

Sector 1

Business Operation and Operating Results

1. Structure and Business Operating Results of Group Companies

1.1 Business Policy and Business Operations Overview

Jasmine International PCL. was established on 3 December 1982 by a group of Thai consultants who were experts in telecommunications engineering and management. At the beginning, the Company engaged in providing engineering consulting service and later, gradually broadened itself into new business lines. It was in 1994 that the Company transformed itself into a public company and was listed on the Stock Exchange of Thailand (the “SET”), with funds raised from both local and foreign money markets and capital markets for business expansion.

Currently, the Company is an investment or a holding company, with an objective to invest in telecommunications and information technology businesses. In addition, the Company considers investing in businesses in which products and services support and complement each other. To successfully achieve all these, the Company fully utilizes the potentiality of its well synergized human capital and telecom networks. At present, its core businesses are categorized into 3 segments as follows:-

1. Broadband Internet and Internet TV Business segment that provides high-speed connectivity, digital data network, Internet services, software and applications, nationwide WiFi service and Internet TV service. The companies under this business segment are as follows:-
 - Triple T Broadband PCL.
 - Triple T Internet Co., Ltd.
 - In Cloud Co., Ltd.
 - Three BB TV Co., Ltd.
 - Jasmine Submarine Telecommunications Co., Ltd.

2. Digital Asset & Technology Solution Business segment that engages in the Bitcoin mining business, telecommunication service business and solution provider business that provides system integration, cloud computing and ICT solution services. The companies under this business segment are as follows:-
- Jasmine Technology Solution PCL.
 - Cloud Computing Solutions Co., Ltd.
 - JasTel Network Co.,Ltd.
3. Other Business segment that engages in supporting work that is related to telecommunication systems and office space rental in Jasmine International Tower. The companies under this business segment are as follows:-
- Jasmine Broadband Internet Infrastructure Fund
 - Premium Asset Co., Ltd.
 - Jasmine Internet Co., Ltd.
 - Acumen Co., Ltd.
 - Internet Knowledge Service Center Co., Ltd.

1.1.1 Vision, Objective, Goal, or Strategy for Business Operation of Group Companies

Vision

To be a leader in telecom and media Company

Mission

- 1) To be a leading high-speed internet provider with the most coverage service area nationwide and No. 1 in offering internet speed, quality and service;
- 2) To provide 3BB GIGATV on 3BB internet networks, offering a variety of contents that are worth the price and best meet the demands of the customers;
- 3) To continuously develop platforms and solutions to address core requirements of the customers, both as an individual and a group;
- 4) To develop the personnel to be sustainably of the best proficiency for total digital workplace via innovation-driven method and modern creativity;
- 5) To invigorate the Company's businesses for sustainable growth through business partnership;
- 6) To remain dedicated to social responsibilities.

Goal

To be the leading provider of quality high speed broadband internet and Internet TV under the official name of "3BB GIGATV", a TV box, delivering a variety of entertainments seamlessly to the customers' houses across several devices and maintain its position as the first mover and leader in Thailand's Crypto mining industry.

1.1.2 Significant Changes and Development

Significant changes and development of the Company during the past 3 years are as follows:-

Changes in Control Power of the Company

2020

On 15 December 2020, the Company's Board of Directors at the meeting No.11/2020 passed the following resolutions:-

- Appointing Mr. Somboon Patcharasopak as a Company Director in place of Mr. Pete Bodharamik to retain his office only for the remaining term of Mr. Pete Bodharamik;
- Acknowledging the resignation of Ms. Sajjai Kitsin from the positions of Director, Acting Chief Executive Officer and Director and President, and also assigning the Remuneration and Nomination Committee to select and nominate a qualified person for this vacant director position;
- Appointing Mr. Subhoj Sunyabhisithkul, Director, as Acting Chief Executive Officer in place of Ms. Sajjai Kitsin.

2021

On 1 March 2021, the Company's Board of Directors at the meeting No.1/2021 passed a resolution to appoint Mr. Subhoj Sunyabhisithkul, Director and Acting Chief Executive Officer, the President of the Company.

On 21 July 2021, the Company acknowledged the demise of Dr.Yodhin Anavil, Independent Director, Member of Audit Committee and Chairman of Remuneration and Nomination Committee and accordingly resolved to assign the Remuneration and Nomination Committee to select and nominate a qualified person for the vacant director position.

On 9 September 2021, the Company's Board of Directors at the meeting No.5/2021 passed a resolution to appoint Dr.Ronnachit Mahattanapreut to the Director position that used to belong to Mr.Sittha Suviratvitayakit so Dr. Ronnachit Mahattanapreut should retain this Director position for the remaining term of office of Mr.Sittha Suviratvitayakit. On this occasion as well that the Board of Directors' meeting approved that Dr. Ronnachit Mahattanapreut perform his duties for the Company as Independent Director, Member of Audit Committee and Member of Remuneration and Nomination Committee in place of Dr.Yodhin Anavil.

On 17 December 2021, the Company's Board of Directors at the meeting No.7/2021 acknowledged the resolution of the Remuneration and Nomination Committee, appointing Dr.Ronnachit Mahattanapreut Chairman of the Remuneration and Nomination Committee in place of Dr.Yodhin Anavil.

2022

On 13 December 2022, the Company's Board of Directors at the meeting No.8/2022 acknowledged the resignation of Mr.Sudhitham Chirathivat from the positions of Chairman of the Board of Directors and Independent Director of the Company. It also acknowledged the resignation of from the positions of Director, Secretary to the Board of Directors, Corporate Secretary, Member of the Executive Committee and Member of the Committee of Risk Management for Sustainable Development of the Company of Mr.Yordchai Asawathongchai. The resignation shall be effective on 29 December 2022; and accordingly resolved to assign the Remuneration and Nomination Committee to select and nominate qualified persons for the vacant director positions.

2023

On 30 January 2023, the Company's Board of Directors at the meeting No.1 /2023 passed the following resolutions:-

1. Approving the appointment of Mr. Veerayooth Bodharamik as Company Director in place of Dr.Yodhin Anavil and having him retain his office only for the remaining term of Dr.Yodhin Anavil.
2. Approving the appointment of Dr. Soraj Asavaprapha as Company Director and the Chairman of the Board of Directors in place of Mr.Sudhitham Chirathivat and having him retain his office only for the remaining term of Mr.Sudhitham Chirathivat.
3. Approving the appointment of Ms. Saranya Amornrattanasuchad as Corporate Secretary in place of Mr. Yordchai Asawathongchai.

On 28 February 2023, the Company's Board of Directors at the meeting No.2/2023 passed a resolution to approve the appointment of Dr.Karl Jamornmarn as Company Director in place of Mr. Yordchai Asawathongchai and having him retain his office only for the remaining term of Mr. Yordchai Asawathongchai.

Significant Changes in Shareholding Structure, Management or Business Operations

2020

On 13 November 2020, the Company's Board of Directors at the meeting No.8/2020 resolved to dissolve 2 dormant companies, one was its subsidiary and the other was its associate company, namely:-

- Chaengwatana Planner Co.Ltd. and
- Telecom KSC Co.Ltd

The Company registered the dissolution of these companies with the Ministry of Commerce on 25 November 2020.

On 15 December 2020, the Company's Board of Directors at the meeting No.11/2020 resolved to approve applying for a loan, in an amount of up to Bt 325,000,000 with interest of MLR which then was of 5.25 percent per annum, totaling Bt 359,125,000, with the term of loan for 12 months and with an extension right for another 12 months, totally not exceeding the period of 24 months, from JTS, a subsidiary in which the Company had the total direct and indirect shareholding of 50.91 percent. The loan would be used as the working capital for the Company's business.

2021

On 1 March 2021, the Company's Board of Directors at the meeting No.1/2021 resolved to approve business restructuring and shareholding of a subsidiary in JAS Group, placing Telecom Network and Service Provider Business of JasTel to be under the management of and in business cooperation with JTS, a company, engaging in procurement, design and installation of communication and telecommunication systems (System Integration Business), by way of transferring all the shares of JasTel held by JSTC, amounting to 5,199,993 shares, with a par value of Bt 100 per share, representing 99.99 percent of the total shares of JasTel, at the average price of Bt 231 per share, totaling Bt 1,201,198,383, to JTS. Such share purchase price was in accordance with the fair value of JasTel shares as appraised by the Independent Financial Advisor for the appraisal of share value.

2022

On 23 September 2022, the Extraordinary General Meeting of Shareholders No.1/2022 (the "EGM No.1/2022") of the Company passed a resolution to approve the disposal of the entire investment in the subsidiaries and the associated company i.e., the shares in TTTBB and JASIF investment units (Collectively referred to as "Asset disposal transaction") to Advanced Wireless Network Company Limited ("AWN"), a subsidiary of Advanced Info Service Public Company Limited and the authorization to further proceed thereof, as detailed below:

1. The share disposal transaction of TTTBB in a total of 7,529,234,885 shares which is equivalent to 99.87 percent of the total issued and paid-up shares of TTTBB held by ACU (a subsidiary of the Company, in which the Company holds 100 percent of its shares). The total investment is equal to Bt 19,500 million. TTTBB has two subsidiaries which are TTTI, in which TTTBB holds the shares of 99.99 percent, and INC in which TTTBB holds 99.99 percent of its shares. In addition, the parties have agreed to proceed with the restructuring process to the effect that TTTBB, TTTI, and INC hold 100 percent of the total issued and paid-up shares of Three BB Company Limited ("3BB"), of which 99.99 percent of its shares are directly held by JAS, before the completion date of the sale and purchase agreement for shares and investment units (the "Share Disposal Transaction").
2. JASIF investment unit disposal transaction in a total of 1,520,000,000 units, which is equivalent to 19.00 percent of the total investment units of JASIF, as held by the Company at Bt 8.50 per unit, totaling Bt 12,920 million. If JASIF declares dividends during the period from 1 January 2023 until the completion date of the sale and purchase agreement for shares and investment units and AWN or the transferee of the investment units from the Company does not have its right to receive the dividends, such dividends shall be deducted from the purchase price of the investment unit (the "Investment Unit Disposal Transaction").

2023

On 2 March 2023, T.J.P. Engineering Company Limited, a subsidiary in which the Company directly and indirectly holds 100% of its shares, registered the change of its name and an addition of a business objective with the Department of Business Development, Ministry of Commerce as detailed below.

The previous name : T.J.P. Engineering Company Limited

The new name : JAS GREEN Company Limited

The company's additional business objective is to engage in electricity generation from alternative energy, renewable energy and all sorts of other energy such as solar energy, wind energy, thermal energy, kinetic energy and biomass energy, etc; and the distribution thereof. Included also in the objective is the distribution of electricity generated by solar rooftops and/or solar farms and/or floating solar farms. Moreover, it involves the distribution of Battery Energy Storage System (BESS), or any other energy storage technologies; and the distribution of microgrid system and any other similar systems.

Changes in Nature of Business in the previous year

In 2022, JAS Group still had 3 major business segments. The business segments that remarkably reported significant progress this year are as follows:-

- The Broadband Internet and Internet TV Business segment that still emphasized the expansion of networks to provide the FTTx service, using the most up-to-date fiber optic networks in parallel with the continuous development of broadband internet networks. TTTBB under the "3BB" brand currently offers a home Internet service package with a speed of 1 Gbps along with 3BB GIGATV which provides Internet TV service covering premium, cartoon, sports, entertainment, worldwide news channels and others of more than 30 channels. Such world-class entertainment channels as HBO GO and MONOMAX have been made available. The company has also joined hands with a streaming content provider like WeTV in giving joint services to attract a larger number of customers who love watching Chinese series. More contents will be brought in to cater to the customers' lifestyles in the digital era. TTTBB has all along been a market leader in uplifting the Internet speed with worthwhile price and quality using the xDSL technology and FTTx technology and offering a speed of as high as 1,000 Mbps at present. The company is working on the service system to offer a speed higher than 1,000 Mbps.
- Digital Asset & Technology Solution Business segment that still operated the Bitcoin mining business had the mining capacity increased and also started a new business of design and installation of solar cell system which shall further enhance a continuous revenue growth of the company.

Business Trend in 2023

Restructuring JAS Group to strengthen existing businesses and create new growth drivers

After the deal to dispose of the entire investment in the subsidiaries and related business of Triple T Broadband PCL (“TTTBB”) and Jasmine Broadband Internet Infrastructure Fund (“JASIF”) to Advanced Wireless Network Co., Ltd. (“AWN”) is complete, JAS Group will add 3 new business segments into its existing business segments as follows:

Existing Business Segments

- **Internet TV Business:**
 - **Three BB TV Co., Ltd.** will continue to operate the Internet TV platform to serve both 3BB and AIS customers.
 - **Jasmine Submarine Telecommunications Co., Ltd.** will be responsible for contents aggregation for 3BB GIGATV.
- **Other Businesses:**
 - **Premium Assets Co., Ltd.** will upgrade its facilities into a smart hub for JAS Group and leading Thai startups.
 - **Jasmine Internet Co., Ltd.** will continue to grow its corporate connectivity services, managed infrastructure services, cyber security services and total ICT solution services under the brand “Ji-NET”.
- **JTS Group:**
 - **Jasmine Technology Solution PCL.** will continue to pursue Bitcoin Mining business by investing in Solar Farm to lower its energy costs.
 - **JasTel Network Co., Ltd.** will expand its regional connectivity and data center business.
 - **Cloud Computing Solutions Co., Ltd.** will expand its cloud services portfolio through partnership with various solutions and Global Cloud Providers.

New Business Segments

- **JAS Green** will be responsible for running the green energy business, including Solar Rooftop installation for both C&I (Commercial and Industrial) and residential sectors.
- **JAS Care** will be responsible for integrating partners’ offline facilities with various online platforms and technologies to provide Digital Healthcare services for the public and private sectors.
- **JAS Innovation** will utilize innovative technologies such as AI, Big Data, Cloud and Robotics to research and develop new sustainable business models for the JAS Group.

Moreover, as a result of the deal, JAS Group’s employee numbers will be reduced from 10,000 to less than 1,000 which will allow the Group to revamp its working culture and quickly adapt to the ever changing business environment of these industries thus increasing our competitiveness, creating added value for the organization, and increasing the potential to generate better returns for shareholders.

1.1.3 Use of Fund from Public Offering of Equity

No new securities were offered for sale.

1.1.4 Commitments Provided in the Registration Statement

No new securities were offered for sale.

