with unmanned aerial vehicles (UAV) or drones in the Eastern Economic Corridor (EEC) Development Plan under the Thailand 4.0 scheme. This was the first time tests of this kind had been carried out in Thailand, and the project set out to measure the capabilities and potential of drones receiving 4G LTE signals at a height of no more than 90 meters as required by law. Information obtained as a result of the tests is to be used for cooperative studies and development in both the public and private sectors in the design of business ecosystems that meet the needs of UAV operation in future.

Unmanned aeriel vehicles or drones are a technology that companies within the Intouch Holdings group (Intouch / AIS / and Thaicom) recognize as coming to play an important role in the daily lives of Thai people in the near future, with the possibilities for a wide variety of commercial applications. These include transportation and shipping, surveys, rescue, or military operations, resulting in a number of social benefits, particularly with regard to the economy and the quality of life of the Thai people. In the future, therefore, we predict greater drone usage in Thailand, and thus see the necessity of an air traffic management system to control these types of drone applications. One important factor for said controls is a communication system with the ability to connect with drones at all times. From the tests carried out, it was found that control within the 2.4 GHz and 5.8 GHz frequency bands still has limitations in its receipt-transmission range. Because of this, a number of countries such as Japan, the U.S.A, and countries within the European Union have begun to experiment with a transmitter attached to the drone itself, which would then report the drone's location, altitude, heading and speed coordinates back to the air traffic control center via the 4G LTE network, thus reducing the aforementioned limitations in efficient receipt-transmission of data.

Customer Satisfaction Standards

Thaicom is committed not only to delivering and maintaining its excellent service quality, but also to continuing measures to foster positive relationships, creating a strong network of satisfied customers through communication and participation in activities. These measures continually bring about greater improvement in services based precisely on customer demands. This is one of the clear objectives and policies of the Company under which it operates as a whole and which is practiced by employees at all levels.

The Company carries out an annual customer satisfaction evaluation covering a variety of aspects, the results of which are then used to analyze and improve services. In 2018, the Company assigned BMRS Asia Co., Ltd. (Thailand) to conduct its customer satisfaction survey and evaluation. The results showed a customer satisfaction level of 83.2%.



This improvement is a result of the implementation of plans and actions based on previous customer satisfaction evaluations. Issues found to be of particular interest to customers can be summarized as follows:

Broadband Services

The Company has sent technical support and service personnel to provide customer assistance and coordination for new satellite projects using a proactive protocol both domestically and internationally, ensuring the absolute success and completion of said projects. This also provides the opportunity to encourage customers in the realization of new business/project opportunities arising from satellite technology usage for maximum benefit.

Broadcast Services

The Company supports its customers' business operations by sending them support personnel experienced in broadcast technology, especially with regard to advice on business expansion and planning for appropriate broadcast technology usage, utilizing technology that is in line with developments and changes in the digital age. We also provide technical data support and invite customers to visit the Company in order to gain knowledge and understanding of technological changes beneficial to the business operations of customers.

Transponder Services

The Company strives to communicate and share up-to-date technology with its customers, particularly since satellite technology and usage has changed substantially in recent times, thus enabling customers and companies to adapt accordingly and grow and develop their businesses in a sustainable manner. The Company continues to present new technology, both related and unrelated to satellite usage, through training sessions held by the Company in order to benefit customer businesses.

In 2018, Thaicom focused on a proactive approach to better understanding the businesses and business goals of customers that will advance appropriate use of satellites and technology in this modern era. In addition to customer satisfaction evaluations, the Company also organizes a variety of activities to promote higher satisfaction levels, create greater engagement, and enhance communications with its customers. The Company has elected to use a tailored approach in relationship development appropriate to each individual customer group, for example, joint sporting events, training sessions, communication technology exchange, etc. The Company also provides its customers with a wide variety of contact channels to facilitate customer feedback and comments. This includes face-to-face, telephone, website and email contact, all of which are protected by our customer privacy and data protection system and policies, ensuring that all said customer data will be protected under Thai laws and that no breach of privacy will occur.

Customer Support Contact

Thaicom Satellite Customers

Tel.: +66 2596 5060 (Main)
+66 2591 5736 - 49
+66 2591 0721, +66 2591 0712
+66 2596 5077 (Technical)

Email: cnd@thaicom.net

Thaicom Website: www.thaicom.net
www.ipstar.com

Customer Service http://tcns.thaicom.net

DTV Service Customers

Tel.: +66 2950 5005 (Call Center)

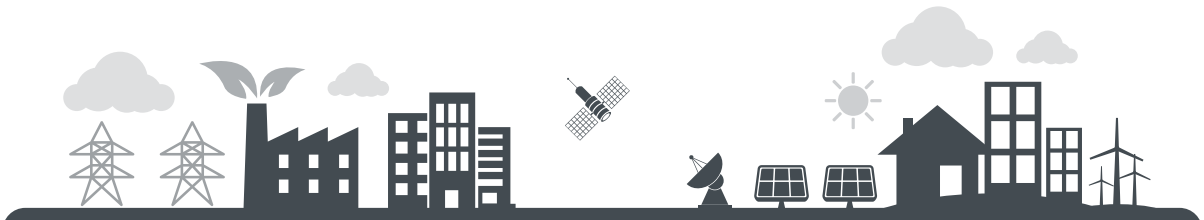
Website: www.dtvthai.com

Social Performance



Telecommunications Business for a Sustainable Society

Thaicom places great importance on conducting its business operations in a socially responsible manner. For this reason, the Company has incorporated its sustainable development policy and a variety of other policies to improve well-being and create sustainability in many aspects. Throughout previous years, the Company has operated its business on the principles of fairness and transparency in accordance with Good Corporate Governance through activities that demonstrate social and environmental responsibility. In addition, the Company always strives to communicate and report its social responsibility activities and stakeholder participation both inside and outside the Organization.



Sustainable Development Policy of Thaicom Public Company Limited:

Thaicom recognizes the importance of strengthening its business alongside practicing social development and environmental responsibility through good governance and the involvement of stakeholders in a variety of contexts in order to achieve sustainable growth. The Company has defined its scope of responsibility under the principles of good corporate governance; fair business practices; anti-corruption; respect for human rights; respect and adherence to labor rights; responsibility to consumers through innovation, environmental management and sustainability; and participation in social and community development.

More information about our Sustainable Development Policy and other policies to promote good corporate governance can be found and downloaded at www.thaicom.net/sustainability

Throughout 2018, the Company carried out its operations with consideration for social aspects to help create a sustainable society, both within the business process by being responsible for its products and delivering quality services, creating satisfaction, reliability and value throughout the Value Chain (CSR in Process), and with social responsibility outside of the Value Chain (CSR after Process). To this end, the Company encourages social sustainability with an emphasis on education and improving the quality of life in communities with due regard to the environment. During the past year, the Company has operated various projects itself, along with the coordination and cooperation of government agencies and local authorities, strengthening the involvement of all relevant parties and improving the volunteer spirit and social responsibility in employees. Details are as follows:

Fair Business Operation throughout the Value Chain

Suppliers and partners are one of the groups of important stakeholders who contribute to sustainable growth. Because of this, the Company has constructed guidelines for communication with and the support of suppliers and partners in accordance with Company business operations. The "Supplier Charter" was created in order to support the business of suppliers and partners and to clearly demonstrate our responsibility to society and to our stakeholders in the following areas:

- Business Ethics
- Human Rights
- Environmental and Safety Standards
- Business Sustainability Standards, such as Commitment and Responsibly, Risk Management, Communication and adherence to various other laws and legislations.

**More information regarding the Supplier Charter can be found at www.thaicom.net/sustainability*

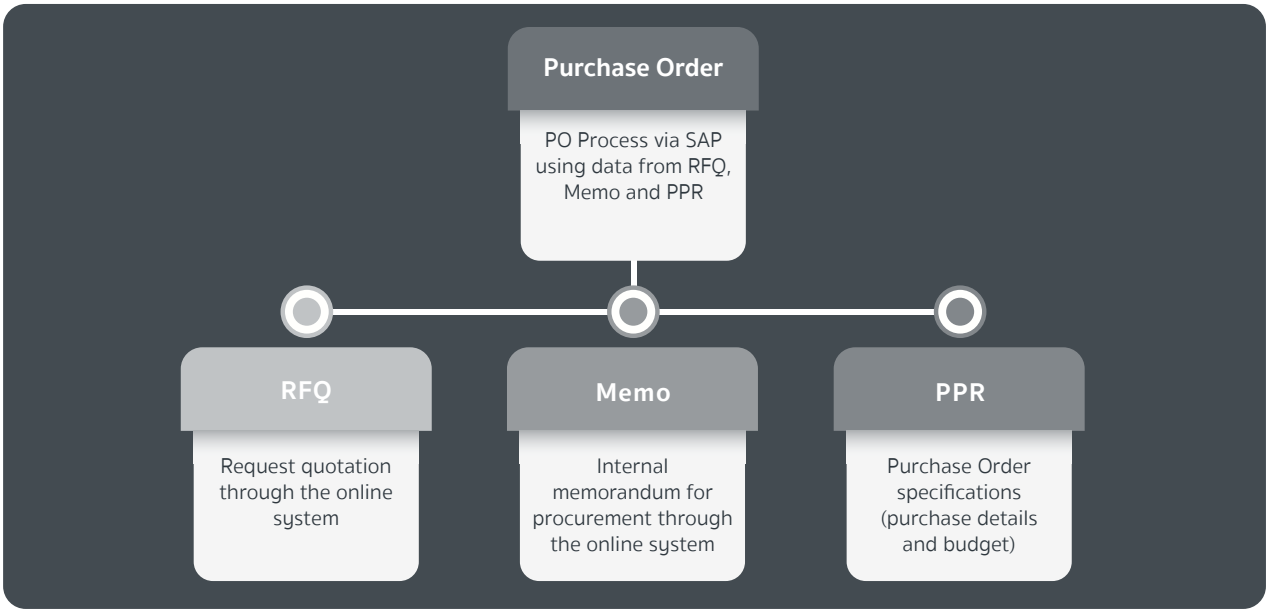
By encouraging suppliers to understand the importance of the abovementioned principles, they can also reap the benefits of sustainable growth. As such, the Company has developed the following work procedures and communication methods for suppliers:

Supplier Management

The supplier data system of the Company is updated frequently to ensure the database is current and that it assesses and prioritizes suppliers accurately. It also features data on user satisfaction and feedback in the form of reviews of products and services which can be used to assess suppliers both fairly and quickly.

Development and Improvement of Procurement System

The Procurement Management and the Management Information System Department of the Company have jointly developed a Web PR system to increase the efficiency of PO issuance through the SAP system. This has been achieved by developing 3 additional sub-modules: 1) RFQ, 2) Memo, and 3) PPR. Users from each department will work with these sub-nodules via online procedures, thereby increasing efficiency and convenience and eliminating workflow problems. Additionally, all transactions are recorded for review in report or data format and connected in real-time to the budget control system, effectively reducing over-budgeting problems and decreasing the amount of paper and printing involved in traditional procurement processes.



Supplier Relationship Management and Development

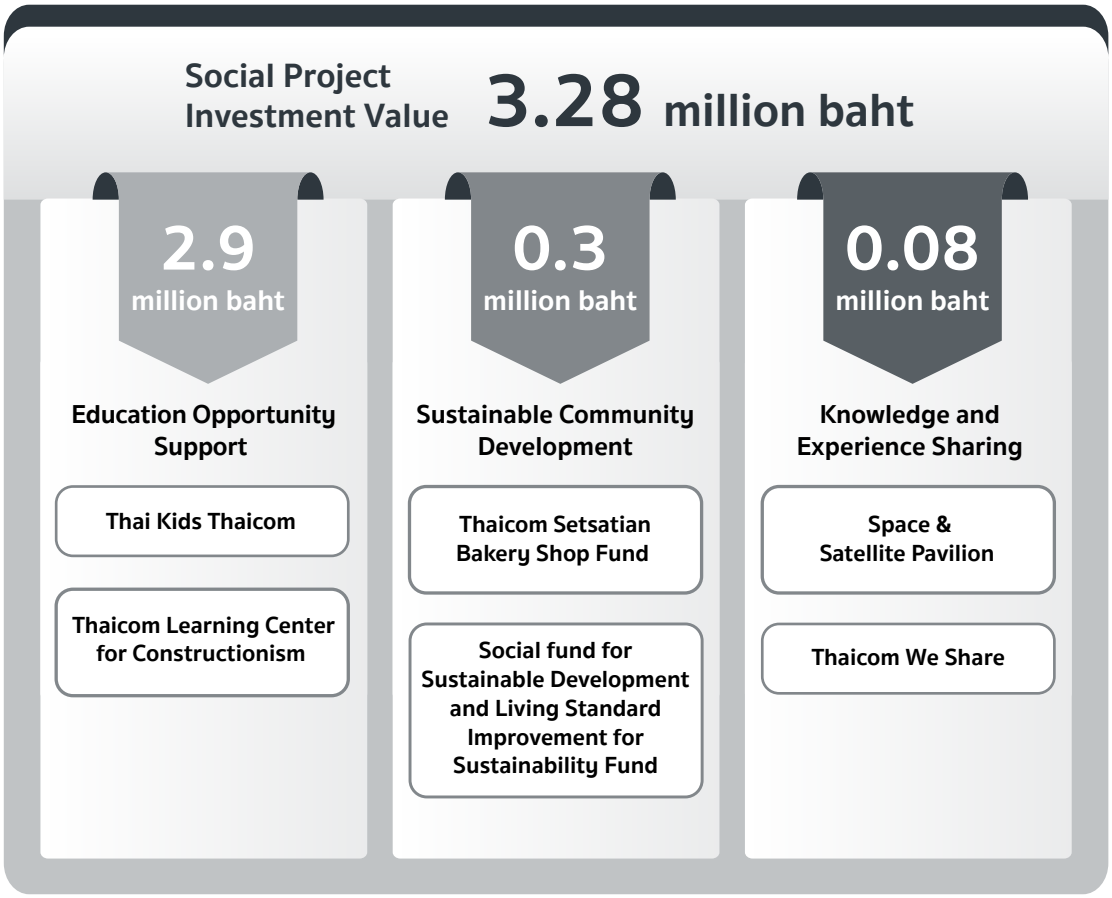
While creating long-term success takes a long time, in order to achieve sustainability for both the Company and suppliers, the Company has formulated the "Supplier Charter" and has distributed it to suppliers for their information and compliance. Throughout this past year, the Company has received 100% response from high-priority and high-value suppliers. Toward the end of 2018, the Company created a Supplier Satisfaction Survey for the first time ever. The first group of suppliers to complete the survey comprised a group of 24 companies. The Company's objective was to understand any needs, problems and/or obstacles in conducting business with the suppliers and thus to create greater understanding and further improve development.

Communication and Supplier Treatment Ethics

The Company has established multiple channels for receiving complaints, including through its website and via direct contact with either the Procurement Department or the Internal Audit Department. These departments will listen to feedback and reach out to the relevant persons in response to supplier queries. The Company also has other processes in place that further demonstrate its commitment to the principles of Business Ethics, including the No Gift Policy, which has been in effect for 3 years consecutively, as well as its Social Media Communication Guidelines and Confidentiality and Data Management Regulations. These are all steps taken by the Company to build confidence in its stakeholders and also as a trial for the ISO 27001 Information Security Management System for which the Company plans to request certification in the near future.

Promoting a Sustainable Society

In order to achieve social sustainability in its business operations as well as to remain in accordance with the "Commitment to Contribute" principle, one of the key values and components of the Thaicom corporate culture, the Company has carried out a variety of projects under 3 major concepts: Education, Opportunity, Support; Sustainable Community Development; and Knowledge and Experience Sharing. Many of these are long-term projects which have continued for 10 years or more. The Company foresees a number of benefits from these projects and thus has continued to expand upon them. With continued collaboration and cooperation, we can maximize both results and the number of beneficiaries, as shown in the following work progress report;











Project	Operations	Results
Thai Kids Thaicom	• Encouraged learning and reduced information access disparity for children in rural areas. • Increased teaching and learning channels for educational institutions in areas with education personnel shortages • Provided and installed "set-top box with satellite dish sets" for schools in rural areas or those suffering education personnel shortages • Taught installation, usage and maintenance of "set-top box with satellite dish sets" to vocational students, Border Patrol Police School teachers and Non-formal Education teachers in order to create career and income opportunities	Provided and installed "set-top box with satellite dish sets" for the Border Patrol Police schools under 4 Divisions of the Northeastern Region as follows: • Border Patrol Police Unit 21, 8 schools • Border Patrol Police Unit 22, 3 schools • Border Patrol Police Unit 23, 3 schools • Border Patrol Police Unit 24, 17 schools • OBEC affiliated schools, Sra Kaew province, 40 schools • Schools in the Thaicom Run for School program, 52 schools • Education Funded schools in collaboration with the National Legislation Assembly, 3 schools • Office of Non-Formal and Informal Education (NFE), "Mae Fa Luang" Rural Education Center for Mountain Clans, Galyani Vadhana District, 5 centers • Tak Technical College, Tak Province



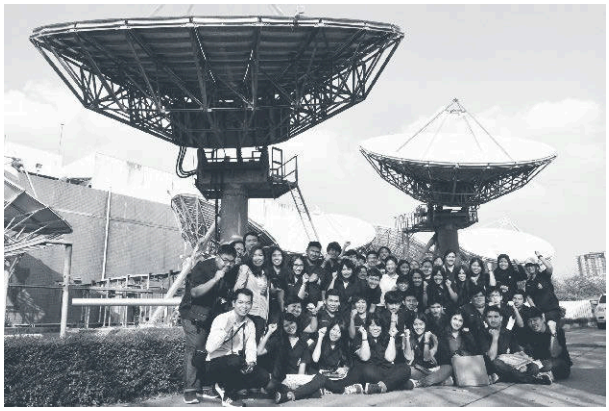




Project	Operations	Results
Thaicom Learning Centers for Constructionism	Trained and developed "Thaicom Learning Center" teachers at Wat Khian Khet School to work as assistant lecturers to help disseminate learning management guidelines for network schools and teachers, enabling learning under Constructionism principles which emphasize self-taught knowledge, as well as to implement these concepts into Social Fund projects for sustainable development • Developed learning resources, created 3-level Thaicom Learning Center and Intelligent Creativity Lab • Learner development with financial support as a 3-year ongoing project, as well as management of project evaluation before and after studies	• 3 high school education learning centers (ongoing studies in Thaicom Learning Center for 3 consecutive years from grades 10-12) • Essential learning elements: technology, media, equipment, computers, classrooms and laboratories • Teacher and administrator development under Constructionism guidelines • 187 students (including 38 students in 2018) have received education through the project under Constructionism principles • 30 projects to further advance education for grade 12 students who graduated in 2018

Project	Operations	Results
Thaicom Setsatian Bakery Shop Fund	Expanded on learning opportunities provided to hearing-impaired students from the Setsatian School under Royal Patronage by acting as volunteer guides in the world-class "NASA A HUMAN ADVENTURE" exhibition. The Company also continues to support various school activities by encouraging career education under the Thaicom Setsatian Bakery Shop Fund for the 3rd consecutive year.	Implementation and expansion of teaching and learning management in the "Thaicom Setsatian Bakery Shop Fund" food career learning center, whereby, in 2018, the center expanded to increase production output by 40%. Thaicom has offered further support in packaging, marketing, and branding. The Company also orders the center's products for use in various company events and special occasions.
Social Fund for Sustainable Development	• Supported the establishment of production funds, value creation funds, and organization and social value in accordance with the principles of business for social sustainability • The Company surveyed and installed set-top box with satellite dish sets for every learning center in the "Mae Fa Luang" Rural Education Center for Mountain Clans included in the project, helping to apply professional knowledge in an area-appropriate manner. • Established fund coordination in Non-Formal and Informal Education centers in all districts participating in the program • Coordinated with government agencies, e.g. the Department of Livestock Development and the Land Development Department to request documentation and education media regarding livestock breeding and agriculture for submission to the Klaikangwon Industrial and Community Education College to be uploaded to the DLTV Network for the learning benefit of the students and general public • Organized success assessment meetings to discuss lessons and experiences from project implementation with various groups and project grantees • Hosted interactive events for Thaicom employees to visit Rural Education Centers participating in the program to promote greater connection to and awareness of social responsibility	Creation of the "Forest for Income under Royal Initiative" project, the "Mountain Clan Children's Scholarship", and the "Vocational Training and Sustainable Development Center" in collaboration with the NFE • 3 NFEs, including Mae Chaem District NFE, Galyani Vadhana District NFE in Chiang Mai Province, and Sob Moei District NFE in Mae Hong Son Province participated in the project, with around 200 participants from local communities • 54 projects in the "Mae Fa Luang" Rural Education Centers for Mountain Clans in areas under the Mae Chaem District NFE Galyani Vadhana District NFE, and the Sob Moei District NFE were established for career creation, e.g. local chicken breeding, pig breeding, goat breeding, termite mushroom and shiitake mushroom cultivation, coffee plantations, and Karen chilies, at 100,000 baht per district for a total value of 300,000 baht • "Mae Fa Luang" Rural Education Center for Mountain Clans, Ban Nam Phae, under the Bo Kluea District NFE, Nan Province, created a coffee processing project with a 120,000 baht budget. The project has been running for 2 consecutive years (continued from 2017)







Project	Operations	Results
Space & Satellite Pavilion	Provided viewing and visitation of a satellite exhibition, as well as visitation to satellite communications-related businesses, with lectures on space and satellite technology from satellite engineers and Thaicom volunteers	In the past year, organizations from government, public and education sectors (both secondary and higher education levels) have visited the exhibition every month. • Statistics show a total of 1,201 visitors to the exhibition for the viewing and study of space and satellites in the past year. In addition, in the year 2018, the Company also continued production of animated learning media entitled, "Space Exploration with P'Thaicom", an animation featuring the P'Thaicom, Nong'Thaicom and Rabbit Moon characters, with the aim of providing learning experiences and promoting knowledge of space and satellites for children. This program has been ongoing for the second consecutive year, with a total of 20 episodes.
THAICOM Run for School 2018	An activity to promote health and to provide educational opportunities building upon the THAICOM 10K and Thai Kids Thaicom projects, recruiting runners from all over the country to run a total of 1,000 kilometers/team and provide set-top box with satellite dish sets to schools in rural areas	• 420 runners from 52 teams • Total collective distance of 52,000 kilometers • 52 set-top box with satellite dish sets donated to 52 schools in rural areas all throughout the country, as per the designation and request of each team

Beneficiary Organizations

4 Northeast Thailand Border Patrol Police Units

31 Border Patrol Police schools

92 OBEC schools *

3 schools receiving Education Fund



5 NFEs **

52 schools/ Run for School Project

2 technical colleges

Note:
* OBEC - Office of the Basic Education Commission

** NFE - Office of the Non-Formal and Informal Education



187 students (from 5 generations) who entered Thaicom Learning Centers for Constructionism

30 projects to further advance education for grade 12 students who graduated in 2018

4 NFE Districts **54** projects in the "Mae Fa Luang" Rural Education Centers for Mountain Clans in areas under the Mae Chaem District NFE Galyani Vadhana District NFE, the Bor Kleor District NFE and the Sob Moei District NFE





1,201 visitors
Thaicom Space and Satellite Pavilion

Beneficiaries of Set-top Boxes and Satellite Dishes*

2011 - 2017
7,531 sets

Additional beneficiaries:
1,506,200 persons

2018
150 sets

Additional beneficiaries:
30,000 persons

Total of
7,681 sets

Current total beneficiaries
1,536,200 persons

*The number of beneficiaries is based upon 200 persons/set

Employee Engagement

Human resource management has proven to be challenging during the turbulent and ever-fluctuating economic climate of the past few years. The Company has therefore worked to revise and improve its strategies regarding human resources in accordance with its new business strategies and vision, while still retaining the same objectives of developing employee potential and encouraging them to increase their work-relevant knowledge and skills so as to support career advancement opportunities, for the benefit of both the Organization and the employees themselves.

- **Recruitment and Selection**

  The Company conducts its business both domestically and internationally. It recognizes the value and importance of its employees and believes strongly that quality employees are a key factor in sustainable growth and success. The Company is therefore committed to seeking out excellent employees who possess the relevant skill and talent; are well-suited to their jobs and positions; have integrity and good morals; and have clear potential and the ability to adapt continually and develop themselves at all times so as to support future business expansion. True to this commitment, the Company has established its human resource management policy which demonstrates its clear intentions to recruit candidates who are truly suited to the business strategy of the Company. The Company also incorporates anti-corruption checks and balances into the recruitment process, along with the obvious requirements of talent, skills, and a good attitude. The Company works to create equal opportunities for all candidates, without discrimination against anyone irrespective of gender, race, religion or education, etc. Because many of our positions are specialization oriented, the Company will announce candidate recruitment and placement according to relevant vacancies through internal communication channels and via announcements on the Company website at www.thaicom.net so that any interested person can apply via email or online application.

Data for 2018 as of November 30, 2018

Total number of employees*



Male (persons) 281



Female (persons) 147

*Thaicom Public Company Limited, TC Broadcasting and DTV Services, in Thailand only, as of November 30, 2018

Employee Distribution



428 **Number employed locally (persons) (In Thailand)**



Local 23 + **Thai** 7 = 30

Number employed abroad (persons)

Number of new employees



7 **Employed locally (persons)**

1.64 **percent of total number of employees**

Number of employees who took maternity leave



5 **(persons)**

Number of employees who returned to work after maternity leave



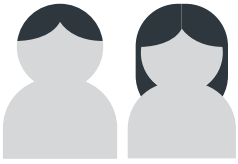
5 **(persons)**

1 Employee Distribution



	(In Thailand)	
	Employed locally	Employed abroad
Operational level	361	21
Managerial and specialist	40	6
Executive	23	3
Senior executive	4	-
Total	428	30

2 Employee Age Distribution



	(In Thailand)	
	Employed locally	Employed abroad
< 30 years	26	-
30-50 years	342	24
>50 years	60	6
Total	428	30

3 Average Employee Years of Service



12.10 years

Employed locally (In Thailand)



9.47 years

Employed abroad

Total average in Thailand and abroad

11.92 years

Due to Company business operations being conducted on a 24-hour basis, the ratio of male employees therefore exceeds that of female employees accordingly. However, both male and female employees receive both equal benefits and advancement opportunity.



- **Capability Development**



Average training hours per employee **23.75 hours/person/year**

Operational level PG 3-9	Managerial PG 10-12	Executive PG 13-15	Senior Executive C Level
24.62 hours/person/year	24.62 hours/person/year	39.05 hours/person/year	11.20 hours/person/year

Each year, the Company plans and provides development for employees at all levels to cultivate their skills and achieve advancement in their respective career paths. We provide training and voluntary job rotation opportunities in order to accommodate change in accordance with the direction and strategy of the Company, creating an Organization of learning and mutual assistance. The Company has also formulated succession plans to prepare employees in terms of leadership skills to allow them to handle responsibility in higher positions. We do this through various training programs and human resource development courses that are designed with a 1-year learning period. This allows employees to achieve continuous learning which is integrated into their daily duties. Details are as follows;

Course	Target Group	Objective
Developing Commercial Decision Framework	Executives and employees related to commercial operations	• Create a framework for collaboration among teams involved in management and decision-making of commercial related processes for greater work efficiency • Develop team management skills with coaching systems
Learn.Link.Launch Program	42 employees at the managerial level	• Achieve one of the Organization's missions of being a learning Organization by nurturing employee competency and engagement • Create learning and knowledge about leadership and people management
Constructionism Program	All employee levels with a total of 23 participants (2018 5 classes)	• Develop learning processes and create greater knowledge in all areas, including self-awareness, self-acceptance, and team-working abilities, in order to build upon the goals and achievements of the Organization

Course	Target Group	Objective
First Line Manager Program	Managerial and Specialist, Level 8 and above	• Prepare for stepping into supervisor roles • Better understand and develop correct attitudes towards work administration and human resource management in various fields • Foster productive communication with supervisors and subordinates alike, as well as effective coordination with other agencies
Middle Management Leadership Development for Sustainable Growth (by the Manchester Business School)	Managerial, Level 13 and above	• Increase middle management leadership skills in creating efficiency and success within their individual departments and agencies • Build a network of leaders and foster positive relationships within the INTOUCH Group • Access internationally renowned business concepts and approaches for use in the Thaicom Organization
Individual Development Plan Workshop	All employees in the Thaicom Next Generation Leader group	• Plan individual employee development in order to raise ability levels according to the set targets • Increase preparation of employees for career path advancement within the Organization
Charismatic Presentation Program	Employees at all levels	• This course has been developed to enable participants to make successful presentations that win both hearts and projects
Adjacent Business Ideation 2018	Employees at all levels	• Help employees develop fresh perspectives for business sector improvement and effective competition in the digital era • Prepare for development and expansion of business from the Company's current areas of expertise into adjacent business opportunities

- **Employee Engagement**

  The company places a priority on the development of all work processes, with suggestions and feedback from employees regarded as one important way to improve company efficiency. The company therefore carries out its annual Employee Engagement Survey as a means to receive clear, straightforward feedback from employees. This is seen as an opportunity to establish plans that will improve and enhance personnel management. For this purpose, we have enlisted a company recognized globally for its expertise in the assessment of employee engagement, Gallup Company Limited. The method used for the employee engagement survey is known as "the Q12", and is a list of 12 statements that link powerfully to key business outcomes within organizations. In 2018, due to adjustments to the Company's organization chart at the end of the year, the annual Employee Engagement Survey will therefore be carried out within January of 2019.

- **Corporate Culture and Positive Work Environment**

  The success of the Organization can be attributed to the skills, ideas, attitudes, beliefs and qualities of its employees, demonstrated in their dedication to their work and engagement with the Organization. Thaicom works to strengthen its corporate culture via EPIC, a set of values instilled in employees for application in their various work responsibilities and activities and as a mechanism for achieving sustainable development.



Excellence in Technology

The Company promotes excellence in technology via knowledge management, originating from information system management. The aim is to allow employees to seek out new and interesting technology-based information and ideas which they can then exchange and pass on to colleagues, expanding the knowledge base within the Company for the creation of new innovations.



Passion to Challenge

Each year, the Company provides training programs in a variety of formats to help stimulate ideas and enhance knowledge and skills that can aid employees in coping with the challenges of the digital world and its rapidly changing technology, for which business strategies must also be adjusted accordingly.



Initiative in Innovation

The Company established its New Business team to help promote innovation and seek out new business models, as well as to explore greater cooperation with partners in the technology sector who can aid the Company in innovation, and thereby continually generating increased revenue for the Company.



Commitment to Contribute

In order to promote greater social awareness and responsibility, the Company encourages all employees to participate as “Thaicom Volunteers” in social activities hosted by Thaicom, using their individual skills and knowledge to share experiences, provide educational opportunities, and assist in community development. One example involves volunteer trainers teaching installation, usage and maintenance of satellite dish sets in the Thai Kids Thaicom project.



In 2018, a total of

224 persons

Thaicom Volunteers



Thaicom Volunteers served for a total of **1152 hours**

- **Thaicom We Share**

  Under the concept and ideal of the workplace as a second home, the Company hosted many activities to promote employee engagement and to create a society of giving. Activities and events included important public and cultural holidays, Company anniversary activities, blood donations, and more than 10 club-related activities. In 2018, Thaicom carried out its "Thaicom We share" project to draw on employee participation with a 'think and then do' methodology. This allowed employees to take responsibility for various different functions within each activity by hosting volunteer activities in many different schools for a variety of purposes, for example, establishing libraries, planting trees, installing satellite dish and television sets, providing meals for students, etc. These were opportunities to create unity among Thaicom volunteer employees, building camaraderie and a greater sense of responsibility in employees who, in some cases, had never had the chance to do this type of work before. It also helped them learn from and practice team-working with their colleagues from other departments. In 2018, the Company organized 10 different "Thaicom We Share" activities involving a total of 160 Thaicom volunteers.

- **Occupational Safety, Health and Environment**

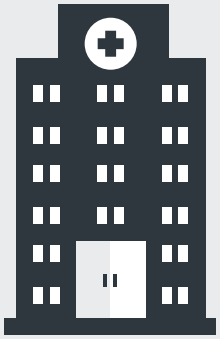
  Thaicom recognizes the great importance of occupational safety, health and environment management and has therefore put policies in place as clear guidelines for both implementation and development and to ensure that these policies are passed down to all employees at every level. The Company has also appointed safety officers responsible at the professional level, supervisor level, and management level to care for the safety of all personnel in each work area in a comprehensive manner. There is also an Occupational Safety, Health and Environment Committee consisting of representatives from both management and staff to ensure that all planning and measures taken to prevent potential hazards are both monitored and controlled in accordance with said plans and legal regulations. In addition, risk assessments are also carried out for control and prevention, such as RF (radio frequency) emission measurements in accordance with international standards, as well as the evaluation of equipment and tools so that they are both safe and ready for use at all times. The Company also carries out various communications, training and drills for any possible emergency scenarios.



Employee work-related injuries

0 persons

No employee deaths from work-related accidents



Additionally, under the Thaicom Wellness Program, for which the main objective is to create a healthy environment and strong, healthy employees, the Company has organized a number of activities to promote health and exercise on a regular basis. These include Thaicom Club activities, such as the bike club, Thaicom running club, badminton club, football club, etc. These activities are organized by employees for employees, allowing them to join fitness-promotion activities according to individual inclination and interest.

Thaicom Young Fit Project

Thaicom sees the importance of and cares for the health of its employees. Its employees, in fact, were the driving force behind 2018's TC Wellness Program, specifically a project known as the "Thaicom Young Fit" program, which focused on providing comprehensive health knowledge in the areas of diet, exercise, and improved mental health for all employees, while also zeroing in more specifically on employees with greater health-related risks. This project was the result of a partnership with Phyathai 2 Hospital, one of the hospitals providing annual health checkups for Thaicom employees and which also collaborated in project management. The objective of this particular project was to enable employees to see clear improvement in their health after following the various instructions and procedures outlined in the program.

The main target group for this particular program was selected by the hospital from the results of the 2017 annual health checkup of employees and was made up of 30 employees in whom were found abnormally high triglyceride levels and LDL, blood sugar (FBS) levels, and BUN (Blood urea nitrogen) and creatine levels. The hospital sent emails to all the selected employees to confirm their voluntary participation and the Company provided internal announcements about the project so as to ensure all employees were thoroughly informed. This included enabling non-participating employees to follow the news and progress of the program via TC Wellness Facebook, Line, video presentations and signage. In addition, the program participants received MFit for the collection of various health data, such as steps taken, sleep hours, heart rate, metabolism, and the 1-mile walk test activity. All participants were required to make a commitment to take steps to improve the health issues made known to them via the health checkup data together with medical advice provided by project doctors. An important factor in participation in this program was that all employee participants had to receive approval from department supervisors allowing the participants to derive maximum benefit from the program and demonstrating the focus and importance placed on employee health by their supervisors, so as to continue to move the Organization forward together.

A total of 4 activities were held as part of this project;

Activity 1: A 3-day, 2-night 'Learn How to Change Your Lifestyle' camp

Activity 2: The first follow-up to share experiences, health issues and interactive activity for training in the principles of nutritious food shopping

Activity 3: The second follow-up, sharing of experiences and health issues and meeting with specialist physicians

Activity 4: Project closing in January of 2019, with a summary of employee health and project evaluation presentation

- ## Corporate Communications

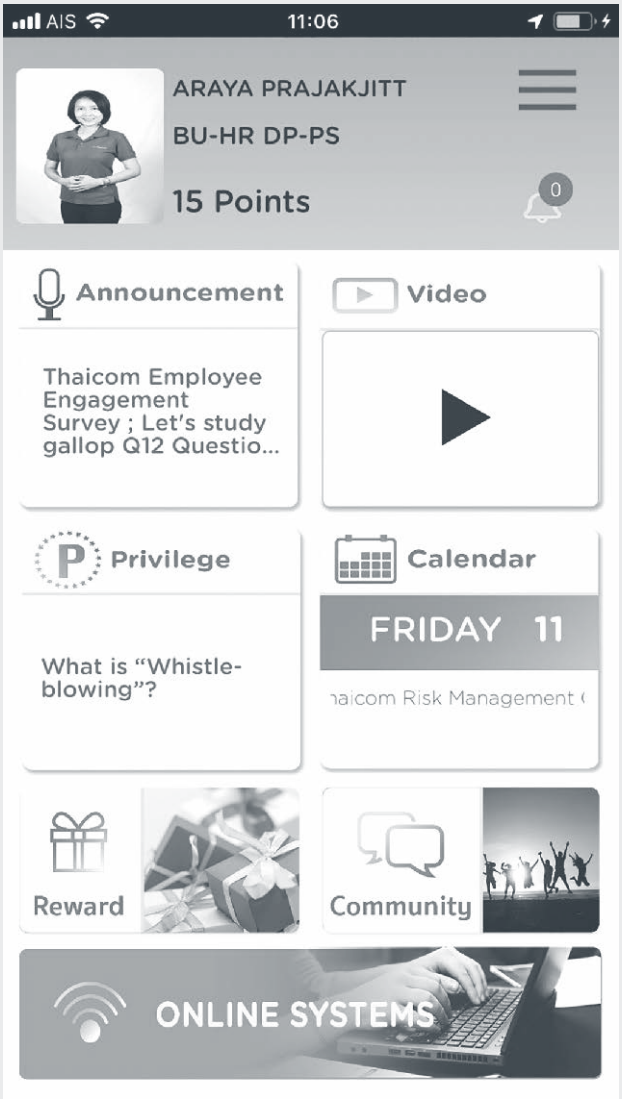
Good internal communication is an important mechanism for providing personnel with a clear, united understanding and vision and is a tool for helping to build positive employee relationships, coordination and cooperation among personnel within the Organization, allowing them to work together effectively and creating a good corporate culture. The Company therefore works to improve its various modes of communication, ensuring such communications are appropriate for every employee at all levels of the Organization. In addition to formal communications, such as annual employee meetings, activity board announcements, email announcements, etc., the Company also endeavors to provide other forms of communication, including:

- **Voice-Over Announcements:** For the notification of various news and information via radio spots in public address format to both attract the attention of employees and provide news information to all areas of the Company simultaneously.

- **Thaicom Well-Done Cards:** A card-writing activity, promoting positive written impressions and stories to and about fellow employees on postcards dropped into special mailboxes situated in 3 locations in the Company in order to create an atmosphere of friendliness and encouragement among company employees.



- **Stimulation of Employee Communication using Point Accumulation via the TC We Link System** Employees themselves were the developers of this program based on the initiative of Constructionism program participants. This resulted in the development of the "TC We Link Application" for use on mobile phones as a channel for employees to quickly and easily access information provided on the Thaicom intranet system. In addition, the program also helps to stimulate awareness of Company news and announcements via company email, and includes the participation of employees involved in various activities. This is known as the "TC Me Point", a tool that takes advantage of the "TC We Link Application" in the accumulation of points for employees participating as per the conditions of the program. These points can then be traded in and rewards can be redeemed in line with the needs of employees, encouraging fun and challenge within the workplace and motivating employees to engage with important information dispersed by the Organization and special drives and movements of the Company. Moreover, the program promotes a genuine "Living Organization" atmosphere, resulting in the sustainable development of all personnel within the Organization.



TC We Link Application for Mobile Devices

Environmental performance



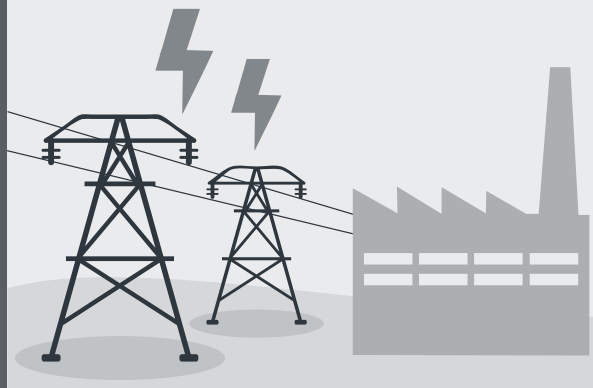
Environmentally friendly operations

Being an organization that is incorporated into society means taking responsibility for that society as well as its environment. Additionally, one of the aspects which the Company is keen to promote is our concrete commitment to working in an environmentally friendly manner, emphasizing operations that are focused on reducing any potential environmental impacts. While it is clear that the products, services and day-to-day operations of an organization such as ours require large amounts of electricity to function properly, we have also been operating for over 10 years in accordance with an "Energy Saving Policy" that has undergone continuous improvements to ensure it is fit for purpose in the modern era. Moreover, to show our continued commitment towards making improvements necessary to becoming an environmentally sustainable company, 2018 saw the Company renew its "Energy Saving Policy" to further promote an environmentally sustainable business model that functions according to the relevant environmental laws and standards. This meant that measures were put in place to reduce impacts on all relevant parties, including employees, communities and stakeholders, with a particular focus on effective prevention and reduction in the production of "greenhouse gases".

You can find out more information about our "Energy Saving Policy" at www.thaicom.net/sustainability

In 2018, the Company continued its environmental work under the SD Green Project with our 'Thaicom Loves Earth' campaign, which operated alongside our 'iSAVE, My Thaicom My Life' campaigns in order to build employee awareness and cooperation on environmental projects. We extended our work to incorporate operations based on the 3R principles, namely to Reduce, Reuse and Recycle our resources. Environmental care and water resource management began with our local communities, and extended into evaluations that resulted in lowering the company's daily production of carbon dioxide gas, as well as other greenhouse gases.

Power Consumption in 2018



Thaicom Satellite Station, Nonthaburi
1,666,000 kWh or 5,997,600 MJ)
(In 2017: 1,791,000 kWh or 6,447,600 MJ)

Thaicom Teleport & DTH Center, Pathum Thani
4,967,100 kWh หรือ 17,881,560 MJ)
(In 2017: 4,864,003 kWh 17,510,410 MJ)

Solar Cell Power Generation 2018
73,500 kWh


TCOP-18-C-061

Thailand Greenhouse Gas Management Organization

Carbon Offset Certificate

presented to

Thaicom Public Company Limited (Branch 1)

for offsetting

135 tons of CO_2 Emissions

From: Mitr Phol Bio-Power (Dancharg)-Block 2
Serial number: TH-21-153764-153898-1-1-6

By participating in this carbon offsetting program, you are contributing to the fight against global warming and supporting greenhouse gases reduction projects in Thailand and enable Thailand's transition to a low-carbon future.

Mrs.Prasobsuk Chamornmarn

September 5, 2018

Amount of greenhouse gases released

Thaicom Satellite Station, Nonthaburi
1,346
Tons CO_2 Emissions

Thaicom Teleport & DTH Center, Pathum Thani
2,894
Tons CO_2 Emissions

Carbon Offset for the Year 2018 = **10%**
for the Thaicom Satellite Station, Nonthaburi

135 Tons CO_2 Emissions



Certificate Number:
TGO CFO FY18-068

THAILAND GREENHOUSE GAS MANAGEMENT ORGANIZATION
(Public Organization) TGO

CERTIFICATE

Awarded to

Thaicom Public Company Limited (branch 0001 Kaerai)

Company address verified :63/21 Rattanatibet Rd., Bang Kraso Sub-District, Amphur Mueang, Nonthaburi Province 11000

Thailand Greenhouse Gas Management Organization certifies that the quantity of Greenhouse Gas of the above organization has been verified by The Industrial Environment Institute The Federation of Thai Industries and found to be in accordance with the requirements of the standard detailed below.

Standard

TGO Guidance of the Carbon Footprint for Organization

Verification Period : [01/01/2017 - 31/12/2017]
Total Greenhouse Gas Emission (Scope 1&2) : 1,346 tonnes of CO_2eq/year

Direct GHG emissions	303	tonnes of CO_2eq
Energy Indirect GHG emissions	1,043	tonnes of CO_2eq
Other Indirect GHG emissions	14	tonnes of CO_2eq

The agreed level of assurance is: Limited at materiality of 5%

Registration Date: 5 September 2018

Mrs.Prasertsuk Chamornmarn
Executive Director
Thailand Greenhouse Gas Management Organization (Public Organization)



Certificate Number:
TGO CFO FY18-069

THAILAND GREENHOUSE GAS MANAGEMENT ORGANIZATION
(Public Organization) TGO

CERTIFICATE

Awarded to

Thaicom Public Company Limited (branch 0003 Ladlumkaew)

Company address verified : 50 Moo 1, Soi Wat Jedi Hoi, Bor Ngern Sub-District, Ladlumkaew District, Patumthani Province 12140

Thailand Greenhouse Gas Management Organization certifies that the quantity of Greenhouse Gas of the above organization has been verified by The Industrial Environment Institute The Federation of Thai Industries and found to be in accordance with the requirements of the standard detailed below.

Standard

TGO Guidance of the Carbon Footprint for Organization

Verification Period : [01/01/2017 - 31/12/2017]
Total Greenhouse Gas Emission (Scope 1&2) : 2,894 tonnes of CO_2eq/year

Direct GHG emissions	62	tonnes of CO_2eq
Energy Indirect GHG emissions	2,832	tonnes of CO_2eq
Other Indirect GHG emissions	-	tonnes of CO_2eq

The agreed level of assurance is: Limited at materiality of 5%

Registration Date: 5 September 2018

Mrs.Prasertsuk Chamornmarn
Executive Director
Thailand Greenhouse Gas Management Organization (Public Organization)

Resource management and environmental solutions that support “the scaling back of global warming”

In 2018, to emphasize the role we are taking with regard to environmental care, the Company applied to become an organization that leads the way with initiatives under the “expansion of carbon offsetting project to support a domestic voluntary carbon market” for the 5th year running, conducted by the environmental faculty from Kasetsart University which received financial support from the Thailand Greenhouse Gas Management Organization (Public Organization) (TGO) for playing a vital role in reducing global warming and committing to sustainable development. TGO management arranged training for our Company employees in order to provide knowledge and information regarding our carbon footprint, explaining how data can be harvested, analyzed and used to create a carbon footprint report for the Company. Additionally, TGO worked alongside our employees to help set up a carbon footprint verification team, consisting of members from The Federation of Thai industries, who have already been declared a verification body (VB) by the TGO. Such a body guaranteed the report on greenhouse gases released by the Organization, including those which result from Company operations across the following two locations: The Thaicom Satellite Station, Nonthaburi and The Thaicom Teleport & DTH Center, Pathum Thani. It was found that these locations produced 1,346 tons and 2,894 tons of CO_2 emissions respectively. The company therefore registered with the TGO to take a role in fighting against global warming, as well as to support projects that aim to reduce greenhouse gas emissions. In this respect, the company has already begun delivering on its commitments by offsetting its carbon emissions by 10%, or by 135 tons of CO_2 emissions, in 2018 alone. This was executed by purchasing from the Mitrphol Biopower Factory, Dan Chang District, Suphan Buri Province, which produces electricity through biomass and steam produced by bagasse, alongside other waste products from the agricultural industry. This agreement meant we were able to support local industries at the same time as fulfilling our commitment to being an Organization that plays a vital role in the scaling back of global warming.

Promoting Green Offices

The Company continued to promote internal solutions to environmental issues during 2018 after completing an initiative to reduce the use of plastic bottles on Company premises. In addition, we promoted recycling by encouraging our employees to separate their litter before placing it into the appropriate containers. Company litter was thus categorized into the 3 following types: recyclable, non-recyclable and organic waste. Meanwhile, the pantry and other key areas of our offices were used as locations for the three aforementioned types of waste disposal bins. Moreover, we have made improvements to our employee rest area and external waste sorting facilities, with 2018 also marking the installation of “hazardous waste containers”, which involved taking old filing cabinets and re-purposing them as hazardous waste bins. Employees were encouraged to bring in any hazardous waste from home to be disposed of in the aforementioned containers - which municipal-owned vehicles came to collect regularly - as another effective way to reduce the company’s environmental impact. Aside from this, Thaicom held its annual Big Cleaning Day to help categorize things to be thrown away, or kept for further use. The day involved a campaign to separate waste clearly, which our employees took to with great understanding and cooperation due to this being a continuation of our company policy with regard to the correct division of waste products.



Energy conservation and alternative energies

Our Company places huge importance on operating in a way that reduces our potential impact on the environment, either directly or indirectly, in order to prevent and reduce said impacts on our stakeholders, both within and outside of the Organization. With these values in mind, we laid out a policy that has been in place since 2009 with regard to energy management, in order to provide guidance on how best to manage operations and achieve our objectives. These objectives include continually reducing energy consumption and improving energy efficiency across the Organization, both of which came into sharp focus during the last iSave campaign. The Company has been pushing these initiatives and running various events with working groups to meet our energy goals, for instance, managing peak energy demand, replacing existing lightbulbs with energy-efficient LED lightbulbs, transferring over to inverter system air conditioning units, and making modifications to our office buildings to increase energy efficiency by reducing energy consumption. Another benefit of better energy management is the economic advantages gained through the reduction in energy related expenditure. However, the Company did not stop there, because we see the value in our continued investment in the environment, especially with regard to energy consumption.

Hence, 2018 was the year that the company created a budget for the expansion of alternative energy usage in the Thaicom Regional Service Offices, Pathum Thani Province. The same year saw alternative energies become the leading form of energy used at those offices due to our installation of 'On Grid Solar Cells' that increased energy production from the existing 28 kW-p, which produced an average of 37,502 kWh/year, to a massive 48kW-p by the end of December 2018. It is anticipated that this form of alternative energy could eventually be responsible for producing 73,500 kWh/year which, aside from reducing electricity expenditure, also ensures that our energy is clean. This means that it reduces the amount of carbon dioxide released into the atmosphere, which is a major cause of the greenhouse effect and is a leading factor behind the increase in temperature across the globe. According to our plans regarding alternative energy usage, the goal is to reach a maximum of 100 kilowatts of solar power within 5 years, which will provide us with an alternative energy total of up to 180,000 kWh/year.



Project	Measure	Investment (THB)	Target (Reduction)		Result (Reduction)	
			Kilowatt-Hour/Year	THB/Year	Kilowatt-Hour/Year	THB/Year
iSave: Energy efficiency and energy conservation						
Thaicom Satellite Station, Nonthaburi						
1	Control monthly peak power demand	-	-	23,551.20	-	44,747.28
2	Split air conditioner system maintenance (17 units)	12,800.00	4,799.83	17,663.37	5,670.35	20,866.89
3	Improve air conditioning compressor efficiency	74,300.00	5,015.10	18,455.56	7,022.60	25,843.20
4	Improve lighting system in the Executive office area and central hall area on the second floor	12,220.00	1,257.39	4,627.20	1,311.07	4,824.76
Total		**99,320.00**	**11,072.32**	**64,297.33**	**14,004.02**	**96,282.13**
Thaicom Teleport & DTH Center, Pathum Thani						
1	Change air conditioners to new high efficiency type system with 22 units (Meeting renovate)	760,950.00	30,268.66	104,124.18	30,393.92	107,290.52
2	Change light bulbs from fluorescent to LED	10,000.00	2,943.36	10,213.46	2,217.60	7,628.54
Total		**770,950.00**	**33,212.02**	**114,337.64**	**32,611.52**	**114,919.06**



Our campaign to make our offices more energy efficient saw us implement a strategy to build employee awareness on the issue in 2018. Every member of staff was encouraged to operate according to a "switch it on/switch it off" policy with regard to our office bathroom facilities and this fostered a conscientious approach to energy use. Additionally, our campaign to be environmentally friendly and energy efficient, in the process helping to reduce global warming, was bolstered by voice clips from company employees that were played during lunch breaks and just before office closing hours. These clips contained information on how we can all work together to place the environment above all else in the way we work. The aforementioned messages were not only communicated to our employees directly, but were also effective in reaching external staff who visited our offices for business purposes, thereby ensuring that everyone could work together in creating environmentally friendly operations for the benefit of our shared world.

Water resource management

Although the Company does not utilize water in its operations directly, we definitely recognize how important water is to each and every one of us. Thus, water consumption in our offices or surrounding areas has been carefully analyzed and subsequent measures have been put into place that represent far more than a Company campaign or calls for increased employee cooperation. Our Organization has extended its scope in terms of water resource management, meaning that we are now taking responsibility for the conservation of natural water sources, as well as carefully managing water use within the company walls. This will help to ensure that water resource management is as efficient as can be.

Water treatment

The Company places huge significance on treating the waste water produced through day-to-day operations before it is released back into the public sewage system. We have therefore been working hard to assess the quality of our waste water since the 'Thaicom Loves Earth' campaign started in 2017. To help with this matter, we asked the Waste Water Department of the Nonthaburi Public Works Committee to assist us in testing waste water quality at the Nonthaburi Thaicom Satellite Station, as well as at our Pathum Thani Thaicom Teleport & DTH Center.

The results of the 2017 waste water quality survey found that the Nonthaburi Thaicom Satellite Station, which covers an area of around 4,000m2, had acidity, alkalinity, suspended solids and B.O.D. levels all within the industry standard, meaning that the company's waste water quality falls within the standard ranges as set out by Thai law. This is just one of the benefits resulting from our installation of an additional waste water turbine, which has a capacity of 10,365m^3 and is located in the vicinity of our eastern water treatment reservoir. The location of the turbine provides the waste water treatment reservoir with an additional tool to ensure the utmost efficiency and effectiveness in its waste water management system. With regard to the Pathum Thani Thaicom Teleport & DTH Center, which covers an area of less than 5,000m^2, the waste water was found to have acidity, alkalinity and suspended solid levels within the standard range. However, its B.O.D. levels were slightly above the standard range due to heightened levels of organic matter, which require additional aeration to break the particles down effectively. With this in mind, Thaicom has plans to install yet another waste water turbine in 2019 to help manage and control the aforementioned issue.

Furthermore, the Pathum Thani Thaicom Teleport & DTH Center ceased the use of fresh water sourced from underground reservoirs in 2018, instead installing a pipeline from the public water system for use in our buildings. This measure was put in place to conserve underground sources of fresh water while also helping to prevent against any future potential environmental impacts on those water sources, such as ground collapses. However, this does mean that company expenditure on public water will subsequently be increased. On the topic of future waste water quality surveys, the Company is currently in discussions with the Pathum Thani Provincial Administrative Organization - the province in which our offices are based - to ask for their cooperation in carrying out a waste water survey on our properties there (we previously asked the Waste Water Department of the Nonthaburi Public Works Committee to analyze waste water quality). The results of such a survey will allow us, as a Company, to analyze our waste water treatment capabilities with a view to making them more effective and efficient because we will no longer be required to travel great distances to collect water samples. This will mean that we can improve and develop our waste water treatment capabilities moving forwards, using the numbers generated to create indicators for our waste water treatment thereafter.

The Company also used its 'Thaicom Loves Earth' campaign to promote the "beautiful, clean canals with Thaicom" initiative in the Khlong Bang Sue Noi community of Nonthaburi Province. The concept is based on rehabilitating the natural environment and ecological system, which the Bang Sue canal supports, by helping manage water flow from the Nonthaburi City Municipality. Our Company has previously helped support this community and canal ecology by introducing water hyacinths, at the same time

as limiting the amount of weeds and litter along the canal's banks by working alongside officials from the local authorities. The length of the canal and community along its banks is just over 1km, and our activities in the area have also included campaigns on litter collection, with the company donating 10 large litter bins to this community in 2018. Thaicom also worked alongside the relevant local municipality agencies to push for continued and sustained change in terms of the canal and the community's treatment of the environment, for instance, identifying the most effective ways to maintain the canal's water quality. Unfortunately, we have not yet been able to come to a satisfactory conclusion on this matter due to the population density that has been a constant along the banks of the canal for a long time, as well as water quality surveys finding that water quality comes in lower than the standard range. However, we will continue working side-by-side with the relevant local authorities in order to ensure that the local environment and community can exist together in total harmony.

At the end of 2018, Thaicom has coordinated with Nonthaburi Province and sent data related to waste water treatment at our Thaicom Satellite Station due to the vital issue of water pollution being at the forefront of the province's operations. Nonetheless, Thaicom was already taking this matter seriously, with our annual improvements to water treatment being clear for all to see. Such improvements have included installing grease traps, waste water treatment tanks, septic reservoirs, as well as recycling water for gardening purposes before releasing it back into the municipality's public sewage system.

Innovative solutions for water management

The company's continued commitment to efficient water resource management has seen us select only the most water-efficient materials for Company use. Additionally, we have worked hard to foster positive attitudes in our Company employees and develop innovative techniques, such as the installation of water pumps that provide water to trees and grassy areas on company property at the Pathum Thani Thaicom Teleport & DTH Center. The pumps recycle all Company waste water which has reduced the Company's reliance on fresh water by 301.40 m^3 / month, thereby reducing the total water usage at this premises by 38%. As well as this measure, we have installed creative new urinals in the male bathrooms that have the hand basin located above the urinals, in order to recycle the water used to wash hands for use in flushing the systems. Such innovative technology has significantly reduced water usage in company washroom facilities.



Biodiversity

- **Radio frequency interference**

  Another aspect which our Company is constantly looking to develop and improve upon each year are the measures we implement to reduce the potential risks felt by the environment as a result of radio wave radiation being broadcast. Because the frequency with which these waves are broadcast could have an impact on the ecological system, we assess levels consistently with regard to electromagnetic frequency and wave lengths being emitted from various broadcasting devices within Thaicom grounds. This helps us to manage, control and prevent against any potential impact felt by the surrounding areas and communities within range of the Thaicom Satellite Station. The Company has previously called upon agencies affiliated with the National Science and Technology Development Agency (PSTDA) to carry out such analysis, as such agencies are highly trusted in the industry. Moreover, they act these agencies act in accordance with internationally recognized measures laid down by the World Health Organization (WHO). The 2018 results of analysis into the C-band, Ku-band and mobile phone frequency levels at the Nonthaburi Thaicom Satellite Station, as well as the Pathum Thani Thaicom Teleport & DTH Center and surrounding areas of both locations, found that the electromagnetic radiation levels were well within the "safe" range. This means that staff and local community residents were exposed to proportionally lower rates of electromagnetic radiation than those found around Wi-Fi hotspots and microwave ovens.

Environmental objectives for 2019

To provide satellite broadcast services alongside digital platforms that are environmentally friendly. To reduce and find solutions for any potential environmental impacts resulting from Company operations by acting in accordance with measures designed to constantly decrease the causes of global warming. To continue our campaign for "green offices" which involves promoting energy and natural resource conservation that fosters sustainability.

Management's Discussion and Analysis

1. Overview

Important matter in 2018

Impairment of satellites' assets

In 2018, Thaicom Plc ("the Company" or "THCOM") recognized the net impairment of satellite assets, in total of Bath 2,253 million. The company has decided to recognize the impairment loss mainly due to the slowdown of satellite industry from the change in customer behavior, together with fierce competition, which cause the price per unit to drop.

The impairment is considered a non-cash item and does not affect the cash management of the Company. The recognition of impairment loss would cause going forward depreciation and amortization of the assets decrease by approximately Baht 116 million per annum.

Performance overview

The Company's consolidated revenue from sales of goods and rendering of services for 2018 was Baht 6,008 million, a decrease of 10.2% from Baht 6,689 million for 2017, mainly due to the decrease of price per unit sold following the industry downtrend and the churn of major customers during 2017.

The Company reported a consolidated net profit for 2018, taking into account the impairment, of Baht 230 million, improving from the previous year that reported the net loss of Baht (2,650) million. This was mainly due to the recognition of gain from sales of CS Loxinfo Public Company Limited (CSL)'s share, a decrease in depreciation and amortization after the recognition of satellite assets impairment in 2017 and an effective cost management. Considering only normal profit of the year, 2018 normalized profit was Bath 140 million, improving significantly from Baht 20 million for that of 2017.

2. Business Summary

Satellite and related Services

Thaicom Public Company Limited received the ASEAN Corporate Governance Awards for the Top 50 ASEAN publicly listed companies category for the second consecutive time. The ASEAN Corporate Governance Awards is initiated by the ASEAN Capital Markets Forum (ACMF) with the support of the Asian Development Bank (ADB) to establish a common governance framework across the region. Thaicom has been recognized by leading organizations in Thailand for its sustained good corporate governance, earning itself excellent governance ratings for last six consecutive years.

The company has also been selected for the 2018 Thailand Sustainability Investment (THSI) for four consecutive years. Thaicom also received the certificate of full membership of Thailand's private sector "Collective Action Coalition Against Corruption" (CAC) for two consecutive years.

Internet and media Services

Since the completion of sales of CSL's shares to AWN during January 2018, the Company has no longer recognized the share of profit from CSL. The revenue from Internet and media services is mainly from the sale of satellite set top box and other services operated by Cambodian DTV Network Ltd (CDN) and DTV Services Co., Ltd (DTV).

Telephone business abroad

As of the end of 2018, Lao Telecommunications Public Company (LTC) had total mobile subscribers (excluded fixed wireless) of 1,488,196 and ranks No.1 with 56.1% mobile's market share.

In January, LTC entered into Sale and Purchase Agreement to acquire 500,000 shares or 100% of Vimpelcom Company Limited, one of the mobile operator under the brand "BEELINE", from the government of Lao PDR. This acquisition will significantly enhance LTC network efficiency and expand its target market, especially young generations.

3. Consolidated Operating Results

Selected financial information of THCOM

Unit: Baht million	Amount		Change YoY (%)
	2018	2017	
Revenue from sales of goods and rendering of services	6,008	6,689	-10.2%
Cost of sales of goods and rendering of services	4,219	5,291	-20.3%
Loss from Impairment *	2,253	3,309	-31.9%
Other SG&A expenses	1,517	1,684	-9.9%
EBIT from continuing operations **	(1,981)	(3,594)	-
Depreciation and Amortization	1,929	2,896	-33.4%
EBITDA from continuing operations ***	(52)	(699)	-
Share of profit of investment in joint venture	119	196	-39.1%
Other income from the sale of CSL's share	1,950	-	-
Profit (loss) for the period from continuing operations	217	(2,787)	-
Profit (loss) for the period from discontinued operation	30	326	-90.9%
Profit (loss) for the period	247	(2,461)	-
Profit (loss) attributable to: non-controlling interest	17	189	-90.9%
Normalized profit ****	140	20	608.0%
Profit (loss) attributable to owner of the Company	230	(2,650)	-
Earnings (loss) per share (Baht)	0.21	(2.42)	-
Earnings (loss) per share from continuing operations (Baht)	0.20	(2.54)	-

* The impairment of satellites and subsidiary

*** EBIT = Sales and service income - Cost of sales and service - SG&A (including impairment)

*** EBITDA = EBIT + Depreciation and Amortization

**** Normalized profit = Profit (loss) attributable to owner of the Company - Profit from the sale of CSL's share + Net impairment loss

Revenue from sales of goods and rendering of services

Consolidated revenue from sales of goods and rendering of services for 2018 was Baht 6,008 million, a decrease of 10.2% from Baht 6,689 million for 2017. This was contributed by a drop of both satellite and Internet and media services revenue.

Revenue from sales of goods and rendering of services Unit: Baht million	2018	2017	%YoY
Satellite and related services	5,850	6,475	-9.7%
Internet and media services*	229	299	-23.4%
Consolidation eliminations	(71)	(85)	-16.5%
Total	**6,008**	**6,689**	**-10.2%**

* Include revenue from sales and services generated by DTV, and CDN

Satellite and related services

Revenue from satellite and related services for 2018 was Baht 5,850 million, a decrease of 9.7% from Baht 6,475 million for 2017. This was caused by a drop of revenue in both conventional and broadband satellite services.

Satellite and related services Unit: Baht million	2018	2017	%YoY
Conventional*	3,565	3,726	-4.3%
Thaicom 4 Broadband	2,284	2,748	-16.9%
Services	2,143	2,480	-13.6%
Sales	141	269	-47.3%
Total	**5,850**	**6,475**	**-9.7%**

* Include the Thaicom 5 6 7 and 8 satellites

- Revenue from the Thaicom conventional satellites and related services for 2018 was Baht 3,565 million, dropped by 4.3% from Baht 3,726 million for 2017. Despite, consistent utilization from conventional satellites, the price per unit has decreased following the slowdown of industry trend.
- Revenue from the Thaicom 4 Broadband Satellite and related services was Baht 2,284 million for 2018, down by 16.9% from Baht 2,748 million for 2017. This was mainly contributed by the churn of major customers during 2017

Internet and media services

The Company's revenue from Internet and media services for 2018 was Baht 229 million, down by 23.4% compared to Baht 299 million for 2017, mainly from a decrease of CDN's revenue from sales of satellite receiver sets following the high competitiveness among the industry in Cambodia.

Cost of sales of goods and rendering of services

The Company reported consolidated cost of sales of goods and rendering of services for 2018 of Baht 4,237 million, a decrease of 19.9% compared to Baht 5,291 million for 2017, due to the decrease of cost from both satellite and Internet and media services.

Cost of sales of goods and rendering of services Unit: Baht million	2018	2017	%YoY
Satellite and related services	4,130	5,129	-19.5%
Internet and media services*	188	243	-22.6%
Consolidation eliminations	(81)	(81)	0.0%
Total	**4,237**	**5,291**	**-19.9%**

* Include cost from sales and services generated by DTV, and CDN

Cost of satellite and related services

Cost relating to satellite and related services for 2018 was Baht 4,130 million, a decrease of 19.5% from Baht 5,129 million for 2017. This was due to a drop in depreciation expense after the recognition of satellite assets impairment in Q4/2017.

Satellite and related services Unit: Baht million	2018	2017	%YoY
Conventional*	2,430	2,658	-8.6%
Thaicom 4 Broadband	1,700	2,471	-31.2%
Total	**4,130**	**5,129**	**-19.5%**

* Include the Thaicom 5 6 7 and 8 satellites

- Cost relating to the conventional satellites and related services was 2,430 Baht million for 2018, decreased by 8.6% compared with Baht 2,658 million for 2017, following the revenue drop and lower depreciation expense from the recognition of satellite assets impairment in Q4/2017.