1.1.5 Corporate Information

Company Name	:	Jasmine International Public Company Limited		
Head Office Address	:	200, 29 th -30 th Fl., Moo 4, Chaengwatana Road, Pakkred Sub-district, Pakkred District, Nonthaburi 11120		
Sector Name	:	Information and Communication Technology		
Registration Number	:	107537000106		
Telephone	:	(66) 0 2100 3000		
Fax	:	(66) 0 2100 3150-2		
Website	:	www.jasmine.com		
Number of Total Issued shares	:	- Registered capital	4,296,408,035.50	Baht
		- Paid-up capital	4,296,408,035.50	Baht
		- divided into	8,592,816,071	Ordinary shares
		- Each with the par value of	0.50	Baht

1.2 Nature of Business

1.2.1 Revenue Structure of the Company

Revenue proportion of each business segment that exceeds 10 percent of the total revenue declared in the statement of comprehensive income is shown in the table below:-

(Unit : Thousand Baht)

Product line/ Business Segment	Operated by	% of Shares Held by JAS	2022		2021		2020 (Restated)	
			Revenue	%	Revenue	%	Revenue	%
Broadband Internet and Internet TV Business Segment	TTTBB	99.87% held by ACU	18,100,875	89.14	8,833,873	43.36	696,030	3.62
	TTTI	100% held by TTTBB	403,848	1.99	10,234,631	50.24	17,310,644	90.02
	INC	100% held by TTTBB	11,936	0.06	468	-	-	-
	3BB TV	100	3,490	0.02	1,265	0.01	2,944	0.02
	JSTC	100	-	-	2,121	0.01	5	-
Total			18,520,149	91.21	19,072,358	93.62	18,009,623	93.66
Digital Asset & Technology Solution Business Segment	JTS	32.80% held by JAS, 9.06% held by ARS and 9.05% held by TJP	115,665	0.57	76,312	0.37	68,552	0.36
	CCS	97.87% held by JTS	32,761	0.16	21,852	0.11	20,177	0.10
	JasTel	100% held by JTS	1,416,437	6.98	1,038,042	5.10	829,778	4.32
Total			1,564,863	7.71	1,136,206	5.58	918,507	4.78
Other Businesses	JAS	-	13,783	0.07	1,112	0.01	1,367	0.01
	PA	53.85% held by ACU and 46.15% held by JSTC	137,242	0.67	123,742	0.60	120,202	0.62
	Others ¹⁾	-	69,284	0.34	37,747	0.19	180,243	0.93
Total			220,309	1.08	162,601	0.80	301,812	1.56
Grand Total			20,305,321	100.00	20,371,165	100.00	19,229,942	100.00

Remarks : ¹⁾ Comprising ACU,ARS,SHW,TLDT,JI-NET,TJP,JIQC,MCS,Three BB,ACT,CP (CP registered the completeness of liquidation on 28 April 2021)

The Company and its subsidiaries have had no comparative proportion between local and overseas distribution during 2020-2021.

1.2.2 Information on Products by Business Segment

Broadband Internet and Internet TV Business Segment

This business segment comprises providers of high-speed Internet service, high-speed connectivity service, digital network service, Internet service, Internet TV service, software and applications, as well as nationwide WiFi. This business segment consists of 5 companies as follows:

1. Triple T Broadband PCL.(TTTBB)

TTTBB was incorporated on 30 August 2005 with a registered capital of Bt 10 mn, of which Bt 7,539.24 mn is paid-up. Its major shareholder is ACU, holding 99.87 percent of its shares. TTTBB mainly engages in providing communication on voice, data, and broadband Internet as telecommunications business operator under Type 3 Telecommunication Business License, issued by the NBTC.

TTTBB has the subsidiaries, namely TTTI and INC. TTTBB's shareholding in TTTI represents 99.99 percent of TTTI's registered capital. TTTI has obtained Type 1 Telecommunication Business License, issued by the NBTC. Its main business is Internet service provider (ISP). TTTBB holds 100 percent of shares in INC whose main business is to develop, distribute or provide various types of software as well as software system to support high-speed Internet service.

Description of products or services and business innovation development

TTTBB's main business is to provide communication services on voice, data and broadband Internet service as telecommunications business operator under Type 3 Telecommunication Business License, issued by the NBTC. It has obtained the license since 23 February 2006 for a 20-year term. On 30 January 2017, the NBTC approved an extension of Type 3 Telecommunication Business License for TTTBB until 29 January 2032 and Type 1 Telecommunication Business License which was granted on 15 July 2020. TTTBB's main business at present can be divided into two types, i.e. data service and voice service. Data service consists of a high-speed connectivity service and high-speed Internet and a digital network service. Voice service consists of fixed-line telephone service. Details of business operation of each product line are as follows:

1) Data service

1.1) High-speed connectivity service and high-speed Internet

TTTBB is a provider of high-speed connectivity for high-speed Internet or broadband Internet service.

TTTBB has mainly adopted FTTx technology for its service provision. With FTTx on the company's fiber optic network, TTTBB can transmit data with a speed of as high as 10 Gbps, which is superior to service speed provided via mobile phone network or other wireless networks; therefore, the company is able to consistently cater to service users' demand for higher speed. In addition, in some service areas, the company still provides xDSL service, covering both ADSL (Asymmetric Digital Subscriber Line) and VDSL (Very high bit rate Digital Subscriber Line). The ADSL technology can transmit data with a speed of as high as 24 Mbps; whereas, VDSL technology can provide service speed of as high as 50 Mbps. TTTBB has expanded and developed its network to cover all areas nationwide in response to service users' demand.

TTTBB currently provides the broadband Internet service under “3BB” brand with a speed of as high as 1,000 Mbps or 1 Gbps.

1.2) Digital network service

TTTBB is a provider of digital network service, which is a high-speed digital leased circuit service to connect data communication system as required by service users, whether it is Intranet data communication or Internet connection. Service users can make point-to-point or point-to-multipoint connection with Internet Protocol (IP) along with Virtual Private Network (VPN) which can well ensure security quality control of the communication circuit; hence, suitable for business entities or organizations with multiple branches, such as banks or financial institutions, etc.

With advanced network technology and nationwide service coverage, TTTBB can offer the high-speed digital leased circuit service with a speed of as high as 100 Gbps, which can well serve the needs of service users who are providers of data communication and telecommunication services and; thus, need to rent and use digital network, apart from service users that are business entities in general.

2) Voice service

TTTBB is a fixed-line telephone service provider with technology using Internet signal in the form of digital signal as media to transport phone voice signal along with data at the same time via Next Generation Network (NGN) system, which is a network built around the Internet protocol (IP) system. Use of this system will enable phone service users to receive quality services at a similar level to the traditional fixed line system with additional functions like number display, conference call, video call, and ring back tone, etc.

TTTBB focuses on providing fixed-line telephone service for business customers with ever-changing needs. The company can provide call numbers together with IP PBX solution which integrates the IT system with the phone system of service users, and accordingly reduces service users' expenses and investment costs.

Market and competition

For the past years, the Internet market has grown continuously due to the changing consumer behaviors, environmental and economic circumstances, and technological advancement which has come with drastic changes. There has been continually increasing demand for communication and work via Internet, and coupled with the government policy to encourage greater access to and use of Internet among the general public, broadband Internet has become a basic service of today people. The government also has implemented a policy to support and promote digital economy for the past few years, such as promotion of expansion of service coverage areas across the country so that people can access data and services from the government more easily, transformation of the government services with paper documents switched to digital documents, remote medical treatment (telehealth), online teaching and learning, and online access to government packages which support people's well-being, etc. In addition, the government has encouraged emergence of new entrepreneurs with unique business models or business operation frameworks to generate income, namely the start-ups. The current technological trend conducive to new business models such as cloud computing service also requires a broadband Internet service to access cloud services. Economic activities in the digital economic system rely on digital technology and broadband Internet to

help drive policies and projects of both public and private sectors, while consumers' behaviors have shifted toward greater demand for Internet service. These are all supporting factors to the expansion of the Internet market and industry in overall. However, due to the prevailing Covid-19 pandemic in the past few years which has rampaged across the country and the globe, series of restriction measures have been put on economic activities to fight the disease. Several businesses or organizations had to level down or suspend their operations, people had to mainly work from home, and domestic purchasing power declined. The government has consistently launched schemes to help relieve hardship of various sectors, such as 50-50 scheme among others, which has encouraged broader ranging use of Internet.

The ongoing increase in popularity and necessity for the use of wired Internet amid the prolonged pandemic have consistently pushed up demand for Internet service. The broadband Internet market has increasingly been competitive in the recent years. Major competitors in the mass market are companies in True Corporation PCL group and TOT, which are major service providers, and AIS group which is a service provider with higher growth. The three major competitors focus on high-speed Internet marketing targeting at their existing customer base or sale of high-speed Internet service in conjunction with fixed-line telephone service or other services such as cable TV, mobile phone, etc. Meanwhile, TTTBB and TTTI have for the past years executed a competitive strategy of providing high-speed Internet service without any accompanying phone service or other additional services in response to the trend of the customers' needs for high-speed Internet with focus on Internet service quality, speed, and worthiness. However, due to the changing customers' behaviors and the company's target to become a full-fledged telecom and media company with a highlighted strength as a provider of "network" and "entertainment content", TTTBB under the "3BB" brand has offered a home Internet service package with a speed of 1 Gbps along with 3BB GIGATV which provides Internet TV service covering premium, cartoon, sports, entertainment, worldwide news channels and others of more than 30 channels. Such world-class entertainment channels as HBO GO and MONOMAX have been made available. The company has also joined hands with a streaming content provider like WeTV in giving joint services to attract a larger number of customers who love watching Chinese series. More contents will be brought in to cater to the customers' lifestyles in the digital era. TTTBB has all along been a market leader in uplifting the Internet speed with worthwhile price and quality using the xDSL technology and FTTx technology and offering a speed of as high as 1,000 Mbps at present. The company is working on the service system to offer a speed higher than 1,000 Mbps. Design of TTTBB network structure has mainly been anchored on to accommodate provision of high-speed Internet service. The company has consistently built and expanded the network to cover areas according to the customers' needs, especially in tourism areas and dense areas which are consistent with the ongoing development and urbanization. Today, TTTBB has expanded its network to cover broader ranging areas and continuously developed the high-speed Internet network. Internet service can now be provided at a speed of 10 Gbps, which is faster and superior to Internet service provision through mobile phone network. TTTBB has devoted to network expansion, focusing on Internet broadband service provision with FTTx technology on the most advanced fiber optic network for provision of high-speed Internet service with comprehensive coverage nationwide, from city level to village level. Also, sale channels and service areas have been enhanced to be able to maintain competitiveness in quality, price, and speed of service provision. 3BB has also pushed for more use of mobile application called 3BB Member to diversify communication channels with service users to a greater extent, and for publicizing promotional campaigns of products and services as well as retention of customer base through loyalty programs, such as offers of benefits or discounts with business partners, and facilitating for the increase in service

users' satisfaction, which would pave way for the company to become a leader in high-speed Internet provision. Moreover, TTTBB has developed various supplementary services to add value to the customers, respond to their diverse needs, and support use of Internet among new target customers to expand the customer base apart from providing high-speed wireless Internet service through 3BB WiFi. There remains high competition in the Internet service market, resulting in higher pricing and marketing competition. However, in view of the still low proportion of the number of service users compared to the number of population, there remains room for further expansion. With the government policy of promoting network development and access to Internet and the government's digital economy policy coupled with the changing behaviors and greater demand of Internet service users, broadband Internet has today become one of the infrastructure services and demand for which has been on the uptrend, which can warrant expansion of the market and rising number of service users.

For corporate customers, i.e. both large- and medium-scale organizations, customers normally have to communicate with transmission of data inside the organization and that with Internet connectivity. In addition, besides high-speed digital leased circuit service, the customers also require services related to Internet connection, e.g. cloud and so forth, as well as end-to-end system maintenance service. Customers also need to use applications that cater to their diverse requirements. For large organizations like educational institutions, banks, hospitals and governmental agencies, such as online sale system via Internet, online stock control system, financial data system, and audio-visual multimedia communication. At present, there are applications that enable safe and efficient communication among employees in the organization via Internet network. Employees can be in contact with one another worldwide as if they are all in the organization. This would help boost business flexibility and reduce remote communication costs. Moreover, the high-speed digital leased circuit service would facilitate development of education quality and ease the lack of personnel with expertise in rural areas, such as remote education via Internet or e-Learning and telehealth, etc. Both government and business sectors thus need a larger number of the leased circuits and higher speed of the leased circuits in alignment with the applications used by business sectors. Service users still need services with high quality and stability, not only with low service fees.

Procurement of products and services

As TTTBB services require installation of network equipment for provision of data and voice services, TTTBB has procured and installed important network equipment such as Optical Line Terminal (OLT) for FTTx service, fiber optic network equipment and Digital Subscriber Line Access Multiplexer (DSLAM) to accommodate high-speed Internet connection with xDSL technology, Dense Wavelength Division Multiplexer (DWDM) for the main connection network, and Multi Protocol Label Switching (MPLS) for data service network, etc. TTTBB has procured equipment from three large manufacturers and distributors overseas for the main networks for service provision. However, there are still other manufacturers that can supply the equipment in substitution for those from the three large ones. TTTBB can thus opt for substitution equipment or new equipment with higher efficiency and advancement from other manufacturers in the future without any impact on its service provision.

TTTBB also gives priority to research and development in various areas, particularly development of business innovation in the form of incremental innovation, as well as adoption of existing technology. For example, AI is used to help manage installation materials or products in the central warehouse including inventory management to ensure efficiency, reduce waste, and develop automatic warning system of network disruption, so that a working team can solve problems timely and reduce repair or recovery time. Customers can thus be assured of service continuation. A network security unit has also been set up to handle security issues of the networks in operation,

and the scope has been expanded to cover customers' networks as a supplementary service for the company's existing corporate customers. The company has carried out ongoing personnel development through on-the-job training and external certified training courses organized by acceptable agencies or manufacturers. All the said activities have been arranged continuously within the company's normal operation budgets.