- Cost relating to the Thaicom 4 Broadband Satellite and related services for 2018 was Baht 1,700 million, decreased by 31.2% from Baht 2,471 million for 2017. This was primarily due to lower revenue sharing to the government, following the decrease of overall bandwidth usage and lower depreciation expense from the recognition of satellite assets impairment in Q4/2017.

Cost of Internet and media services

Cost relating to the Internet and media services for 2018 amounted to Baht 188 million, a decrease of 22.6% from Baht 243 million for 2017, following the sales drop.

Selling and administrative expenses

SG&A expenses, including directors and management benefit expenses and impairment loss, totaled Baht 3,770 million for 2018, a decrease of 24.5% from Baht 4,993 million for 2017. This was mainly contributed to the important matters in 2018 as following:

- The impairment of satellite assets of Baht 2,253 million in 2018, compared to the impairment of satellite assets and subsidiary of Baht 3,309 million in 2017
- The decrease of staff expenses and marketing expenses,
- The decrease of provision for doubtful debts for the satellite business.

SG&A, excluding the impairment of satellite assets, was Baht 1,517 million, decrease 9.9% from the same period of last year.

Finance costs

Finance costs totaled Baht 338 million for 2018, decrease by 11.6% from Baht 382 million for 2017, contributed mainly from the decrease of interest from long-term loans according to their repayment schedule, together with the prepayment of USD 40 million in Q3/2017.

Share of profit of investment in joint venture

Share of profit of investment in joint venture in telephone business for 2018 was Baht 119 million, decrease by 39.1% from Baht 196 million for 2017 despite higher LTC's revenue. This was because of the increase of depreciation from an investment for network expansion and also the expenses according to the disaster from dam collapse in Laos.

Net profit

The Company reported a profit (loss) attributable to owner of the Company of Baht 230 million for 2018, significantly improved from last year that reported Baht (2,650) million. The improvement of net profit in 2018, despite a drop in revenue, was mainly from the recognition of gain from sale of CS Loxinfo Public Company Limited (CSL)'s share, a decrease of depreciation and amortization of the assets after the impairment of satellites and subsidiary in 2017 and an effective cost management. Considering only normal profit of the year, 2018 normalized profit was Bath 140 million, improving significantly from Baht 20 million for that of 2017.

4. Financial Position

As at the end of 2018, the Company reported total assets of Baht 22,202 million, a decrease of 14.4% from Baht 25,939 million as at the end of 2017. This was mainly due to;

- The recognition of the impairment of satellite assets.
- The decrease of non-current assets classified as held for sale which caused by the sale of CSL's share.
- Depreciation and amortization of PP&E and intangible assets under operating agreements for 2017, offsetting with
- The increase of cash and cash equivalents, and current investments, mostly cash from operation and cash received from the sales of CSL's ordinary shares.

THCOM's asset components

Assets Unit: Baht million	December 31, 2018		December 31, 2017	
	Amount (Bt mn)	% of Total assets	Amount (Bt mn)	% of Total assets
Current assets	9,679	43.6%	9,488	36.6%
Property, plant and equipment	4,815	21.7%	7,859	30.3%
Intangible assets under operating agreement	3,007	13.5%	3,987	15.4%

Trade and other receivables

As at the end of 2018, the Company had net trade accounts receivable and accrued income (excluded other account receivable) of Baht 1,536 million (or 6.9% of total assets), comprising of receivables from other parties and related parties, representing 95% and 5% of total trade accounts receivable and accrued income, respectively.

Liquidity

As at the end of 2018, the Company had a current ratio of 2.39x, down from 3.22x as at the end of 2017, due mainly to the increase of the current portion of long-term loan due to the bond repayment schedule in 2019 of Baht 2,275 million.

Non-current assets

Total non-current assets as at the end of 2018 was Baht 12,523 million, a decrease of 23.9% from Baht 16,451 million as at the end of 2017. This was due mainly to depreciation and amortization of PP&E and the intangible assets, together with the recognition of impairment of satellite assets in 2018.

Borrowings and shareholders' equity

The Company's net borrowings as at the end of 2018 were Baht 7,023 million, a decrease of 5.7% from Baht 7,446 million as at the end of 2017, because of the repayments on schedule.

The Company's shareholders' equity as at the end of 2018 was Baht 13,137 million, decreased by 14.0% from Baht 15,280 million as at the end of 2017, mainly reflecting from a declaration of dividends to owners of the Company during Q1/2018.

As at the end of 2018, the ratio of net borrowings to equity was 0.53x, increased from 0.49x as at the end of 2017.

Cash flows

Net cash provided by operating activities for 2018 was Baht 1,886 million, a decrease of 36.7% from Baht 2,980 million for 2017, due mainly to the decrease of operating profit.

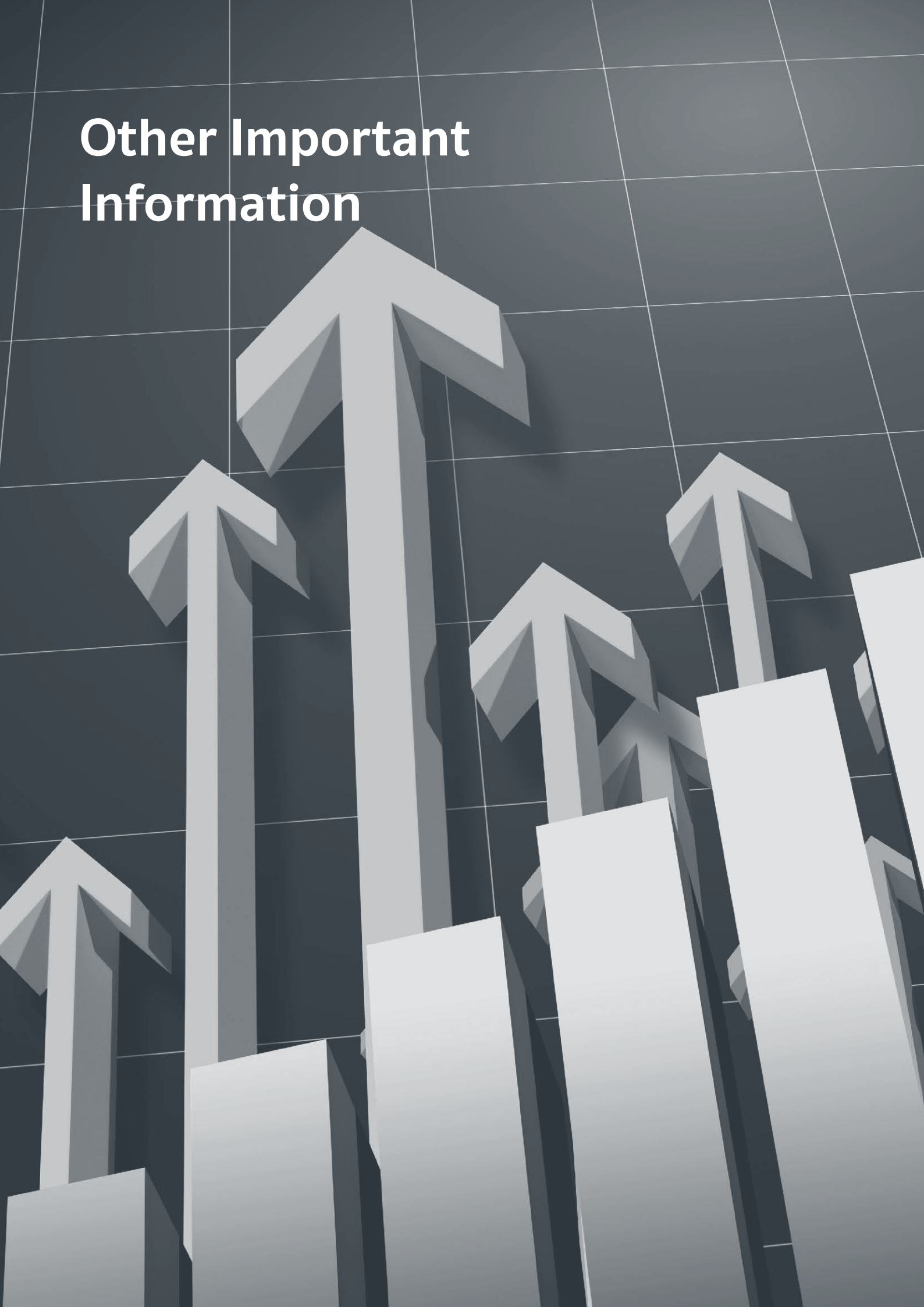
Net cash provided (used) by investing activities for 2018 was Baht 1,207 million, most of which were cash received from the sales of CSL's ordinary shares.

Net cash provided (used) in financing activities for 2018 was Baht (2,223) million, mainly comprising of the loans and interest payment, including dividend payment.

The Company had ending cash and cash equivalents of Baht 2,830 million and also held current investment of Baht 4,227 million as at the end of 2018.

This document contains certain forward-looking statements. They refer to future events and to the future financial performance of the Companies. Forward-looking statements generally can be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue." Although the Companies believe that the expectations reflected in such forward-looking statements are reasonable at this time, it can give no assurance that such expectations will prove to be correct. Given these uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

Other Important Information



Information of Directors, Executives, Controlling Person and Company Secretary



Mr. Prasert Bunsumpun

- Chairman of the Board of Directors
- Independent Director

Date of Appointment 1 October 2015
Age 66 years **% Shareholding(1) :** None

Relationship between Directors and Executives
None

Highest Education
- Honorary Doctor of Engineering, Chulalongkorn University
- Honorary Doctor of Management
  National Institute of Development Administration (NIDA)
- Honorary Doctor of Management Science
  Petchaburi Rajabhat University
- Honorary Doctor of Management
  Mahasarakham University
- Honorary Doctor of Public and Local Innovative Management,
  Suan Sunandha Rajabhat University
- Advanced Management Program, Harvard Business School
- Master Degree in Business Administration
  Utah State University, USA

IOD Training Programs
- RCP: Role of the Chairman Program Class 27/2012
- DAP: Directors Accreditation Program Class 26/2004

Other Training / Seminars
- The Executive Program of Energy Literacy for a Sustainable Future Class No.3, Thailand Energy Academy (TEA).
- Executive Program Class 3, The Capital Markets Academy (CMA)
- King Prajadhipok's Institute: Politics & Democracy for Senior Executive Class 6
- National Defense College of Thailand (NDC 4010)
- Certification in Advanced Management Program (1998) Harvard Business School (USA)

Working Experiences in the 5 preceding years

Mar 2018 - Present	Chairman of the Board of Director Thaicom Plc.
Oct 2015 - Present	Independent Director Thaicom Plc.

Position in other listed companies

Feb 2018 - Present	Chairman of the Board of Directors / Independent Director Nok Airlines Plc.
Apr 2016 - Present	Chairman of the Board of Directors / Independent Director SVI Plc.
Mar 2012 - Present	Chairman of the Board of Directors / Chairman of the Executive Committee Mermaid Maritime Plc
Jan 2012 - Present	Chairman of the Board of Directors / Chairman of the Executive Committee Thoresen Thai Agencies Plc
Dec 2011 - Present	Independent Director Intouch Holdings Plc
Oct 2011 - Present	Chairman of the Board of Directors PTT Global Chemical Plc

Position in other non-listed companies

Sep 2014 - Present	Member The National Legislative Assembly
2011 - Present	Chairman Thailand Business Council for Sustainable Development

Past Experiences

Apr 2013 - Feb 2016	Independent Director PTT Plc.
Oct 2011 - Apr 2015	Director / Chairman of the Executive Committee Krung Thai Bank Plc
Jul 2006 - Apr 2013	Chairman of the Board of Directors / Director IRPC Plc
Jul 2006 - Dec 2012	Chairman of the Board of Director / Director IRPC Polyol Co., Ltd.
Jul 2006 - Dec 2012	Chairman of the Board of Director / Director IRPC Oil Co., Ltd.
Jul 2006 - Dec 2012	Chairman of the Board of Director / Director Thai ABS Co., Ltd.
Oct 2005 - Dec 2012	Chairman of the Board of Directors Thai Lube Base Plc



Mrs. Patareeya Benjapolchai

- Independent Director
- Chairman of the Audit Committee
- Member of the Governance and Nomination Committee

Date of Appointment 30 March 2016
Age 64 years **% Shareholding(1) :** None

Relationship between Directors and Executives
None

Highest Education
- Master of Business Administration
  Thammasat University
- Certificate in Advance Auditing
  Chulalongkorn University

IOD Training Programs
- Ethical Leadership in 2018
- Driving Company Success with IT Governance in 2016
- Director Certification Program Update in 2014
- Financial Institutions Governance in 2010
- Director Certification Program (DCP) 1st in 2000

Other Training / Seminar
- IOD (Singapore) 2017 Flagship Conference "The Sustainability Imperative" โดย Singapore Institute of Director (SID) in 2017
- IOD (UK) Annual Convention 2016 "Thriving in a changing world" โดย The Institute of Director (UK) in 2016

Working Experiences in the 5 preceding years

Mar 2018 - Present	Member of Audit Committee and Chairman of Governance and Nomination Committee Thaicom Plc.
Mar 2016 - Present	Independent Director Thaicom Plc.

Position in other listed companies

2014 - Present	Independent Director / Chairperson of the Audit Committee MCOT Plc.
2013 - Present	Independent Director Bangkok Glass Plc.
2011 - Present	Independent Director / Member of Audit Committee TISCO Financial Group Plc.
2011 - Present	Independent Director / Member of Audit Committee TISCO Bank Plc.

Position in other non-listed companies

Feb 2017 - Present	Advisor for Civil Penalties Measurement The Securities and Exchange Commission
Feb 2017 - Present	Subcommittee on Acquisition of Securities for Business Takeover The Securities and Exchange Commission
2013 - Present	Director of Revolving Fund Evaluation Committee Ministry of Finance
2013 - Present	Member of the SET AWARD Committee as an Expertise for Corporate Governance and Social Responsibilities The Stock Exchange of Thailand
2013 - Present	Director Thai Institute of Directors Association
2010 - Present	Associate Judge The Central Intellectual Property and International Trade Court
2010 - Present	Director Baan Ruam Tang Fhun Co., Ltd.

Past Experiences

2013 - 2017	Directors' Responsibilities Steering Committee The Securities and Exchange Commission
2011 - 2017	Member of Ethics Committee Federation of Accounting Professions Under The Royal Patronage of His Majesty the King
2011 - 2016	Chairman of the Audit Committee The Office of the Agricultural Futures Trading Commission
2002 - 2010	President The Stock Exchange of Thailand



Mrs. Charintorn Vongspootorn

- Independent Director
- Member of the Audit Committee
- Chairman of the Compensation Committee

Date of Appointment 8 December 1999
Age 72 years **% Shareholding[1] :** None

Relationship between Directors and Executives

None

Highest Education

- Master of Business Administration
  Creighton University, USA

IOD Training Programs

- BMD: Boards that Make a Difference Class 3/2016
- SFE: Successful Formulation & Execution of Strategy Class 21/2014
- MFM: Monitoring Fraud Risk Management Class 2/2010
- AACP: Advance Audit Committee Program Class 2010
- RCC: Role of the Compensation Committee Class 6/2008
- MIA: Monitoring the Internal Audit Function Class 2/2008
- MIR: Monitoring the System of Internal Control and Risk Management Class 2/2008
- MFR: Monitoring the Quality of Financial Reporting Class 5/2007
- DCP: Refresher Class 1/2005
- ACP: Audit Committee Program Class 1/2004
- DCP: Directors Certification Program Class 8/2001

Working Experiences in the 5 preceding years

2012 - Present	Chairman of Compensation Committee Thaicom Plc.
1999 - Present	Independent Director and Member of the Audit Committee Thaicom Plc.

Position in other listed companies

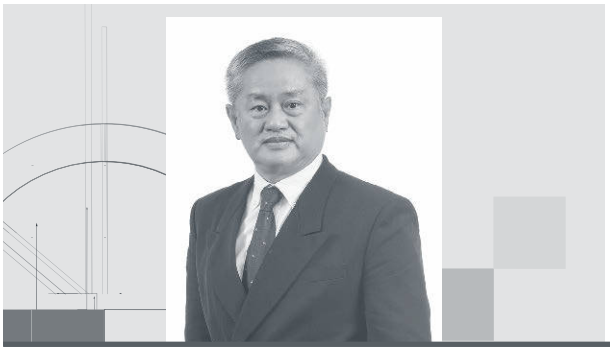
2010 - Present	Independent Director / Chairman of Audit Committee Ini3 Digital Plc.

Position in other non-listed companies

None

Past Experiences

2015 - Jan 2018	Advisor to Board of Directors Solaris Asset Management Co., Ltd.
2013 - Jan 2017	Advisor of Chief Executive Officer SEAMICO Securities Plc.
2008 - 2014	Advisor of Chief Executive Officer KT ZIMICO Securities Co., Ltd.
2008 - 2012	Advisor of the Board of Director SEAMICO Asset Management Co., Ltd.



Prof. Samrieng Mekkriengkrai

- Independent Director
- Member of the Audit Committee
- Member of the Compensation Committee
- Chairman of the Governance and Nomination Committee

Date of Appointment 10 August 2007

Age 65 years **% Shareholding[1] :** None

Relationship between Directors and Executives

None

Highest Education

- Master of Laws
  University of Miami, USA
- Thai Barrister At Law
  Institute of Legal Education of Thai Bar

IOD Training Programs

- BMD: Boards that Make a Difference Class 3/2016
- SFE: Successful Formulation & Execution of Strategy Class 19/2013
- HMS: How to Measure the Success of Corporate Strategy Class 2/2013
- FSD: Financial Statement for Directors Class 9/2010
- MFM: Monitoring Fraud Risk Management Class 2/2010
- ACP: Audit Committee Program Class 20/2007
- DCP: Directors Certification Program Class 96/2007

Other Training / Seminar

- Top Executive Program in Commerce and Trade (TEPCoT 8)

Working Experiences in the 5 preceding years

Mar 2018 - Present	Member of Compensation Committee / Member of Governance and Nomination Committee Thaicom Plc.
2007 - Present	Independent Director / Member of Audit Committee Thaicom Plc.

Position in other listed companies

2016 - Present	Independent Director Sermsang Power Corporatin Plc.
2012 - Present	Independent Director Unique Engineering and Construction Plc.

Position in other non-listed companies

2014 - Present	Expert Lecturer Faculty of Law, Chulalongkorn University
1990 - Present	Researcher of Law and Organization Chulalongkorn University

Past Experiences

2518 - 2557	Lecturer Faculty of Law, Chulalongkorn University



Mr. Somprasong Boonyachai

- Director

Date of Appointment 11 August 2006
Age 63 years **% Shareholding[1] :** None

Relationship between Directors and Executives
None

Highest Education
- Master Degree in Engineering
  Asian Institute of Technology (AIT)

IOD Training Programs
- RCP : Role of the Chairman Program Class 21/2009
- DCP: Directors Certification Program Class 65/2005
- DAP: Directors Accreditation Program Class 30/2004

Other Training / Seminar
- National Defense College of Thailand (NDC 4313)
- Graduate School of Business, Stanford University: Leading Change and Organizational Renewal
- IMD International, MIT Sloan: Leadership Dilemmas and Profitable Growth
- King Prajadhipok's Institute: Politics & Democracy for Senior Executive Class 11
- Executive Program Class 6, The Capital Markets Academy (CMA)
- Top Executive Program in Commerce and Trade (TEPCoT 4)
- Harvard Business School: Corporate Restructuring, Mergers, and Acquisitions
- The Programe for Senior Executive on Justice Administration (BATCH 17)
- Energy Literacy for Sustainable Future Class 4
- High Performance Board 2015 by IMD

Working Experiences in the 5 preceding years

2006 - Present	Director Thaicom Plc.

Position in other listed companies

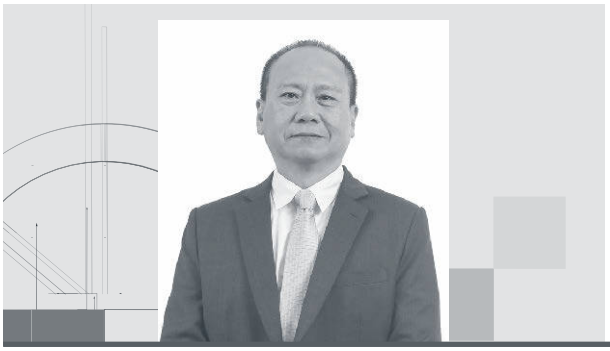
2018 - Present	Vice Chairman of the Board of Directors / Independent Director Osotspa Plc.
2017 - Present	Director BEC World Plc.
2017 - Present	Director Dusit Thani Plc.
2008 - Present	Director Intouch Holdings Plc.
2008 - Present	Vice Chairman of the Board of Directors Advanced Info Service Plc.
2002 - Present	Independent Director / Member of the Audit Committee Power Line Engineering Plc.

Position in other non-listed companies

2017 - Present	Director National Strategy Committee for the Development and Capacity Building of Human Resources of year 2017

Past Experiences

2016 - 2018	Director Osotspa Co., Ltd
Jan 2017 - Mar 2018	Chairman of the Executive Committee BEC World Plc.
Jan 2016 - Jun 2017	Advisor of Chief Executive Officer Intouch Holdings Plc.
Jan 2016 - Jan 2017	Independent Director Pruksa Real Estate Plc.
2016 - 2016	Independent Director Pruksa Holdings Plc.
2008 - 2016	Director Praram 9 Hospital Co., Ltd.
2008 - 2016	Chairman of the Executive Committee Intouch Holdings Plc.
2008 - 2015	Chief Executive Officer Intouch Holdings Plc.
2009 - 2011	Chairman of the Executive Committee Thaicom Plc.
2000 - 2008	Member of the Executive Committee Shin Satellite Plc.
1999 - 2008	Chairman of the Executive Committee Advanced Info Service Plc.
1994 - 2008	Director Advanced Info Service Plc.



Mr. Kwek Buck Chye

- Director
- Member of the Executive Committee
- Member of the Governance and Nomination Committee

Date of Appointment 27 March 2015
Age 64 years **% Shareholding[1] :** None

Relationship between Directors and Executives

None

Highest Education

- Advanced Management Program
  Harvard University, USA
- Bachelor of Accountancy
  University of Singapore

IOD Training Programs

- DCP: Director Certification Program Class 214/2015

Other Training / Seminar

- High Performance Board 2015, IMD

Working Experiences in the 5 preceding years

Mar 2017 - Present	Member of Governance and Nomination Committee Thaicom Plc.
Mar 2015 - Present	Director / Executive Committee Member Thaicom Plc.

Position in other listed companies

Apr 2017 - Present	Director Accuron Technologies Ltd.
Apr 2016 - Present	Director Trailblazer Foundation Ltd. (Singapore)
Jan 2015 - Present	Director Intouch Holdings Plc.

Position in other non-listed companies

Apr 2017 - Present	Director / member of Risk & Audit Precision Engrg & Aerospace Parts Mfg
2013 - Present	Self-employed financial consultant
2011 - Present	Advisory Committee Member Singapore CFO Institute, subsidiary of Singapore Accounting Commission

Past Experiences

Oct 2000 - Sep 2002	Chief Financial Officer ST Telemedia Pte Ltd.
May 2000 - Sep 2001	Chief Financial Officer Vickers Capital Ltd.
Jan 1999 - Apr 1999	Chief Financial Officer Vertex Management (II) Pte. Ltd.
Nov 1997 - Jan 1999	Chief Financial Officer ST Assembly & Test Services Pte. Ltd.
Apr 1996 - Nov 1997	Chief Financial Officer Chartered Semiconductor Mfg Ltd.
Sep 1992 - Sep 2013	Chief Financial Officer StarHub Ltd.
Apr 1992 - Apr 1999	Group Director Finance Singapore Technologies Pte Ltd. & Subsidiaries



Mr. Anek Pana-Apichon

- Chairman of the Executive Committee
- Member of Compensation Committee
- Director (Authorized Director)

Date of Appointment 1 July 2017
Age 53 years **% Shareholding[1] :** None

Relationship between Directors and Executives

None

Highest Education

- Master Degree in Business Administration
  Chulalongkorn University

IOD Training Programs

- DCP: Director Certification Program 111/2008

Other Training / Seminar

- Advanced Management Program - The Wharton School of the University of Pennsylvania, USA
- Executive Program Class 15, The Capital Markets Academy (CMA)
- Harvard Leadership Development Program by Harvard Business Publishing (2017 - 2018)

Working Experiences in the 5 preceding years

Mar 2018 - Present	Chairman of Executive Committee / Member of Compensation Committee Thaicom Plc.
July 2017 - Present	Director / Authorized Director Thaicom Plc.

Position in other listed companies

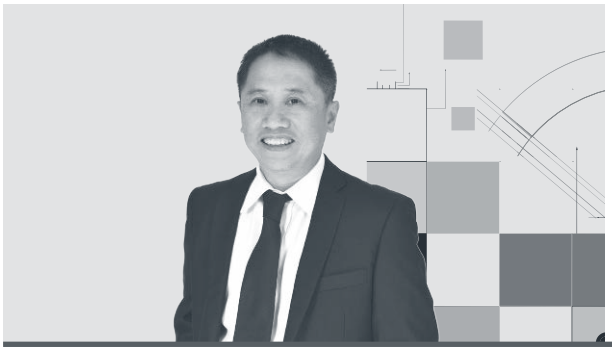
Jan 2019 - Present	Chief Executive Officer Intouch Holdings Plc.
Jul 2017 - Present	Director / Authorized Director Intouch Holdings Plc.

Position in other non-listed companies

2018 - Present	Director / Member of the Executive Committee CS Loxinfo Plc.
2017 - Present	Chairman of Board of Director High Shopping Co.,Ltd.
2558 - ปัจจุบัน	Director I.T. Applications and Services Co.,Ltd.
2558 - ปัจจุบัน	Director High Shopping TV Co., Ltd.

Past Experiences

2017 - 2018	Acting Chief Executive Officer Intouch Holding Plc.
2010 - 2018	Executive Vice President - Finance & Accounting Intouch Holding Plc.
2010 - 2018	Member of the Executive Committee Thaicom Plc.
2015 - Jun 2017	Director High Shopping Co.Ltd.
2010 - 2015	Director Thaicom Plc.
Feb - Sep 2011	Acting Chief Finance Officer Thaicom Plc.
2004 - 2010	Vice President - Finance & Accounting Intouch Holding Plc.



Mr. Anant Kaewruamvongs [2]

- Director
- Member of the Executive Committee
- Chief Executive Officer (Authorized Director)

Date of Appointment 1 May 2018
Age 57 years **% Shareholding[1] :** None

Relationship between Directors and Executives
None

Highest Education
- Master Degree in Management
  SASIN Graduate Institute of Business Administration of Chulalongkorn University
- Diploma, National Defence College
  The Joint State - Private Sector Course Class 26

IOD Training Programs
- DCP: Director Certification Program Class 66/2005
- DAP: Director Accreditation Program Class 45/2005
- EDP: Executive Development Program Class 2/2008
- SFE: Successful Formulation and Executive Strategy Class 6/2010
- HRP: How to Develop a Risk Management Plan Class 9/2016

Other Training / Seminar
- TCLA Executive Development Program (EDP) Class 2/2008 by Thai Listed Companies Association
- Advance Management Program Class 187/2014 by Harvard Business School, USA
- Harvard Leadership Development Program (2017-2018)

Working Experiences in the 5 preceding years

May 2018 - Present	Director / Chief Executive Officer Thaicom Plc.
Mar 2018 - Present	Member of the Executive Committee Thaicom Plc.

Position in other listed companies

Feb 2016 - Present	Member of Executive Committee Advance Info Service Plc.

Position in other non-listed companies

May 2018 - Present	Director / Member of the Executive Committee Shenington Investment Pte. Ltd.
May 2018 - Present	Director International Satellite Co., Ltd.
May 2018 - Present	Director Lao Telecommunications Public Company
May 2018 - Present	Director IPSTAR Co., Ltd.
May 2018 - Present	Director Star Nucleus Co., Ltd.
May 2018 - Present	Director IPSTAR International Pte. Ltd.
May 2018 - Present	Director IPSTAR Global Services Ltd.
May 2018 - Present	Director IPSTAR Australia Pty Ltd.
May 2018 - Present	Director IPSTAR New Zealand Ltd.
May 2018 - Present	Director IPSTAR Japan Ltd.
May 2018 - Present	Director TC Broadcasting Company Limited
2007 - Present	Director / Member of the Executive Committee CS Loxinfo Plc.

Past Experiences

Apr 2013 - Apr 2018	Chief Executive Officer CS Loxinfo Plc.
Mar 2010 - Present	Director / Member of the Executive Committee Teleinfo Media Plc.
Aug 2009 - Present	Director AD Ventures Plc.
Jul 2005 - Apr 2018	Managing Director CS Loxinfo Plc.
2007	Director / Member of Executive Committee CS Loxinfo Plc.
1999 - 2005	Deputy Managing Director CS Loxinfo Plc.
1997-1999	General Manager CS Satellite Phone Co., Ltd.



Mr. Anuwat Sanguansappayakorn[2]

- Chief Financial Officer

Date of Appointment 1 September 2017
Age 53 years **% Shareholding[1] :** None

Relationship between Directors and Executives

None

Highest Education

- Master of Accounting
  Chulalongkorn University

IOD Training Programs

- DCP: Director Certification Program Class 88/2017

Other Training / Seminar

- Executive Development Program (EDP) by TLCA
  Class 9/2012
- Diploma ISP Class 116 Institute of Security Psychology,
  National Defense Studies Institute, Royal Thai Armed
  Forces Headquarters
- Harvard Leadership Development Program (2017-2018)

Working Experiences in the 5 preceding years

Sep 2017 - Present	Chief Finance Officer Thaicom Plc.

Position in other non-listed companies

2017 - Present	Director Shenington Investments Pte Ltd.
2017 - Present	Director Cambodian DTV Network Limited
2017 - Present	Director IPSTAR Global Services Limited
2017 - Present	Director Star Nucleus Company Limited
2017 - Present	Director International Satellite Company Limited
2017 - Present	Director IPSTAR Company Limited
2017 - Present	Director IPSTAR Australia Pty Limited
2017 - Present	Director IPSTAR New Zealand Limited
2017 - Present	Director IPSTAR Japan Company Limited
2017 - Present	Director IPSTAR International Pte Limited
2017 - Present	Director Lao Telecommunications Public Company
2017 - Present	Director TC Broadcasting Company Limited

Past Experiences

May 2003 - Aug 2017	Chief Finance Officer CS Loxinfo Plc.
1998 - 2003	Finance Manager CS Communications Ltd.



Mr. Patompob Suwansiri [2]

- Member of Executive Committee
- Chief Commercial Officer

Date of Appointment 1 January 2016
Age 50 years **% Shareholding[1] :** 0.0008

Relationship between Directors and Executives

None

Highest Education

- Advanced Management Program
  Harvard Business School
- Executive MBA, Sasin Graduate Institute of Business Administration of Chulalongkorn University

IOD Training Programs

- DCP: Director Certification Program Class 185/2014

Other Training / Seminar

- Strategy and Innovation for Business in Asia (SIBA), College of Management Mahidol University
- Executive Program Class 18/2014, The Capital Markets Academy (CMA)
- Harvard Leadership Development Program (2017-2018)

Working Experiences in the 5 preceding years

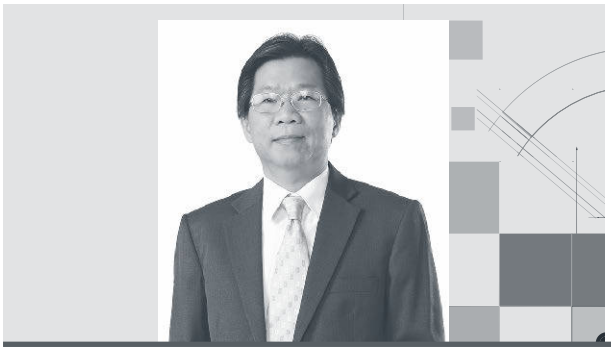
Jan 2016 - Present	Chief Commercial Officer Thaicom Plc.
Nov 2015 - Present	Member of Executive Committee Thaicom Plc.

Position in other non-listed companies

Sep 2016 - Present	Academic Director (Thai and International Curriculum Review and Revision Committees) College of Management Mahidol University
Feb 2015 - Present	Director International Satellite Co., Ltd.
Feb 2014 - Present	Director Orion Satellite Systems Pty Ltd.

Past Experiences

May 2014 - Dec 2015	Chief Marketing Officer Thaicom Plc.
Apr 2013 - Apr 2014	Senior Vice President - Marketing and Business Development Thaicom Plc.
Jan 2012 - Mar 2013	Vice President - Marketing and Business Development Thaicom Plc.
Jul 2009 - Dec 2011	Vice President - Marketing and Sales Thaicom Plc.



Mr. Wichai Kittiwittayakul[2]

- Chief Audit Executive

Date of Appointment 1 August 2018
Age 57 years **% Shareholding[1] :** 0.000004

Relationship between Directors and Executives

None

Highest Education

- Master of Accounting
  Thammasat University

IOD Training Programs

- Board Composition and Relations
- Board Practices / Board Policy
- Effective Audit Committee
- Board & CEO Assessment Program
- Company Secretary Program
- Directors Certification Program Class 104/2008

Other Training / Seminar

- High Performance Board Program by IMD
- Risk Management for Corporate Leader by Harvard Business School

Working Experiences in the 5 preceding years

Aug 2018 - Present	Chief Audit Executive Thaicom Plc.

Position in other listed companies

Aug 2008 - Present	Executive Vice President - Governance, Risk and Compliance Intouch Holdings Plc.
2008 - Present	Company Secretary Intouch Holdings Plc.

Position in other non-listed companies

2016 - Present	Director Condominium Juristic Person of Ocas Hua Hin

Past Experiences

2013 - 2018	Executive Vice President - Company Secretary and Internal Audit Intouch Holdings Plc.
2011 - 2017	Professional Accounting Committee on Accounting Education and Technology Federation of Accounting Professions (Under The Royal Patronage of His Majesty The King)
2010 – 2017	Advisor The Institute of Internal Auditors of Thailand
2011 - 2013	Senior Vice President - Company Secretary and Internal Audit Intouch Holdings Plc.
2004 - 2011	Vice President - Company Secretary and Internal Audit Intouch Holdings Plc.
2007 - 2009	President The Institute of Internal Auditors of Thailand



Mr. Ekachai Phakdurong[2]

- Head of Regulatory Affairs Department
- Head of Platform and Services Business Department

Age 48 years **% Shareholding[1] :** 0.0007

Relationship between Directors and Executives
None

Highest Education
- Master of Sciences in Electrical Engineering
  University of Southern California

IOD Training Programs
- DCP: Directors Certification Program Class 157/2014

Working Experiences in the 5 preceding years

2018 - Present	Head of Regulatory Affairs Department Head of Platform and Services Business Department Thaicom Plc.

Position in other non-listed companies

Present	Director TC Broadcasting Ltd.
Present	Director Thai Advance Innovation Company Limited

Past Experiences

2017 - 2018	Senior Vice President - Media and Retail Business Thaicom Plc.
2014 - 2018	Senior Vice President - Government Affairs Thaicom Plc.
2011 - 2014	Vice President - Corporate Affairs Thaicom Plc.



Mrs. Pannee Nivasnanda[2]

- Head of Finance Department

Age 56 years **% Shareholding[1] :** None

Relationship between Directors and Executives
None

Highest Education
- Bachelor of Business Administration
  Assumption University

IOD Training Programs
- DCP: Directors Certification Program Class 179/2013

Other Training / Seminar
- TLCA Executive Development Program (EDP)
- Management Development Program (MDP)

Working Experiences in the 5 preceding years

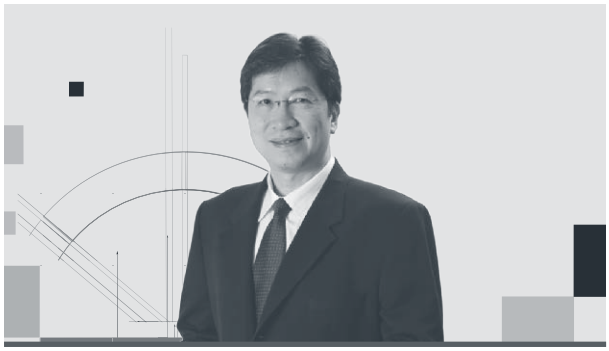
Nov 2018 - Present	Head of Finance Department Thaicom Plc.

Position in other non-listed companies

2016 - Present	Director IPSTAR (India) Private Limited
2016 - Present	Director TC Global Services Company Limited
2016 - Present	Director Thai Advance Innovation Company Limited

Past Experiences

May 2018 - Oct 2018	Senior Vice President - Finance Department Thaicom Plc.
2010 - Apr 2018	Vice President - Finance Department Thaicom Plc.



Dr. Sakon Kittivatcharapong[2]

- Head of Marketing and Business Development Department

Age 58 years **% Shareholding[1] :** 0.0008

Relationship between Directors and Executives
None

Highest Education
- Doctor of Engineering in Electrical Engineering
  The Ohio State University

IOD Training Programs
- DCP: Directors Certification Program Class 193/2014

Working Experiences in the 5 preceding years

2016 - Present	Head of Marketing and Business Development Department Thaicom Plc.

Position in other non-listed companies

2016 - Present	Director TC Global Services Company Limited.



Ms. Yupapan Panclurbthong

- Head of COMSEC and Compliance Section and Company Secretary [3]

Date of Appointment 12 November 2012

Age 55 years **% Shareholding[1] :** None

Relationship between Directors and Executives
None

Highest Education
- Bachelor of Arts
  Chulalongkorn University

IOD Training Programs
- BMD: Boards that Make a Difference Class 3/2016
- ACPG: Anti-Corruption: The Practical Guide Class 10/2014
- DCP: Directors Certification Program Class 185/2014
- CSP: Company Secretary Program Class 48/2012

Other Training / Seminar
- TMA: Management Development Program Class 26/2017
- ITD World: Change your habits, change your world 2017
- TLCA Executive Development Program - EDP Class 12/2013

Working Experiences in the 5 preceding years

2017 - Present	Head of COMSEC and Compliance Section Thaicom Plc.
2012 - Present	Company Secretary Thaicom Plc.

Past Experiences

2017 - 2018	Vice President - Corporate Communications Thaicom Plc.
Apr 2014 - 2018	Vice President - Executive Office and Company Secretary Thaicom Plc.
2012 - 2014	Assistant Vice President - Executive Office Thaicom Plc.
1989 - 2012	Secretary to Chairman of the Executive Committee Thaicom Plc.

Remarks

(1) Includes shareholding by spouse and minor children

(2) Executive according to definition of the Notification of Securities and Exchange Commission

(3) Duties and Responsibilities of Company Secretary presented in Corporate Governance and Management: Company Secretary

Information of Directors, Executives and Controlling Authorities of Subsidiaries and Associates

Name of Directors and Executives	Holding Company	Company					
			1	2	3	4	
	INTOUCH	THAICOM	IPSTAR	IPNZ	IPA	OSS	
1. Mr. Prasert Bunsumpun [1]	/	C					
2. Mrs. Charintorn Vongspootorn		/					
3. Prof. Samrieng Mekkriengkrai		/					
4. Mrs. Patareeya Benjapolchai		/					
5. Mr. Somprasong Boonyachai	/	/					
6. Mr. Kwek Buck Chye	/	/, //					
7. Mr. Anek Pana-Apichon	/	/, //					
8. Mr. Anant Kaewruamvongs [2]		/, //, E	/	/	/		
9. Mr. Anuwat Sanguansappayakorn		E	/	/	/		
10. Mr. Patompob Suwansiri		//, E				/	
11. Mr. Wichai Kittiwittayakul		E					
12. Mr. Ekachai Phakdurong		E					
13. Mrs. Pannee Nivasnanda		E					
14. Mr. Sakon Kittivatcharapong		E					

C = Chairman / = Director // = Executive Director E = Executive

Remarks:

(1) Mr. Prasert Bunsumpun was appointed as Chairman of the Board of Directors in replacement of Mr. Paron Israsena who resigned, by the resolution of the Board of Directors Meeting No. 3/2018 held on 19 March 2018, effective from 24 March 2018.

(2) Mr. Anant Kaewruamvongs was appointed as Chief Executive Officer in replacement of Mr. Paiboon Panuwattanawong who resigned, by the resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 1 May 2018.

(3) DTV has changed its name to Thai Advance Innovation Company Limited (ThaiAI) registered on 27 November, 2018.

Company's Name

BEELINE	VimpelCom Limited	IPJ	IPSTAR Japan Limited
CDN	Cambodian DTV Network Limited	IPNZ	IPSTAR New Zealand Limited
INTOUCH	Intouch Holdings Public Company Limited	IPSTAR	IPSTAR Company Limited
IPA	IPSTAR Australia Pty Limited	ISC	International Satellite Company Limited
IPGS	IPSTAR Global Services Limited	LTC	Lao Telecommunications Public Company
IPI	IPSTAR (India) Private Limited	OSS	Orion Satellite System Pty Limited
IPIN	IPSTAR International Pte Limited		

(As of 31 December 2018)

	5	6	7	8	9	10	11	12	13	14	15	16	17
	IPIN	IPGS	IPJ	IPI	STAR	TCB	ISC	TCGS	ThaiAI[3]	CDN	SHEN	LTC	BEELINE
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SHEN	Shenington Investment Pte Limited
STAR	Star Nucleus Company Limited
TCB	TC Broadcasting Company Limited
TCGS	TC Global Services Company Limited
ThaiAI	Thai Advance Innovation Company Limited
THAICOM	Thaicom Public Company Limited

Securities Holding of the Directors and Executives For The Year 2018

The Company has notified all members of the Board of Directors and the Company's Executives on their duties to file their securities holding, including those of their spouses and underage children, to SEC Office within 30 days as from date of appointment as director or executive. In case of change in securities holding, they are required to file the change with SEC Office within 3 business days as from the date of purchase, sale, transfer or acceptance of transfer of such securities.

In each quarter, directors and executives of the Company must report the securities holding and changes to the Board of Directors. As of 31 December 2018, the securities holding of the directors and executives are as follows.

Name of Directors and Executives	Thaicom Public Company Limited								
	Common share (shares)			Warrant (units)			Debentures (units)		
	31 Dec 17	31 Dec 18	+ / (-)	31 Dec 17	31 Dec 18	+ / (-)	31 Dec 17	31 Dec 18	+ / (-)
1. Mr. Prasert Bunsumpun[1]	-	-	-	-	-	-	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
2. Mrs. Charintorn Vongspootorn	-	-	-	-	-	-	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
3. Prof. Samrieng Mekkriengkrai	-	-	-	-	-	-	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
4. Mrs. Patareeya Benjapolchai	-	-	-	-	-	-	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
5. Mr. Somprasong Boonyachai	-	-	-	-	-	-	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
6. Mr. Kwek Buck Chye	-	-	-	-	-	-	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
7. Mr. Anek Pana-Apichon	-	-	-	-	-	-	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
8. Mr. Anant Kaewruamvongs[2]	-	-	-	-	-	-	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-

Name of Directors and Executives	Thaicom Public Company Limited								
	Common share (shares)			Warrant (units)			Debentures (units)		
	31 Dec 17	31 Dec 18	+ / (-)	31 Dec 17	31 Dec 18	+ / (-)	31 Dec 17	31 Dec 18	+ / (-)
9. Mr. Anuwat Sanguansappayakorn	-	-	-	-	-	-	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
10. Mr. Patompob Suwansiri	8,900	13,379	4,479	333,960	329,481	(4,479)	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
11. Mr. Ekachai Phakdurong[3]	5,000	7,509	2,509	143,373	140,864	(2,509)	-	-	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
12. Dr. Sakon Kittivatcharapong[3]	4,400	8,905	4,505	141,687	137,182	(4,505)	1,000	1,000	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-
13. Mrs. Pannee Nivasnanda[3]	18,500	-	(18,500)	77,037	75,274	(1,763)	1,000	1,000	-
Spouse / Minor child	-	-	-	-	-	-	-	-	-

Remarks:

(1) Mr. Prasert Bunsumpun was appointed as Chairman of the Board of Directors, replacing Mr. Paron Israsena who resigned, by the resolution of the Board of Directors Meeting No. 3/2018 held on 19 March 2018, effective from 24 March 2018.

(2) Mr. Anant Kaewruamvongs was appointed as Chief Executive Officer, replacing Mr. Paiboon Panuwattanawong who resigned, by the resolution of the Board of Directors Meeting No. 4/2018 held on 28 March 2018, effective from 1 May 2018.

(3) Due to the change in organization structure on 1 November 2018, therefore Mr. Ekachai Phakdurong, Dr. Sakon Kittivatcharapong and Mrs. Nivasnanda considered as the first 4 managers who are required to disclose their securities holding in the Company and to notify to Securities and Exchange Commission of Thailand (SEC) according to the definition of executive in Section 3/1 of the Securities and Exchange Act BE 2535.

Board of Directors' Responsibility for Financial Reporting

The Board of Directors is responsible for Thaicom Public Company Limited's separate financial statements and Thaicom Public Company Limited and its subsidiaries' consolidated financial statements, including the financial information presented in this annual report. The aforementioned financial statements are prepared in accordance with generally accepted accounting principles, using careful judgment and the best estimations. Important information is adequately and transparently disclosed in the notes to financial statements for the Company's shareholders and investors.

The Board of Directors has provided and maintained a risk management system and appropriate and efficient internal controls to ensure that accounting records are accurate, reliable and adequate to protect its assets and uncover any weaknesses that may be presented in order to prevent fraud or materially irregular operations.

In this regard, the Board of Directors has appointed an Audit Committee to be responsible for reviewing the accounting policy, financial reports, internal controls, internal audit and risk management system. The Audit Committee has also reviewed a disclosure of related party transactions. All their comments on these issues have been included in the Audit Committee Report which is presented in this annual report.

The separate financial statements of the Company and the consolidated financial statements of the Company and its subsidiaries have been examined by an external auditor, DELOITTE TOUCHE TOHMATSU JAIYOS AUDIT CO., LTD. To conduct the audits and express an opinion in accordance with generally accepted auditing standards, the auditor was provided with all of the Company's records and related data as requested. The auditor's opinion is presented in the auditor's report as part of this annual report.

The Board of Directors believes that the Company's overall internal control system has functioned up to a satisfactory level and rendered credibility and reliability to Thaicom Public Company Limited's separate financial statements and Thaicom Public Company Limited and its subsidiaries' consolidated financial statements for the year ended 31 December 2018. The Board of Directors also believes that all these financial statements have been prepared in accordance with generally accepted accounting principles and related regulations.



(Mr.Prasert Bunsumpun)
Chairman of the Board of Directors



(Mr.Anant Kaewruamvongs)
Chief Executive Officer


200
150
100
50

REPORT OF THE INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

TO THE SHAREHOLDERS AND BOARD OF DIRECTORS
THAICOM PUBLIC COMPANY LIMITED

Opinion

We have audited the consolidated financial statements of Thaicom Public Company Limited and its subsidiaries (the "Group") and the separate financial statements of Thaicom Public Company Limited (the "Company"), which comprise the consolidated and separate statements of financial position as at December 31, 2018, and the related consolidated and separate statements of profit or loss, profit or loss and other comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the financial position of Thaicom Public Company Limited and its subsidiaries and of Thaicom Public Company Limited as at December 31, 2018, and its financial performance and its cash flows for the year then ended in accordance with Thai Financial Reporting Standards ("TFRSs").

Basis for Opinion

We conducted our audit in accordance with Thai Standards on Auditing ("TSAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements section of our report. We are independent of the Group in accordance with the Federation of Accounting Professions' Code of Ethics for Professional Accountants together with the ethical requirements that are relevant to the audit of the consolidated and separate financial statements, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter

Without modifying our opinion, we draw attention to Note 9 to the financial statements that a subsidiary of the Company has sold its entire investment in CS Loxinfo Public Company Limited to Advance Wireless Network Co., Ltd. on January 25, 2018. The Company presented the net profit from CS Loxinfo Public Company Limited as net profit from discontinued operation in the consolidated and separate statements of profit or loss for the years ended December 31, 2018 and 2017.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated and separate financial statements of the current period. These matters were addressed in the context of our audit of the consolidated and separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit Matters	Key Audit Procedures
Recognition of revenue from rendering of services The Group has many service agreements which have different terms and pricing conditions. Therefore, the key audit matter is occurrence, accuracy and completeness of recognition of revenue from rendering of services whether the revenue from rendering of services has been recorded according to the service agreements accurately in accordance with TFRSs. Accounting policy of revenue recognition and detail of revenue from rendering of services were disclosed in the Note 3.18 and Note 24 to the financial statements.	Key audit procedures included: • Understanding the revenue recognition process related to rendering of services and related internal control procedures • Testing the design and implementation of the internal control procedures related to rendering of services • Performing the operating effectiveness testing over the internal control procedures around revenue recognition process related to rendering of services including related information, and • Performing substantive testing as follows: – Examining the terms and condition of the service agreements and recalculating the revenues whether it has been recorded appropriately and examining the related supporting documents of those revenues from rendering of services – Performing substantive analytical procedures relating to the revenue from rendering of services.

Key Audit Matters	Key Audit Procedures
Impairment of equipment and intangible assets under operating agreement The consideration of impairment of equipment and intangible asset under operating agreement is depended on the management judgements and assumptions. Therefore, the key audit matter is whether the valuation of equipment and intangible asset under operating agreement and impairment of equipment and intangible asset under operating agreement have been recognized in accordance with TFRSs. Accounting policies of property, plant and equipment, intangible assets under operating agreement and impairment and detail of property, plant and equipment and intangible assets under operating agreement were disclosed in the Note 3.9, Note 3.10, Note 3.13, Note 12, and Note 13 to the financial statements, respectively.	Key audit procedures included: • Understanding the impairment consideration process and impairment recognition and related internal control procedures • Testing the design and implementation of the internal control procedures • Performing the operating effectiveness testing over the internal control procedures around impairment consideration process, and • Performing substantive testing as follows: – Examining the supporting documents in relation to the management consideration of impairment indicators for equipment and intangible asset under operating agreement. – Involving the internal specialists of the independent auditor in assessing and testing the appropriateness of valuation model and key assumptions the management used in the estimation of the impairment provision for equipment and intangible asset under operating agreement – Examining the correctness of the data used in the estimation of the impairment provision for equipment and intangible asset under operating agreement with supporting documents and relative report – Examining the correctness of the calculation of the impairment provision for equipment and intangible asset under operating agreement.

Key Audit Matters	Key Audit Procedures
Allowance for doubtful accounts The allowance for doubtful accounts of trade receivables represent management's estimation of allowance for doubtful accounts as at the end of financial reporting period. The Company has assessed the allowance for doubtful accounts by consideration of the payment histories and the ability to make payments in the future of customer. Therefore, the key audit matter is whether as valuation of the trade receivables and the allowance for doubtful accounts are in accordance with TFRSs. Accounting policy of allowance for doubtful accounts and detail of trade receivables and allowance for doubtful accounts were disclosed in the Note 3.5 and Note 7 to the financial statements.	Key audit procedures included: • Understanding the allowance for doubtful accounts consideration process and related internal control procedures • Testing the design and implementation of the internal control procedures • Performing the operating effectiveness testing over the internal control procedures around the consideration of allowance for doubtful accounts and • Performing substantive testing as follows: - Examining the supporting documents the managements used in considering the indicators of allowance for doubtful accounts - Assessing the appropriateness of considering process and key assumption and information that management used in assessing the allowance for doubtful accounts - Testing the calculation of the allowance for doubtful accounts.

Other Information

Management is responsible for the other information. The other information comprises information in the annual report, we have received such other information in the annual report that has been prepared for issuance before the date of this auditors' report.

Our opinion on the consolidated and separate financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated and separate financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We have read other information in the annual report that has been prepared for issuance, we did not find any material inconsistency therein which we have to report.

Responsibilities of Management and Those Charged with Governance for the Consolidated and Separate Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of the consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with TSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.



Chavala Tienpasertkij
Certified Public Accountant (Thailand)
Registration No. 4301
DELOITTE TOUCHE TOHMATSU JAIYOS AUDIT CO., LTD.

BANGKOK
February 8, 2019

Thaicom Public Company Limited and its Subsidiaries
Statements of financial position
As at 31 December 2018

	Notes	Consolidated financial statements		Separate financial statements	
		31 December 2018	31 December 2017	31 December 2018	31 December 2017
		Baht	Baht	Baht	Baht
Assets					
Current assets					
Cash and cash equivalents	5	2,830,234,585	1,960,770,857	1,719,753,567	683,765,774
Current investments	6	4,227,209,793	3,407,069,423	3,834,155,421	3,436,461,878
Trade and other current receivables	7	1,851,432,896	1,666,859,482	2,571,027,795	1,957,412,837
Amounts due from related parties	4	42,699,114	90,824,861	88,525,483	190,369,034
Current portion of long-term loan to related parties	4	485,724,816	244,591,079	525,724,816	244,591,079
Inventories	8	122,483,562	124,813,587	98,280,234	106,892,786
Current tax assets		96,384,799	62,645,724	96,384,799	62,645,724
Other current assets		22,520,023	93,203,229	19,786,409	25,951,957
Non-current assets classified as held for sale	9	-	1,837,189,239	-	-
Total current assets		**9,678,689,588**	**9,487,967,481**	**8,953,638,524**	**6,708,091,069**
Non-current assets					
Long-term loans to related parties	4	1,457,174,448	1,712,137,550	1,467,174,448	1,752,137,549
Investments in subsidiaries	10	-	-	1,502,621,824	1,674,859,190
Investments in a joint venture	10	1,444,282,683	1,356,700,860	1,444,282,683	1,356,700,860
Property, plant and equipment	12	4,814,703,118	7,859,316,266	4,771,240,586	7,794,040,539
Intangible assets under operating agreement	13	3,007,340,364	3,986,568,906	3,007,340,364	3,986,568,906
Deferred charges	13	13,614,935	15,632,576	13,614,935	15,632,576
Intangible assets	13	325,027,926	427,047,889	240,374,560	333,565,036
Deferred tax assets	14	1,117,018,424	775,824,882	992,281,352	704,853,399
Other non-current assets	15	344,227,641	317,997,744	326,404,118	298,977,826
Total non-current assets		**12,523,389,539**	**16,451,226,673**	**13,765,334,870**	**17,917,335,881**
Total assets		**22,202,079,127**	**25,939,194,154**	**22,718,973,394**	**24,625,426,950**

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries
Statements of financial position (Continued)
As at 31 December 2018

	Notes	Consolidated financial statements		Separate financial statements	
		31 December 2018	31 December 2017	31 December 2018	31 December 2017
		Baht	Baht	Baht	Baht
Liabilities and equity					
Current liabilities					
Trade and other current payables	17	712,891,519	866,662,159	543,581,634	658,855,472
Amounts due to related parties	4	169,230	829,729	3,724,256	23,522,941
Current portion of long-term borrowings	16	2,673,841,281	421,788,460	2,695,841,281	421,788,460
Advance receipts from customers		275,480,256	218,392,223	65,907,840	60,020,292
Accrued operating agreement fee		258,340,350	263,344,848	258,340,350	263,344,848
Income tax payable		34,032,013	7,225,864	-	-
Other current liabilities	18	91,314,282	95,844,393	44,493,053	63,253,253
Liabilities directly associated with non-current assets classified as held for sale	9	-	1,055,257,237	-	-
Total current liabilities		**4,046,068,931**	**2,929,344,913**	**3,611,888,414**	**1,490,785,266**
Non-current liabilities					
Long-term borrowings	16	4,349,010,715	7,024,628,257	4,352,010,715	7,061,628,257
Long-term accounts payable - property and equipment		225,042,120	226,645,680	225,042,120	226,645,680
Net liabilities in subsidiaries	10	-	-	980,026,152	576,045,267
Non-current provisions for employee benefit	19	160,746,632	175,939,941	135,591,812	148,950,511
Other non-current liabilities	20	284,153,167	302,925,926	277,356,357	299,278,905
Total non-current liabilities		**5,018,952,634**	**7,730,139,804**	**5,970,027,156**	**8,312,548,620**
Total liabilities		**9,065,021,565**	**10,659,484,717**	**9,581,915,570**	**9,803,333,886**
Equity					
Share capital	21				
Authorised share capital		5,499,884,200	5,499,884,200	5,499,884,200	5,499,884,200
Issued and paid-up share capital		5,480,509,770	5,480,333,200	5,480,509,770	5,480,333,200
Premium on ordinary shares	21	4,325,271,183	4,324,626,137	4,325,271,183	4,324,626,137
Retained earnings					
Appropriated					
Legal reserve	22	549,988,420	549,988,420	549,988,420	549,988,420
Unappropriated		2,936,698,328	4,201,676,132	2,936,698,328	4,201,676,132
Other components of equity		(155,409,877)	265,469,175	(155,409,877)	265,469,175
Equity attributable to owners of the Company		**13,137,057,824**	**14,822,093,064**	**13,137,057,824**	**14,822,093,064**
Non-controlling interests		(262)	457,616,373	-	-
Total equity		**13,137,057,562**	**15,279,709,437**	**13,137,057,824**	**14,822,093,064**
Total liabilities and equity		**22,202,079,127**	**25,939,194,154**	**22,718,973,394**	**24,625,426,950**

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries

Statements of profit or loss

For the year ended 31 December 2018

	Notes	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
		Baht	Baht	Baht	Baht
Continuing operations					
Income	4				
Revenues from sale of goods and rendering of services	24	6,008,200,977	6,688,843,268	5,457,530,264	5,878,290,011
Construction revenue under operating agreement		17,980,846	186,400	17,980,846	186,400
Net foreign exchange gain		5,515,942	152,243,504	-	152,315,241
Gain from sale of investment	9	1,949,515,538	-	-	-
Other income	25	192,303,277	387,141,296	225,186,039	253,622,355
Total income		**8,173,516,580**	**7,228,414,468**	**5,700,697,149**	**6,284,414,007**
Expenses	4				
Cost of sale of goods and rendering of services		3,301,555,523	4,312,036,220	2,833,216,042	3,778,396,818
Construction cost under operating agreement		17,980,846	186,400	17,980,846	186,400
Operating agreements fee		917,473,311	978,521,346	917,473,311	978,521,346
Selling expenses		97,842,549	105,906,051	62,937,377	99,321,380
Administrative expenses		1,362,031,738	1,515,011,381	964,284,842	848,276,646
Impairment loss on assets		2,253,000,000	3,308,681,047	2,253,000,000	3,196,000,000
Directors and management benefit expenses		56,957,789	63,129,812	56,589,817	62,764,012
Net foreign exchange loss		-	-	3,658,714	-
Finance costs		338,242,739	382,429,405	338,228,829	378,304,300
Total expenses		**8,345,084,495**	**10,665,901,662**	**7,447,369,778**	**9,341,770,902**
Share of profit (loss) of investment in subsidiaries and a joint venture		119,387,670	196,184,926	1,628,779,604	(263,785,847)
Loss before income tax expense from continuing operations		**(52,180,245)**	**(3,241,302,268)**	**(117,893,025)**	**(3,321,142,742)**
Income tax expense	28	269,216,801	454,566,970	334,929,581	534,407,444
Profit (loss) from continuing operations		**217,036,556**	**(2,786,735,298)**	**217,036,556**	**(2,786,735,298)**
Discontinued operation					
Profit from discontinued operation, net of income tax	9	29,649,253	325,660,831	12,508,799	136,958,006
Profit (loss) for the year		**246,685,809**	**(2,461,074,467)**	**229,545,355**	**(2,649,777,292)**
Profit (loss) attributable to:					
Owner of the Company		229,545,355	(2,649,777,292)	229,545,355	(2,649,777,292)
Non-controlling interest					
Continuing operation		-	-	-	-
Discontinued operation	11	17,140,454	188,702,825	-	-
Profit (loss) for the year		**246,685,809**	**(2,461,074,467)**	**229,545,355**	**(2,649,777,292)**
Earnings (loss) per share (Baht)	29				
Basic earnings (loss) per share		0.21	(2.42)	0.21	(2.42)
Diluted earnings (loss) per share		0.21	(2.42)	0.21	(2.42)
Earnings (loss) per share - continuing operation (Baht)	29				
Basic earnings (loss) per share		0.20	(2.54)	0.20	(2.54)
Diluted earnings (loss) per share		0.20	(2.54)	0.20	(2.54)

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries
Statements of profit or loss and other comprehensive income
For the year ended 31 December 2018

	Notes	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
		Baht	Baht	Baht	Baht
Profit (loss) for the year		**246,685,809**	**(2,461,074,467)**	**229,545,355**	**(2,649,777,292)**
Other comprehensive income					
Items that will not be reclassified to profit or loss					
Defined benefit plan actuarial (gains) loss		(4,949,366)	15,874,884	(4,949,366)	4,762,288
Income tax on other comprehensive income		931,481	(2,674,819)	931,481	(452,300)
		(4,017,885)	**13,200,065**	**(4,017,885)**	**4,309,988**
Items that maybe reclassified to profit or loss					
Foreign currency translation differences for foreign operations		(61,929,642)	(288,274,898)	(61,929,642)	(288,274,898)
Change in cumulative gain on dilution of investment in a subsidiary	9	(350,970,688)	(17)	(350,970,688)	(17)
Changes in fair value of available-for-sale investment transfers to profit or loss		(1,481,089)	(1,564,964)	(1,481,089)	(1,564,964)
Changes in fair value of available-for-sale investment		(12,182,265)	5,996,514	(12,182,265)	5,996,514
Income tax on other comprehensive income		2,732,671	(886,310)	2,732,671	(886,310)
		(423,831,013)	(284,729,675)	(423,831,013)	(284,729,675)
Other comprehensive income for the year, net of income tax		**(427,848,898)**	**(271,529,610)**	**(427,848,898)**	**(280,419,687)**
Total comprehensive income for the year		**(181,163,089)**	**(2,732,604,077)**	**(198,303,543)**	**(2,930,196,979)**
Total comprehensive income attributable to:					
Owners of the Company		(198,303,543)	(2,930,196,979)	(198,303,543)	(2,930,196,979)
Non-controlling interests		17,140,454	197,592,902	-	-
Total comprehensive income for the year		**(181,163,089)**	**(2,732,604,077)**	**(198,303,543)**	**(2,930,196,979)**

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries

Statement of changes in equity

For the year ended 31 December 2018

		Consolidated financial statements											
				Retained earnings		Other components of equity							
	Notes	Issued and paid-up share capital	Share premium	Legal reserve	Unappropriated	Other reserve for share-based payment	Cumulative gain on dilution of investment in subsidiaries	Foreign currency translation differences	Changes in fair value of available-for-sale investments	Total other components of equity	Equity attributable to owners of the Company	Non-controlling interests	Total equity
		Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht
Year ended 31 December 2017													
Balance at 1 January 2017		**5,479,969,700**	**4,305,387,362**	**549,988,420**	**7,614,333,524**	**21,520,987**	**328,844,656**	**210,628,179**	**(1,066,722)**	**559,927,100**	**18,509,606,106**	**411,566,054**	**18,921,172,160**
Transactions with owners, recorded directly in equity													
Shares options exercised	21	363,500	19,238,775	-	-	(19,602,275)	-	-	-	(19,602,275)	-	-	-
Share-based payment transactions	21	-	-	-	-	9,874,025	-	-	-	9,874,025	9,874,025	-	9,874,025
Dividends to owners of the Company	30	-	-	-	(767,190,088)	-	-	-	-	-	(767,190,088)	(151,542,583)	(918,732,671)
Total transactions with owners, recorded directly in equity		**363,500**	**19,238,775**	**-**	**(767,190,088)**	**(9,728,250)**	**-**	**-**	**-**	**(9,728,250)**	**(757,316,063)**	**(151,542,583)**	**(908,858,646)**
Comprehensive income for the year													
Profit	29	-	-	-	(2,649,777,292)	-	-	-	-	-	(2,649,777,292)	188,702,825	(2,461,074,467)
Other comprehensive income		-	-	-	4,309,988	-	(17)	(288,274,898)	3,545,240	(284,729,675)	(280,419,687)	8,890,077	(271,529,610)
Total comprehensive income for the year		**-**	**-**	**-**	**(2,645,467,304)**	**-**	**(17)**	**(288,274,898)**	**3,545,240**	**(284,729,675)**	**(2,930,196,979)**	**197,592,902**	**(2,732,604,077)**
Balance at 31 December 2017		**5,480,333,200**	**4,324,626,137**	**549,988,420**	**4,201,676,132**	**11,792,737**	**328,844,639**	**(77,646,719)**	**2,478,518**	**265,469,175**	**14,822,093,064**	**457,616,373**	**15,279,709,437**

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries

Statement of changes in equity (Continued)