Assets for Business Operation

Details of assets as at 31 December 2022 are as follows

Item	Net Book Value (Million Baht)
Land, buildings and leasehold improvements	83
Telecommunications equipment	28,078
Furniture, fixtures and office equipment	118
Motor vehicles	101
Assets under installation	1,722
Total	30,102

Depreciation, calculated by reference to costs of assets on the straight-line basis over the following estimated useful lives :

- Buildings 20 years
- Telecommunications equipments 3-25 years
- Leasehold improvements 5 years
- Furniture, fixtures and office equipment 3,5 years
- Motor vehicles 5 years

Undelivered works

- None -

Summary of contracts/agreements

Salient points of Type 3 Telecommunication Business License No. TEL3/2549/001

Name of license	:	Type 3 Telecommunication Business License
License issuer	:	Office of the National Broadcasting and Telecommunications Commission
Licensee	:	Triple T Broadband Public Company Limited
License issuance date	:	23 February 2006
License expiry date	:	29 January 2032

Nature and types of permitted telecommunication business :

1. Fixed service

1.1 Fixed-line telephone service

1.2 Pay phone service

1.3 15 additional services on fixed-line telephone service as follows:

- Call waiting service
- Call forwarding service
- Outgoing call barring service
- Abbreviated dialing service
- Automatic call repetition service
- Hot-line service
- Conference call service
- Hosted PBX
- Direct inward dialing (DID)
- Hunting group service
- Caller ID presentation service
- Free phone service
- Mass calling service
- Calling card Service
- Fixed line SMS service

2. Data communication service

- 2.1 Integrated services digital network (ISDN)
- 2.2 Leased network service
- 2.3 High speed circuit service
- 2.4 Virtual private network service (VPN)
- 2.5 Virtual private dial-up network service (VPDN)
- 2.6 Video conference service

3. Internet service

- 3.1 Narrowband Internet service (Dial-up)
- 3.2 High speed Internet service (Broadband Internet)
- 3.3 Leased line Internet service (leased line)
- 3.4 xDSL and FTTx Internet service
- 3.5 WiFi Internet service
- 3.6 Internet service via frequency network, such as cellular network or PCT network
- 3.7 Voice service via Internet service without phone number
- 3.8 Other services such as web hosting, mail hosting, backup server

Fees :

1. For annual fees for Type 3 license, the licensee must pay annually at the rate as percentage of income generated from telecommunication business each year before expenses according to NBTC Notification regarding Telecommunication License Fees, dated 27 December 2012, and NBTC Notification regarding Telecommunication License Fees (No. 2), dated 19 December 2017, as follows:

- Income from 0 to Bt 100 mn, at a rate of 0.125%
- Income over Bt 100 mn to Bt 500 mn, at a rate of 0.25%
- Income over Bt 500 mn to Bt 1,000 mn, at a rate of 0.5%
- Income over Bt 1,000 mn to Bt 10,000 mn, at a rate of 0.75%
- Income over Bt 10,000 mn to Bt 25,000 mn, at a rate of 1.0%
- Income over Bt 25,000 mn to Bt 50,000 mn, at a rate of 1.25%
- Income over Bt 50,000 mn, at a rate of 1.5%

Of income without deducting expenses or deductibles, and when including frequency use license fees (only in case of frequency use), not over 2% of income.

2. For the fees for universal service obligations (USO), licensees must allocate income from the telecommunication business to the Broadcasting, Television and Telecommunication Research and Development Fund for Public Benefits at a rate of 2.5% of income generated from telecommunication business after deductibles but not over 60% of income, such as expenses on purchase or rent of telecommunication service paid to other licensees, concessionaires or telecommunication service providers overseas, and interconnection charge, etc., and entitled to exemption on net income of Bt 40 mn per year pursuant to NBTC Notification, regarding Criteria and Method on Collection of Income for Universal Service Obligations, dated 26 May 2017.
3. Telecommunication number fees:
 - 3.1 Phone number for fixed-line telephone service, at a rate of 1 Baht/number/month
 - 3.2 4-digit phone number, at a rate of 10,000 Baht/number/month
 - 3.3 Telecommunication number for technical work of telecommunication network, at a rate of 1,000 Baht/number/month

Salient points of Type 1 Telecommunication Business License No. TEL1/2563/020

Name of license : Type 1 Telecommunication Business License
 License issuer : Office of the National Broadcasting and Telecommunications Commission
 Licensee : Triple T Broadband Public Company Limited
 License issuance date : 15 July 2020 (perpetual license)

Nature and types of permitted telecommunication business :

1. Mobile phone service resale
2. Voice service via Internet service with phone numbers

Fees :

1. For annual fees for Type 1 license, the licensee must pay annually at the rate as percentage of income generated from telecommunication business each year before expenses according to NBTC Notification, regarding Telecommunication License Fees dated 27 December 2012, and NBTC Notification, regarding Telecommunication License Fees (No. 2), dated 19 December 2017, as follows:
 - Income from 0 to Bt 100 mn, at a rate of 0.125%
 - Income over Bt 100 mn to Bt 500 mn, at a rate of 0.25%
 - Income over Bt 500 mn to Bt 1,000 mn, at a rate of 0.5%
 - Income over Bt 1,000 mn to Bt 10,000 mn, at a rate of 0.75%
 - Income over Bt 10,000 mn to Bt 25,000 mn, at a rate of 1.0%

License issuance date : 20 June 2007

Renewal date : 24 August 2025

Nature and types of permitted telecommunication business :

Internet service

1. Leased line Internet service
2. Others, such as web hosting, mail hosting, backup server

Telecommunication service

1. Fixed-line telephone service resale
2. Leased line or leased circuit service resale
3. Mobile phone service resale

Fees :

1. For annual fees for Type 1 license, the licensee must pay annually at the rate as percentage of income generated from telecommunication business each year before expenses according to NBTC Notification, regarding Telecommunication License Fees, dated 27 December 2012, and NBTC Notification, regarding Telecommunication License Fees (No. 2), dated 19 December 2017, as follows:

- Income from 0 to Bt 100 mn, at a rate of 0.125%
- Income over Bt 100 mn to Bt 500 mn, at a rate of 0.25%
- Income over Bt 500 mn to Bt 1,000 mn, at a rate of 0.5%
- Income over Bt 1,000 mn to Bt 10,000 mn, at a rate of 0.75%
- Income over Bt 10,000 mn to Bt 25,000 mn, at a rate of 1.0%
- Income over Bt 25,000 mn to Bt 50,000 mn, at a rate of 1.25%
- Income over Bt 50,000 mn, at a rate of 1.5%

of income without deducting expenses or deductibles, and when including frequency use license fees (only in case of frequency use), not over 2% of income.

2. For the fees for universal service obligations (USO), licensees must allocate income from the telecommunication business to the Broadcasting, Television and Telecommunication Research and Development Fund for Public Benefits at a rate of 2.5% of income generated from telecommunication business after deductibles but not over 60% of income, such as expenses on purchase or rent of telecommunication service paid to other licensees, concessionaires or telecommunication service providers overseas, and interconnection charge, etc., and entitled to exemption on net income of Bt 40 mn per year pursuant to NBTC Notification, regarding Criteria and Method on Collection of Income for Universal Service Obligations, dated 26 May 2017.
3. Phone number fees for voice service via number use Internet, at a rate of 1 Baht/number/month

3. In Cloud Company Limited (INC)

INC was incorporated on 12 September 2011. With the current registered capital of Bt 10 mn, INC has TTTBB as its major shareholder holding 100% of the registered capital.

INC is a subsidiary established to be a developer, distributor or provider of general software and software supporting provision of broadband Internet service. This will help promote and add value to TTTBB's and TTTI's main businesses, and the software so developed can be sold to providers of other service types.

Description of products or services and business innovation development

INC develops and distributes or provides software services with focus on developing software which supports supplementary services to add value to the high-speed Internet service. Its major products at present are as follows:

1) InCloud Storage Program

It is a program for Internet users to keep files on the online file storage space and can support all operating systems. Users can back up important data without concern about data corruption. It also has a file sharing function, that can set duration and number of times for file sharing as well as encryption for the files which require privacy for recipients. Multiple files can be uploaded simultaneously together with a good file management system, hence more convenience for users.

2) InCloud IPTV Program

It is a program for Internet users to watch TV and other entertainment media via Internet, whether they are TV online, video on demand, video clip, and other entertainment contents. Users can access the programs anywhere and anytime provided that Internet connection is available. It also supports use with multiple types of equipment, e.g. iOS, Android, or Windows operating systems via diverse devices or platforms, such as Internet TV, set top box, Android mobile, tablet, iPhone, iPod, iPad, notebook, etc. Image resolution quality depends on the speed of data download of Internet network. Currently, the internet signal is efficient and fast enough to support this kind of service, which meets the needs and lifestyles of today's users.

Market and competition

INC strives to develop software which supports supplementary services to add value to the high-speed Internet. Competition in the software development service market is not so high. INC has worked closely with Internet service providers in the Group to ensure that product development research shall meet the needs of customers who use Internet service. There is a convenient and fast use function which responds to their needs and domestic market conditions to efficiently support a diverse range of supplementary services of Internet service providers and with the quality on a par with that of service providers overseas, as well as in line with the competitive conditions in both wired and wireless Internet service, and the upward trends of Internet speed of service providers.

Procurement of products and services

INC has personnel who are system developers with expertise in developing programs by partly using open source software in program development to reduce product development costs under good standard software development processes. In addition, it has closely worked with Internet service providers in the Group closely to ensure that product development research shall meet the needs of Internet service providers and support provision of supplementary services in response to the needs of customers who use the services. This has consistently been carried out within the company's normal operation budget.

Assets for business operation

The assets for business operation of INC are computer equipment, used for program development, most of which have the wear and tear and depreciation that were fully deducted. The net book value is currently of Bt 1,732.

Undelivered works

- None -

4. Three BB TV Company Limited (3BB TV)

3BB TV (formerly known as JAS Mobile Broadband Co., Ltd.) was established on 10 August 2015 with a registered capital of Bt 1 mn. Its current registered capital is Bt 100 mn with JAS as the major shareholder, holding 100% of its shares. 3BB TV operates IPTV service business under “3BB GIGATV” brand with the broadcasting license for broadcasting or television service and the broadcasting license for businesses which do not use frequency (IPTV network) (subscription type) from the NBTC.

Description of products or services and business innovation development

3BBTV has provided its service under the “3BB GIGATV: Entertainment that Understands Thai People” brand via a highly efficient network under the broadcasting license across the nation.

3BB and 3BB TV have collaborated in uplifting efficiency of network and supporting equipment for stability of both 3BB home Internet and 3BB GIGATV service at the same time. It offers new experience to viewers who require high quality services. 3BB GIGATV has been designed comprehensively in every step in cooperation with KT Corporation, an IPTV expert in Korea, as a differentiation for the company’s 3BB GIGATV box platform under certification from Google. With TV connection, it is easy-to-use and offers new features, which stand out from others in the market, such as easy-to-use remote function, mini EPG, 2 and 4 screen multi-views, subtitle size adjustment, and ability to download other applications, etc.

Market and competition

Subscription-based television business or Pay TV in Thailand uses such technologies as satellite distribution network, optic fiber, and coaxial cable directly to consumers’ homes nationwide with a diverse range of domestic and foreign programs, accounting for 58% of total domestic households (referring to data from NSO).

This business has been affected by copyright infringement and change in behaviors of consumers who have switched to multimedia and content, especially via OTT, video streaming via Internet of both local and foreign service providers, for both free-of-charge and paid membership. Viewers; thus, have diverse choices. However, there is still room in the market as most consumers choose more than one service provider. Also, apart from contents and prices, quality has also been part of consumers’ decision factors for service use.

3BB is a provider of quality broadband Internet service offered in all provinces across the country. It has a customer base of more than 3 million along with high experienced personnel and service centers to serve customers. As such, 3BB TV can offer speedy and efficient services to the customers.

In addition to existing customers, the company can expand its customer base to new ones who prefer Gigabit Internet service and 3BB GIGATV service with high quality, easy installation, high resolution, and a diverse range of contents; for instances, HBO content from world-class studio, Bloomberg, WWE, including 3BB Sport1 channel and 3BB Asian channel, etc., exclusively on 3BB GIGATV. What 3BB GIGATV provides, be it a complete suite of contents accessible through digital TV, premium channels, and video streaming from HBO GO and MONOMAX; or

Summary of contracts/agreements

Salient points of the broadcasting license for broadcasting or television network service for businesses which do not use national frequency no. B1-N21331-0001-63

Name of license	:	Broadcasting license for broadcasting or television network service for businesses which do not use national frequency
License issuer	:	Office of the National Broadcasting and Telecommunications Commission
Licensee	:	Three BB TV Company Limited
License issuance date	:	29 July 2020
License revocation date	:	28 July 2035

Nature and types of permitted business: broadcasting or television network service for businesses which do not use national frequency (IPTV network) (subscription type)

Fee :

1. For annual fees for broadcasting on television network service license, the licensee must pay annually by calculating the fees on the income generated from the business in the accounting period of the licensee at the rate specified in NBTC Notification, regarding Broadcasting License Fees, dated 31 October 2012, and NBTC Notification, regarding Broadcasting License Fees (No. 3), dated 22 January 2018, as follows:

- Income over 0 to the first Bt 100 mn, at a rate of 0.125%
- Income over Bt 100 mn to Bt 500 mn, at a rate of 0.25%
- Income over Bt 500 mn to Bt 1,000 mn, at a rate of 0.5%
- Income over Bt 1,000 million to Bt 10,000 mn, at a rate of 0.75%
- Income over Bt 10,000 mn to Bt 25,000 mn, at a rate of 1.0%
- Income over Bt 25,000 mn to Bt 50,000 mn, at a rate of 1.25%
- Income over Bt 50,000 mn, at a rate of 1.5%

of income without deducting expenses or deductibles.

The NBTC may reduce or waive the license fees if it is apparent to the NBTC that the licensee's broadcasting or television business has produced news or programs with contents beneficial to the public in the proportion of beneficial contents as determined by the NBTC.

2. As regards fees for Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits, the licensee not engaging in broadcasting or television for the type of public service and community service must allocate fees to Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits annually at the rate as percentage of income generated from telecommunication business before expenses each year pursuant to NBTC Notification, regarding Criteria and Method on Allocation of Annual Fees to Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits of Broadcasting Licensees, dated 10 November 2016, and NBTC Notification, regarding Criteria and Method on Allocation of Annual Fees to Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits of Broadcasting Licensees (No. 2), dated 22 April 2020, as follows:

- Income over 0 to the first Bt 100 mn, at a rate of 0.125%
- Income over Bt 100 mn to Bt 500 mn, at a rate of 0.25%
- Income over Bt 500 mn to Bt 1,000 mn, at a rate of 0.5%
- Income over Bt 1,000 mn to Bt 10,000 mn, at a rate of 0.75%
- Income over Bt 10,000 mn to Bt 25,000 mn, at a rate of 1.0%
- Income over Bt 25,000 mn to Bt 50,000 mn, at a rate of 1.25%
- Income over Bt 50,000 mn, at a rate of 1.5%

of income without deducting expenses or deductibles.

Licensees who operate for the general public to receive general television service pursuant to NBTC Notification regarding Criteria on General Television Broadcasting or as determined by the NBTC are entitled to use expenses incurred from such operation as deductibles before the licensees submit the annual fees to Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits.