For the year ended 31 December 2018

		Consolidated financial statements											
				Retained earnings		Other components of equity							
	Notes	Issued and paid-up share capital	Share premium	Legal reserve	Unappropriated	Other reserve for share-based payment	Cumulative gain on dilution of investment in subsidiaries	Foreign currency translation differences	Changes in fair value of available-for-sale investments	Total other components of equity	Equity attributable to owners of the Company	Non-controlling interests	Total equity
		Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht
Year ended 31 December 2018													
Balance at 1 January 2018		5,480,333,200	4,324,626,137	549,988,420	4,201,676,132	11,792,737	328,844,639	(77,646,719)	2,478,518	**265,469,175**	**14,822,093,064**	457,616,373	**15,279,709,437**
Transactions with owners, recorded directly in equity													
Shares options exercised	21	176,570	645,046	-	-	(821,616)	-	-	-	(821,616)	-	-	-
Share-based payment transactions	21	-	-	-	-	3,773,577	-	-	-	3,773,577	3,773,577	-	3,773,577
Dividends to owners of the Company	30	-	-	-	(1,490,505,274)	-	-	-	-	-	(1,490,505,274)	-	(1,490,505,274)
Disposal of investment in indirect subsidiary		-	-	-	-	-	-	-	-	-	-	(474,757,089)	(474,757,089)
Total transactions with owners, recorded directly in equity		**176,570**	**645,046**	**-**	**(1,490,505,274)**	**2,951,961**	**-**	**-**	**-**	**2,951,961**	**(1,486,731,697)**	**(474,757,089)**	**(1,961,488,786)**
Comprehensive income for the year													
Profit	29	-	-	-	229,545,355	-	-	-	-	-	229,545,355	17,140,454	246,685,809
Other comprehensive income		-	-	-	(4,017,885)	-	(350,970,688)	(61,929,642)	(10,930,683)	(423,831,013)	(427,848,898)	-	(427,848,898)
Total comprehensive income for the year		**-**	**-**	**-**	**225,527,470**	**-**	**(350,970,688)**	**(61,929,642)**	**(10,930,683)**	**(423,831,013)**	**(198,303,543)**	**17,140,454**	**(181,163,089)**
Balance at 31 December 2018		**5,480,509,770**	**4,325,271,183**	**549,988,420**	**2,936,698,328**	**14,744,698**	**(22,126,049)**	**(139,576,361)**	**(8,452,165)**	**(155,409,877)**	**13,137,057,824**	**(262)**	**13,137,057,562**

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries
Statement of changes in equity
For the year ended 31 December 2018

		Separate financial statements									
				Retained earnings		Other components of equity					
	Notes	Issued and paid-up share capital	Share premium	Legal reserve	Unappropriated	Other reserve for share-based payment	Cumulative gain on dilution of investment in subsidiaries	Foreign currency translation differences	Changes in fair value of available-for-sale investments	Total other components of equity	Total equity
		Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht
Year ended 31 December 2017											
Balance at 1 January 2017		**5,479,969,700**	**4,305,387,362**	**549,988,420**	**7,614,333,524**	**21,520,987**	**328,844,656**	**210,628,179**	**(1,066,722)**	**559,927,100**	**18,509,606,106**
Transactions with owners, recorded directly in equity											
Shares options exercised	21	363,500	19,238,775	-	-	(19,602,275)	-	-	-	(19,602,275)	-
Share-based payment transactions	21	-	-	-	-	9,874,025	-	-	-	9,874,025	9,874,025
Dividends to owners of the Company	30	-	-	-	(767,190,088)	-	-	-	-	-	(767,190,088)
Total transactions with owners, recorded directly in equity		**363,500**	**19,238,775**	**-**	**(767,190,088)**	**(9,728,250)**	**-**	**-**	**-**	**(9,728,250)**	**(757,316,063)**
Comprehensive income for the year											
Profit	29	-	-	-	(2,649,777,292)	-	-	-	-	-	(2,649,777,292)
Other comprehensive income		-	-	-	4,309,988	-	(17)	(288,274,898)	3,545,240	(284,729,675)	(280,419,687)
Total comprehensive income for the year		**-**	**-**	**-**	**(2,645,467,304)**	**-**	**(17)**	**(288,274,898)**	**3,545,240**	**(284,729,675)**	**(2,930,196,979)**
Balance at 31 December 2017		**5,480,333,200**	**4,324,626,137**	**549,988,420**	**4,201,676,132**	**11,792,737**	**328,844,639**	**(77,646,719)**	**2,478,518**	**265,469,175**	**14,822,093,064**

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries

Statement of changes in equity (Continued)

For the year ended 31 December 2018

		Separate financial statements									
				Retained earnings		Other components of equity					
	Notes	Issued and paid-up share capital	Share premium	Legal reserve	Unappropriated	Other reserve for share-based payment	Cumulative gain on dilution of investment in subsidiaries	Foreign currency translation differences	Changes in fair value of available-for-sale investments	Total other components of equity	Total equity
		Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht
Year ended 31 December 2018											
Balance at 1 January 2018		**5,480,333,200**	**4,324,626,137**	**549,988,420**	**4,201,676,132**	**11,792,737**	**328,844,639**	**(77,646,719)**	**2,478,518**	**265,469,175**	**14,822,093,064**
Transactions with owners, recorded directly in equity											
Shares options exercised	21	176,570	645,046	-	-	(821,616)	-	-	-	(821,616)	-
Share-based payment transactions	21	-	-	-	-	3,773,577	-	-	-	3,773,577	3,773,577
Dividends to owners of the Company	30	-	-	-	(1,490,505,274)	-	-	-	-	-	(1,490,505,274)
Total transactions with owners, recorded directly in equity		**176,570**	**645,046**	**-**	**(1,490,505,274)**	**2,951,961**	**-**	**-**	**-**	**2,951,961**	**(1,486,731,697)**
Comprehensive income for the year											
Profit	29	-	-	-	229,545,355	-	-	-	-	-	229,545,355
Other comprehensive income		-	-	-	(4,017,885)	-	(350,970,688)	(61,929,642)	(10,930,683)	(423,831,013)	(427,848,898)
Total comprehensive income for the year		**-**	**-**	**-**	**225,527,470**	**-**	**(350,970,688)**	**(61,929,642)**	**(10,930,683)**	**(423,831,013)**	**(198,303,543)**
Balance at 31 December 2018		**5,480,509,770**	**4,325,271,183**	**549,988,420**	**2,936,698,328**	**14,744,698**	**(22,126,049)**	**(139,576,361)**	**(8,452,165)**	**(155,409,877)**	**13,137,057,824**

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries
Statements of cash flows
For the year ended 31 December 2018

	Notes	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
		Baht	Baht	Baht	Baht
Cash flows from operating activities					
Profit (loss) for the year		246,685,809	(2,461,074,467)	229,545,355	(2,649,777,292)
Adjustments for					
Depreciation of plant and equipment	12	719,411,686	910,015,082	673,105,752	699,697,390
Amortisation of intangible assets under operating agreements	13	1,150,329,737	2,022,365,154	1,150,329,737	2,022,365,154
Amortisation of deferred charges	13	2,017,642	2,017,642	2,017,642	2,017,642
Amortisation of intangible assets	13	103,920,740	125,264,936	94,592,453	95,119,440
Impairment loss on assets		2,253,000,000	3,308,681,047	2,253,000,000	3,196,000,000
Investment income		(181,558,213)	(159,053,634)	(177,488,647)	(151,947,441)
Share-based payment	21	3,773,577	9,874,025	3,773,577	9,874,025
Finance costs		338,242,739	400,807,998	338,228,829	378,304,300
(Gain) loss on exchange rate		12,420,499	(297,171,291)	(18,933,924)	(207,898,131)
Amortisation of borrowing costs	16, 26	1,065,891	1,065,891	1,065,891	1,065,891
Bad and doubtful debts expense	7	358,394,586	494,032,966	337,681,328	109,609,606
Loss on obsolete inventory		9,996,089	12,931,779	5,680,403	12,189,598
(Gain) loss on disposal of plant and equipment		4,585,037	(4,798,459)	4,541,280	(4,036,281)
Write-off plant and equipment		148,358	1,691,518	148,350	32,789
Gain from sale of investment in a subsidiary	9	(1,949,515,538)	-	-	-
Write-off intangible assets		7,223	950,001	7,223	-
Share of (profits) loss of investment in subsidiaries and a joint venture	10	(119,387,670)	(196,184,926)	(1,641,288,403)	126,827,841
Income tax expense		(260,628,962)	(383,352,970)	(334,929,581)	(534,407,444)
		2,692,909,230	3,788,062,292	2,921,077,265	3,105,037,087
Changes in operating assets and liabilities					
Trade and other current receivables		(549,956,343)	(234,633,428)	(967,715,787)	(402,775,404)
Amounts due from related parties		48,053,827	33,311,762	101,771,630	112,358,336
Inventories		(25,011,294)	147,918,136	(14,277,128)	117,282,165
Other current assets		25,282,541	(27,229,677)	8,090,689	(11,931,498)
Other non-current assets		(43,119,327)	132,322,907	(45,387,964)	135,139,062
Trade and other current payables		(212,108,369)	(112,096,459)	(121,335,822)	(9,947,827)
Amounts due to related parties		(681,364)	780,360	(19,819,551)	21,179,158
Advance receipts from customers		57,088,032	(465,788,925)	5,887,548	(217,339,857)
Accrued operating agreement fee		(5,004,497)	(52,878,113)	(5,004,497)	(52,878,113)
Other current liabilities		(5,606,818)	21,961,645	(19,836,906)	(11,416,741)
Other non-current liabilities		(18,772,759)	(17,929,002)	(21,922,548)	(17,246,337)
Non-current provisions for employee benefit		(27,643,171)	143,402	(24,253,642)	15,686,080
Income tax paid		(66,474,200)	(234,177,100)	(450,012)	(112,939,711)
Net cash from operating activities		**1,868,955,488**	**2,979,767,800**	**1,796,823,275**	**2,670,206,400**

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries
Statements of cash flows (Continued)
For the year ended 31 December 2018

	Notes	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
		Baht	Baht	Baht	Baht
Cash flows from investing activities					
Interest received		169,092,557	161,005,365	174,454,150	155,761,047
Dividends received	10	-	-	1,717,154,736	431,473,936
Current investments		(818,477,229)	98,250,625	(359,635,556)	108,550,819
Payment for plant and equipment		(81,963,778)	(303,764,408)	(59,518,209)	(46,048,295)
Proceeds from sale of plant and equipment		5,989,370	7,783,701	5,888,374	5,316,561
Proceeds from loan to a joint venture	4	-	18,185,988	-	18,185,988
Loan to related parties	4	-	-	(10,000,000)	(10,000,000)
Purchase of intangible assets		(1,409,200)	(27,857,560)	(1,409,200)	(1,449,807)
Proceeds from sale of investment in a subsidiary	9	1,950,779,922	-	-	-
Net cash outflow on investment in subsidiaries		-	-	-	(1,272,348)
Net cash from (used in) investing activities		**1,224,011,642**	**(46,396,289)**	**1,466,934,295**	**660,517,901**
Cash flows from financing activities					
Dividends paid to owners of the Company	30	(1,490,585,395)	(918,734,829)	(1,490,585,214)	(767,190,088)
Proceeds from borrowings		-	480,000,000	-	-
Repayments of borrowings	16	(414,482,938)	(2,496,861,589)	(414,482,938)	(1,976,063,810)
Interest paid		(318,269,838)	(391,157,693)	(322,536,394)	(381,704,594)
Net cash used in financing activities		**(2,223,338,171)**	**(3,326,754,111)**	**(2,227,604,546)**	**(3,124,958,492)**
Net increase (decrease) in cash and cash equivalents		**869,628,959**	**(393,382,600)**	**1,036,153,024**	**205,765,809**
Cash and cash equivalents at 1 January		1,960,770,857	2,683,685,053	683,765,774	477,958,084
Non-current assets classified as held for sale		-	(329,573,477)	-	-
Effect of exchange rate changes on ending balances held in foreign currencies		(165,231)	41,881	(165,231)	41,881
Cash and cash equivalents at 31 December	5	**2,830,234,585**	**1,960,770,857**	**1,719,753,567**	**683,765,774**
Non cash transactions					
Acquisition of property and equipment through credit		6,191,328	40,351,222	1,701,109	7,724,688
Acquisition of property and equipment under a license		271,331	-	271,331	-
Finance lease liabilities		30,788,907	38,559,624	30,788,907	34,640,408

The accompanying notes are an integral part of these financial statements.

Thaicom Public Company Limited and its Subsidiaries
Notes to the financial statements
For the year ended 31 December 2018

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These notes form an integral part of the financial statements.

The financial statements were approved and authorized for issuing by the Board of Directors on 8 February 2019.

1 General information

Thaicom Public Company Limited, the "Company", is incorporated in Thailand and has its registered office at 414 Phaholyotin Road, SamsenNai, Phayathai, Bangkok 10400.

The Company was listed on the Stock Exchange of Thailand in January 1994.

The Company's parent company during the financial year was Intouch Holdings Public Company Limited (as at 31 December 2018 and 2017: 41.13% shareholding and 41.14% shareholding, respectively) which is incorporated in Thailand.

The Company, its subsidiaries and a joint venture (collectively referred to as "the Group") are primarily involved in transponder service is for domestic and international communications, sale of user terminal of iPSTAR, broadband content services, sale of direct television equipment, internet data center services, internet services, satellite uplink-downlink services, providing technical support in relation satellite business, broadcasting television service, telecommunication, telephone network services, mobile contents, and engineering and development services on communication technology and electronics, which are mainly operated under agreements for operation.

The Group has operations in 10 countries; Thailand, Singapore, Cambodia, Lao PDR, Australia, New Zealand, Mauritius, the British Virgin Islands, Japan and India.

The Company obtained agreements for operation from the Ministry of Transport and Communication for a period of 30 years to operate and administer satellite projects and to render transponder services for domestic and international communications as well as the right to collect, for a 30-year period, service charges from users of the transponders. These agreements for operation have been transferred to the Ministry of Digital Economy and Society and will expire in 2021.

The Company received a license from the National Broadcasting and Telecommunications Commission ("NBTC"), to provide telecommunication services on its network for domestic and international communications. The license has a term of 20 years and will expire in 2032.

Details of the Company's subsidiaries and a joint venture as at 31 December 2018 and 2017 were as follows:

Name of the entity	Type of business	Country of incorporation	Ownership interest	
			2018 (%)	2017 (%)
Direct subsidiaries				
Thai Advance Innovation Company Limited (Previously named DTV Service Company Limited)	Sale of direct television equipment, providing system integration consultancy service for broadband network and broadband content services	Thailand	99.99	99.99
iPSTAR Company Limited	Providing Thaicom 4 transponder services	The British Virgin Islands	100	100
Star Nucleus Company Limited	Providing engineering and development services, technology and electronics	The British Virgin Islands	100	100
IPSTAR International Pte Limited	Providing Thaicom 4 transponder services and sale of satellite equipment of Thaicom 4	Singapore	100	100
IPSTAR Global Services Company Limited	Providing Thaicom 4 transponder services	Mauritius	100	100
Cambodian DTV Network Limited	Sale of direct television equipment	Cambodia	100	100
IPSTAR Australia Pty Limited	Providing Thaicom 4 transponder services and sale of user terminal of Thaicom 4 in Australia	Australia	100	100
TC Broadcasting Company Limited	Providing broadcasting, television and telecommunication services	Thailand	99.99	99.99
IPSTAR Japan Company Limited	Providing Thaicom 4 transponder services and sale of user terminal of Thaicom 4 in Japan	Japan	100	100
IPSTAR New Zealand Company Limited	Providing Thaicom 4 transponder services and sale of user terminal of Thaicom 4 in New Zealand	New Zealand	100	100
International Satellite Company Limited	Providing Thaicom 7 and Thaicom 8 transponder services	Mauritius	100	100

Name of the entity	Type of business	Country of incorporation	Ownership interest	
			2018 (%)	2017 (%)
IPSTAR (India) Private Limited	Providing of service for technical support for satellite network	India	100	100
TC Global Services Company Limited	Providing technology service	Mauritius	100	100
Indirect subsidiaries				
CS Loxinfo Public Company Limited	Providing internet data center service, internet and satellite uplink-downlink services	Thailand	-[(1)]	42.07
Orion Satellite Systems Pty Limited	Providing satellite communication services and business solutions in Australia	Australia	100	100
Joint venture				
Shenington Investments Pte Limited	Holding company for investment in international telecommunications	Singapore	51	51
Joint ventures of Shenington Investments Pte Limited				
Lao Telecommunications Company Limited	Providing fixed line, mobile phone, public phone, public international facilities and Internet services	Lao PDR	24.99	24.99

[(1)] The Group sold all of investment in CS Loxinfo Public Company Limited on 25 January 2018.

Material intercompany transactions between the Company and its subsidiaries have been eliminated from this consolidated financial statements. The consolidated financial statements for the year ended 31 December 2018 have included the subsidiaries' financial information for the year ended 31 December 2018 which were audited.

2. Basis of preparation of the financial statements

2.1 Statement of compliance

The Group maintains its accounting records in Thai Baht and prepares its statutory financial statements in the Thai language in conformity with Thai Financial Reporting Standards ("TFRSs") and accounting practices generally accepted in Thailand.

The Group's financial statements have been prepared in accordance with the Thai Accounting Standard (TAS) No. 1 (Revised 2017) "Presentation of Financial Statements", which was effective for financial periods beginning on or after January 1, 2018 onward, and the Regulation of The Stock Exchange of Thailand (SET) dated October 2, 2017, regarding the preparation and submission of financial statements and reports for the financial position and results of operations of the listed companies B.E. 2560 and the Notification of the Department of Business Development regarding "The Brief Particulars in the Financial Statements (No.2) B.E. 2559" dated October 11, 2016.

During the period, the Group has adopted the revised and new financial reporting standards and guidelines on accounting issued by the Federation of Accounting Professions which become effective for fiscal years beginning on or after January 1, 2018. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards, with most of the changes directed towards revision of wording and terminology, and provision of interpretations and accounting guidance to users of standards. The adoption of these financial reporting standards does not have any significant impact on the Group's financial.

2.2 Basis of measurement

The financial statements have been prepared on the historical cost basis unless otherwise stated.

2.3 Functional and presentation currency

The financial statements are prepared and presented in Thai Baht, which is the Company's functional currency. All financial information presented in Thai Baht has been rounded to the nearest thousand unless otherwise stated.

2.4 Use of estimates and judgements

The preparation of financial statements in conformity with TFRS requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

(i) Judgements

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements is included in the following notes:

Note 10	Classification of the joint venture
Note 10	Consolidation: whether the Group has De facto control over an investee

(ii) Assumptions and estimation uncertainties

Information about significant areas of estimation uncertainties that have a significant risk of resulting in a material adjustments to the amounts recognised in the financial statements is included in the following notes:

Note 7	Allowance for doubtful accounts
Note 8	Realisable value of inventory
Note 10, 12, 13	Key assumptions used in discounted cash flow projections
Note 12	Estimated useful lives and measurement of the recoverable amounts of property and equipment
Note 13	Estimated useful lives and measurement of the recoverable amounts of intangible asset under operating agreements and other intangible assets.
Note 14	Deferred income tax
Note 19	Measurement of employee benefits
Note 21	Measurement of share-based payment
Note 31	The measurement of fair values of foreign currency forward contracts
Note 33 and 34	Provisions and contingencies

3. Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

3.1 Basis of consolidation

The consolidated financial statements relate to the Company and its subsidiaries and joint ventures.

Business combinations

The Group applies the acquisition method for all business combinations when control is transferred to the Group, as describe in subsidiaries section, other than those with entities under common control.

Control is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, the Group takes into consideration potential voting rights that currently are exercisable. The acquisition date is the date on which control is transferred to the acquirer. Judgment is applied in determining the acquisition date and determining whether control is transferred from one party to another.

Goodwill is measured as the fair value of the consideration transferred including the recognized amount of any non-controlling interest in the acquiree, less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed, all measured as of the acquisition date. Any gain on bargain purchase is recognised in profit or loss immediately.

Consideration transferred includes the fair values of the assets transferred, liabilities incurred by the Group to the previous owners of the acquiree, and equity interests issued by the Group. Consideration transferred also includes the fair value of any contingent consideration and share-based payment awards of the acquiree that are replaced mandatorily in the business combination. If a business combination results in the termination of pre-existing relationships between the Group and the acquiree, then the lower of the termination amount, as contained in the agreement, and the value of the off-market element is deducted from the consideration transferred and recognised in other expenses.

When share-based payment awards exchanged (replacement awards) for awards held by the acquiree's employees (acquiree's awards) relate to past services, then a part of the market-based measure of the awards replaced is included in the consideration transferred. If they require future services, then the difference between the amount included in consideration transferred and the market-based measure of the replacement awards is treated as post-combination compensation cost.

A contingent liability of the acquiree is assumed in a business combination only if such a liability represents a present obligation and arises from a past event, and its fair value can be measured reliably.

The Group measures any non-controlling interest at its proportionate interest in the identifiable net assets of the acquiree.

Transaction costs that the Group incurs in connection with a business combination, such as legal fees, and other professional and consulting fees are expensed as incurred.

Acquisitions from entities under common control

Business combinations arising from transfers of interests in entities that are under the control of the shareholder that controls the Group are accounted for as if the acquisition had occurred at the beginning of the earliest comparative period presented or, if later, at the date that common control was established; for this purpose comparatives are revised. The assets and liabilities acquired are recognised at the carrying amounts recognised previously in the Group controlling shareholder's consolidated financial statements. The components of equity of the acquired entities are added to the same components within Group equity except that any share capital of the acquired entities is recognised as part of share premium. Any cash paid for the acquisition is recognised directly in equity.

Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

Loss of control

When the Group loses control over a subsidiary, it derecognises the assets and liabilities of the subsidiary, and any related non-controlling interests and other components of equity. Any resulting gain or loss is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

Interests in equity - accounted investees

The Group's interests in equity-accounted investees is interests in a joint venture.

A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Interests in joint ventures are accounted for using the equity method. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the profit or loss and other comprehensive income of equity–accounted investees, until the date on which significant influence or joint control ceases.

Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income or expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with associates and jointly-controlled entities are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

3.2 Foreign currencies

Foreign currency transactions

Transactions in foreign currencies are translated to the functional currency (Baht) at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to the functional currency at the foreign exchange rates ruling at that date. Foreign exchange differences arising on translation are recognised in profit or loss.

Non-monetary assets and liabilities measured at cost in foreign currencies are translated to the functional currency at the foreign exchange rates ruling at the dates of the transactions.

Foreign entities

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to Thai Baht at the foreign exchange rates ruling at the reporting date.

Goodwill and fair value adjustments arising on the acquisition of foreign operations are stated at exchange rates ruling on the reporting date.

The revenues and expenses of foreign operations are translated to Thai Baht at the weighted average foreign exchange rates for the year.

Foreign exchange differences are recognised in other comprehensive income and accumulated in the translation reserve, except to extent that the translation difference is allocated to non-controlling interest.

When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. If the Group disposes of part of its interest in a subsidiary but retains control, then the relevant proportion of the cumulative amount is reattributed to non-controlling interests. When the Group disposes of only part of an associate or joint venture while retaining significant influence or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

3.3 Derivative financial instruments

Derivative financial instruments are used to manage exposure to foreign exchange arising from operational, financing and investment activities. Derivative financial instruments are not used for trading purposes. However, derivatives that do not qualify for hedge accounting are accounted for as trading instruments.

Derivative financial instruments are recognised initially at fair value; attributable transaction costs are recognised in the profit or loss when incurred. Subsequent to initial recognition, they are remeasured at fair value. The gain or loss on remeasurement to fair value is recognised immediately in profit or loss. However, where derivatives qualify for hedge accounting, recognition of any resultant gain or loss depends on the nature of the item being hedged.

The fair value of forward exchange contracts is based on their listed market price, if available. If a listed market price is not available, then fair value is estimated by discounting the difference between the contractual forward price and the current forward price at the reporting date for the residual maturity of the contract using a risk-free interest rate (based on government bonds).

3.4 Cash and cash equivalents

Cash and cash equivalents in the statements of cash flows comprise cash balances, call deposits and highly liquid short-term investments with original maturities of three months or less. Bank overdrafts that are repayable on demand are a component of operating activities for the purpose of the statement of cash flows.

3.5 Trade and other current receivables

Trade and other current receivables are stated at their invoice value less allowance for doubtful accounts.

The allowance for doubtful accounts is assessed primarily on analysis of payment histories and future expectations of customer payments, net of deposit from customers. Bad debts are written off when incurred.

3.6 Inventories

Inventories are measured at the lower of cost and net realisable value.

Cost is calculated using the weighted average cost principle, and comprises all costs of purchase and costs directly attributable to the acquisition of the inventory, such as taxes and transportation charges, less all attributable discounts, allowances or rebates. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads based on normal operating capacity, but excludes borrowing costs.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

3.7 Non-current assets classified as held for sale

Non-current assets, or disposal groups comprising assets and liabilities, are classified as held for sale if it is highly probable that they will be recovered primarily through sale rather than through continuing use. Such assets, or disposal group, are measured at the lower of their carrying amount and fair value less cost to sell. Any impairment loss on a disposal group is allocated first to goodwill, and then to remaining assets and liabilities on a pro rata basis, except that no loss is allocated to inventories, financial assets, deferred tax assets and investment properties. Impairment losses on initial classification as held for sale or held for distribution and subsequent gains and losses on remeasurement are recognised in profit or loss.

Once classified as held for sale, intangible assets and property, plant and equipment are no longer amortised or depreciated, and any equity-accounted investee is no longer equity accounted.

3.8 Investments

Investments in subsidiaries and joint ventures

Investments in subsidiaries and joint ventures in the separate financial statements of the Company are accounted for using the equity method. Investments in joint ventures in the consolidated financial statements are accounted for using the equity method.

Interests in associates, subsidiaries and joint ventures are accounted for using the equity method. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the separate financial statements include the Company's share of the profit or loss and other comprehensive income of equity–accounted investees, until the date on which significant influence or joint control ceases.

Investments in other debt and equity securities

Debt securities and marketable equity securities held for trading are classified as current assets and are stated at fair value, with any resultant gain or loss recognised in profit or loss.

Debt securities that the Group has the positive intent and ability to hold to maturity are classified as held-to-maturity investments. Held-to-maturity investments are stated at amortised cost, less any impairment losses. The difference between the acquisition cost and redemption value of such debt securities is amortised using the effective interest rate method over the period to maturity.

Debt securities and marketable equity securities, other than those securities held for trading or intended to be held to maturity, are classified as available-for-sale investments. Available-for-sale investments are, subsequent to initial recognition, stated at fair value, and changes therein, other than impairment losses and foreign currency differences on available-for-sale monetary items, are recognised in other comprehensive income. Impairment losses and foreign exchange differences are recognised in profit or loss. When these investments are derecognised, the cumulative gain or loss previously recognised in other comprehensive income is recognised in profit or loss. Where these investments are interest-bearing, interest calculated using the effective interest method is recognised in profit or loss.

Equity securities which are not marketable are stated at cost less any impairment losses.

The fair value of financial instruments classified as held-for-trading and available-for-sale is determined as the quoted bid price at the reporting date.

Disposal of investments

On disposal of an investment, the difference between net disposal proceeds and the carrying amount together with the associated cumulative gain or loss that was reported in equity is recognised in profit or loss.

If the Group disposes of part of its holding of a particular investment, the deemed cost of the part sold is determined using the weighted average method applied to the carrying value of the total holding of the investment.

3.9 Property, plant and equipment

Owned assets

Property, plant and equipment are measured at cost less accumulated depreciation and impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located, and capitalised borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalized as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property and equipment.

Any gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property and equipment, and are recognised net in profit or loss.

Leased assets

Leases in terms of which the Group substantially assumes all the risk and rewards of ownership are classified as finance leases. Property, plant and equipment acquired by way of finance leases is capitalised at the lower of its fair value and the present value of the minimum lease payments at the inception of the lease, less accumulated depreciation and impairment losses. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly to the profit or loss.

Assets for rent

Assets leased out under operating leases are included in property and equipment in the statements of financial position. They are depreciated over their expected useful lives on a basis consistent with similar fixed assets.

Subsequent costs

The cost of replacing a part of an item of property and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property and equipment are recognised as expenses in profit or loss as incurred.

Depreciation

Depreciation is calculated based on the depreciable amount, which is the cost of an asset, or other amount substituted for cost, less its residual value.

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property and equipment or, if shorter, the lease term. The estimated useful lives are as follows:

Leasehold land	30	years
Buildings and improvements	5-10	years
Equipment	5-18	years
Furniture fixtures and office equipment	5-18	years
Computer equipment	3-5	years
Motor vehicles	5	years

No depreciation is provided on freehold land or assets under construction.

Depreciation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

3.10 Intangible assets under operating agreement

Intangible assets under operating agreement comprise rights of the charges for satellite services under the operating agreement.

Amortisation is amortised on the straight-line basis over the lower of the period of useful lives or operating agreement.

3.11 Deferred charges

Deferred charges principally represent bond issuing and long-term borrowing costs and are amortised on the straight-line basis over the period of time to maturity of the bond or long-term loan agreement.

3.12 Intangible assets

Goodwill

Goodwill that arises upon the acquisition of subsidiaries is included in intangible assets. The measurement of goodwill at initial recognition is described in note 3.1. Subsequent to initial recognition, goodwill is measured at cost less accumulated impairment losses. In respect of equity-accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment, and an impairment loss on such an investment is not allocated to any asset, including goodwill, that forms part of the carrying amount of the equity-accounted investee.

Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in profit or loss as incurred.

Costs incurred on development projects (relating to the design and testing of new or improved products) are recognised as intangible assets when it is probable that the project will be a success considering its commercial and technological feasibility, and only if the cost can be measured reliably. Other development expenditure is recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period. Development costs that have been capitalised are amortised from the commencement of the commercial production of the product.

Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses.

Other intangible assets

Other intangible assets that are acquired by the Group and have finite useful lives are measured at cost less accumulated amortisation and accumulated impairment losses.

The cost of other intangible assets comprises the development of IPSTAR technology, expenditure on acquired software, patents, trademarks and licenses and is amortised using the straight-line method over their period of their benefits of related assets for a period of 5 to 15.75 years.

Specific software is recognised as assets when acquired and operated to intend purposes and is amortised using the straight-line method over their expected benefits for a period of 3 - 5 years.

Amortisation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

3.13 Impairment

The carrying amounts of the Group's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated. For goodwill and intangible assets that have indefinite useful lives or are not yet available for use, the recoverable amount is estimated each year, at the same time.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. The impairment loss is recognised in profit or loss.

Calculation of recoverable amount

The recoverable amount of available-for-sale financial assets is calculated by reference to the fair value.

The recoverable amount of a non-financial asset is the greater of the asset's value in use and fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Reversals of impairment

An impairment loss in respect of a financial asset is reversed if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognised in profit or loss. For available-for-sale financial assets that are equity securities, the reversal is recognised in other comprehensive income.

An impairment loss in respect of goodwill is not reversed. Impairment losses recognised in prior periods in respect of other non-financial assets are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

3.14 Interest-bearing liabilities

Interest-bearing liabilities are recognised initially at fair value less attributable transaction charges. Subsequent to initial recognition, interest-bearing liabilities are stated at amortised cost with any difference between cost and redemption value being recognised in profit or loss over the period of the borrowings on an effective interest basis.

3.15 Trade and other current payables

Trade and other current payables are stated at cost.

3.16 Provision for employee benefits

Defined contribution plans

The Group operates a provident fund, which is a defined contribution plan. The assets of which are held in a separate trust fund which is managed by external fund manager. The provident fund is funded by payments from employees and by the relevant Group companies. Contributions to the provident fund are charged to the statements of profit or loss in the year to which they relate.

Defined benefit plans

The Group's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount.

The calculation of defined benefit obligations is performed at least one in three years by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any application minimum funding requirements.

Remeasurements of the net defined benefit liability, actuarial gain or loss are recognized immediately in other comprehensive income. The Group determines the interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Other long-term employee benefits

The Group's net obligation in respect of long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognized in profit or loss in the period in which they arise.

Termination benefits

Termination benefits are expensed at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognizes costs for a restructuring. If benefits are not expected to be settled wholly within 12 months of the end of the reporting period, then they are discounted.

Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

Share-based payments

The grant-date fair value of equity-settled share-based payment awards granted to employees is generally recognised as an expense, with a corresponding increase in equity, over the vesting period of the awards. The amount recognised as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognised is based on the number of awards that meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

The fair value of the amount payable to employees in respect of share appreciation rights, which are settled in cash, is recognised as an expense with a corresponding increase in liabilities, over the period that the employees become unconditionally entitled to payment. The liability is remeasured at each reporting date and at settlement date. Any changes in the fair value of the liability are recognised as personnel expenses in profit or loss.

3.17 Provisions

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance cost.

Provision for warranties

A provision for warranties is recognised when the underlying products or services are sold. The provision is based on historical expense related to warranty data and a weighting of all possible outcomes against their associated probabilities.

3.18 Revenue

Revenue excludes value added tax and is arrived at after deduction of trade discounts.

Sale of goods and services rendered

Revenue is recognised in profit or loss when the significant risks and rewards of ownership have been transferred to the buyer. No revenue is recognised if there is continuing management involvement with the goods or there are significant uncertainties regarding recovery of the consideration due, associated costs or the probable return of goods.

Revenue and cost of sales of gateway equipment with installation are recognised using the percentage of completion method. The stage of completion is measured by reference to the related contract costs incurred for work performed to date compared with the estimated total costs for the contract. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately.

Revenue from rendering transponder services and services related to the satellite business, internet services, and other business related to the internet business, and telephone services is recognised when the said services are provided to customers and there are certainties regarding recovery of the consideration due.

Revenue from leases on equipment is recognised over the period and at the rate of the leasing contract.

Revenue arising from royalties is recognised on an accrual basis in accordance with the substance of the relevant agreements.

Interest income

Interest income is recognised in profit or loss as it accrues.

3.19 Finance costs

Finance costs comprise interest expense on borrowings, unwinding of the discount on provisions and contingent consideration, losses on disposal of available-for-sale financial assets, dividends on preference shares classified as liabilities, fair value losses on financial assets at fair value through profit or loss, impairment losses recognised on financial assets (other than trade receivables), and losses on hedging instruments that are recognised in profit or loss.

Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

3.20 Lease payment

Payments made under operating leases are recognised in profit or loss on a straight line basis over the term of the lease. Contingent lease payments are accounted for by revising the minimum lease payments over the remaining term of the lease when the lease adjustment is confirmed.

Determining whether an arrangement contains a lease

At inception of an arrangement, the Group determines whether such an arrangement is or contains a lease. A specific asset is the subject of a lease if fulfilment of the arrangement is dependent on the use of that specified asset. An arrangement conveys the right to use the asset if the arrangement conveys to the Group the right to control the use of the underlying asset.

At inception or upon reassessment of the arrangement, the Group separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, an asset and a liability are recognised at an amount equal to the fair value of the underlying asset. Subsequently the liability is reduced as payments are made and an imputed finance charge on the liability is recognised using the Group's incremental borrowing rate.

3.21 Income tax

Income tax expense for the year comprises current and deferred tax. Current and deferred tax are recognised in profit or loss except to the extent that they relate to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill; the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss; and differences relating to investments in subsidiaries and joint venture to the extent that it is probable that they will not reverse in the foreseeable future.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

In determining the amount of current and deferred tax, the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

4. Related parties

Related parties are enterprises and/or individuals that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with, the Company, including holding companies, subsidiaries and fellow subsidiaries are related parties of the Company. Joint ventures and individuals owning, directly or indirectly, an interest in the voting power of the Company that gives them significant influence over the enterprise, key management personnel, including directors and officers of the Company and close members of the family of these individuals, and companies associated with these individuals also constitute related parties. In considering each possible related party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

The Company is controlled by Intouch Holdings Public Company Limited ("Intouch") (incorporated in Thailand), which owns 41.13% (2017: 41.14%) of the Company's shares. Transactions with Intouch Group and shareholders of the Intouch Group are recognised as related party transactions of the Group.

Sales and service transactions with related parties were conducted under normal commercial terms and conditions, which were the same as for other customers. Consulting and management services were charged at an agreed percentage of assets.

Significant transactions for the years ended 31 December 2018 and 2017 with related parties were as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Revenue				
Revenue from sale of goods and rendering of services				
Parent	91	968	-	-
Subsidiaries	-	-	1,794,641	1,919,389
Related parties under common control	114,016	290,679	72,121	63,171
Other related party	45	1,163	-	-
Other income				
Subsidiaries	-	-	43,476	75,339
Joint venture	109,316	98,032	109,316	98,031
Related parties under common control	19	2,254	19	19
Other related party	-	2	-	-
Total revenue	**223,487**	**393,098**	**2,019,573**	**2,155,949**

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Expenses				
Purchases of goods and services				
Subsidiaries	-	-	135,827	102,269
Joint venture	5,322	6,009	-	-
Related parties under common control	4,658	21,250	2,945	51
Other related party	21,760	36,986	7,768	14,365
Selling and administrative expenses				
Parent	771	485	723	446
Subsidiaries	-	-	17,767	16,034
Related parties under common control	7,898	12,584	7,153	6,836
Director and management benefit expenses	57,782	107,992	57,414	63,354
Total expenses	**98,191**	**185,306**	**229,597**	**203,355**

Balance as at 31 December 2018 and 2017 with related parties were as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Trade receivables and accrued income				
Trade receivables				
Subsidiaries	-	-	1,295,882	332,109
Related parties under common control	29,288	52	28,834	22
Other related parties	52,736	54,293	2,629	2,648
Total	**82,024**	**54,345**	**1,327,345**	**334,779**
Accrued income				
Subsidiaries	-	-	1,580	325,817
Joint venture	350	-	350	-
Related parties under common control	1	5,305	-	5,305
Total	**351**	**5,305**	**1,930**	**331,122**
Total trade receivables and accrued income	**82,375**	**59,650**	**1,329,275**	**665,901**
Less allowance for doubtful accounts	(52,737)	(54,293)	(2,629)	(2,648)
Net	**29,638**	**5,357**	**1,326,646**	**663,253**
Other current receivables				
Parent	250	-	250	-
Subsidiaries	-	-	45,826	99,544
Joint venture	42,449	90,825	42,449	90,825
Total	**42,699**	**90,825**	**88,525**	**190,369**

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Loan to related parties				
Current portion of long-term loans				
Subsidiary	-	-	40,000	-
Joint venture	485,725	244,591	485,725	244,591
	485,725	**244,591**	**525,725**	**244,591**
Long-term Loans				
Subsidiary	-	-	10,000	40,000
Joint venture	1,457,174	1,712,138	1,457,174	1,712,138
	1,457,174	**1,712,138**	**1,467,174**	**1,752,138**
Total	**1,942,899**	**1,956,729**	**1,992,899**	**1,996,729**

The term of the long-term loan to subsidiary is 2 years. As at 31 December 2018, the interest rate at the rate of 5.05% to 5.64% per annum (31 December 2017: rate of 5.05% to 5.17% per annum).

The term of the long-term loan to a joint venture is 10 years with the interest rate at the rate of LIBOR + 3.

Movements during the years ended 31 December 2018 and 2017 of loans to subsidiary and a joint venture were as follows:

	Consolidated and Separate financial statements	
	2018	2017
	Baht'000	Baht'000
Short-term loans to a joint venture		
As at 1 January	-	18,186
Decrease	-	(18,186)
As at 31 December	**-**	**-**

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Long-term loans				
Subsidiary				
As at 1 January	-	-	40,000	30,000
Increase	-	-	10,000	10,000
As at 31 December	**-**	**-**	**50,000**	**40,000**
Joint venture				
As at 1 January	1,956,729	2,145,947	1,956,729	2,145,947
Unrealised loss on exchange rate	(13,830)	(189,218)	(13,830)	(189,218)
As at 31 December	**1,942,899**	**1,956,729**	**1,942,899**	**1,956,729**

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Other current assets				
Subsidiaries	-	-	-	560
Related party under common control	2	2	2	2
Total	**2**	**2**	**2**	**562**
Trade payables				
Parent	72	-	72	-
Subsidiaries	-	-	13,596	16,956
Joint venture	445	-	-	-
Related party under common control	2,052	919	1,781	765
Other related parties	1,252	3,732	1,252	2,339
Total	**3,821**	**4,651**	**16,701**	**20,060**
Other current payables				
Subsidiaries	-	-	3,555	23,398
Related party under common control	97	830	97	125
Other related party	72	-	72	-
Total	**169**	**830**	**3,724**	**23,523**
Advance receipts from customers				
Subsidiaries	-	-	3,411	14,178
Related party under common control	9,974	5,714	8,865	4,649
Total	**9,974**	**5,714**	**12,276**	**18,827**
Accrued expenses				
Subsidiaries	-	-	143,663	109,696
Joint venture	-	1,794	-	-
Related party under common control	374	928	370	926
Other related party	14,686	8,011	-	-
Total	**15,060**	**10,733**	**144,033**	**110,622**
Other current liabilities				
Subsidiaries	-	-	-	10
Related party under common control	2,200	2,200	160	160
Total	**2,200**	**2,200**	**160**	**170**
Other non-current liabilities				
Subsidiaries	**-**	-	**1,308**	**1,444**

Key management personnel compensation

Key management personnel compensation comprised:

	Consolidated financial statements		Separate financial statements	
For the year ended 31 December	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Short-term benefits	55,403	101,279	55,035	57,868
Other long-term benefits				
- Current service costs, included in administrative expenses	1,154	1,740	1,154	1,056
- Interest on obligation, included in finance costs	824	1,003	824	590
- Share-based payment	401	3,840	401	3,840
Total	**57,782**	**107,862**	**57,414**	**63,354**

From time to time directors of the Group, or their related entities, may purchase goods from the Group. These purchases are on the same terms and conditions as those entered into by the Group with employees or customers.

Directors' remuneration

The directors' remuneration represents monthly compensation, annual remuneration, meeting fees, and other benefits. The directors' remuneration was approved by the shareholders of the Company at their annual general meetings. The directors' remuneration was presented as part of directors and management benefit expenses presented in the statement of profit or loss.

Significant agreements with related parties

1. The Company and subsidiary entered into agreements with a subsidiary, under which the Company and subsidiaries were committed to pay royalty fee at 1% of revenue from sale or lease of IPSTAR gateway, 1% of revenue from sale or lease of IPSTAR user terminal and 3% of revenue from sale or service of Thaicom 4.

2. The Company entered into agreements with subsidiaries and related parties under common control, under which the Company was committed to provide transponder service and advisory service. Subsidiaries and related parties under common control were committed to pay the Company for the service of the agreements at approximately USD 14.97 million and Baht 9.20 million (2017: approximately USD 33.48 million and Baht 14.60 million). The service fees of contracts vary to the actual used or number of installed user terminal at the rate stated in the contract.

3. The Company had entered into agreements with a subsidiary, under which a subsidiary was committed to provide broadcasting, television and telecommunication service. The Company was committed to pay for the service in respect of the agreements at USD 6,480 per channel/per year.

5. Cash and cash equivalents

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Cash on hand	105,311	41,066	91,879	25,358
Current accounts and saving deposits	2,230,682	1,629,080	1,330,209	658,408
Highly liquid short-term investments	494,242	290,625	297,666	-
Total	**2,830,235**	**1,960,771**	**1,719,754**	**683,766**
The weighted average interest rate of saving deposits and fixed deposits	**0.71%**	**0.67%**	**0.77%**	**0.24%**

6. Current investments

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Short-term deposit and bill of exchange	2,272,934	2,501,522	1,787,934	2,412,500
Debt securities available for sale	1,954,276	905,547	2,046,221	1,023,962
Total	**4,227,210**	**3,407,069**	**3,834,155**	**3,436,462**

As at 31 December 2018, short-term deposit and bill of exchange have interest rates of 0.80% to 2.87% per annum (31 December 2017: 1.35% to 1.70% per annum) and mature within 1 year.

7. Trade and other current receivables

	Note	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
		Baht'000	Baht'000	Baht'000	Baht'000
Trade receivables					
Related parties	4	82,024	54,345	1,327,345	334,779
Other parties		1,891,098	1,708,865	1,144,910	985,674
Total		**1,973,122**	**1,763,210**	**2,472,255**	**1,320,453**
Accrued income					
Related parties	4	351	5,305	1,930	331,122
Other parties		639,793	413,580	447,482	407,601
Total		**640,144**	**418,885**	**449,412**	**738,723**
Other current receivables					
Prepaid expenses		49,760	46,744	28,567	31,125
Advance payments		159,038	158,977	139,418	136,060
Others		106,599	33,102	79,881	14,300
Total		**315,397**	**238,823**	**247,866**	**181,485**
Total trade receivables accrued income and other current receivables		**2,928,663**	**2,420,918**	**3,169,533**	**2,240,661**
Less allowance for doubtful accounts		(1,077,230)	(754,059)	(598,505)	(283,248)
Net		**1,851,433**	**1,666,859**	**2,571,028**	**1,957,413**

	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Bad and doubtful debts expenses for the years ended 31 December	**358,395**	**494,033**	**337,681**	**109,610**

Aging analyses for trade receivables were as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Related parties				
Within credit terms	8,668	22	795,961	291,797
Overdue:				
Less than 3 months	3,721	30	411,054	38,667
3 - 6 months	15,537	-	115,739	768
6 - 12 months	463	-	1,063	-
Over 12 months	53,635	54,293	3,528	3,547
	82,024	**54,345**	**1,327,345**	**334,779**
Less allowance for doubtful accounts	(52,737)	(54,293)	(2,629)	(2,648)
	29,287	**52**	**1,324,716**	**332,131**
Other parties				
Within credit terms	138,934	253,857	97,118	146,600
Overdue:				
Less than 3 months	416,532	426,551	345,010	187,225
3 - 6 months	226,721	395,136	100,455	192,006
6 - 12 months	256,184	389,601	148,889	264,450
Over 12 months	852,727	243,720	453,438	195,393
	1,891,098	**1,708,865**	**1,144,910**	**985,674**
Less allowance for doubtful accounts	(1,024,493)	(699,766)	(595,876)	(280,600)
	866,605	**1,009,099**	**549,034**	**705,074**
Net	**895,892**	**1,009,151**	**1,873,750**	**1,037,205**

The normal credit term for general customers were granted by the Group ranging 15 - 120 days.

8. Inventories

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Raw material and supplies	45,066	47,069	44,777	46,776
Work in process	15,434	14,717	15,434	14,717
Finished goods	154,303	157,780	113,551	114,800
Goods in transit	134	535	-	402
	214,937	**220,101**	**173,762**	**176,695**
Less allowance for decline in value	(92,453)	(95,287)	(75,482)	(69,802)
Net	**122,484**	**124,814**	**98,280**	**106,893**

9. Non-current assets classified as held for sale and liabilities directly associated with non-current assets classified as held for sale

Investment in CS Loxinfo Public Company Limited ("CSL") is presented as assets held for sale following the Shares Tender Agreement of the Group's subsidiary, Thai Advance Innovation Company Limited ("Thai AI") (Previously named DTV Service Company Limited ("DTV")) on 6 October 2017 to sell entire ordinary shares held in CSL amount of 250,099,990 shares or 42.07% of the issue and paid-up share capital to Advance Wireless Network Company Limited ("AWN") at the bid price of Baht 7.80 per share, totaling of Baht 1,950.78 million. The disposal of CSL is accomplished on 25 January 2018 and there were gain on sale of investment in the amount of Baht 1,949.52 million and profit from discontinued operation in the amount of Baht 29.65 million in consolidated statements of profit or loss for the year ended 31 December 2018.

Gain from sale of investment in a subsidiary for the year ended 31 December 2018 was as follows:

	Unit: Thousand Baht
Consideration of sale	1,950,780
Less expenses related to the sale	(4,876)
Net consideration of sale	**1,945,904**
Total assets	1,842,453
Total liabilities	1,020,338
Net assets	**822,115**
Less non-controlling interests	(474,756)
Net assets attributable to owners of parent	347,359
Reverse of cumulative gain on dilution of investment in a subsidiary	350,971
	3,612
Gain from sale of investment in a subsidiary	**1,949,516**

As at 31 December 2017, the disposal group comprised of;

Details of non-current assets held for sale and liabilities directly associated with non-current assets held for sale are as follows:

	Consolidated financial statements As at 31 December 2017
	Baht'000
Assets	
Cash and cash equivalents	329,573
Trade and other current receivables	446,297
Inventories	43,767
Other current assets	797
Property, plant and equipment	872,880
Intangible assets	68,617
Deferred tax assets	51,683
Other non-current assets	23,575
	1,837,189

	Consolidated financial statements As at 31 December 2017
	Baht'000
Liabilities	
Short-term borrowing from financial institution	250,000
Trade and other current payables	432,790
Amount due to related parties	90
Current portion of long-term borrowings	60,548
Advance receipts from customers	121,549
Income tax payable	6,585
Other current liabilities	7,464
Long-term borrowings	1,799
Non-current provisions for employee benefit	154,983
Other non-current liabilities	19,449
	1,055,257

The statement of profit or loss for the years ended 31 December 2018 and 2017 has been re-presented to show the discontinued operations separately from continuing operations.

		Consolidated financial statements	
For the years ended 31 December	Note	2018	2017
		Baht'000	Baht'000
Results of discontinued operation			
Revenue		227,372	2,818,829
Expenses		(189,241)	(2,421,954)
Results from operating activities		**38,131**	**396,875**
Income tax		(8,482)	(71,214)
Results from operating activities, net of income tax		**29,649**	**325,661**
Earnings per share			
Basic earnings per share (Baht)	29	0.01	0.12
Diluted earnings per share (Baht)	29	0.01	0.12

	Consolidated financial statements
For the year ended 31 December	2017
	Baht'000
Cash flows from (used in) discontinued operation	
Net cash from operating activities	442,196
Net cash used in investing activities	(222,051)
Net cash used in financing activities	(310,900)
Net cash used in discontinued operation	**(90,755)**

10. Investments in subsidiaries and a joint venture

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Investments in subsidiaries	-	-	522,595	1,098,814
Investments in a joint venture	1,444,283	1,356,701	1,444,283	1,356,701
Total investments, net	**1,444,283**	**1,356,701**	**1,966,878**	**2,455,515**
Presentation in the statement of financial position as follows:				
Investments - equity method	1,444,283	1,356,701	2,946,904	3,031,560
Net liabilities in subsidiaries	-	-	(980,026)	(576,045)
Total investments, net	**1,444,283**	**1,356,701**	**1,966,878**	**2,455,515**

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
As at 1 January	1,356,701	1,417,201	2,455,515	1,290,210
Impacted from changes accounting policies	-	-	-	2,071,866
Addition	-	-	-	1,272
Share of net profits (loss) of investments in equity method	119,388	196,185	1,628,780	(263,786)
Share of net profits of discontinued operation	-	-	12,509	136,958
Dividend income	-	-	(1,717,155)	(431,474)
Defined benefit plan actuarial gain (loss)	-	(77,978)	130	(61,256)
Written-off from sale of investment in a subsidiary	-	-	(350,971)	-
Foreign currency translation adjustments	(31,806)	(178,707)	(61,930)	(288,275)
As at 31 December	**1,444,283**	**1,356,701**	**1,966,878**	**2,455,515**

Investments in subsidiaries and joint venture as at 31 December 2018 and 2017 and dividend income from those investments for the years then ended were as follows:

	Consolidated financial statements									
	Ownership interest		Paid-up capital		Cost		Equity		Dividend income	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	%	%			Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Joint venture										
Shenington Investments Pte Limited	51.00	51.00	SGD 15 million	SGD 15 million	138	138	1,444	1,357	-	-
					138	**138**	**1,444**	**1,357**	**-**	**-**

Name of the Company's joint venture is publicly listed and consequently do not have published price quotations.

Thaicom Public Company Limited and its Subsidiaries
Notes to the financial statements
For the year ended 31 December 2018

	Separate financial statements									
	Ownership interest		Paid-up capital		Cost-net of impairment		Equity method		Dividend income	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	%	%			Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Subsidiaries										
Thai Advance Innovation Company Limited (Previously named DTV Service Company Limited)	99.99	99.99	Baht 399 million	Baht 399 million	399	399	478	419	1,491	95
iPSTAR Company Limited	100.00	100.00	USD 2 million	USD 2 million	157	157	(964)	(564)	-	-
Star Nucleus Company Limited	100.00	100.00	-	-	-	-	74	149	99	68
IPSTAR International Pte Limited	100.00	100.00	SGD 20,000	SGD 20,000	1	1	1	37	-	-
IPSTAR Global Services Company Limited	100.00	100.00	USD 20,000	USD 20,000	1	1	54	43	-	-
Cambodian DTV Network Limited	100.00	100.00	USD 600,000	USD 600,000	21	21	84	68	-	-
IPSTAR Australia Pty Limited	100.00	100.00	AUD 6.95 million	AUD 6.95 million	425	425	249	383	-	-
TC Broadcasting Company Limited	99.99	99.99	Baht 0.25 million	Baht 0.25 million	-	-	8	5	-	-
IPSTAR Japan Company Limited	100.00	100.00	JPY 100 million	JPY 100 million	33	33	261	202	29	-
IPSTAR New Zealand Company Limited	100.00	100.00	NZD 3.20 million	NZD 3.20 million	98	98	102	108	-	-
International Satellite Company Limited	100.00	100.00	USD 50,000	USD 50,000	2	2	160	240	98	268
IPSTAR (India) Private Limited	100.00	100.00	INR 30 million	INR 30 million	16	16	32	21	-	-
TC Global Services Company Limited	100.00	100.00	USD 12,500	USD 12,500	1	1	(16)	(12)	-	-
Total					**1,154**	**1,154**	**523**	**1,099**	**1,717**	**431**
Joint venture										
Shenington Investments Pte Limited	51.00	51.00	SGD 15 million	SGD 15 million	**138**	**138**	**1,444**	**1,357**	-	-

Joint Venture

The following table summarises the financial information of the joint venture as included in their own financial statements, adjusted for fair value adjustments at acquisition and differences in accounting policies. The table also reconciles the summarized financial information to the carrying amount of the Group's interest in this company.

	Reporting date	Ownership	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Net assets	Total revenues	Net profit	Other comprehensive income (loss)	Total other comprehensive income
		(%)	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
2018											
Shenington Investments Pte Limited	31 December	51.00	151,905	6,701,997	(89,239)	(3,829,076)	2,935,587	4	234,093	(73,483)	160,610
Total			**151,905**	**6,701,997**	**(89,239)**	**(3,829,076)**	**2,935,587**	**4**	**234,093**	**(73,483)**	**160,610**
2017											
Shenington Investments Pte Limited	31 December	51.00	105,507	6,702,003	(668,610)	(3,374,303)	2,764,597	8	384,676	(361,722)	22,954
Total			**105,507**	**6,702,003**	**(668,610)**	**(3,374,303)**	**2,764,597**	**8**	**384,676**	**(361,722)**	**22,954**

Significant movements in investments in subsidiaries and joint ventures for the year ended 31 December 2018 were as follows:

Subsidiary

At the Extraordinary Meeting of the Shareholders of DTV Service Company Limited ("DTV") no.1/2018 held on 16 November 2018, the shareholders approved to change the name from DTV Service Company Limited to Thai Advance Innovation Company Limited which was registered to Department of Business Development, Ministry of Commerce on 27 November 2018.

Joint venture

Dividend payment of Lao Telecommunications Company Limited ("LTC")

At the Annual General Meeting of the shareholders of LTC held on 9 February 2018, the shareholders approved the appropriation of dividend from 2017 operation of USD 28 million.

Commitments

According to the joint venture agreement between the Group and the Government of the Lao People's Democratic Republic, the Group must transfer all of LTC's shares to the Government of the Lao People's Democratic Republic, without any charges or compensation, on the expiration date of the joint venture agreement in 2046 (Note 32.2).

11. Non-controlling interests

The following table summarises the information relating to each of the Group's subsidiaries (CS Loxinfo Public Company Limited ("CSL")) that has a material non-controlling interest, before any intra-group eliminations:

As at 31 December 2017

	Unit: Thousand Baht
Non-controlling interest percentage	57.93%
Non-current assets classified as held for sale	1,837,189
Non-current liabilities classified as held for sale	(1,055,257)
Net assets	**781,932**
Carrying amount of non-controlling interest	457,616

For the year ended 31 December 2017

	Unit: Thousand Baht
Non-controlling interest percentage	57.93%
Profit from discontinued operation	325,743
Other comprehensive income	15,346
Total comprehensive income	**341,089**
Profit allocated to non-controlling interest	188,703
Other comprehensive income allocated to non-controlling interest	197,593

12. Property, plant and equipment

	Consolidated financial statements				
	Land Leasehold land & building	Equipment	Vehicles & equipment	Asset under construction	Total
	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
Cost					
As at 1 January 2017	**711,377**	**12,430,414**	**1,348,443**	**41,541**	**14,531,775**
Additions	11,559	89,980	97,633	115,196	314,368
Transfers	58,249	12,323	56,929	(152,131)	(24,630)
Disposals	-	(57,353)	(50,874)	-	(108,227)
Write-offs	(2,098)	(202,607)	(12,117)	-	(216,822)
Foreign currency translation adjustments	(5,603)	(26,151)	(5,097)	(99)	(36,950)
Less transferred to current assets held for sale	(334,775)	(802,652)	(1,056,036)	(127)	(2,193,590)
As at 31 December 2017 and 1 January 2018	**438,709**	**11,443,954**	**378,881**	**4,380**	**12,265,924**
Additions	2,010	61,474	24,061	5,237	92,782
Transfers	(1,630)	(9,939)	(9,122)	(77)	(20,768)
Disposals	(427)	(32,149)	(33,594)	-	(66,170)
Write-offs	(1,138)	(17,704)	(2,994)	-	(21,836)
Foreign currency translation adjustments	(27,248)	(19,726)	(5,004)	(577)	(52,555)
As at 31 December 2018	**410,276**	**11,425,910**	**352,228**	**8,963**	**12,197,377**
Accumulated depreciation and impairment loss					
As at 1 January 2017	**396,328**	**3,820,559**	**967,728**	**-**	**5,184,615**
Depreciation for the year	38,534	749,092	122,389	-	910,015
Transfers	(20,414)	4,651	(3,130)	-	(18,893)
Disposals	-	(57,130)	(48,169)	-	(105,299)
Write-offs	(1,888)	(202,583)	(10,659)	-	(215,130)
Foreign currency translation adjustments	(5,398)	(19,783)	(2,810)	-	(27,991)
Less transferred to current assets held for sale	(28,068)	(554,201)	(738,440)	-	(1,320,709)
As at 31 December 2017 and 1 January 2018	**379,094**	**3,740,605**	**286,909**	**-**	**4,406,608**
Depreciation for the year	19,752	660,192	39,468	-	719,412
Loss on impairment	-	2,423,000	-	-	2,423,000
Transfers	(1,558)	(29,015)	(8,370)	-	(38,943)
Disposals	(356)	(25,349)	(29,891)	-	(55,596)
Write-offs	(1,136)	(17,620)	(2,931)	-	(21,687)
Foreign currency translation adjustments	(27,027)	(18,638)	(4,455)	-	(50,120)
As at 31 December 2018	**368,769**	**6,733,175**	**280,730**	**-**	**7,382,674**

	Consolidated financial statements				
	Land Leasehold land & building	Equipment	Vehicles & equipment	Asset under construction	Total
	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
Net book value					
As at 1 January 2017					
Owned assets	315,049	8,609,855	346,914	41,541	9,313,359
Assets under finance leases	-	-	33,801	-	33,801
	315,049	**8,609,855**	**380,715**	**41,541**	**9,347,160**
As at 31 December 2017 and 1 January 2018					
Owned assets	59,615	7,703,349	70,984	4,380	7,838,328
Assets under finance leases	-	-	20,988	-	20,988
	59,615	**7,703,349**	**91,972**	**4,380**	**7,859,316**
As at 31 December 2018					
Owned assets	41,507	4,692,735	55,131	8,963	4,798,336
Assets under finance leases	-	-	16,367	-	16,367
	41,507	**4,692,735**	**71,498**	**8,963**	**4,814,703**

The gross amount of the Group's fully depreciated plant and equipment that was still in use as at 31 December 2018 amounted to Baht 2,239.61 million (31 December 2017: Baht 2,123.43 million).

Impairment loss for equipment

The fierce competition in satellite industry has resulted to a significant market price erosion. As a consequence, the satellite operating result of the company has been affected. The Company has assessed the impairment of equipment by way of discounted cash flow approach applying the discount rate of 8%. The book value of the assets were higher than the recoverable amount estimated by the discounted cash flow. Therefore, the impairment losses were recorded in the amount of Baht 2,423 million, which was presented as impairment losses for the year ended 31 December 2018.

	Separate financial statements				
	Leasehold land & building	Equipment	Vehicles & equipment	Asset under construction	Total
	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
Cost					
As at 1 January 2017	**160,548**	**10,673,958**	**222,054**	**-**	**11,056,560**
Additions	8,438	25,954	21,045	-	55,437
Transfers	-	(1,882)	-	-	(1,882)
Disposals	(295)	(49,036)	(18,891)	-	(68,222)
Write-offs	(131)	(94,106)	(1,391)	-	(95,628)
As at 31 December 2017 and 1 January 2018	**168,560**	**10,554,888**	**222,817**	**-**	**10,946,265**
Additions	2,004	51,233	12,608	-	65,845
Transfers	(1,630)	11,030	(8,298)	-	1,102
Disposals	(427)	(32,149)	(24,450)	-	(57,026)
Write-offs	(1,138)	(17,468)	(1,878)	-	(20,484)
As at 31 December 2018	**167,369**	**10,567,534**	**200,799**	**-**	**10,935,702**
Accumulated depreciation and impairment loss					
As at 1 January 2017	**92,896**	**2,368,021**	**154,507**	**-**	**2,615,424**
Depreciation for the year	22,280	650,788	26,629	-	699,697
Transfers	-	(360)	-	-	(360)
Disposals	(295)	(48,975)	(17,672)	-	(66,942)
Write-offs	(98)	(94,106)	(1,391)	-	(95,595)
As at 31 December 2017 and 1 January 2018	**114,783**	**2,875,368**	**162,073**	**-**	**3,152,224**
Depreciation for the year	18,841	629,635	24,630	-	673,106
Loss on impairment	-	2,423,000	-	-	2,423,000
Transfers	(1,558)	(7,831)	(7,548)	-	(16,937)
Disposals	(356)	(25,349)	(20,892)	-	(46,597)
Write-offs	(1,136)	(17,384)	(1,815)	-	(20,335)
As at 31 December 2018	**130,574**	**5,877,439**	**156,448**	**-**	**6,164,461**
Net book value					
As at 1 January 2017					
Owned assets	67,652	8,305,937	37,322	-	8,410,911
Assets under finance leases	-	-	30,225	-	30,225
	67,652	**8,305,937**	**67,547**	**-**	**8,441,136**
As at 31 December 2017 and 1 January 2018					
Owned assets	53,777	7,679,520	39,756	-	7,773,053
Assets under finance leases	-	-	20,988	-	20,988
	53,777	**7,679,520**	**60,744**	**-**	**7,794,041**
As at 31 December 2018					
Owned assets	36,795	4,690,095	27,984	-	4,754,874
Assets under finance leases	-	-	16,367	-	16,367
	36,795	**4,690,095**	**44,351**	**-**	**4,771,241**

The gross amount of the Company's fully depreciated plant and equipment that was still in use as at 31 December 2018 amounted to Baht 1,722.15 million (31 December 2017: Baht 1,571.74 million).

13. Intangible assets under operating agreement, deferred charges and intangible assets

	Consolidated financial statements				
			Intangible assets		
	Intangible assets under operating agreement	Deferred charges	Goodwill	Other intangible assets	Total intangible assets
	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
Cost					
As at 1 January 2017	**26,232,910**	**20,233**	**968,984**	**1,851,326**	**2,820,310**
Additions	-	-	-	32,754	32,754
Transfer	186	-	-	(640)	(640)
Disposal	-	-	-	(800)	(800)
Write-offs	-	(56)	-	(1,456)	(1,456)
Foreign currency translation adjustment	-	-	(1,481)	(13,430)	(14,911)
Less transferred to current assets held for sale	-	-	-	(251,947)	(251,947)
As at 31 December 2017 and 1 January 2018	**26,233,096**	**20,177**	**967,503**	**1,615,807**	**2,583,310**
Additions	271	-	-	1,409	1,409
Transfer	17,710	-	-	-	-
Disposal	-	-	-	(298)	(298)
Write-offs	-	-	-	(8,135)	(8,135)
Foreign currency translation adjustment	-	-	(5,096)	(5,639)	(10,735)
As at 31 December 2018	**26,251,077**	**20,177**	**962,407**	**1,603,144**	**2,565,551**

	Consolidated financial statements				
			Intangible assets		
	Intangible assets under operating agreement	Deferred charges	Goodwill	Other intangible assets	Total intangible assets
	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
Accumulated amortisation and impairment loss					
1 January 2017	**17,028,162**	**2,583**	**825,930**	**1,283,608**	**2,109,538**
Amortisation for the year	2,022,365	2,017	-	125,265	125,265
Impairment loss	3,196,000	-	85,059	27,622	112,681
Transfers	-	-	-	(640)	(640)
Disposals	-	-	-	(741)	(741)
Write-offs	-	(56)	-	(505)	(505)
Foreign currency translation adjustment	-	-	2,550	(8,555)	(6,005)
Less transferred to current assets held for sale	-	-	-	(183,331)	(183,331)
As at 31 December 2017 and 1 January 2018	**22,246,527**	**4,544**	**913,539**	**1,242,723**	**2,156,262**
Amortisation for the year	1,150,330	2,018	-	103,921	103,921
Reversal of impairment	(170,000)	-	-	-	-
Transfer	16,880	-	-	-	-
Disposals	-	-	-	(298)	(298)
Write-offs	-	-	-	(8,128)	(8,128)
Foreign currency translation adjustment	-	-	(5,877)	(5,357)	(11,234)
As at 31 December 2018	**23,243,737**	**6,562**	**907,662**	**1,332,861**	**2,240,523**
Net book value					
As at 1 January 2017	**9,204,748**	**17,650**	**143,054**	**567,718**	**710,772**
As at 31 December 2017 and 1 January 2018	**3,986,569**	**15,633**	**53,964**	**373,084**	**427,048**
As at 31 December 2018	**3,007,340**	**13,615**	**54,745**	**270,283**	**325,028**

Impairment loss for intangible assets under operating agreement

The fierce competition in satellite industry has resulted to a significant market price erosion. Moreover, the major customers were churned both domestic and international with uncertainty of replacement. As a consequence, the satellite operating result of the company has been affected. The Company recorded impairment loss for intangible assets under operating agreement amounting to Baht 3,196 million for the year ended 31 December 2017. However, the Company has assessed the impairment of equipment by way of discounted cash flow approach applying the discount rate of 8%. The recoverable amount estimated by the discounted cash flow were higher than the book value of the assets. Therefore, the reversal of impairment loss was recorded in the amount of Baht 170 million for the year ended 31 December 2018.