Salient points of the broadcasting license for broadcasting or television service for businesses which do not use frequency

Name of license	:	Broadcasting licenses (television service which does not use frequency, without own network, subscription type), altogether 28 licenses
License issuer	:	Office of the National Broadcasting and Telecommunications Commission
Licensee	:	Three BB TV Company Limited
License details	:	

No.	License number	Channel	Program type	Approval date	Expiry date
1	B1-S21040-0007-63	HBO	6 Entertainment and Others	29 Jul 20	28 Jul 23
2	B1-S21040-0008-63	CINEMAX	6 Entertainment and Others	29 Jul 20	28 Jul 23
3	B1-S21040-0009-63	HBO SIGNATURE	6 Entertainment and Others	29 Jul 20	28 Jul 23
4	B1-S21040-0010-63	CARTOON NETWORK	3 Children, Youth, Families, the Elderly, the Disabled, and the Underprivileged	29 Jul 20	28 Jul 23
5	B1-S21040-0011-63	HBO FAMILY	6 Entertainment and Others	29 Jul 20	28 Jul 23
6	B1-S21040-0012-63	CNN INTERNATIONAL	2 General News or Current Affairs	29 Jul 20	28 Jul 23
7	B1-S21040-0013-63	HBO HITS	6 Entertainment and Others	29 Jul 20	28 Jul 23
8	B1-S21040-0015-63	BOOMERANG	3 Children, Youth, Families, the Elderly, the Disabled, and the Underprivileged	29 Jul 20	28 Jul 23
9	B1-S21040-0033-63	CGTN TV	2 General News or Current Affairs	28 Oct 20	27 Oct 23
10	B1-S21040-0034-63	BBC World News	2 General News or Current Affairs	28 Oct 20	27 Oct 23
11	B1-S21040-0035-63	Bloomberg TV	2 General News or Current Affairs	28 Oct 20	27 Oct 23

No.	License number	Channel	Program type	Approval date	Expiry date
12	B1-S21040-0036-63	Nick Jr.	3 Children, Youth, Families, the Elderly, the Disabled, and the Underprivileged	28 Oct 20	27 Oct 23
13	B1-S21040-0037-63	Nickelodeon Asia	3 Children, Youth, Families, the Elderly, the Disabled, and the Underprivileged	28 Oct 20	27 Oct 23
14	B1-S21040-0038-63	Love Nature 4K	3 Children, Youth, Families, the Elderly, the Disabled, and the Underprivileged	28 Oct 20	27 Oct 23
15	B1-S21040-0039-63	BBC Earth	3 Children, Youth, Families, the Elderly, the Disabled, and the Underprivileged	28 Oct 20	27 Oct 23
16	B1-S21040-0040-63	BBC Lifestyle	3 Children, Youth, Families, the Elderly, the Disabled, and the Underprivileged	28 Oct 20	27 Oct 23
17	B1-S21040-0043-63	Edge Sport	5 Sports, Tourism, or Health Promotion	28 Oct 20	27 Oct 23
18	B1-S21040-0044-63	3BB Sports One	5 Sports, Tourism, or Health Promotion	28 Oct 20	27 Oct 23
19	B1-S21040-0045-63	Blue Ant Extreme	6 Entertainment and Others	28 Oct 20	27 Oct 23
20	B1-S21040-0046-63	Hunan Satellite TV HD	6 Entertainment and Others	28 Oct 20	27 Oct 23
21	B1-S21040-0047-63	3BB Asian	6 Entertainment and Others	28 Oct 20	27 Oct 23
22	B1-S21040-0029-64	CCTV 4	2 General News or Current Affairs	20 Oct 21	19 Oct 24
23	B1-S21040-0030-64	Al Jazeera English HD	2 General News or Current Affairs	20 Oct 21	19 Oct 24
24	B1-S21040-0031-64	Golf Channel Thailand HD Plus	5 Sports, Tourism, or Health Promotion	20 Oct 21	19 Oct 24
25	B1-S21040-0040-64	Global Trekker Channel	6 Entertainment and Others	17 Dec 21	16 Dec 24
26	B1-S21040-0002-65	CNA	2 General News or Current Affairs	21 Jan 22	20 Jan 25
27	B1-S21040-0033-65	NHKW WORLD-JAPAN	6 Entertainment and Others	7 Dec 22	6 Dec 23
28	B1-S21040-0034-65	Yunnan International	6 Entertainment and Others	7 Dec 22	6 Dec 23

TV channel licenses, when expired in the first year, can be renewed for up to 14 years.

Fees :

1. For annual fees for broadcasting on television network service license, the licensee must pay annually by calculating the fees on the income generated from the business in the accounting period of the licensee at the rate specified in NBTC Notification regarding Broadcasting License Fees dated 31 October 2012, and NBTC Notification regarding Broadcasting License Fees (No. 3) dated 22 January 2018, as follows:

- Income from 0 to the first Bt 100 mn, at a rate of 0.125%
- Income over Bt 100 mn to Bt 500 mn, at a rate of 0.25%
- Income over Bt 500 mn to Bt 1,000 mn, at a rate of 0.5%

- Income over Bt 1,000 mn to Bt 10,000 mn, at a rate of 0.75%
- Income over Bt 10,000 mn to Bt 25,000 mn, at a rate of 1.0%
- Income over Bt 25,000 mn to Bt 50,000 mn, at a rate of 1.25%
- Income over Bt 50,000 mn, at a rate of 1.5%

of income without deducting expenses or deductibles.

The NBTC may reduce or waive the license fees if it is apparent to the NBTC that the licensee's broadcasting or television business has produced news or programs with contents beneficial to the public in the proportion of beneficial contents as determined by the NBTC.

2. As regards fees for Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits, the licensee not engaging in broadcasting or television for the type of public service and community service must allocate fees to Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits annually at the rate as percentage of income generated from telecommunication business before expenses each year pursuant to NBTC Notification, regarding Criteria and Method on Allocation of Annual Fees to Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits of Broadcasting Licensees, dated 10 November 2016, and NBTC Notification, regarding Criteria and Method on Allocation of Annual Fees to Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits of Broadcasting Licensees (No. 2), dated 22 April 2020, as follows:

- Income from 0 to the first Bt 100 mn, at a rate of 0.125%
- Income over Bt 100 mn to Bt 500 mn, at a rate of 0.25%
- Income over Bt 500 mn to Bt 1,000 mn, at a rate of 0.5%
- Income over Bt 1,000 mn to Bt 10,000 mn, at a rate of 0.75%
- Income over Bt 10,000 mn to Bt 25,000 mn, at a rate of 1.0%
- Income over Bt 25,000 mn to Bt 50,000 mn, at a rate of 1.25%
- Income over Bt 50,000 mn, at a rate of 1.5%

of income without deducting expenses or deductibles.

Licensees who operate for the general public to receive general television service pursuant to NBTC Notification regarding Criteria on General Television Broadcasting or as determined by the NBTC are entitled to use expenses incurred from such operation as deductibles before the licensees submit the annual fees to Broadcasting, Television, and Telecommunication Research and Development Fund for Public Benefits.

5 Jasmine Submarine Telecommunications Company Limited (JSTC)

JSTC has a paid-up registered capital of Bt 1,550 mn with JAS holding 100% of its paid-up registered capital.

JSTC is a concessionaire in a joint investment project to build and provide submarine fiber optic cable network services for TOT for a 20-year term, which expired in October 2011. This investment project, valued approximately Bt 4,300 mn, was to extend telephone network to the south, and to build a backup signal system in case there is disruption in the land signal system. TOT shared income from the telephone services, using the network built by the company at a descending rate from 31% in the 2nd year to 13% in the 20th year.

At present, JSTC's concession contract with TOT came to an end.

In addition, JSTC engages in a business as content aggregator for 3BB TV. The company has world-class content partners such as HBO that offers a lot of premium movies and series from world-class studio of Hollywood and MONOMAX that offers great movies and series from Korea and China; hence, a harmony of entertainment. Diverse range of contents provided for over 30 premium channels of 3BB TV are well selected to meet the demands of different groups of viewers. 3BB TV channels comprise 6 HBO channels, 6 special MONO channels and others that offer contents from CNN, Bloomberg, BBC Earth, BBC Lifestyle, Cartoon Network, Nic, Nic Junior, 3BB Sports One that serves both Thai and international sports ;for examples, WWE wrestling and extreme sports; in addition to Edge and Love4KNature channels with 4k resolution.

As content aggregator, the company also pulls together video on demand from several providers for 3BB TV service. It also has OTT and other content partners such as WeTV and golf channel. Many more partners are under negotiation for jointly providing their services for 3BB GIGATV, making its set-top box a one stop box of contents of all kinds for the customers. Furthermore, in the future, a lot more special services can be offered through this same set-top box to facilitate the customers as a smart solution that make their demands fulfilled.

Digital Asset & Technology Solution Business Segment comprises Bitcoin mining business, telecommunication service business and solution provider business, encompassing ; for instances, System Integration business, cloud computing service offering and ICT solutions.

Under this segment are the following 3 companies:-

1. Jasmine Technology Solution Public Company Limited (JTS)

JTS has a paid-up capital of Bt 706,457,300 as of 31 December 2022. Its shares are held by JAS Group at a ratio of 50.91% of paid-up registered capital.

JTS and its subsidiaries conduct businesses of procurement, design, and installation of telecommunication system and integrated information technology (System Integrator), such as computer procurement, design and installation business, cloud computing service business, WiFi system design and installation business, design and installation of system for smart building, fiber optic and LAN installation business, as well as supply of all related equipment. The company has engaged in new businesses which are digital assets business or Bitcoin mining business and solar cell system design and installation business. These new businesses have helped generate continuous revenue growth of the company.

Business operations of JTS and the subsidiaries at present can be divided into 4 types as follows:-

1) System integration business

The company is a distributor of communication and telecommunication system equipment, and provider of design, procurement, installation and testing services (on a turnkey basis).

In addition, the company has partnered with Dell EMC, a major manufacturer of IT products and Hikvision, a world leader in AI smart security. Apart from these 2 companies, JTS has several more partners. JTS partnership with these partners is considered a strength that enables the company to provide its IT total solutions service to every target group of customers.

Main services of this business are as follows:-

- 1.1) Computer system procurement, design, and installation service – The company is a distributor of computer equipment and related network equipment, and also a provider and consultant of such services as design and installation of computer network, telecommunication network, computer network security system, and data backup system. The company can offer a diverse range of alternatives that suit the customers' needs.
 - 1.2) WiFi system design and installation service – The company designs and installs WiFi system, aiming to serve corporate clients, hotels, schools, factories, etc.; it also provides other relevant systems, such as hotspot authentication system, WiFi social login system and Computer Act log system.
 - 1.3) Smart building design and system installation service
Smart building is a building with installation of input devices of building (IoT devices), and adoption of computer system as a central brain for remote and automatic control of building systems via smart phone. Scope of services covers:
 - Automated building – capable of controlling electric lighting system and air conditioning system automatically or online.
 - Smart access control – having smart automatic entrance door system which can scan faces and open the door automatically. It can also generate QR code to enter or leave the building temporarily.
 - AI CCTV – increasing efficiency of CCTV system with mobility detecting sensor for alarming and collecting data on cloud to prevent data loss and supporting new technologies, such as facial recognition, people counting, age and gender statistics, heatmap, POS integration, etc.
 - 1.4) LAN & fiber optic procurement and installation service – The company lays fiber optic and LAN cables both in and outside the building, as well as connecting fiber cables by the engineering team and technicians with high expertise and experience.
- 2) Telecommunications service, run by JasTel Network Co.,Ltd. (JasTel) (Operation data as in the section on JasTel)
 - 3) Work system software design and development business and cloud computing business, run by Cloud Computing Solutions Co., Ltd. (CCS) (subsidiary) (Operation data as in the section on CCS)
 - 4) Digital asset business which is Bitcoin mining business, run by JasTel Network Co.,Ltd. (JasTel) (subsidiary) (Operation data as in the section on JasTel)

(For details of JTS, please see Form 56-1 One Report of JTS.)

2. Cloud Computing Solutions Company Limited (CCS)

CCS is a subsidiary of JTS with a paid-up registered capital of Bt 55 mn, having JTS as the major shareholder holding 97.87% of its registered capital.

The company conducts the work-system software design and development business and also provides cloud computing service to allows businesses with requirement of information technology system to have an option to

lease the system instead of own investment. It is; thus, ideal for small and medium-sized businesses which might have budget limitation. CCS cloud services can be divided into two types as follows:-

1) Cloud infrastructure service (Infrastructure-as-a-Service)

It is an infrastructure service such as CPU, memory, storage which is working on a virtual system (virtualization) to support the use of software and application of lease of computer resources on Internet network covering CPU, memory, storage, etc. Customers do not need to buy any hardware or hire IT personnel for supervision as service providers will manage all these matters. Customers can select resources as appropriate and can adjust the size of resources themselves according to the changing needs. Other relevant services are also offered, such as data backup, redundancy process, and so on.

2) Software service (Software-as-a-Service)

It is a provision of software and application via Internet service, such as Hotmail, Facebook, Salesforce.com, etc. It is similar to a lease. Service charge is calculated on a pay-as-you-go basis, taking into account number of users and duration of use, among others. Service users do not need to make additional investment in hardware and software license, and maintenance fees, as service providers will manage the entire system. Users can access software and application via Internet anywhere no matter what location and on which server such software and application are installed or processed.

(For details of CCS, please see Form 56-1 One Report of JTS.)

3. Jastel Network Company Limited (JasTel)

JasTel has a registered capital of Bt 520 mn. with JTS holding its shares in a proportion of 100% of the registered capital. The company was granted the following telecommunication business licenses from the NBTC:-

- Type 1 Telecommunication Business License, granted on 6 November 2008 and scheduled for renewal on 22 June 2025.
- Type 2 Telecommunication Business License for leased circuit and IP bandwidth services in the country, international Internet gateway service, and Internet gateway service, granted on 30 November 2006 and scheduled for renewal on 15 June 2025.
- Type 3 Telecommunication Business License for international private leased circuit (IPLC) and virtual international private leased circuit, granted on 18 November 2009 and valid for 15 years and due to expire on 17 November 2024.

In addition to running the businesses in accordance with the telecommunication business licenses, granted by the NBTC, JasTel operates the Bitcoin mining business of which the return are Bitcoins that are considered a type of cryptocurrency that can be exchanged or traded around the clock. Digital asset trading can be done via digital asset exchange such as Zipmex, Bitkub and Bitazzar etc. A Bitcoin is like digital gold in that it can preserve its own value; besides, it can be used as a hedge against inflation due to the limit on its number. As there shall be no unexpected increase in the number of Bitcoins in the market, it is assured that Bitcoins value remain preserved. Bitcoins are durable; the coins on the blockchain cannot be destroyed.