Impairment loss for goodwill and other intangible assets

For the year ended 31 December 2017, the declining of mining and construction sectors in Australia, which were the major customers of Orion Satellite Systems Pty Limited ("OSS"), has affected the operating results of OSS, which is the indirect subsidiary of the Group. As a consequence, the Company has assessed the impairment of goodwill and intangible assets by way of discounted cash flow approach applying the discount rate of 10%. The book value of the assets were higher than the recoverable amount estimated by the discounted cash flow. Therefore, the impairment losses for goodwill was recorded in the amount of Baht 85 million and other intangible asset amounting to Baht 28 million, which was presented as impairment losses.

	Separate financial statements		
	Intangible assets under operating agreement	Deferred charges	Other intangible assets
	Baht'000	Baht'000	Baht'000
Cost			
1 January 2017	**26,232,910**	**20,177**	**1,419,784**
Additions	-	-	6,346
Transfers	186	-	-
Write-offs	-	-	(126)
As at 31 December 2017 and 1 January 2018	**26,233,096**	**20,177**	**1,426,004**
Additions	271	-	1,409
Transfers	17,710	-	-
Disposals	-	-	(298)
Write-offs	-	-	(8,135)
As at 31 December 2018	**26,251,077**	**20,177**	**1,418,980**
Accumulated amortisation and impairment loss			
1 January 2017	**17,028,162**	**2,527**	**997,445**
Amortisation for the year	2,022,365	2,017	95,120
Impairment loss on assets	3,196,000	-	-
Write-offs	-	-	(126)
As at 31 December 2017 and 1 January 2018	**22,246,527**	**4,544**	**1,092,439**
Amortisation for the year	1,150,330	2,018	94,592
Reversal of impairment	(170,000)	-	-
Transfers	16,880	-	-
Disposal	-	-	(298)
Write-offs	-	-	(8,128)
As at 31 December 2018	**23,243,737**	**6,562**	**1,178,605**
Net book value			
As at 1 January 2017	**9,204,748**	**17,650**	**422,339**
As at 31 December 2017 and 1 January 2018	**3,986,569**	**15,633**	**333,565**
As at 31 December 2018	**3,007,340**	**13,615**	**240,375**

14. Deferred tax assets

Deferred tax assets determined after appropriate off-setting are included in the statement of financial position as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Deferred tax assets	1,117,018	775,825	992,281	704,853
	1,117,018	**775,825**	**992,281**	**704,853**

Deferred tax assets for tax loss carried forward are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

As at 31 December 2017, the subsidiary has tax losses carried forward to offset future taxable income, which are not recognised in the consolidated financial statements as follows: (As at 31 December 2018, a subsidiary utilized entirely the loss carried forward).

	2018	2017
	Baht'000	Baht'000
Year expired		
2018	-	34,652
2019	-	68,589
2020	-	45,717
2021	-	13,615
2022	-	9,867
Total	**-**	**172,440**

Movements in total deferred tax assets during the year were as follows:

		Consolidated financial statements (Charged)/credited to:		
	At 1 January 2018	Profit or loss (*Note 28*)	Other comprehensive income	**At 31 December 2018**
Deferred tax assets	Baht'000	Baht'000	Baht'000	Baht'000
Loss carry forward	3,122	63,904	(5,798)	61,228
Allowance for doubtful accounts	4,350	2,284	(432)	6,202
Allowance for obsolete inventory	16,250	(293)	(861)	15,096
Deposits	30,735	(6,272)	-	24,463
Advance receipts from customers	21,131	(7,452)	(731)	12,948
Employee benefit obligations	33,941	(3,856)	931	31,016
Accrued expenses	17,765	18,946	(2,696)	34,015
Impairment loss on assets	639,200	276,229	-	915,429
Others	9,331	5,854	1,436	16,621
Total	**775,825**	**349,344**	**(8,151)**	**1,117,018**

	Consolidated financial statements				
		(Charged)/credited to:			
	At 1 January 2017	Profit or loss (*Note 28*)	Other comprehensive income	Discontinued operation	**At 31 December 2017**
	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
Deferred tax assets					
Loss carry forward	60,057	(47,482)	(2,571)	(6,882)	3,122
Allowance for doubtful accounts	13,006	933	(62)	(9,527)	4,350
Allowance for obsolete inventory	12,879	2,706	671	(6)	16,250
Deposits	36,696	(5,961)	-	-	30,735
Advance receipts from customers	(11,674)	34,760	(366)	(1,589)	21,131
Employee benefit obligations	83,431	5,071	(18,333)	(36,228)	33,941
Accrued expenses	66,608	(48,209)	77	(711)	17,765
Prepaid expenses	30,782	(30,910)	128	-	-
Impairment loss on assets	-	639,200	-	-	639,200
Others	18,626	(3,336)	(2,328)	(3,631)	9,331
Total	**310,411**	**546,772**	**(22,784)**	**(58,574)**	**775,825**

	Separate financial statements			
		(Charged)/credited to:		
	At 1 January 2018	Profit or loss (*Note 28*)	Other comprehensive income	**At 31 December 2018**
	Baht'000	Baht'000	Baht'000	Baht'000
Deferred tax assets				
Allowance for obsolete inventory	13,960	1,136	-	15,096
Deposits	29,963	(6,662)	-	23,301
Employee benefit obligations	29,790	(3,709)	1,037	27,118
Impairment loss on assets	639,200	276,229	-	915,429
Others	(8,060)	16,664	2,733	11,337
Total	**704,853**	**283,658**	**3,770**	**992,281**

	Separate financial statements			
		(Charged)/credited to:		
	At 1 January 2017	Profit or loss (*Note 28*)	Other comprehensive income	**At 31 December 2017**
	Baht'000	Baht'000	Baht'000	Baht'000
Deferred tax assets				
Allowance for obsolete inventory	11,522	2,438	-	13,960
Deposits	35,821	(5,858)	-	29,963
Employee benefit obligations	41,502	4,680	(16,392)	29,790
Impairment loss on assets	-	639,200	-	639,200
Others	(5,766)	(1,408)	(886)	(8,060)
Total	**83,079**	**639,052**	**(17,278)**	**704,853**

15. Other non-current assets

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Withholding taxes receivable	164,440	124,676	154,075	117,492
Tax assessment's deposits	200,994	220,214	200,994	220,214
Others deposit	15,290	15,506	15,290	15,506
Others	17,459	11,835	10,000	-
	398,183	372,231	380,359	353,212
Less accumulated impairment loss	(53,955)	(54,234)	(53,955)	(54,234)
Total	**344,228**	**317,997**	**326,404**	**298,978**

16. Interest-bearing liabilities

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Current				
Current portion of long-term borrowings				
Loans from financial institutions	412,127	415,064	412,127	415,064
Loans from others	8,714	6,724	8,714	6,724
Total current portion of long-term borrowings	420,841	421,788	420,841	421,788
Current portion of debenture	2,253,000	-	2,275,000	-
Total current interest-bearing liabilities	2,673,841	421,788	2,695,841	421,788
Non-current				
Long-term borrowings				
Loans from financial institutions	2,060,638	2,490,386	2,060,638	2,490,386
Loans from others	18,061	23,997	18,061	23,997
Total long-term borrowings	2,078,699	2,514,383	2,078,699	2,514,383
Long-term debentures	2,270,312	4,510,246	2,273,312	4,547,246
Total non-current interest-bearing liabilities	4,349,011	7,024,629	4,352,011	7,061,629
Total	**7,022,852**	**7,446,417**	**7,047,852**	**7,483,417**

Long-term debentures

As at 31 December 2018, the Company has two tranches totaling Baht 4,550 million, with a par value of Baht 1,000 each, unsubordinated and unsecured with having registered and bond holders' representative debentures as follows:

Issue date	No. of units	Amount	Interest rate (per annum)	Term of interest payment	Principal payment term	Outstanding balance as at 31 December 2018
	Million	Million Baht				Million Baht
29 September 2014	2.275	2,275	4.28%	Semiannually	Entirely redeemed on 2 October 2019	2,275
29 September 2014	2.275	2,275	4.68%	Semiannually	Entirely redeemed on 2 October 2021	2,275
Total debentures						4,550
Less bond issuing cost						(3)
Net						**4,547**

The movements in the borrowing can be analysed as follows:

For the year ended 31 December	Note	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
		Baht'000	Baht'000	Baht'000	Baht'000
Opening net book value		7,446,417	10,224,860	7,483,417	9,870,052
Proceeds from borrowings, net of financial costs		-	480,000	-	-
Repayment of borrowings		(414,483)	(2,496,861)	(414,483)	(1,976,064)
Amortisation of finance costs	26	1,066	1,066	1,066	1,066
Gain on exchange rate		(28,433)	(413,301)	(28,433)	(413,301)
Others		18,285	(37,000)	6,285	1,664
Less transferred to current assets held for sale		-	(312,347)	-	-
Closing net book value		**7,022,852**	**7,446,417**	**7,047,852**	**7,483,417**

The group has to maintain the financial ratios restricted in the long-term loan agreements.

The interest rate exposure of the borrowings of the Group is as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Total borrowings:				
- at fixed rates	4,550,086	4,540,967	4,575,086	4,577,967
- at floating rates	2,472,766	2,905,450	2,472,766	2,905,450
Total	**7,022,852**	**7,446,417**	**7,047,852**	**7,483,417**
Weighted average interest rates:				
- Loans	4.78%	3.70%	4.78%	3.70%
- Debentures	4.48%	4.48%	4.48%	4.48%

The periods to maturity of long-term borrowings and long-term debentures net of financial costs were as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Later than 1 year but not later than 2 years	423,778	2,663,742	423,778	2,697,742
Later than 2 years but not later than 5 years	3,925,233	4,360,887	3,928,233	4,363,887
Total	**4,349,011**	**7,024,629**	**4,352,011**	**7,061,629**

The Group has to maintain the financial ratios restricted in the long-term borrowing agreements and to comply with certain restrictions and maintain certain financial ratios under the terms and conditions of the debentures.

Credit facilities

As at 31 December 2018 available credit facilities for loans from local and overseas banks are Baht 3,924.41 million and USD 30.00 million (2017: Baht 4,583.03 million and USD 30.00 million).

Reconciliation of liabilities arising from financing activities

Unit: Thousand Baht

	Consolidated financial statements				
	Short-term loan	**Finance lease liabilities**	**Long-term loans**	**Debentures**	**Total**
As at 1 January 2018	-	30,721	2,905,450	4,510,246	7,446,417
Change in cashflows					
Repayment of borrowings	-	(10,231)	(404,252)	-	(414,483)
Non-cash changes					
Addition of finance lease	-	6,285	-	-	6,285
Amortisation of finance costs	-	-	-	1,066	1,066
Investment in debentures within the Group	-	-	-	12,000	12,000
Change in currency translation	-	-	(28,433)	-	(28,433)
As at 31 December 2018	**-**	**26,775**	**2,472,765**	**4,523,312**	**7,022,852**

Unit: Thousand Baht

	Consolidated financial statements				
	Short-term loan	**Finance lease liabilities**	**Long-term loans**	**Debentures**	**Total**
As at 1 January 2017	230,000	43,369	5,405,311	4,546,180	10,224,860
Change in cashflows					
Proceed from borrowing	480,000	-	-	-	480,000
Repayment of borrowings	(460,000)	(10,301)	(2,026,560)	-	(2,496,861)
Non-cash changes					
Amortisation of finance costs	-	-	-	1,066	1,066
Investment in debentures within the Group	-	-	-	(37,000)	(37,000)
Change in currency translation	-	-	(413,301)	-	(413,301)
Transferred to non-current assets held for sale	(250,000)	(2,347)	(60,000)	-	(312,347)
As at 31 December 2017	**-**	**30,721**	**2,905,450**	**4,510,246**	**7,446,417**

Unit: Thousand Baht

	Separated financial statements			
	Finance lease liabilities	**Long-term loans**	**Debentures**	**Total**
As at 1 January 2018	30,721	2,905,450	4,547,246	7,483,417
Change in cashflows				
Repayment of borrowings	(10,231)	(404,252)	-	(414,483)
Non-cash changes				
Addition of finance lease	6,285	-	-	6,285
Amortisation of finance costs	-	-	1,066	1,066
Change in currency translation	-	(28,433)	-	(28,433)
As at 31 December 2018	**26,775**	**2,472,765**	**4,548,312**	**7,047,852**

Unit: Thousand Baht

	Separated financial statements			
	Finance lease liabilities	**Long-term loans**	**Debentures**	**Total**
As at 1 January 2017	38,561	5,285,311	4,546,180	9,870,052
Change in cashflows				
Repayment of borrowings	(9,504)	(1,966,560)	-	(1,976,064)
Non-cash changes				
Addition of finance lease	1,664	-	-	1,664
Amortisation of finance costs	-	-	1,066	1,066
Change in currency translation	-	(413,301)	-	(413,301)
As at 31 December 2017	**30,721**	**2,905,450**	**4,547,246**	**7,483,417**

17. Trade and other current payables

	Note	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
		Baht'000	Baht'000	Baht'000	Baht'000
Trade payables					
- Related parties	4	3,821	4,651	16,701	20,060
- Other parties		258,785	438,740	146,204	256,801
Total		**262,606**	**443,391**	**162,905**	**276,861**
Other current payables					
- Accrued expenses		329,036	309,753	302,859	298,612
- Others		121,250	113,518	77,818	83,382
Total		**450,286**	**423,271**	**380,677**	**381,994**
Total trade and other current payables		**712,892**	**866,662**	**543,582**	**658,855**

18. Other current liabilities

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Short-term deposits from customers	31,091	52,206	28,197	48,734
Other taxes	58,215	41,352	16,296	14,518
Others	2,008	2,286	-	1
Total	**91,314**	**95,844**	**44,493**	**63,253**

19. Non-current provisions for employee benefit

The statement of financial position obligations was determined as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Present value of unfunded obligations	160,747	175,940	135,592	148,951
Statement of financial position	**160,747**	**175,940**	**135,592**	**148,951**

Movements in the present value of the employee benefit obligations:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Employee benefit obligations at 1 January	175,940	429,770	148,951	207,512
Benefits paid by the plan	(85,311)	(37,518)	(71,172)	(5,413)
Include in profit or loss:				
Current service costs and interest	23,212	52,019	19,387	28,811
Loss from settlement during the year	41,957	-	33,241	-
	65,169	**52,019**	**52,628**	**28,811**
Included in other comprehensive income:				
Actuarial (gain) loss recognised in the year	4,949	(113,348)	5,185	(81,959)
	4,949	**(113,348)**	**5,185**	**(81,959)**
Less Transferred to non-current assets classified as held for sale	-	(154,983)	-	-
Employee benefit obligations at 31 December	**160,747**	**175,940**	**135,592**	**148,951**

Principal actuarial assumptions at the reporting date (expressed as weighted averages):

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	%	%	%	%
Discount rate	3.20	3.00	3.20	3.00
Future salary increases	5.00	5.00	5.00	5.00

Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

	Consolidated financial statements		Separate financial statements	
	Baht'000	Baht'000	Baht'000	Baht'000
Defined benefit obligation 31 December 2018	Increase	Decrease	Increase	Decrease
Discount rate (0.5% movement)	157,581	175,407	134,664	149,898
Future salary growth (0.5% movement)	174,803	158,042	149,382	135,058

Although the analysis does not take account of the full distribution of cash flows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

20. Other non-current liabilities

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Long-term deposits from customers	161,876	174,042	155,079	170,395
Others	122,277	128,884	122,277	128,884
Total	**284,153**	**302,926**	**277,356**	**299,279**

21. Share capital and share-based payment transaction

	Par value per share (Baht)	2018		2017	
		Number Share'000	Amount Baht'000	Number Share'000	Amount Baht'000
Authorised					
At 1 January					
- ordinary shares	*5*	1,099,977	5,499,884	1,099,977	5,499,884
Increase of new shares	5	-	-	-	-
At 31 December					
- ordinary shares	***5***	**1,099,977**	**5,499,884**	**1,099,977**	**5,499,884**
Issued and paid-up					
At 1 January					
- ordinary shares	*5*	1,096,067	5,480,333	1,095,994	5,479,970
Issue of new shares from exercise warrants	*5*	35	177	73	363
At 31 December					
- ordinary shares	***5***	**1,096,102**	**5,480,510**	**1,096,067**	**5,480,333**

The holders of ordinary shares are entitled to receive dividends as declared from time to time, and are entitled to one vote per share at meetings of the Company.

Share-based payment transaction

21.1 Share-based payment transaction settled by equity

21.1.1. Information of project

The issuance and offering of warrants to purchase ordinary shares to directors and employees of the Company and its subsidiaries. The warrants are offered directly to employees who are full-time employed and qualify for the Performance Share Plan project ("Project"). Major information is listed below:

	Project I	**Project II**	**Project III**	**Project IV**
Issued date:	28 March 2013	27 March 2014	26 March 2015	30 March 2016
Issued:	682,000 units	1,197,700 units	1,085,300 units	1,074,300 units
Exercise price:	23.266 Baht/Share	38.265 Baht/Share	37.626 Baht/Share	25.918 Baht/Share
Number of reserved shares:	682,000 shares	1,197,700 shares	1,085,300 shares	1,074,300 shares
Offer period:	5 years after first time to offered the warrant			
Offer price per unit:	Baht 0 (zero Baht)			
Exercise ratio:	One unit of warrant per one ordinary share			

Movements in the number of warrants outstanding are as follows:

	1 January 2018	Issue during the period	Return during the period	Exercise during the period	Expire during the period	31 December 2018
	thousand unit	thousand unit	thousand unit	thousand unit	thousand unit	thousand unit
ESOP - Grant I						
Directors	360	-	-	(15)	(345)	-
Employees	193	-	-	(20)	(173)	-
Total	**553**	**-**	**-**	**(35)**	**(518)**	**-**
ESOP - Grant II						
Directors	374	-	-	-	-	374
Employees	769	-	-	-	-	769
Total	**1,143**	**-**	**-**	**-**	**-**	**1,143**
				-	-	
ESOP - Grant III				-	-	
Directors	254	-	-	-	-	254
Employees	691	-	-	-	-	691
Total	**945**	**-**	**-**	**-**	**-**	**945**
ESOP - Grant IV						
Directors	155	-	-	-	-	155
Employees	741	-	-	-	-	741
Total	**896**	**-**	**-**	**-**	**-**	**896**
Grand Total	**3,537**	**-**	**-**	**(35)**	**(518)**	**2,984**

21.1.2 Fair value measurement

The measurement is in reference to the fair value of the offered ordinary shares issued at the grant date using Monte Carlo Simulation techniques. The assumptions are as below:

	Project I	**Project II**	**Project III**	**Project IV**
Fair value at grant date	Baht 35.037	Baht 27.864	Baht 20.424	Baht 12.475
Share price at grant date	Baht 35.750	Baht 40.500	Baht 36.500	Baht 27.000
Exercise price	Baht 23.266	Baht 38.265	Baht 37.626	Baht 25.918
Expected volatility	55.392%	41.562%	39.894%	36.534%
Expected dividend	1.119%	1.111%	1.781%	2.407%
Risk-free interest rate	3.074%	3.082%	2.340%	1.721%

Reconciliation of other reserve-shared-base payment settled by equity:

	Consolidated and separate financial statements	
For the years ended 31 December	2018	2017
	Baht'000	Baht'000
As at 1 January	11,793	21,521
Total expense recognised during the year in the statement of profit and loss	3,774	9,874
Decrease during the year	(822)	(19,602)
As at 31 December	**14,745**	**11,793**

21.2 Performance incentive payment settled by cash

On 9 May 2018, the Board of Director had a resolution to approve the revised amount of performance incentive payment to Baht 22.76 million allocating to the managements at the end of the project if the Absolute Total Shareholder Return and Relative Total Shareholder Return meet the criteria at the third year of the project. As at 31 December 2018, the Company remeasured the criteria of the project and found that the criteria cannot be met. Therefore, the Company reversed the entire recognized expense in the statement of profit or loss during the year of Baht 8.42 million.

Share premium

Section 51 of the Public Companies Act B.E. 2535 requires companies to set aside share subscription monies received in excess of the par value of the shares issued to a reserve account ("share premium"). Share premium is not available for dividend distribution.

22. Reserves

Reserves comprise:

Appropriations of profit and/or retained earnings

Legal reserve

The Public Companies Act B.E. 2535 Section 116 requires that a company shall allocate not less than 5% of its annual net profit, less any accumulated losses brought forward (if any), to a reserve account ("legal reserve"), until this account reaches an amount not less than 10% of the registered authorised capital. The legal reserve is not available for dividend distribution.

Other components of equity

Currency translation differences

The currency translation differences account within equity comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

Fair value changes in available-for-sale investments

The fair value changes in available-for-sale investments account within equity comprise the cumulative net change in the fair value of available-for-sale investments until the investments are derecognised or impaired.

23. Segment information

Segment information is presented in respect of the Group's business and geographic segments. The primary format, business segments / geographic segments is based on the Group's management and internal reporting structure.

Business segments

The Group comprises the following main business segments:

Segment 1 Services relating to the satellite business and the transponder services segment
Segment 2 Sales and services relating to the internet and media business
Segment 3 Sales and services relating to the telephone network business

Geographic segments

In presenting information on the basis of geographical segments, segment revenue is based on the geographic location of customers.

The areas of operation in Thailand are principally satellite business services, internet and media services and printing and publishing of business telephone directories services. Lao PDRs' main activities are sales and services relating to telephone network business and satellite business services. Australia, China, India, Japan and Myanmar main activities are sales and services relating to satellite business. Australia, China, India, Japan and Myanmar main activities are sales and services relating to satellite business.

The Group comprises the following main geographic segments:

Segment 1 Thailand
Segment 2 China
Segment 3 India
Segment 4 Japan
Segment 5 Myanmar
Segment 6 Others

Revenue and results, based on business segments, in the consolidated financial statements for the years ended 31 December 2018 and 2017 were as follows:

For the years ended 31 December	Satellite business services		Internet services and media		Telephone network		Consolidation eliminations		Total continuing operations		Discontinued operation		Consolidated financial statements	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Revenues	5,850	6,475	229	299	-	-	(71)	(85)	6,008	6,689	224	2,793	6,232	9,482
Shares of profit of investment in joint venture	-	-	-	-	119	196	-	-	119	196	-	-	119	196
Cost of sales and services	(4,112)	(5,129)	(188)	(243)	-	-	81	81	(4,219)	(5,291)	(137)	(1,732)	(4,356)	(7,023)
Selling and administrative expenses	(1,487)	(1,659)	(33)	(30)	-	-	4	7	(1,516)	(1,682)	(51)	(672)	(1,567)	(2,354)
Segment results	251	(313)	8	26	119	196	14	3	392	(88)	36	389	428	301
Gain from sale of investment									1,950	-	-	-	1,950	-
Other income									192	387	3	26	195	413
Net gain on foreign exchange									5	152	-	-	5	152
Loss on impairment asset									(2,253)	(3,309)	-	-	(2,253)	(3,309)
Profit (loss) before finance cost and income tax									286	(2,858)	39	415	325	(2,443)
Finance costs									(338)	(383)	(1)	(18)	(339)	(401)
Operating profit (loss)									(52)	(3,241)	38	397	(14)	(2,844)
Income tax									269	454	(8)	(71)	261	383
Non-controlling interests									-	-	(17)	(189)	(17)	(189)
Net Profit (loss)									**217**	**(2,787)**	**13**	**137**	**230**	**(2,650)**

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	Satellite business services		Internet services and media		Telephone network		Consolidation eliminations		Total continuing operations		Discontinued operation		Consolidated financial statements	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Segment assets	18,741	21,154	644	219	-	-	(570)	(585)	18,815	20,788	-	1,837	18,815	22,625
Loan to related parties	1,943	1,957	-	-	-	-	-	-	1,943	1,957	-	-	1,943	1,957
Investment in joint venture	-	-	-	-	1,444	1,357	-	-	1,444	1,357	-	-	1,444	1,357
Total assets													**22,202**	**25,939**
Segment liabilities	1,987	2,135	72	46	-	-	(17)	(23)	2,042	2,158	-	1,055	2,042	3,213
Borrowings	7,023	7,446	-	-	-	-	-	-	7,023	7,446	-	-	7,023	7,446
Total liabilities													**9,065**	**10,659**

Revenue and results, based on geographical segments, in the consolidated financial statements for the years ended 31 December 2018 and 2017 were as follows:

	2018	2017
	Baht'000	Baht'000
Segment revenue		
Thailand	3,224,969	3,377,172
China	1,151	216,909
India	649,830	686,249
Japan	662,558	834,482
Myanmar	180,258	365,036
Others	1,289,435	1,208,995
Total continued operation	**6,008,201**	**6,688,843**
Discontinued Operation	224,527	2,792,840
Total	**6,232,728**	**9,481,683**

Major customers of the Group

For the year ended 31 December 2018 and 2017, the Group has no revenue transactions with a single external customer amount to 10 percent or more of the Group's revenues.

Non-current assets based on geographical segments in the consolidated financial statements as at 31 December 2018 and 2017 were as follows:

	2018	2017
	Baht'000	Baht'000
Non-current assets		
Thailand	8,323,092	12,441,711
China	3,208	5,766
India	17,460	25,288
Japan	17,636	29,611
Myanmar	19	48
Others	3,044,956	3,235,624
Total	**11,406,371**	**15,738,048**

24. Revenues from sale of goods and rendering of services

	Consolidated financial statements		**Separate financial statements**	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Continuing operation				
Revenues from sale of goods	382,882	544,582	191,381	262,163
Revenues from rendering of services	5,625,319	6,144,261	5,266,149	5,616,127
	6,008,201	**6,688,843**	**5,457,530**	**5,878,290**
Discontinued operation				
Revenues from sale of goods	31,184	406,039	-	-
Revenues from rendering of services	193,343	2,386,801	-	-
	224,527	**2,792,840**	**-**	**-**
Total	**6,232,728**	**9,481,683**	**5,457,530**	**5,878,290**

25. Other income

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Continuing operation				
Consulting and management fees	-	-	48,603	76,706
Interest income	182,852	158,165	177,488	151,947
Gain (loss) on sale of equipment	(4,585)	3,903	(4,541)	4,036
Compensation from customers	-	195,460	-	11,092
Others	14,036	29,613	3,636	9,841
Total other income from continuing operation	**192,303**	**387,141**	**225,186**	**253,622**
Discontinued operation	2,845	25,727	-	-
Total	**195,148**	**412,868**	**225,186**	**253,622**

26. Expenses by nature

The statements of profit or loss include an analysis of expenses by function. Expenses by nature disclosed in accordance with the requirements of various TFRS were as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Baht'000	Baht'000	Baht'000	Baht'000
Continuing operation				
Impairment loss on assets	2,253,000	3,308,681	2,253,000	3,196,000
Depreciation of plant and equipment	719,412	910,015	673,106	699,697
Amortisation of intangible assets under the agreements for operations, deferred charges and intangible assets	1,256,268	2,149,648	1,246,940	2,117,485
Amortisation of finance costs	1,066	1,066	1,066	1,066
Staff costs	959,965	963,378	663,717	644,538
Discontinued operation				
Depreciation of plant and equipment	13,029	146,113	-	-
Amortisation of intangible assets	1,312	16,023	-	-
Staff costs	42,221	540,095	-	-

27. Provident funds

The defined contribution plans comprise provident funds established by the Group for its employees. Membership to the funds is on a voluntary basis. Contributions are made monthly by the employees at rates ranging from 3% to 7% of their basic salaries and by the Group at rates ranging from 3% to 7% of the employees' basic salaries. The provident funds are registered with the Ministry of Finance as juristic entities and are managed by a licensed Fund Manager.

28. Income tax expense

	Notes	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
		Baht'000	Baht'000	Baht'000	Baht'000
Current tax expense from continuing operation					
Current tax expense		(80,127)	(92,205)	51,271	(104,645)
Deferred tax expense					
Movement in temporary differences	14	349,344	546,772	283,658	639,052
Total		**269,217**	**454,567**	**334,929**	**534,407**
Total current tax expense from continuing operation		**269,217**	**454,567**	**334,929**	**534,407**
Current tax expense from discontinued operation	9	(8,482)	(71,214)	-	-
Total current tax expense		**260,735**	**383,353**	**334,929**	**534,407**

Reconciliation of effective tax rate

	Consolidated financial statements			
	2018		2017	
	Rate (%)	Baht'000	Rate (%)	Baht'000
Profit (loss) for the year		217,036		(2,786,735)
Total income tax expense		(269,217)		(454,567)
Loss before total income tax expense		(52,181)		(3,241,302)
Income tax using the Thai corporation tax rate	20	10,436	20	648,260
Effect of different tax rates in foreign jurisdictions		(2,808)		(22,879)
Share of profit (loss) of investment in a joint venture		(23,878)		39,237
Effect of the income recognised in different periods for account and tax purposes		7,119		3,766
Effect of non-deductible tax and expense recognised in different periods for accounting and tax purposes		165,202		(231,250)
Current year losses for which no deferred tax asset was recognised		29,827		(816)
Others		83,319		18,249
Total	**516**	**269,217**	**14**	**454,567**

	Separate financial statements			
	2018		2017	
	Rate (%)	Baht'000	Rate (%)	Baht'000
Profit (loss) for the year		217,036		(2,786,735)
Total income tax expense		(334,929)		(534,407)
Loss before total income tax expense		(117,893)		(3,321,142)
Income tax using the Thai corporation tax rate	20	23,579	20	664,228
Income not subject to tax		9,720		17,700
Share of profit (loss) of investment in subsidiaries and a joint venture		325,756		(52,757)
Effect of the income recognised in different periods for account and tax purposes		6,684		3,777
Effect of the non-deductible tax expense and expense recognised in different periods for accounting and tax purposes		(85,442)		(114,678)
Others		54,632		16,137
Total	**284**	**334,929**	**16**	**534,407**

Income tax reduction

Royal Decree No. 577 B.E. 2557 dated 10 November 2014 grants the reduction to 20% of net taxable profit for the accounting period 2015 which begins on or after 1 January 2015.

Revenue Code Amendment Act No. 42 B.E. 2559 dated 3 March 2016 grants a reduction of the corporate income tax rate to 20% of net taxable profit for accounting periods which begin on or after 1 January 2016.

The Group has applied the tax rate of 20% in measuring deferred tax asset and liabilities as at 31 December 2018 and 2017.

29. Earnings (loss) per share

Basic earnings (loss) per share

The calculations of basic earnings (loss) per share for the years ended 31 December 2018 and 2017 were based on the profit (loss) for the years attributable to ordinary shareholders of the Company and the number of ordinary shares outstanding during the years by weighted average method as follows:

	Consolidated financial statements and separate financial statements					
	2018			2017		
	Continuing operation	Discontinued operation	Total	Continuing operation	Discontinued operation	Total
	(in thousand Baht/thousand share)					
For the years ended 31 December						
Profit (loss) attributable to ordinary shareholders of the Company (basic)	**217,036**	**12,509**	**229,545**	**(2,786,735)**	**136,958**	**(2,649,777)**
Number of ordinary shares outstanding	**1,096,102**	**1,096,102**	**1,096,102**	**1,096,067**	**1,096,067**	**1,096,067**
Earnings (loss) per share (basic) *(in Baht)*	**0.20**	**0.01**	**0.21**	**(2.54)**	**0.12**	**(2.42)**

Diluted earnings (loss) per share

The calculation of diluted earnings (loss) per share for the years ended 31 December 2018 and 2017, were based on the earnings (loss) for the period attributable to equity holders of the Company and the number of ordinary shares outstanding during the period after adjusting for the effects of all dilutive potential ordinary shares. However, for the years ended 31 December 2018 and 2017, the Company did not calculate diluted earnings per share since exercise price is higher than fair value of weighted ordinary shares during the year.

30. Dividends

At the annual general meeting of the shareholders of the Company held on 28 March 2018, the shareholders approved the appropriation of dividend of Baht 1.36 per share, amounting to Baht 1,491 million. The dividend was paid to shareholders on 25 April 2018.