Description of products or services and business innovation development

1. Provision of high-speed IPLC service
2. Provision of national internet exchange (NIX) service and international Internet gateway (IIG) service
3. Provision of center or space for installation of computer network server system equipment and router and other related services to such customers as operators/Internet service providers (ISP) and corporate customers.
4. Provision of high-speed domestic private leased circuit (DPLC) service for specific groups of customers
5. Provision of Internet service for specific groups of customers
6. Bitcoins are considered as a type of cryptocurrency. It is an electronic unit with value, like other common intangible assets. Bitcoins are built on an electronic system or network, but they can be traded for the exchange of ownership via decentralized transaction, using blockchain technology to record the transactions; hence, the trade/buy-sell activities can be possible 24 hours a day and 7 days a week without cease. The company is now running the Bitcoin mining business. The Bitcoin earned shall be partially sold. The company expects to continuously realize the revenue from this business.

Market and competition

1. JasTel's competition strategy is aimed at providing services exclusively for specific groups of customers, i.e. operators/ISP, multinational corporate customers or specific area customers like those in industrial estates, who have high purchasing power and look for high quality products and services. As such, JasTel focuses on developing products and services of high quality and stability and signal system network with a large bandwidth supporting diverse forms of applications with DWDM/MPLS technology, and offers total solutions in collaboration with affiliated companies and marketing alliances. It has direct sale teams as a marketing channel to reach target customers. Sale promotion is carried out in various types for specific groups of customers in conjunction with public relations through various multiple media.
2. For competition condition, since liberalization of international gateway in 2008, the telecommunication and Internet market has become a perfectly competitive market with promotion from the NBTC to increase the number of new service providers to give more choices to consumers; hence higher market competition.
3. To prevent the inflation of Bitcoin, after every 210,000 blocks are mined in roughly every 4 years, the block-chain algorithm reduces the block reward given to Bitcoin miners in half which is referred to as Bitcoin Halving. This incident along with the Demand and Supply influences Bitcoin price to grow cyclically. This cycle begins as Bitcoin Halving makes less new Bitcoins come into circulation and along with the increase in the number of people interested in Bitcoin, the price shoots up. Some investors who had already collected Bitcoins will then cash out by selling it in the Crypto exchanges, causing the price to fall. The cycle will repeat itself as the price decreases and investors who had left the market turn their attention to Bitcoin and enter the market again.

Procurement of products and services

1. Production capacity according to JasTel's business plan is partly based on leased fiber optic cable network and partly on its own network in collaboration with other local and international telecommunication network service providers to jointly provide services and conduct marketing activities. JasTel can thus offer more comprehensive services according to the needs of target customers.
2. JasTel selects and procures signal equipment system and connecting devices for provision of its telecommunication services from suppliers and service providers of high quality and expertise and well accepted in the telecommunication market. For lease of fiber optic network and domestic distribution line, JasTel conducts in the form of business collaboration to jointly offer services to customers, hence no limitation in service offering.
3. In order to obtain Bitcoins, the company has managed to procure quality mining machines, manufactured by the world's leading and largest manufacturer of miners and designer of the Application-Specific Integrated Circuit (ASIC) for Bitcoin mining. The miners, including other related equipment and systems have been installed at Khao Khlung Sub District, Ban Pong District, Ratchaburi Province where there is a Company's team of engineers in charge of maintenance and repair around the clock.

Undelivered works

- None -

(For details of JasTel, please see Form 56-1 One Report of JTS.)

Other Businesses – comprises businesses that support telecommunication system – related work and office space rental in Jasmine International Tower. There are 5 companies under this business segment as detailed below:–

1. Jasmine Broadband Internet Infrastructure Fund (JASIF)

JAS holds 1,520 million investment units in JASIF from a total of 8,000 million investment units, with a par value of 9.8516 Baht/unit, accounting for 19.00%.

JASIF is a mutual fund, established to mobilize funds from general investors and institutional investors for investment in not only telecommunications infrastructure business that has good prospect to contribute to returns on investment of the Fund, but also in other assets, securities, and/or instruments as permitted by the securities law in order for the Fund to generate returns to the unit holders in the long run.

JASIF initially invested in optic fiber assets of 980,500 core kilometers by using proceeds from the initial public offering (IPO) of investment units on 10 February 2015. JASIF completely received optic fiber assets from TTTBB according to the agreement on 20 November 2016. After acquisition of optic fiber from TTTBB, JASIF will seek benefits from the assets by (1) lease of 80% of the optic fiber assets to TTTBB for use in the company's operations under the Main Lease Agreement, under which JASIF will receive return in the form of rental fees throughout the Main Lease Agreement term, and (2) entering into a Rental Assurance Agreement with TTTBB for 20% of the OFC to comply with the NBTC's policy on shared use of telecommunication infrastructure. While there is no one

interested in renting optic fiber assets, TTTBB agrees to rent and pay rental for the optic fiber assets according to the terms and conditions in the Rental Assurance Agreement to guarantee income for the Fund throughout the agreement period. The term of the Rental Assurance Agreement is three years throughout which JASIF has the right to renew the rental income guarantee agreement for three years at a time until the Main Lease Agreement's term ends.

In addition, JASIF will enter into the OFC Maintenance Agreement with TTTBB under which TTTBB becomes manager of optic fiber assets to provide repair, maintenance, and management of the optic fiber assets on behalf of the Fund. The Fund will then pay consideration on a monthly basis at the rate mutually agreed upon.

On 20 November 2019, JASIF made the first additional investment in optic fiber assets of 700,000 core kilometers at the price of Bt 38,000 mn in total. The proceeds for this first additional investment in optic fiber assets came from offering and allocation of 2,500 million newly issued investment units to existing investment unit holders and also from borrowings from financial institutions. The company and JASIF made amendments to the original agreements made with JASIF, comprising the Main Lease Agreement, the Rental Assurance Agreement, the OFC Maintenance Agreement, the Marketing Service Agreement, and the Undertaking Agreement, etc.

2. Premium Assets Company Limited (PA)

PA was registered on 11 November 2005 with a registered capital of Bt 1,300 mn. The company is 53.85% held by ACU and 46.15% by JSTC, respectively.

PA operates a real estate business for the office building "Jasmine International Tower," which is a 31-story and 1-basement high-rise building on Chaengwattana Road. In overall, office building rental business in Bangkok and the surrounding areas has been on the declining trend due to stagnant investment amid the prevailing pandemic. Most entrepreneurs have switched to cutting space rent costs by reducing business operating spaces and suspending planned space expansion. However, most Jasmine International Tower tenants have rented spaces to accommodate their head offices, hence no significant impact on the company. At present, the company has a marketing plan in place that is adjustable according to the economic conditions, with focus on aggressive marketing. Thus, several active plans have been set to promote the rental space and attract more tenants. Besides, the company gets its staff to meet the customers who might have certain problems with regard to the rental and to accordingly provide them with solutions. Also, the company has devised additional flexible strategies in terms of rental fees and duration of contracts to facilitate the customers' decision making; as well as keeping rental rates unchanged in tenants' renewal of contracts so that the customers do not have to bear higher costs. Thus, the company's tenant base can still be maintained.

As regards marketing policy, the company gives importance to the target customers, e.g. private business entities, especially small and medium-sized enterprises (SMEs), whose demand for office space rent has been on the rise continuously. Nevertheless, economic recession that is a result of the pandemic has directly affected the SMEs group of customers; whereas, the customers who are government agencies have remained unaffected. Jasmine International Tower has 1 government agency as its tenant. This tenant previously rented 1,487 square meters of space. Later on, in 2023, it additionally rent 765.60 square meters. Thus, at present, the total rental space of this

agency is 2,252.60 square meters. Currently, the company's income mainly comes from rent of spaces of office buildings with a total rental space of 41,535 square meters. Furthermore, the company can generate income from spaces accommodating conference rooms, training rooms, seminar rooms, food court, and sale promotion halls, as well as those for putting up advertising billboards in buildings. The company can also expand public relations channel through digital signage, e.g. new advertising screens to replace billboards. Details of products and services can be displayed standstill or in motion to attract interest of viewers. The screens can be managed via IT network by having them set up at the lobby. Jasmine International Tower has become highly popular and well accepted by entrepreneurs and agencies (sale promotion space agencies). At present, there is Café Amazon outside the building at the entrance to food court parking lot to generate higher income and bring good image among visitors at the meeting point of the building, making the building attractive and equipped with complete facilities.

For service provision, the company focuses on improvement of service models to cater to the customers' one-stop service needs, covering data presentation, design, and decoration services, together with other services required for space rent in a one stop service manner to bring convenience to customers and become the strength of its services. Moreover, the company has developed new additional services for customers, such as

- WiFi Internet service in the common area of the building
- Broadband Internet in the office space
- IP phone service

Jasmine International Tower is a modern office building with adoption of advanced communication technology in conjunction with system engineering of the building which is of acceptable international standards. Moreover, the company is committed to ongoing development of its management system and new services to bring highest satisfaction to the customers, which will ensure the company's successful business operation during the current Covid-19 pandemic. The company's building administration team has given priority to tightening of prevention measures by emphasizing and providing information to all employees so that they complete vaccination of both main and booster doses according to the government measures, alongside conduct of ATK tests for employees at the beginning of each week. Meanwhile, all visitors to the building must undergo temperature measurement, and alcohol gel is also made available, together with keeping abreast of updated news on the pandemic and follow-up of strict compliance with the government measures.

3. Jasmine Internet Company Limited (Ji-NET)

Ji-NET has a paid-up registered capital of Bt 15 mn. It has JAS as the major shareholder, holding 98.34% of its registered capital. The company provides services under Type 1 Telecommunication Business License by the NBTC. Summary of the contract is as follows:

Name of license	:	Type 1 Telecommunication Business License No. TEL1/2550/001
License issuer	:	Office of the National Broadcasting and Telecommunications Commission
Licensee	:	Jasmine Internet Company Limited
License receipt date	:	25 January 2007
License renewal date	:	28 June 2025

Summary : Jasmine Internet Co., Ltd. can freely provide telecommunication services to general public via networks of licensees having own networks according to the nature and types of the telecommunication businesses as below:

1. Domestic public switched telecommunication service
2. Narrowband (dial-up modem) Internet service by connecting Internet via call line in the public switched telephone network (PSTN)
3. Broadband (dial-up modem) Internet service by connecting Internet via call line in the integrated services digital network (ISDN)
4. xDSL (xDSL modem) Internet service by connecting Internet via call line in the public switched telephone network (PSTN)
5. Leased line Internet service only on the part which licensees lease from telecommunication network service providers for service provision to licensees' customers. Licensees have no power to control signal release or cut-off.
6. WiFi Internet service with radio frequency of 2.4 Gigahertz and equivalent isotropically radiated power (E.I.R.P) of not over 100 milliwatts.
7. Internet service via frequency network, such as cellular mobile system network and mobile personal communication telephone (PCT) network.
8. Voice over Internet protocol or Internet telephony service, only for service provision from computers to computers, computers to phones without phone numbers, and voice over Internet protocol with phone numbers.
9. Other services, i.e. colocation, dedicated server, backup server, virtual private server, web hosting and mail hosting.

Description of products or services and business innovation development

The company mainly provides corporate Internet connectivity service via unlimited service providers' networks consisting of broadband Internet via leased line with a speed from 64 Kbps to 1,000 Mbps. It is a high-speed Internet service on its private communication line with a digital signal, and can transmit large-sized data with point-to-point connection directly from the organizations of service users to Ji-NET. It is also a technology with high stability, security, and efficiency in transmitting data and can accommodate services of middle and large-sized corporate customers. Characteristics of the services are as follows:

- 1) Fixed IP, unlimited number of times based on actual use
- 2) Availability of a network check system and 24-hour after sale service
- 3) Availability of a multi router traffic grapher (MRTG) system

Market and competition

Market for corporate Internet connectivity service

At present, there is an increasing number of Internet service providers (ISP). Coupled with the rising number of service providers of international Internet gateway (IIG), there occurs fierce price competition in the market for corporate Internet connectivity service.

The company's marketing guideline is to focus on building understanding among customers that Internet and IT solution system will help reduce costs of businesses of each size in various forms, and on stability and diversity of services. The company has cut down costs of circuit lease by combining all circuits used in the Group for negotiation of lease rates with providers of network service and national internet exchange (NIX) as well as international Internet gateway (IIG) services.

Undelivered works

- None -

4. Acumen Company Limited (ACU)

ACU has a paid-up registered capital of Bt 760 mn. It has JAS as the major shareholder, holding 100% of registered capital.

Description of products or services and business innovation development

ACU offers a very small aperture terminal (VSAT) service featuring data communication service for government agencies and middle and large business organizations which require a huge amount of data exchange in the group with high stability by using a small satellite under Type 2 Telecommunication Business License without own network, No. TEL2/S/2549/001 by the NBTC. Salient points of the license are as follows:

Name of license	:	Type 2 Telecommunication Business License, without own network, No. TEL2/S/2549/001
License issuer	:	Office of the National Broadcasting and Telecommunications Commission
License term	:	30 November 2016 – 29 November 2021
Summary	:	ACU provides satellite communication service via a very small aperture terminal (VSAT) within the purview of Type 2 Telecommunication Business License by the transponder from the network provider, namely Thaicom PCL., to provide satellite telecommunication services. It is a connection service from headquarters to branches (domestically or overseas) or between branch offices in a private network. There are five service types based on space limitations and nature of demand of the target groups.

1. One-way multicast service – The service is a signal transmission from the host satellite station to the receiving station at various locations, which will be a one-way communication service.
2. Domestic VSAT with rooftop service – The service is a direct connection between two satellite stations using small antenna dish (VSAT) in a point-to-point manner.
3. Domestic VSAT with teleport service – The service is the connection between the head office and the branch office. The head office will connect data with the satellite service center (teleport) of the company via the ground network to be passed to the branch office equipped with the small antenna dish (VSAT).
4. International VSAT with rooftop service – The service is a direct connection between two satellite stations using small antenna dish (VSAT) in a point-to-point manner. One station is installed in the country and the other overseas.
5. International VSAT with teleport service – The service is a connection between the head office and the branch office. The head office will connect data with the satellite connection service center (teleport) of the company via the ground network to be passed to the branch offices equipped with small antenna dishes (VSAT) overseas.

Market and competition

1. Competition strategy – The company focuses on excellent service quality in terms of speed, use format, service stability, and perfect after sale service.
2. Distribution and distribution channel – For satellite communication service, the company adopts a direct marketing method by the company's sale engineer team, as the business requires specialized knowledge and expertise in provision of advice to the customers.
3. Competition condition – There is keen competition in provision of satellite data communication services (VSAT), especially in terms of price among industry peers.

Procurement of products and services

1. Production capacity and actual production volume for satellite communication services -- The company has satellite channels leased from Thaicom PCL to provide satellite data communication services (VSAT).
2. Information about raw materials – The company selects all equipment with international standard quality from local and foreign manufacturers, which can well respond to the customers' needs, build system stability, and bring satisfaction and confidence to the customers, as well as helping reduce system maintenance costs.

Assets for business operation

Ground satellite stations	Details of equipment used for satellite communication service			
	Satellite dish size	Satellite frequency transmitter	Satellite modem device	Multiplexer
1. PTT Co., Ltd., Chonburi	4.5m (of PTT)	1	1	1
2. Trans Thai – Malaysia Co., Ltd., Songkhla Province	2.4m	1	2	-
3. On natural gas rig, Jad-b17 station	2.4m	1	1	-
4. On natural gas rig, Jad-a18 station	2.4m	1	2	1

Undelivered works

- None -

5. Internet Knowledge Service Center Company Limited (IKSC)

IKSC has a paid-up registered capital of Bt 50 mn with JAS holding 37.5% of its registered capital. The Company has a policy to jointly invest in this company, aiming for receipt of only returns from investment. At present, apart from some small transactions (such as computer device lease), IKSC's main obligation is to be a holding company with investment in KSC Commercial Internet Co., Ltd., which principally performs as Internet service provider – providing information service through the Internet-linked network system.

The companies that have ceased their operations or have no significant transactions are as follows:-

1. Jasmine International Overseas Company Limited (JIOC)

JIOC was established on 5 October 1994. It currently has a registered capital of Bt 115 mn with JAS direct and indirect holding of its shares, representing 75.23% of the registered capital.

The company jointly invests in new overseas business, both as sole investor and leader in co-management, using engineering expertise in installation design, large-sized national telecommunications system management, plus significant engineering strengths of the company which are satellite communications, gateway station installation for the control of mobile phone system, fixed-line telephone system installation, submarine optical fiber cable system, including applied IT-related knowhow. At present, the company's investment structure is as follows:-

Company's Name	Amount of Investment (Million Baht)	% of Shareholding	Nature of Business
Subsidiary			
1. ACeS (Thailand) Company Limited	1,950.00	58.84	Holding Company
2. Clippership Investments (BVI) Limited	2.40	100.00	Holding Company
Associated and Related Company			
3. ACeS International Company Limited	824.00	10.66	Satellite mobile phone services for Asia

2. ACeS (Thailand) Company Limited (ACT)

ACT was established on 14 February 1997. The company has a registered capital of Bt 1,950 mn with JIOC holding its shares, representing 58.84% of the registered capital. ACT operates its business as a holding company.

3. T.J.P Engineering Company Limited (TJP)

T.J.P changed its name to JAS GREEN Company Limited and registered additional business objective with the Department of Business Development, Ministry of Commerce on 2 March 2023. The company has the paid-up capital of Bt 200 mn. The company shares are held by JAS and via ACU, representing 100 % of the registered capital. TJP engages in providing outside plant engineering service, the design and installation of outside plant equipment for all kinds of telecommunications network systems, including fixed-line telephone system, transmission system, drop wire installation and civil work for telecommunications projects such as maintenance center, training center, Private Automatic Branch Exchange center; plus the installation of towers for mobile phone system and so on.

Currently, the company still has the undelivered works. The company; therefore, amended the contract entered into with the customer to reduce the scope of work and extend the period to enable the project closing.

4. Mobile Communication Services Company Limited (MCS)

MCS has the paid-up capital of Bt 100 mn. It is held by JAS in a proportion of 70% of the registered capital. MCS was established in December 1997 as a joint-venture company between JAS and TOT with an objective to serve TOT in its maintenance of networks and perform any work as related to the NMT 470 MHz. Cellular Mobile Telephone network or any other work as assigned by TOT. At present, MCS has not yet started running its business.

5. Three BB Company Limited (Three BB)

Three BB started its operation in May 2000. It has the paid-up capital of Bt 52 mn and is held by JAS in the proportion of 100% of the registered capital.

Three BB was established with an objective to develop and create new revenues from new businesses and projects that are related to Internet E-commerce business and also to develop new software and applications. The company is open for proposals of any interested creative operator who wishes to jointly invest in the businesses of the company and is also prompt to support and facilitate it with itself holding not exceeding 50% of the total shares.

6. Aces Regional Services Company Limited (ARS)

ARS is a subsidiary of ACT. At present, ARS has a registered capital of Bt 1,020 mn, with ACT holding 98.04% of its shares.

ARS is the investor of ground station construction for the ACeS satellite phone project. It has also been awarded the right to be service provider of the phone system via satellite for Asia as a national service provider from ACeS International Co., Ltd. (AIL), the sole operator of the ACeS satellite network under the Asia Cellular Satellite (ACeS) project in Thailand. The company started operation in 2001. Its main income comes from sale of mobile handsets and call fees. ACeS signal transmission service works well everywhere at all times, be it in the forests or at sea, covering countries across Asia. It has also been designed to be a communication system to support areas outside the ground network, particularly such main target customers as fishing and commercial vessels, and areas with no population density which is not worth investing in other types of telecommunication networks, as well as in the countries in lack of telecommunication systems, and customers in governmental organizations and charitable organizations for use as backup communication equipment in case the ground communication network is cut off. Applications can be in the forms of satellite mobile phone using small portable handset and satellite phone set on marine vessels, designed to be durable for use on the vessels. Service has been provided in both pre-paid and registration as choices to be made by customers as appropriate.

ARS already ceased its satellite phone business operation in 2021.

7. Thai Long Distance Telecommunications Company Limited (TLDT)

TLDT is a subsidiary of JSTC. It has a registered capital of Bt 309 mn with JIOC holding its shares, representing 90% of the registered capital.

TLDT is a concessionaire of the extension of the submarine optic fiber cable network on the western coast line or Andaman Sea and installation of the submarine optic fiber cables connecting with the countries whose borders are adjacent to Thailand and connecting with the eastern coast line. Its services, products, and use of raw materials are the same as JSTC. Its income sharing with the TOT was determined as percentage of income at the downward rates starting from 26.0% per year in the first year to 12.5% per year in the 15th year (2011). TLDT's concession contract with the TOT already came to an end.

8. Smart Highway Company Limited (SHW)

SHW is a subsidiary of ACU with a registered capital of Bt 15.5 mn. The company is a joint venture between ACU and CAT. Its shares are held by ACU in a proportion of 67.40% of registered capital.

SHW operates the high-speed domestic signal circuit lease business under a marketing cooperation agreement for provision of data communication with CAT and digital leased circuit business. Currently, due to the end of the concession contract, SHW has no leased line customers.

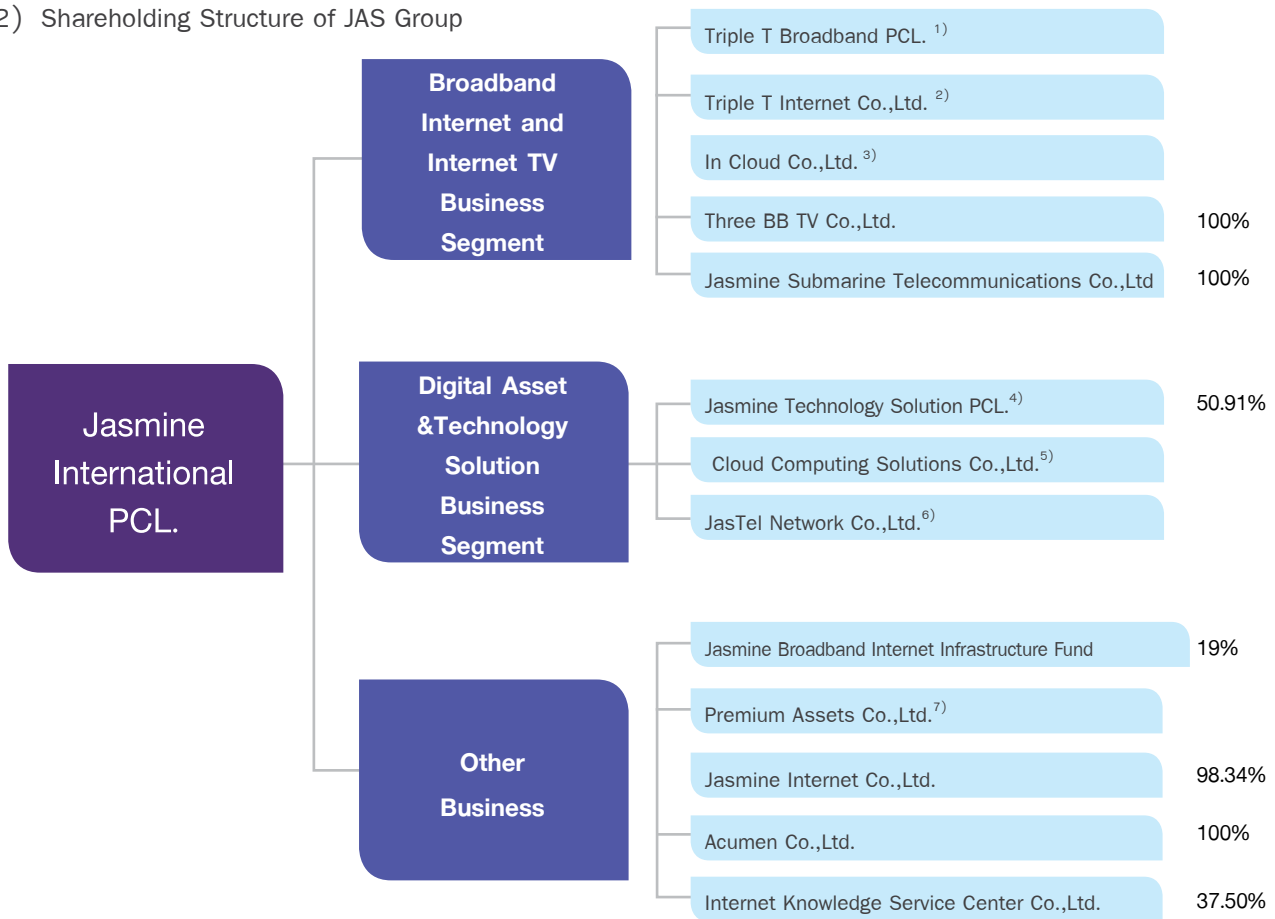
1.3 Shareholding Structure of JAS Group

1.3.1 Shareholding Structure of JAS Group

1) Policy on Business Operation Categorization of JAS Group

The Company engages in investment, as a holding company, through its own subsidiaries only. The investment is mostly in telecom business, information technology systems, and other related businesses. The Company places emphasis on supporting the subsidiaries to increase their competitiveness, keep close-knitted collaboration and synergize all resources so as to achieve maximum efficiency in developing new products, suitable for the era of rapid technological changes. Businesses of JAS Group are categorized into 3 main segments. (Please see details on Business segments in item 1.1). The subsidiary that operates the core business is TTTBB.

2) Shareholding Structure of JAS Group



Remarks :

- 1) = 99.87% held by ACU
- 2) = 100% held by TTTBB
- 3) = 100% held by TTTBB
- 4) = 32.80% held by JAS, 9.06% held by ARS and 9.06% held by TJP, making the total of 50.91%
- 5) = 97.87% held by JTS
- 6) = 100% held by JTS
- 7) = 53.85% held by ACU and 46.15% held by JSTC

3) Size of the Companies that Operate Core Businesses

The Company has invested in the company that operates the core business in compliance with the relevant regulations. The size of this company is equivalent to 96.51 percent, compared to the size of the Company.

4) General Information of Juristic Persons in which the Company's Shareholding Proportion is of 10 Percent up

Company Name and Head Office Address	Nature of Business	Total Number of Paid-up Shares	Number and Proportion of Common Shareholding of JAS and/or the Subsidiary
1. Broadband Internet and Internet TV Business Segment			
Triple T Broadband PCL. 200, Moo 4, Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120 Tel : 0-2100-2100 Fax : 0-2100-2121	Engages in Broadband Internet service, digital data network service, fixed-line telephone service	7,539,242,315	ACU 7,529,234,885 shares = 99.87%
Triple T Internet Co.,Ltd. 200, Moo 4, Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120 Tel : 0-2100-2255 Fax : 0-2100-2129	Engages in providing Internet service and Internet applications to residential clients and corporate clients	10,000,000	TTTBB 9,999,300 shares = 100%
In Cloud Co.,Ltd. 200, Moo 4, Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120 Tel : 0-2100- 4400 Fax : 0-2100-4401	Engages in software development, distribution and provision of the service of general software and software system that supports supplementary services of Broadband business	100,000	TTTBB 99,997 shares = 100%
Three BB TV Co.,Ltd. Jasmine International Tower 200, Moo 4, Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120	Engages in providing Internet TV service under "3BB GIGATV" brand.	10,000,000	JAS 9,999,997 shares = 100%
Jasmine Submarine Telecommunications Co.,Ltd. 200, Moo 4, Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120 Tel : 0-2100-3183 Fax : 0-2100-3184	Engaging in content aggregation	15,500,000	JAS 15,499,994 shares = 100%