At the annual general meeting of the shareholders of the Company held on 29 March 2017, the shareholders approved the appropriation of dividend of Baht 0.70 per share, amounting to Baht 767 million. The dividend was paid to shareholders on 26 April 2017.

31. Financial instruments

Financial risk management policies

The principal financial risks faced by the Group are interest rate risk and exchange rate risk. The Group borrows at fixed and floating rates of interest for capital expenditure. Certain sales, purchases and a portion of borrowings are denominated in foreign currencies. In order to manage the risks arising from fluctuations in exchange rates and interest rates, the Group makes use of derivative financial instruments.

The objectives of using derivative financial instruments are to reduce uncertainty over future cash flows arising from movements in interest and exchange rates, and to manage the liquidity of cash resources. The following strategies are employed to achieve these objectives. Interest rate exposures are managed through interest rate swaps taken out with commercial banks and foreign exchange forward contracts and foreign currency options are taken out to manage the currency risks in future sales, purchases and loan repayments. Decisions on the level of risk undertaken are governed by corporate policy, which has established limits by transaction type and by counterparty.

Trading for speculative purposes is prohibited. All derivative transactions are subject to approval of the management before execution.

Management of currency and interest rate exposures is the responsibility of the Treasury Department. Management reports contain detail of cost and market value for all derivative financial instruments including outstanding forward contracts and cross currency and interest rate swap. An analysis of exposures against the limits established by the management is also provided. These limits principally cover the maximum permitted exposure in respect of short-term investment regarding to guideline to short-term investment policy.

Capital management

The primary objective of the Company's capital management is to provide good returns to shareholders and benefits to other stakeholders and to maintain an optimal capital structure in order to support asset management plan and new investment opportunities which will create value and strengthen financial position for the whole group.

Foreign currency risk

The Group is exposed to foreign currency risk relating to purchases and sales which are denominated in foreign currencies.

As at 31 December 2018 and 2017, the Group was exposed to foreign currency risk in respect of financial assets and liabilities denominated in the following currencies:

	Consolidated financial statements			
	2018		2017	
	Foreign currency million	Baht million	Foreign currency million	Baht million
Assets				
US Dollars	114.76	3,704.99	37.62	1,223.24
Euro	0.11	4.26	-	-
India Rupee	446.35	193.71	446.35	212.24
New Zealand Dollars	0.14	3.09	0.11	2.56
Australia Dollars	0.10	2.15	-	-
Hong Kong Dollars	2.50	10.26	2.50	10.36
Total		3,918.46		1,448.40
Liabilities				
US Dollars	94.34	3,076.80	105.53	3,466.38
India Rupee	246.77	122.22	236.08	128.71
Australia Dollars	0.05	1.22	-	-
New Zealand Dollars	-	-	0.15	3.51
Total		3,200.24		3,598.60

Foreign currency assets mainly represent cash in bank and accounts receivable. Foreign currency liabilities mainly represent trade payables, accounts payable - plant and equipment and borrowings.

Credit risk

The Group has no significant concentrations of credit risks. The Group has policies in place to ensure that sales of products and services are made to customers with an appropriate credit history. Derivative counterparties and cash transactions are limited to high quality financial institutions.

Liquidity risk

The Group monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Group's operations, including finding short term credit facility from various banks for reserve in case of necessary and to mitigate the effects of fluctuations in cash flows.

Determination of fair values

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

The carrying amount of cash and cash equivalents, short-term investments, trade receivables, amounts due from related parties, short-term loans and advances to related parties, trade payables, accounts payable-plant and equipment, amounts due to related parties, and borrowings are assumed to approximate their fair value due to the short maturities of these instruments.

Fair values of interest-bearing liabilities, together with the carrying amount values shown in the statement of financial position as follows:

	Consolidated financial statements				
		Fair value			
	Carrying amount	Level 1	Level 2	Level 3	Total
	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
As at 31 December 2018					
Current					
Debt securities available for sale	1,954,276	-	1,954,276	-	1,954,276
Current portion of long-term loan to related party	485,725	-	-	598,473	598,473
Current portion of long-term borrowings	420,841	-	-	426,386	426,386
Current portion of debentures	2,253,000	-	2,353,503	-	2,353,503
Non - current					
Long-term loan to related party	1,457,174	-	-	1,795,418	1,795,418
Long term borrowings	2,078,699	-	-	2,106,425	2,106,425
Debentures	2,270,312	-	2,371,558	-	2,371,558
As at 31 December 2017					
Current					
Debt securities available for sale	905,547	-	905,547	-	905,547
Current portion of long-term loan to related party	244,591	-	-	244,591	244,591
Current portion of long-term borrowings	421,788	-	-	421,788	421,788
Non - current					
Long-term loan to related party	1,712,138	-	-	1,743,763	1,743,763
Long term borrowings	2,514,383	-	-	2,512,028	2,512,028
Debentures	4,510,246	-	4,822,658	-	4,822,658

	Separated financial statements				
		Fair value			
	Carrying amount	Level 1	Level 2	Level 3	Total
	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
As at 31 December 2018					
Current					
Debt securities available for sale	2,046,221	-	2,046,221	-	2,046,221
Current portion of long-term loan to related party	525,725	-	-	638,473	638,473
Current portion of long-term borrowings	420,841	-	-	426,386	426,386
Current portion of debentures	2,275,000	-	2,376,480	-	2,376,480
Non - current					
Long-term loan to related parties	1,457,174	-	-	1,795,418	1,795,418
Long term borrowings	2,078,699	-	-	2,106,425	2,106,425
Debentures	2,273,312	-	2,374,717	-	2,374,717
As at 31 December 2017					
Current					
Debt securities available for sale	1,023,962	-	1,023,962	-	1,023,962
Current portion of long-term loan to related party	244,591	-	-	244,591	244,591
Current portion of long-term borrowings	421,788	-	-	421,788	421,788
Non - current					
Long-term loan to related parties	1,712,138	-	-	1,721,277	1,721,277
Long term borrowings	2,514,383	-	-	2,512,028	2,512,028
Debentures	4,547,246	-	4,862,197	-	4,862,197

Fair value hierarchy

The table above analyses recurring fair value measurements for financial assets. These fair value measurements are categorised into different levels in the fair value hierarchy based on the inputs to valuation techniques used. The different levels are defined as follows.

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities that the Group/Company can access at the measurement date.
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: unobservable inputs for the asset or liability.

The Group determines Level 2 fair values for debentures have been determined based on quoted selling prices from The Thai Bond Market Association at the close of the business on the reporting date.

The Group determines Level 3 fair values for borrowing have been estimated using discounted cash flows based on the Group's incremental borrowing rates for similar types of borrowings.

32. Commitments with non-related parties

32.1 Agreement for operation of domestic communication satellite

The Company was permitted by the Ministry of Transport and Communications, under an agreement dated 11 September 1991 and an amendment thereto dated 22 March 1992, to operate and administer certain satellite projects and to render transponder services for domestic and international communications as well as the right to collect, for a thirty-year period, service charges from users of the transponders. The agreements for operation have been transferred to the Ministry of Digital Economy and Society ("MDE") (previously named Ministry of Information and Communication Technology ("MICT")).

Under the aforementioned agreement, the Company must pay an annual fee to MDE based on a percentage of certain service incomes or at the minimum level specified in the agreement, whichever is higher. As at 31 December 2018, the remaining minimum fee is Baht 245 million (31 December 2017: Baht 327 million). In addition, the Company, according to the aforementioned agreement, must transfer its ownership of all satellites, and monitoring stations and other operating equipment to MDE on the date of completion of construction and installation.

32.2 Shareholder agreement

Lao Telecommunications Company Limited ("LTC") is a joint venture, which was established under the terms of a Joint Venture Contract dated 8 October 1996, signed by the Government of the Lao People's Democratic Republic ("LAOGOV") and Intouch Holdings Public Company Limited (formerly named Shinawatra Computer and Communications Public Company Limited), According to the aforementioned Joint Venture Contract, LTC has the right to provide telecommunication services - fixed line phone, mobile phone, international facilities, internet and paging - within the Lao PDR for 25 years. Currently, Shenington Investments Pte Ltd ("SHEN"), which is a joint venture of the Company, owns 49% of LTC's registered shares. After the end of the 20th year, in 2016, LAOGOV shall have the right to consider purchasing all LTC's shares at a market price. And after the end of the 23rd year, in 2019, the Group has a right to submit a proposal to LAOGOV to consider the extension of the term of agreement. Otherwise at the end of the 25th year, in 2021, the Group has to transfer all of LTC's shares to LAOGOV without any charges (Note 10). According to the shareholder agreement, LTC is required to invest at least USD 400 million in the projects specified in the agreement within 25 years.

On 23 October 2015, SHEN and LAOGOV have officially reached the agreement to extend the Joint Venture Agreement and the Master Agreement for the Development of Telecommunications Services in the Lao PDR, as a result LTC obtain right to operate communication service in Lao PDR for a further period of 25 years until 2046. According to the amended agreements, LTC is required to invest ESS at least USD 400 million in the projects specified in the agreements within 25 years.

32.3 Agreements for operation of the Company and subsidiary companies for the satellite uplink-downlink and Satellite Internet services and Internet services in Thailand

Currently, the National Broadcasting and Telecommunications Commission ("NBTC") (previously termed the National Telecommunications Commission ("NTC")) is responsible for granting licenses to provide telecommunication services and internet access services in Thailand. The Company and its subsidiaries operate the business to provide internet, broadcasting and telecommunication services under licenses granted by NBTC as follows:

Type of license	Issued Date	Period
License of the Company		
Telecom Operation License Type I	16 August 2016	5 years
Telecom Operation License Type III	26 September 2012	20 years
Internet Operation License Type I	7 May 2015	5 years
License of Thai Advance Innovation Company Limited (Previously named DTV Service Company Limited)		
Broadcasting Operation License	21 January 2013	15 years
Broadcasting Operation License (Lao Star)	28 January 2016	5 years
Broadcasting Operation License (D-Channel)	28 January 2016	5 years
Broadcasting Operation License (Lao PSTV)	13 July 2018	5 years
Broadcasting Operation License (LNTV 3)	13 July 2018	5 years
Broadcasting Operation License (TV Lao)	24 November 2017	5 years
License of TC Broadcasting Company Limited		
Broadcasting Operation License	4 March 2013	15 years
Telecom Operation License Type III	10 November 2015	15 years

Revenue of the Company under the NBTC's regulation

Revenue from rendering of services and equipment rentals of the Company for the years ended 31 December 2018 and 2017 was classified as follows:

	Separate financial statements	
	2018	2017
	Baht'000	Baht'000
Telecom Operation License Type I	65,566	95,153
Telecom Operation License Type III	229,464	283,261
Other service income	5,162,500	5,499,876
Total	**5,457,530**	**5,878,290**

32.4 Operating lease commitments

The Group has future aggregate minimum lease payments under non-cancellable operating leases as follows:

		Consolidated financial statements		Separate financial statements	
	Currency	2018	2017	2018	2017
		thousands	thousands	thousands	thousands
Within one year	THB	3,581	16,121	3,581	16,121
	IDR	115,000	-	115,000	-
	VND	13,328	-	13,328	-
	YEN	1,392	1,452	-	-
	USD	70	247	-	195
	INR	1,825	2,434	-	-
	PHP	-	600	-	600
	AUD	180	186	-	-
	NZD	-	26	-	-
Total equivalent Baht		11,660	31,627	3,872	22,937
After one year but within five years	THB	5,933	9,514	5,933	9,514
	YEN	4,049	5,441	-	-
	USD	-	36	-	-
	INR	-	1,825	-	-
	AUD	9	189	-	-
Total equivalent Baht		7,345	18,013	5,933	9,514
Grand total equivalent Baht		**19,005**	**49,640**	**9,805**	**32,451**

32.5 Other commitments

The Group has commitments with banks, whereby the banks issued letters of guarantee, letters of credit and other guarantees in respect of business contracts, for the following amounts:

	Currency	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
		thousands	thousands	thousands	thousands
Minimum operating agreement fee payable to Ministry of Digital Economy and Society	THB	56,667	54,000	56,667	54,000
Satellite space leasing by customers	USD	2,347	2,529	2,336	2,522
	THB	134,349	21,235	133,799	21,079
Others	THB	25,450	16,681	25,181	16,411

32.6 Other services agreement

On 1 December 2017, the Company entered into the Services Agreement for life-extension service to the satellites for five years term with a minimum commitment until the end of concession period of USD 8.88 million and with a certain right of termination by the Company under term and condition specified in the agreement. Another service fee of USD 71.12 million depends on certain conditions of the agreement if the Company is allowed to operate the current concession satellites after the concession ends.

33. Contingent liabilities

Assessment for income tax in India

The Tax Authority in India ('the Tax Authority'), has held that the payments received by the Company for providing Transponder Services ('TPS') to its Indian Customers and non-resident customers targeting Indian audience ('the Customer') was Royalty under both the Indian Income Tax Act ('the Act'), and the Double Taxation Avoidance Agreement between Thailand and India ('the DTAA') and subject to withholding tax at the rate of 15% on gross basis. But the Company considered income from Transponder Services to be business income, and as the Company does not have permanent establishment in India, such income is not taxable in India.

The Tax Authority still insisted on its consideration and raised the tax demand including surcharge, education tax and interest aggregating to INR 859.4 million (approximately Baht 399.3 million) against the said payment received by it from the customers and also levied penalty of INR 566.1 million (approximately Baht 263.1 million) for the Assessment Year ('AY') 1998-1999 to 2012-2013 (1 April 1997 to 30 March 2012).

So far, the Company had received Withholding Tax Certificates ('WTC') from its customers until Assessment Year ('AY') 2012-2013 net amounting to INR 593.8 million (approximately Baht 275.9 million), in which part of the amount is substituted and paid by the customer on behalf of the Company and used it as deposit. The Company had also deposited INR 480.4 million (approximately Baht 223.2 million). The deposit is presented as other non-current assets in the statements of financial position.

On 4 March 2011, Income Tax Appellate Tribunal (ITAT) gave its decision that the Company's income from transponder services in India was not a royalty and, as the Company has no permanent establishment in India, such income was not taxable in India.

As the consequence, the Company does not have to pay interest and penalty imposed by the Revenue Department of India, and ITAT also decided that the demand for penalty for the assessment year 1998-1999, 1999-2000, 2000-2001, 2001-2002 and 2002-2003 made by the Revenue Department of India against the Company be cancelled. The Revenue Department of India did not appeal against the ITAT's decision on penalty for the said assessment years to the High Court of Delhi and the ITAT's decision on penalty was final. On 30 December 2011, the Tax authority notified the partial return of deposit placed by the Company against the penalty for the Assessment Year ('AY') 1998-1999 to 2001-2002 and interest, aggregating to INR 162.4 million (approximately Baht 75.5 million).

Further to ITAT decision as stated in the preceding paragraphs, the Company is in the process of requesting the refund of the remaining deposit and withholding tax from the Tax Authority. Upon the final decision of the Supreme Court and the receipt of refund, the Company will forward the Customer the amount they substituted on behalf of the Company.

On 28 September 2011, the Tax Authority has filed an appeal against the decision of High Court on 17 February 2011 which decided that the Company's income from transponder services in India was not a royalty, to the Supreme Court. At the moment, this issue is still under the consideration of the Supreme Court.

The Supreme Court of India issued a letter dated 9 November 2011, to inform the agent of the Company's tax consultant of the appeal. Currently, the matter is in process, awaiting the Supreme Court of India's consideration.

34. Other events

34.1 According to the judgment of the Supreme Court, Criminal Division for Persons Holding Political Positions rendered on 26 February 2010, concerns the Company and its affiliated companies in many aspects. The Company is of the opinion that the consequence of the judgment is limited to the holding that some property of the person holding political position was improperly acquired by an abuse of power while being in a political position. The judgment does not contain any order indicating that the Company or its affiliated companies shall take any actions as the Company is not involved to the case. The Company and its affiliated companies have been operating to the best of its ability in accordance with the law and the agreements and in good faith. The Company and its affiliated companies have every right available under the law and agreements to provide the facts to prove its innocence and good faith in any proceeding which may be initiated by the relevant government agencies in accordance with the law and justice.

34.2 On 19 April 2007, Mr. Supong Limthanakul brought legal actions against the National Telecommunications Commission ("NTC"), the office of the NTC and the Ministry of Digital Economy and Society ("MDE") (previously named the Ministry of Information and Communication Technology ("MICT")) in the Central Administrative Court ("CAC") on the ground that the three state agencies neglected to perform their duties in overseeing whether the Company has been carrying on its telecommunications business lawfully after the sale of Shin Corporation Public Company Limited's shares to the new shareholder.

CAC issued an order dated 8 April 2009 making the Company the fourth respondent in order to allow the Company to file the Reply to the petitioner's claim including evidence, documentary or otherwise to CAC and the Company filed the Reply and supporting evidence in July 2009. On 10 June 2011, CAC has dismissed the verdict.

On 8 July 2011, Mr. Supong Limthanakul has filed an appeal with the Supreme Administrative Court ("SAC"). The case is under consideration by SAC. On 23 September 2011, the Company has filed an argument against appeal with the Supreme Administrative Court ("SAC").

On 28 December 2018, the Supreme Administrative Court issued an order that the ending date of the fact inquiry shall be held on 12 February 2019 which both plaintiff and defendant are required to submit the additional documents (if any) to the Court within the said period. After that, the Court shall further determine the first hearing date.

The Company is of the opinion that it will not be adversely affected in any way as the actions were brought against NTC, office of the NTC and MICT for neglecting to perform their duties and will not constitute a cause for terminating the operating agreement as the Company has fully complied with the terms and conditions of the operating agreement.

34.3 On 26 December 2015, Golden Town Film Company Limited ("Plaintiff") has filed the Intellectual Property Court a lawsuit against Thaicom Public Company Limited ("THAICOM" or "the Company"), Directors of the Company, and a customer of the Company ("Defendant"), and claimed that Defendant has broadcasted a movie through satellite TV channel leased from THAICOM infringing the movie copyrights owned by Plaintiff.

On 8 September 2016, The Intellectual Property Court issued an order that THAICOM and its directors were dismissed from the case on the ground that THAICOM and its directors did not mutually infringe the movie copyright of the Plaintiff. At present, the Plaintiff got a permission from the Court to file the appeal of the Court Order within 8 November 2016. On 19 December 2016, THAICOM has filed an argument against appeal to Court.

On 3 September 2018, the Supreme Intellectual Property Court issued a confirmation of judgement of the Intellectual Property Court that THAICOM and its directors were dismissed from the case and the case becomes final.

34.4 A subsidiary of the Company was being sued and claimed for the damages of satellite equipment in Australia since 2011. On 22 December 2016, the Court gave its judgement that the subsidiary shall compensate for damages of 5.3 million Australian dollars with interest which the impact of such expense was recorded in the financial statements for the year 2016. On 17 March 2017, the subsidiary has filed an argument against appeal to Court.

On 16 February 2018, the Court ordered the appeal be dismissed which a subsidiary paid an interest and a portion of expense after the Court's decision in the amount of 1.8 million Australian dollars. Nonetheless, the additional legal costs which a subsidiary shall compensate the Plaintiff are being aggregated for the certain amount by the Court.

34.5 The Company and its partner have a different interpretation of certain clauses of the cooperation agreement. As a result, the Company and such company have submitted the case to the arbitrator to consider and find a solution for such different view. All witnesses from both parties have been already cross-examined. During the year 2018, the arbitrator has already considered that the interpretation of certain clauses of the company is correct, and this decision is final.

34.6 Dispute over THAICOM 7 and THAICOM 8 satellites under Operating Agreement on Domestic Communication Satellite

On 5 October 2017, the Company received a letter from the Ministry of Digital Economy and Society (the "Ministry") stating that Thaicom 7 and Thaicom 8 satellites were the satellites under the Operating Agreement on Domestic Communication Satellite dated 11 September 1991 between Intouch Holdings Public Company Limited ("INTOUCH") and the Ministry (formerly known as the Ministry of Information and Communication Technology (MICT)) (the "Agreement"), which INTOUCH established the Company to operate works under the Agreement. In this regard, the letter from the Ministry stated a request for the full compliance with the Agreement on an urgent basis; e.g. transfer of ownership and delivery of assets, procurement of the backup satellite(s), payment of overdue revenue sharing, and property insurance.

The Extra-Ordinary Board of Directors' Meetings of the Company on 24 October 2017, considered such letter and consulted with legal advisor and then opined that Thaicom 7 and Thaicom 8 satellites were not the satellites under the Agreement as the procedures of Thaicom 7 and Thaicom 8 satellites fell under the scope of license received from the National Broadcasting and Telecommunications Commission. Moreover, the Company has fully complied with the terms and conditions of the Agreement and has not proceeded with any operations against or violating the Agreement. Therefore, the Company had a different opinion from the Ministry on Thaicom 7 and Thaicom 8 satellites. Accordingly, the Meetings resolved that the Company submit to an arbitrator the dispute, resulting from the terms of and compliance with the Agreement and that the parties thereto have not been able to resolve it, for further settlement. This is in accordance with Clause 45.1 of the Agreement and the Company has submitted the dispute to the Arbitration Institute on 25 October 2017, as appeared in the Black Case No. 97/2560.

During a period that the dispute is pending arbitration proceedings, the Company does not have any duties to comply with any of the foregoing requests made by the Ministry until an award is rendered, pursuant to Clause 45.6 of the Agreement, stating that in the event where there is a dispute pending arbitration proceedings, the parties shall still be obligated to comply with terms of the Agreement until an award is rendered.

35. Event after the reporting period

On 16 January 2019, Lao Telecommunication Public Company ("LTC") entered into the Sale and Purchase Contract for Shares in Vimpelcom Company Limited with the Government of The Lao PDR ("LAOGOV") to purchase the 500,000 shares, equivalent to 100% shareholding in Vimpelcom Company Limited. LTC agreed to purchase at the price of USD 42 million and the first payment instalment was paid on the contract date in the amount of USD 3 million and the remaining instalment amount of USD 39 million will be paid within 180 days after the signing date. Under the said contract, LAOGOV agreed to transfer all the right attached to the shares to LTC which details indicated in the contract.

36. Reclassification accounts

Certain accounts in the statements of financial position as of 31 December 2017, which is included in the financial statements for 2018 comparative proposes. The reclassification accounts to conform to the presentation in the 2018 financial statements.

	Consolidated financial statement			Separate financial statement		
	Before Reclassi-fication	Reclassi-fication	After reclassi-fication	Before Reclassi-fication	Reclassi-fication	After reclassi-fication
	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000	Baht'000
Statements of financial position						
Current tax assets	-	62,646	62,646	-	62,646	62,646
Other non-current assets	380,643	(62,646)	317,997	361,624	(62,646)	298,978
		-			-	

37. Thai Financial Reporting Standards announced in the Royal Gazette but not yet effective

The Federation of Accounting Professions has issued the Notification regarding TFRS 15 "Revenue from Contracts with Customers" which has been announced in the Royal Gazette on 14 March 2018 and will be effective for the financial statements for the period beginning on or after 1 January 2019 onwards.

The Federation of Accounting Professions has issued the Notification regarding Thai Financial Reporting Standard Group of Financial Instruments, which have been announced in the Royal Gazette on 21 September 2018 and will be effective for the financial statements for the period beginning on or after 1 January 2020 onwards, as follows:

TAS	**Topic**
No. 32	"Financial Instruments: Presentation"

TFRS	**Topic**
NO. 7	"Financial Instruments: Disclosures"
NO. 9	"Financial Instruments"

TFRIC	**Topic**
No. 16	"Hedge of a Net Investment in a Foreign Operation"
No. 19	"Extinguishing Financial Liabilities with Equity Instruments"

On 27 November 2018, the Federation of Accounting Professions has issued the notification regarding 52 TFRSs, which will be effective for the financial statements for the period beginning on or after 1 January 2019, onwards, and have been announced in the Royal Gazette. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards, with most of the changes directed towards revision of wording, terminology and reference.

The Group's management will adopt such TFRSs in the preparation of the Group's financial statements when they become effective. The Group's management is in the process to assess the impact of these TFRSs on the financial statements of the Group in the period of initial application.

Dividend Policy

Dividend policy of the Company

The Board of Directors of the Company may recommend annual dividends, subject to the approval of the Company's shareholders, at an Annual General Meeting. From time to time, the Company's Board of Directors may declare interim dividends. The current policy of the Board of Directors of the Company is to recommend to our shareholders a dividend of not less than 40% of stand-alone net profits, and shall not exceed the retained earnings as shown in the Company's Financial Statement. However, the dividend payment shall not materially affect our investment plans and operations, and depends on cash flows as well as any other future obligations of the Company and subsidiaries and any obligations with the financial institutions.

Dividend policy of the subsidiaries and associated companies

The Company's subsidiaries and associated companies have dividend policies in line with that of the Company. The Board of Directors of the Company and those of its subsidiaries and associated companies will consider and propose dividend payments to shareholders for approval, subject to their investment plans and financial needs or unless the payment of dividends would materially affect their operations.

3-year dividend payment history of the Company are as follows:

Details of dividend payment	2018[1]	2017[1]	2016
Earnings (loss) per share (Baht)	0.21	(2.42)	1.47
Dividend per share (Baht)	1.36	-	0.70
Dividend payout ratio (%)	649	-	25

Remark

(1) The 2018 Annual General Meeting of Shareholders on 28 March 2018 has passed the resolution to approve no appropriation of the net profit and no dividend payment for to year 2017 due to the Company's net loss and approve the interim dividend payment for performance during the period of 1-31 January 2018 of 1.36 Baht per share, which was appropriated from the net profit from selling of CS Loxinfo Public Company Limited.

Glossary

Analog
A variable data or electrical signal that changes continuously.

Backhaul
A channel of data traffic between transmitting site and signal receiving site.

Bandwidth
A range of frequencies occupied by an electronic signal. Bandwidth also refers to data (information) transmission rates when communicating over certain media or devices, analog signal and digital signal with bandwidth that can be measured in Megabit Per Second, Mbps.

Broadband
A type of high-speed data transmission through Internet Protocol (IP).

Broadcast Beam
A width of satellite signal transponders aimed at the Earth's surface as a result of combining of a number of SPOT Beams, depending on the demand in the service area. The service is a one-way communication.

C-band
The frequency range from 4 - 8 GHz, covering a large footprint. C-band needs a large dish to receive signals. It is suitable for general telecommunications services such as audio, video or data transmission.

CCTV
Closed-circuit television

Code Division Multiple Access (CDMA)
A popular digital cellular technology that uses spread-spectrum techniques. Individual conversations are encoded with a pseudo-random digital sequence. CDMA allows more subscribers to connect at any given time.

Compression
A way of squeezing more data through the same size of transponder.

Compressed Video
A digital transmission process used to transmit a digital video signal by compressing into a fraction of its former bandwidth by a codec. The resulting compressed video can be transmitted more economically and through existing phone lines. However, the compression of digital video may reduce the quality of the video.

Digital Broadcasting
Converting TV pictures to digits when transmitting and re-converting them to pictures when they are received.

Digital Direct-to-Home (DTH)
Digital signals transmitted directly to the customer's home.

Digital Subscriber Line (DSL)
A technology that provides digital data transmission over the wires of a local telephone network at the download speed ranges from 256 kilobits per second (Kbps) to 24,000 Kbps, depending on line conditions and service level implemented. The users must be within the 5 Km. radius. It is suitable for populated urban areas.

Downlink
The reception of satellite signal. After a ground station send the signal to the satellite, the satellite dish antenna received the signals and will transmit data and voice signals and repeat to the desired location on Earth within the footprint coverage, called "Downlink".

Femto cell
A device used to improve mobile network coverage in small areas. Femto cells connect locally to mobile phones and similar devices through their normal GSM, CDMA, or UMTS connections, and then route the connections over a broadband internet connection back to the carrier, bypassing the normal cell towers.

Fiber Optics
A technology that uses glass (or plastic) threads (fibers) to transmit data. It is costly to install, fragile and more difficult to be reconnected than metal wire.

Free-to-Air
A term used to describe television (TV) and radio services broadcast in unencrypted form, allowing person with the appropriate receiving equipment to receive the signal without cost.

Gateway
Two meanings: 1) In Networking: a gateway is a medium of data transmission from one network to other networks. 2) In a satellite system (including IPSTAR): a gateway is a main earth station that links the satellite system to the ground system (i.e. the Internet).

High Definition Television (HDTV)
An improved television system which provides approximately twice the vertical and horizontal resolution of existing television standards. It also provides audio quality approaching that of compact discs.

High Throughput Satellite (HTS)
Broadband satellite

Integrated Services Digital Network (ISDN)
A circuit-switched telephone network system, designed to allow digital transmission of voice and data over ordinary telephone wires.

Internet Protocol Television (IPTV)
A system where a digital television service is delivered over a network infrastructure for residential users. IPTV is often provided in conjunction with Video on Demand and may be bundled with Internet services such as Internet access and VoIP. Despite its name, IPTV typically does not come to consumers over the Internet, but over carrier owned fiber optic, or coaxial cables. Service providers are normally the cable TV, phone or power service operators.

Ka-band
The frequency range from 18 - 31 GHz covers a very small foot print. Small dishes are enough to receive signals from the satellite for home users. It is normally used in communicating to and from the satellite, such as transmissions from the IPSTAR gateway to the THAICOM 4 (IPSTAR) satellite.

Ku-band
The frequency range from 12 - 18 GHz, suitable for DTH video broadcasting or internet services.

Leased Line
A symmetric telecommunication line connecting two locations together.

Local Multipoint Distribution Service (LMDS)
A broadband wireless access technology that uses microwave signals operating between 26 - 29 GHz. LMDS is a point-to-multipoint, with long distance.

Multi-Channel Per Carrier (MCPC)
A type of data transmission by blending multiple channels into a common carrier, as in blending television signals into a common carrier to be transmitted to a satellite.

Point-to-Multipoint
A specific type of multipoint link which consists of a central connection endpoint (CE) that is connected to multiple peripheral CEs. Any transmission of data that originates from the central CE is received by all of the peripheral CEs while any transmission of data that originates from any of the peripheral CEs is only received by the central CE.

Point-to-Point
A dedicated link that connects exactly one communications point to another.

Shaped Beam
A satellite signal that is modified to have a suitable shape for certain wide geographical area coverage. Mostly used in two-way communication service in an open and less populated area.

Spot Beam
A satellite signal that is specially concentrated in power so that it will cover only a limited geographic area. When seen from the satellite, the Spot Beam covers the service areas in multiple, narrowed, circular-shaped footprints connected in the shape of a beehive. It is a suitable beam type for two-way communications services over a densely populated area.

Streaming
Playing video or sound in real time as it is downloaded over the Internet. The information is amplified and played (via web browser) while being transferred from Internet to the PC. The reception of streaming requires high speed computer because the file is not kept in the receiver's PC.

Teleport
A teleport (telecommunications port) is an earth station providing an integrated range of television and radio broadcasting and telecommunications services, including networking service and high quality internet service to user in remote area.

Terminal
The end point of a network. In the IPSTAR system, it refers to the satellite modem (internal unit) and the satellite dish, including cables (external unit).

Transponder
Satellite signal channel. It is an electronic device inside a satellite that uses the satellite dish that receives signals from the teleport, lowers the signals' frequency, amplifies them, and then retransmits them to a ground teleport. Two or three transponders aimed at a target area are called a beam, i.e. "Indian Beam", a group of transponders that cover India.

Turnaround Service
The act of receiving signals from other satellites and re-sending them to Thaicom satellite.

Turnkey Service
An integrated service that is readily usable by buyer.

TTC & M
The abbreviation of Telemetry, Tracking, Command and Monitoring, which is an operation system for satellite control.

Universal Service Obligation (USO)
The practice of providing a baseline level of telecommunication services for public use.

Uplink
The act of transmitting a signal up to a satellite. The communications satellite is act as a repeater to a ground station by using microwave frequency to transmit the signal to satellite. That's why it is called "Uplink".

Very Small Aperture Terminal (VSAT)
A system that provides sound, data and pictures by sending and receiving computer data and other telecommunication data via satellite.

WiFi
A broadband transmission system that transmits over the air at frequencies between 2.4 - 5 GHz. The higher frequency allows the signal to carry more data. WiFi transmits and receives in short distances of about 100 feet.

WiMAX
WiMAX is a wireless broadband transmission system known as "IEEE 802.16e". WiMAX may reach three miles or more while WiFi can reach only 100 feet. With new chips WiMAX may be accessed by cell phones and notebook computers.

Other Reference Persons

Security Registrar :
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The Stock Exchange of Thailand Building
93 Ratchadapisek Road, Dindaeng, Dindaeng,
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Investor Information

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THAICOM is listed on the Stock Exchange of Thailand (SET)

SET ticker	THCOM
Reuters	THCOM.BK
Bloomberg	THCOM TB

Foreign limit	:	40%
Fiscal year ends	:	December 31
External Auditor	:	Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd.

For additional information, please visit the Company's Form 56-1 at www.sec.or.th or the Company's website.



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