Company Name and Head Office Address	Nature of Business	Total Number of Paid-up Shares	Number and Proportion of Common Shareholding of JAS and/or the Subsidiary
2. Digital Asset & Technology Solution Business Segment			
Jasmine Technology Solution PCL. 200, Moo 4, 9 th Fl., Jasmine International Tower, Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120 Tel : 0-2100-8300 Fax : 0-2962-2523	Engages in providing procurement, design and installation of telecommunications system service and digital asset business	706,457,300	- JAS 231,714,400 shares = 32.80% - ARS 64,027,700 shares = 9.06% - TJP 63,918,000 shares = 9.05%
Cloud Computing Solutions Co.,Ltd. 200 Moo 4 Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120 Tel : 0-2100-3000 Fax : 0-2100-3501	Engages in providing cloud computing services from the Infrastructure-as-a- Service stage all the way through to the Software-as-a Service stage; plus consulting, design and installation of computer system services as well as IT network and application software development services	550,000	JTS 538,264 shares = 97.87%
JasTel Network Co., Ltd. 200, Moo 4, 7 th Fl, Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120 Tel : 0-2100-3183 Fax : 0-2100-3184	Engages in circuit leasing service and local as well as international data communications service and digital asset business	5,200,000	JTS 5,199,993 shares = 100%
3. Other Businesses			
Jasmine Broadband Internet Infrastructure Fund BBL Asset Management Co., Ltd. 175 Sathorn City Tower, 7 th , 21 st and 26 th Fl., South Sathorn Rd., Tung- mahamek, Sathorn District, Bangkok 10120 Tel : 0-2674-6488 (Press 8) Fax: 0-2679-5955	A mutual fund, established to mobilize funds from general and institutional investors for investment in telecommunications infrastructure business	8,000,000,000	JAS 1,520,000,000 shares = 19%
Premium Assets Co., Ltd. 200, Moo 4, Chaengwatana Rd., Pakkred Sub-district, Pakkred District Nonthaburi 11120 Tel : 0-2100-3000 Fax : 0-2100-3575	Engages in space rental management and related services for Jasmine International Tower	130,000,000	- ACU 69,999,993 shares = 53.85% - JSTC 60,000,000 shares = 46.15%
Jasmine Internet Co., Ltd. 200, Moo 4, Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120 Tel : 0-2100-3700 Fax : 0-2100-3793	Engages in providing Internet services, mainly for Corporate clients	1,500,000	JAS 1,475,100 shares = 98.34%

Company Name and Head Office Address	Nature of Business	Total Number of Paid-up Shares	Number and Proportion of Common Shareholding of JAS and/or the Subsidiary
Acumen Co.,Ltd. 200, Moo 4, Chaengwatana Rd., Pakkred Sub-district, Pakkred District, Nonthaburi 11120 Tel : 0-2100-3000 Fax : 0-2100-3222	Engages in wireless communication services in the form of satellite communications via Very Small Aperture Terminal (VSAT)	7,600,000	JAS 7,599,994 shares = 100%
Internet Knowledge Service Center Co., Ltd. 2/4,10 th Fl., Chubb Tower, Vibhavadi Rungsit Rd., Thungsoyong Sub-district, Laksi District, Bangkok 10210 Tel: 0-2779-7777 Fax: 0-2779-7111	A holding company	12,000,000	JAS 4,500,000 shares = 37.50%

1.3.2 Person who may have conflict of interest, holding more than 10 percent of shares of the Company's subsidiary or associate companies

-None-

1.3.3 Relationship with Business Group of Major Shareholders

-None-

1.3.4 Shareholders

1) Major Shareholder

The top 10 largest shareholders of JAS as at the latest closing date of the share register book (25 July 2021) are as follows:- (The total number of shares: 8,592,816,071 shares)

Name of Shareholder	Number of Shares	% of Shareholding
1. Mr. Pete Bodharamik	4,696,043,783	54.65
2. Thai NVDR Co., Ltd.	296,406,342	3.45
Group of Shareholders under Thai NVDR Co., Ltd		
- STATE STREET BANK AND TRUST COMPANY	76,698,268	0.89
- THE BANK OF NEW YORK (NOMINEES) LIMITED	23,794,800	0.28
- J.P. MORGAN SECURITIES PLC	19,537,997	0.23
- MRS. SIRIWAN PANICHTRAKUL	18,000,000	0.21
- MR. AIKE TE	16,909,700	0.20
- SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	16,166,300	0.19
- MORGAN STANLEY & CO. INTERNATIONAL PLC	12,098,127	0.14
- UBS AG LONDON BRANCH	11,067,468	0.13
- STATE STREET EUROPE LIMITED	10,796,188	0.13
- MR. AIK HLA	7,234,200	0.08

	Name of Shareholder	Number of Shares	% of Shareholding
3.	MR. SUPACHAI WEERABORWORNONG	137,290,880	1.60
4.	MR. TIDCHUAN NANAWARATORN	134,000,000	1.56
5.	MR. VRIT YONGSAKUL	77,100,300	0.90
6.	Kiatnakin Phatra Securities Public Company Limited	58,448,000	0.68
7.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	42,296,752	0.49
8.	STATE STREET EUROPE LIMITED	40,986,116	0.48
9.	MR. VACHARA TANSIRICHAIIYA	40,000,000	0.47
10.	CHINA TONGHAI SECURITIES LIMITED A/C CLIENT	39,821,800	0.46

2) Information of Shareholders of the Subsidiary that Operates the Core Business

TTTBB's shareholders are as follows:-

	Name of Shareholder	Number of Shares	% of Shareholding
1.	Acumen Co., Ltd.	7,529,234,885	99.87
2.	TT&T PCL.	9,999,930	0.13
3.	Mr. Subhoj Sunyabhisithkul	2,500	0.00
4.	Mrs. Nitt Visesphan	1,250	0.00
5.	Mr. Somboon Patcharasopak	1,250	0.00
6.	Ms. Sompoch Sukchareon	1,250	0.00
7.	Ms. Ananya Buapuan	1,250	0.00

3) Shareholders' Agreement

- None -

1.4 Registered Capital and Paid-up Capital

The Company registered capital is Bt 4,296,408,035.50; all is paid-up and divided into 8,592,816,071 ordinary shares, each with the par value of Bt 0.50 per share.

1.5 Other Securities

In 2021, TTTBB, a subsidiary in which the Company holds 99.87 percent via ACU (ACU is 100 percent held by the Company) issued and offered long-term debentures with details as follows:-

- Debenture Issuer : Triple T Broadband PCL.
- Specific Name of Debenture : Secured Debenture of Triple T Broadband PCL. No.1/2021 with maturity date in 2024 which grants the issuer an option to redeem prior to the maturity date
- Type of Debenture : Unsubordinated and secured debentures with a Debentureholders' Representative in the Name-Registered Certificate and debenture issuer is eligible to redeem the debenture prior to the maturity date
- Purpose of Using the Proceeds :
 1. To invest in the Broadband Internet and IPTV businesses;
 2. To reserve as a loan for the companies within Jasmine International Group;
 3. To be the working capital for TTTBB
- Tenor :
 - 3 years, commencing from debenture issuance date
 - Debenture issuance date : 30 September 2021
 - Maturity date : 30 September 2024
- Number of Debentures Issued and Sold : 1,373,500 Units
- Value of the Sold Debentures : The total amount obtained from the sale of the debentures was Bt 1,373,500,000
- Par Value per Unit : Bt 1,000
- Offering Price per Unit : Bt 1,000
- Interest Rate : Fixed rate at 6.25 percent per annum
- Interest Payment Period : Every 3 months, with the first payment being scheduled on 30 December 2021 and the last payment on the maturity date of the debentures
- Early Redemption : Debenture issuer is eligible to redeem or prepay debentures (whole or partial) prior to the maturity date, starting from 30 September 2022
- Collateral : The ordinary shares of Jasmine Technology Solution PCL. ("JTS"), valued Bt 1,716,875,026.18. The issuer will maintain the collateral value to the total value of debentures that remain unredeemed not less than 1.0 times until the redemption date, as stipulated in the terms and conditions of the debentures.
- Debenture Holder Representative : KTBST Securities PCL.
- Debenture Registrar : Bank of Ayudhya PCL.

1.6 Dividend Payment Policy

1) Dividend Payment Policy of the Company

The Board of Directors has the policy to propose for Shareholders' Meeting's consideration the dividend payment to general shareholders in the ratio of not less than 50 percent of the net profit after tax each year as shown in the Company's separate financial statement. Details of dividend payment during the past 3 years are as follows: -

Details of dividend payment	2022	2021	2020
Net profit (Loss) for the year (Baht)	1,819,085,568	1,627,240,084	2,966,684,363
Total dividend paid per share for the whole year (Baht: Share)	-	-	0.25
- The first interim dividend payment	-	-	0.05
- The second interim dividend payment	-	-	0.20
- Annual dividend payment	-	-	-
Total dividend payment for the whole year (Baht)	-	-	2,134,311,002.40
Total dividend payment ratio for the whole year	-	-	71.94%

2) Dividend Payment Policy of the Subsidiaries

- TTTBB has a policy to pay the dividend in the ratio of not less than 40 percent of its annual net profit, as declared in the separate financial statements, after corporate tax and statutory reserve and after the company's compliance with laws and terms and conditions in loan contracts, including other related burdens, each year. However, the Board of Directors of TTTBB has the authority to consider and approve occasional exemption or change in this policy on the condition that such exemption or change must be for the optimum benefits of the company.
- JTS has a policy to pay the dividend in the ratio of not less than 40 percent of its net profit after corporate tax each year, as declared in the separate financial statement. The dividend payment of the company must not significantly affect its normal operation. Nevertheless, provided that it is of necessity for the company to use its net profit for business expansion, the dividend may be paid in the ratio lower than the ratio stated above.
- For other subsidiaries, the dividend payment depends on their operating results and annual liquidity of cash flows.

2. Risk Management

2.1 Risk Management Policy and Plans

Realizing that risk management is important to the Company's business operation, the Committee of Risk Management for Sustainable Development has established risk management policy, control activities, monitoring system and also conducted risk factor analyses by considering the internal as well as external risk factors so as to evaluate risk management in every area to be appropriate and in line with the Company's policies and strategies. Additionally, the Committee has promoted risk management to its personnel organization-wide, fostering the awareness that it is a duty of everyone to take part in managing risks to an acceptable level.

2.2 Risk Factors of Business Operations of the Company

2.2.1 Risks that the Company or the entire JAS Group currently encounters and is likely to encounter in 3-5 years ahead are as follows:-

1. Strategic Risks

- Regarding business expansion tendency and investment opportunities that may add more values to the existing businesses
 - The Broadband Internet business still grows, but with a lower rate of potential growth and less income per subscriber as a consequence of price competition and other operators' offering of a diverse range of products with special prices to attract 3BB's customers to use their services. A partial loss of market share has caused TTTBB to use pricing strategy to retain its customers. Additionally, to reduce churn and increase its revenue at the same time, TTTBB has also entered into an MOU with AWN—a new business partner—and brought AWN's mobile-and-content bundled package to service the customers. As regards, future investments, key focuses will be on uplifting equipment efficiency for the provision of service speed of over 1,000 Mbps, providing more supplementary services that could accommodate diverse forms of connectivity such as Mesh and IOT, etc. and using of data mining to facilitate customers' behavioral analysis for the provision of several more additional services at a reasonable prices.
 - The IPTV business has a continuous potential growth. The company strategically focuses on the access to and the use of 3BB GIGATV box, using hi-speed internet; this would result in a wider ranges of service offering, customer retention for churn rate reduction and a business chance of the company to collaborate with streaming content or OTT service providers such as WeTV and Golf channel, etc. Nevertheless, the IPTV service has risk that occurs due to its service platform being monopolized by KT Corporation – its platform developer, causing development delay and risk in higher cost as content streaming is expensive. To manage this risk, the company may have to consider hiring additional platform developers to work alongside KT.
 - Corporate solution business still has potential growth. JAS Group's current market share in this business is still small; therefore, the Group aims to penetrate more into the market to gain more market shares. In conducting this business, the core strategy is to secure a wide variety of acceptably quality solutions to

serve the demands of corporate clients; thus, the company has partnered with suppliers and operators for the provision of leased circuit service and other diverse solutions; meanwhile, training its own personnel to be well-versed in selecting solutions for efficient customization service as well as recruiting the new ones with such expertise.

- Regarding risks that arise from new business
 - JTS is now operating the Bitcoins mining business which is considered a new business of JAS Group. The major risk of this business is volatility of the exchange rate of the Bitcoin currency. The downward trend in the price of Bitcoins is due to instability of other digital currencies. JTS; therefore, has proceeded to manage this risk carefully by ways of cost comparison, stocking of the Bitcoins mined, temporary mining stoppage and seeking additional alternatives for cost reduction such as the use of the solar farm system. Moreover, the company has established the Digital Asset Risk Management Committee to analyze information with respect to digital assets and record changes thereof that may impact the company; whereas, operation work unit has a duty to notify the Digital Asset Risk Management Committee without delay of every 10 percent change in digital asset market prices in case that they are lower than those as at the end of the quarter. The operation work unit is also required to immediately inform the Digital Asset Risk Management Committee of every 10 percent increase in total network hash rate, electricity bills and other expenses, compared to the previous quarter.
- Risks pertaining to the disposal of TTTBB shares and JASIF investment units to AWN
 - In the event that the disposal transaction of TTTBB's shares and JASIF investment units is unsuccessful, TTTBB might encounter a problem of customers' declining of confidence in its business operation. If it is as such, the company needs to draw up a plan to regain the customers' trust. Besides, it is necessary that contingency plans be in place to ensure the company's competitiveness both for during the period when the transaction is still under consideration of the NBTC and in the case whereby the transaction fails at the end. However, while the disposal transaction is under process, TTTBB and AWN shall develop a strategic partnership, allowing; for examples, the use of Optical Fiber Cables, contents or mobile products for mutual benefits.
 - The disposal transaction of TTTBB's shares and JASIF investment units to AWN has caused risks pertaining to personnel's feeling of insecurity in their career paths and worry about changes in the work under their responsibilities once AWN becomes the major shareholder of the company. To this regard, as soon as the news on the asset disposal transaction was disclosed to the Stock Exchange of Thailand, the executives of the company took action to initially explain and give confidence to the personnel. In addition, the executives of AWN (AWN's Chief Executive Officer and the Management Team) and the Management of TTTBB had already reached a mutual understanding on this issue.
 - The disposal transaction of TTTBB's shares and JASIF investment units to AWN has also caused risks pertaining to JAS investors' confidence. To manage this risk, JAS has to consider new businesses that could generate as much core revenue to the Group as TTTBB. Nevertheless, it shall take the Company some time for prudent consideration and business development. JAS has to build confidence among the

investors that its new businesses would be stable in the long run. As regards the clarity in the allocation of the proceeds to be received from this asset disposal transaction that is an issue in focus of the investors, the Company's Management has taken its action to consider the issue and shall propose it further to the Board of Directors for consideration.

2. Governance Risks : The Company has managed risks pertaining to governance to ensure that each subsidiary of JAS Group shall conduct its business operations and organize the activities in alignment with the directions in place and established goals of JAS Group. To this regard,
 - The Company's Board of Directors has considered the guideline for the selection and the appointment of JAS' qualified representatives with appropriate experiences to work as directors, executives or persons with controlling power in the subsidiary and the associate companies. The number of the representatives assigned shall be based on the percentage of JAS shareholding in each particular subsidiary and associate. Through these representatives, the management of the subsidiary as well as the associate companies of JAS can be well in accordance with JAS Group's business policies. However, the appointees, representing JAS as directors of the companies within JAS Group shall not receive any additional compensation from JAS.
 - The performances of JAS representatives in the subsidiaries are quarterly reported to JAS Board of Directors in the like manner as the reports on risk management that shall be prepared by all the subsidiaries and reported to the Risk Committee of JAS Group on a quarterly basis.
3. Human Resources Risks : The Company realizes that human resources is a key factor that enhances the growth of JAS Group. Thus, actions have been taken to manage risk of losing efficient key personnel and to strengthen competitiveness in the industries to which the Group's businesses belong as follows:-
 - Setting up recruitment criteria, principally placing importance on the applicants' good attitude on par with skills that suit with the jobs that the Group requires; developing the recruitment procedures by using online assessment system and reliable standard LSP online assessment tool to appropriately evaluate the applicants' proficiency.
 - Preparing data for the adjustment of the starting rates of the new employees who are recruited to the positions that are considered rare or highly competitive in the job market (such as engineering or IT personnel) as well as the positions required by the core business (such as salespersons, technicians, contact center staff) to be competitive in the job market, taking into consideration the result of the comparison between the Company's wage rates and the wage rates of other companies in the same industry plus possible impacts that may arise from the starting rates adjustment. The Company has also proceeded to consider models for adjusting other additional benefits of the employees.
 - Reinforcing employees' motivation, loyalty, love and devotion to the organization and setting a human resources development plan to uplift the efficiency of the employees who are core competency and functional competency of each business of JAS Group and accordingly follow up the plan.

- Preparing a succession plan for executive positions as well as key positions in charge of the oversight of the businesses of JAS Group and accordingly determining successors such as the Head of the IPLC Network Management, in order to manage risk pertaining to succession in the long run. The Company has also proceeded to conduct the OKRs and prepare the work plan and the appraisal thereof in order to prepare the successors to be ready for the responsibilities once assuming the above positions.
 - Preparing balanced scorecard for every company within JAS Group that engages in service offering together with directions and supports for strategy-related work. To this regard, the policies, goals and collective strategies shall be determined by the Management and passed on to relevant work units.
4. Operation Risk : The Company's subsidiary and associated companies have conducted risk assessment as required by JAS Group's policy on risk management and have classified their operation risks in accordance with the standard of the Company.
- TTTBB has risks pertaining to dispute regarding the right of way on the pole of the Provincial Electricity Authority (PEA) which is currently under the negotiation with PEA. It is likely that PEA may change certain conditions and is now seeking opinions from service providers who joined its teamwork.
 - The Company is aware of digital information security; therefore, TTTBB has set the security standards for securing its digital information. Furthermore, with ISO 27001 certification, the information security management system of the company is more efficient and tough enough to help alleviate digital information risk and, at the same time, protect the information from hacking. Every company of JAS Group has appropriately acquired risk insurance for networks and equipment and also has the Business Continuity Plan (BCP) in place to manage diverse circumstances that may cause business interruption and to finally enable recovery of business continuity; hence, the least negative effects on the operations of the company.
 - The subsidiaries have drawn up the "Health Safety and Environment Measure" and the Company has the Welfare Committee established with the representatives of the employees as its members in addition to the Safety and Health Committee that was established as required by law and the CSR (Corporate Social Responsibility) Department that is responsible for every relevant party. In terms of health care, the Company arranges the annual health check for the employees of all levels and positions. In addition, during the COVID-19 pandemic outbreaks, the Company announced the Work From Home (WFH) policy for everyone to comply organization-wide in order to decrease workplace density and reduce the risk of infection. Along with the WFH policy, the Company also arranged vaccination for the staff who had to service and contact with the customers directly. Besides vaccination, the Company monthly procured 10,000 sets of the COVID-19 Antigen Test Kit for its frontline staff to use free of charge for safety in customer service. In order to efficiently manage this risk, the Company set up the generally accepted requirements and practices that required its employees' compliance throughout the Group; for examples, once a staff was a COVID-19 lab-confirmed case, a report together with the classification of tiers of colleagues who came into contact with the patient was to be submitted and every time an employee was vaccinated or conducted an ATK test, he/she had to report to the Company via a link provided. The Company always communicates with its employees about good hygiene via the Line Official HR system.

5. Financial Risk

- As for financial risk, financial institutions have continued to pursue the policy to either slow down or remain stringent in their loan approval for entrepreneurs. What they need to consider prior to making a decision whether or not to grant a loan is not only the financial position and the ability to repay debt of that particular borrower, but also the overall operating results of the companies within the group to which that borrower belongs. As for the case of JAS Group, the fact that the Group had net loss due to the impact of TFRS 16, as declared in the consolidated financial statements, some financial institutions felt concerned and took a longer time than usual to consider the case before approving the grant of loan. (It is possible that TFRS 16 will still affect overall operating results of JAS Group until 2023). To manage this financial risk, amidst the current economic circumstances, the Company has determined not to rely on financial institutions as the sole financing source, but to seek more funding by way of issuing debentures, applying for suppliers' credit and entering into financial leases to ensure that its liquidity is enough to support business operations of the companies within the Group.
- Regarding the investment in the Bitcoin mining business by JasTel, a subsidiary of JTS, as this is a new business, the financial institutions have considered risks that are related to it; for instances, risk from the volatility of the Bitcoin price, the fluctuation of the exchange rate and the supervision of the government sector, etc. These risks are borrowing limits in applying for a loan from financial institutions; therefore, it is necessary that JTS raise funds to empower the Bitcoin business through debenture issuance.
- Risks from the exchange rates of JAS Group have occurred due to the subsidiaries' procurement of equipment which, in most cases, was done in USD. The Baht depreciation that has resulted in higher equipment cost (when converted to the Baht equivalent rate) has caused TTTBB to try to reduce possible impacts on its cash outflows and the booking of profit (loss) from the exchange rates. Thus, the company has proceeded to manage this risk by continuously holding price negotiation with the suppliers to control the equipment price; in addition to considering the entering into forward contracts for the procurement of the equipment under supply agreements. As for JasTel, that partially has both the revenue and the expenses in foreign currencies, has chosen to rely on natural hedging to minimize the risk from the exchange rates. The above methods (continuously applied) have more or less helped mitigate risks from the exchange rates. Nevertheless, the companies within JAS Group shall not enter into the forward contracts during the volatile period of the exchange rates; they shall wait until the rates have been declining to a proper range to start the transactions again, taking into consideration also due dates of debt repayment of each particular equipment.
- In addition, the companies within the Group have entered into financial contracts which require compliance with the terms, conditions and obligations, stipulated therein. Compliance with such terms, conditions and obligations is considered another risk of JAS Group. For instances, TTTBB is required not only to comply with the terms and conditions in the documents that are related to the transactions, entered into between the company itself and JASIF, but also the conditions and procedures governing its secured debentures; and the Company and the subsidiaries are to comply with the terms and conditions in the loan agreements. To mitigate this risk, the Group has proceeded to thoroughly examine its financial covenants in those agreements to prevent defaults that may occur.

- JTS financial risk is due to the terms and conditions of its secured debentures, guaranteed by the ordinary shares of JTS, owned by TJP (80 percent held by JAS and 20 percent held by ACU) valued not less than 1.25 times of the issued and offered debentures as at the issuance date (equivalent to 3,013,844 shares). The company has the collateral value reviewed at the end of every month. In this regard, in the event that the percentage of the value of the collateral shares to the value of the debentures is lower than 1.0 time (or Bt 740.20 mn), JTS has the duty to provide additional collaterals to enable the proportion to be at 1.25 times and ; thus, it has to make a request to TJP for additional collateral support.

2.2.2 Risks that have Effects on the Investment of Security Holders

As at 25 July 2022, Mr. Pete Bodharamik held 4,696,043,783 shares of JAS, equivalent to 54.65 percent of the entire paid-up shares of the Company. His shareholding proportion is significant to the resolutions made at a shareholders' meeting, except for the ones required by law or the Company's Articles of Association to be passed by the votes of not less than $\frac{3}{4}$ of the total votes of the shareholders' meeting. As such, other shareholders may encounter risks arising from the number of votes collected for the check and balance in the event that a matter is proposed by the major shareholder. Nevertheless, the Company is well aware of the importance of the check and balance and thus complies with Corporate Governance Policy. The Company has 3 independent directors who are also the audit committees, being responsible for reviewing the accuracy, the completeness and the reliability of the financial reports, including the compliance with the Securities and Exchange Act and other laws applicable to the business of the Company.

2.2.3 Risks from Legal Disputes

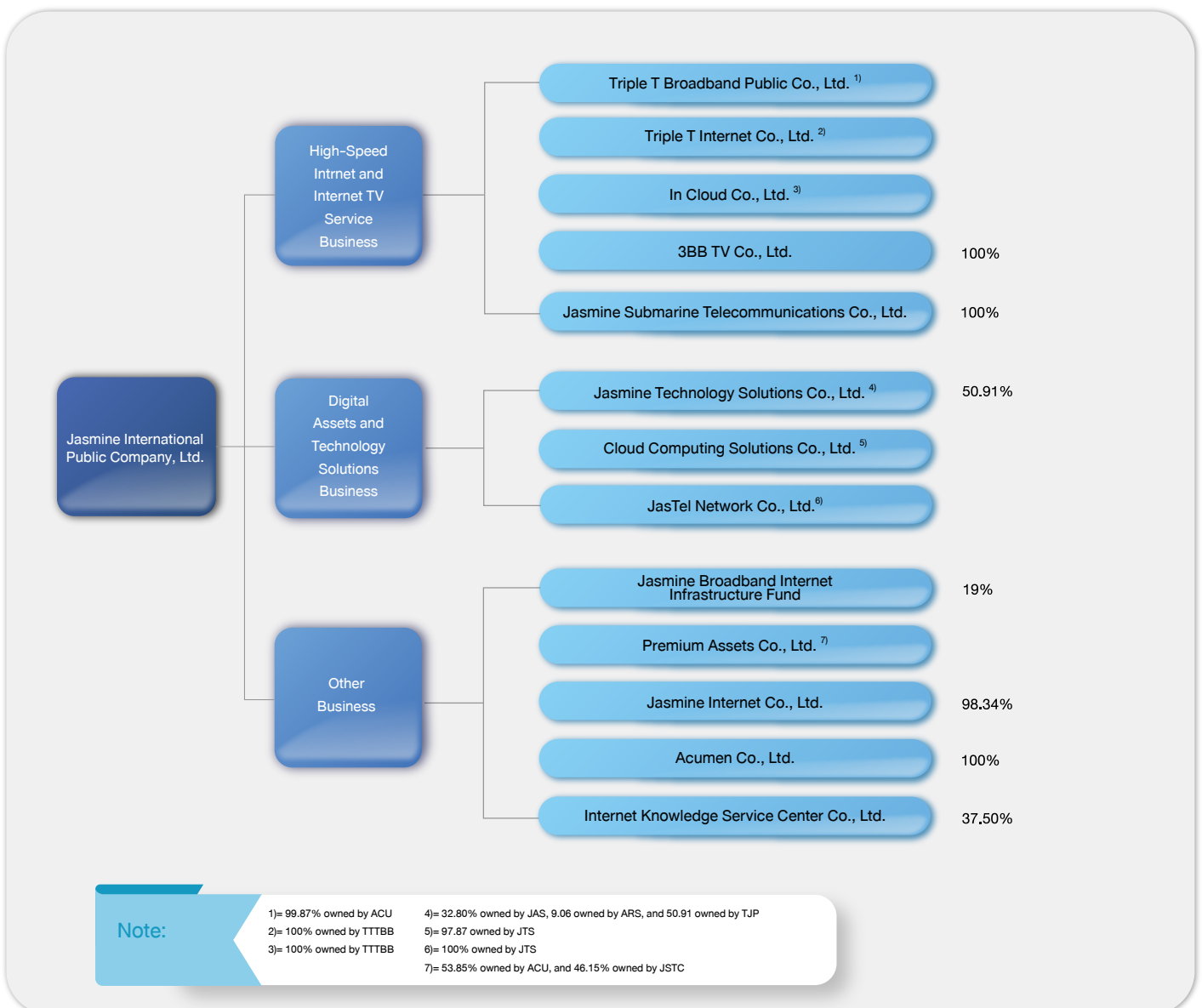
The information on legal disputes is disclosed in details in Topic 5.3: Legal Disputes of Form 56-1 One Report and Item 33.6 of Notes to the Financial Statements, regarding risks from legal disputes of the subsidiaries. For litigation and disputes between TT&T and JAS subsidiaries, please see Notes to the Financial Statements, Item 33.7.

3 Sustainable Business Development

Jasmine International Public Company Limited, prepared a sustainability report to portray the commitment towards disclosing important developmental information for the stakeholders accurately and transparently. The report covers on the performance of economic, social and environmental sectors, from January 1, 2022, to December 31, 2022. The Company prepared the 2022 Sustainability Report based on the Sustainability Reporting Guide of the Securities and Exchange Commission (SEC), which corresponds to the international standards, as well as determining content and presenting performance results

that support the United Nations Sustainable Development Goals (SDGs).

The scope of this report was determined based on relevance to business, availability of information, and impact towards the Company’s performance, the society, and the environment. All these categories fall are under 3 main business groups, being the High-Speed Internet and Internet TV Service business, Digital Assets and Technology Solutions business, and other businesses, in which the shareholding proportions and operational results are presented as follows:



Sustainability Issues



Economical Sector

• Supervision and Risk Management	✓	✓	NA	NA
• Innovation Development	✓	✓		
• Cyber Security and Protection of Personal Data	✓	✓		

Environmental Sector

• Greenhouse Gas Reduction and Resource Management	✓	✓	NA	NA
• Electronic Waste and Waste Management	✓	✓		

Social Sector

• Responsibility towards customers and consumers	✓	✓	NA	NA
• Fair and equal treatment of labor	✓	✓		
• Corporate Social Responsibility	✓	✓		

Note:

✓ Information was recorded on the issue
 NA (Not Available) – No information was recorded on the issue

Contact Us

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 You can load this report at www.jasmine.com



3.1 Sustainability Policy and Targets

The Company is committed in driving its business on the basis of sustainability, covering upon 3 dimensions, which are Economy, Social and Environmental dimensions, in order to build confidence among all stakeholder groups through transparent, fair and verifiable operations. The Company has established the sustainability policy as an operational guideline, and has set clear goals to ensure itself as a “Growing Sustainable Organization with Innovative Solutions”.

Delivering “Sustainable Technology” for a Better World	Building Digital Organization while Putting People First	Empowering Wellness of Society with Technology
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Commitment

- Develop new products through innovated technology, on the basis of understanding and paying attention towards environment
- Environmental impact mitigation

- Encourage employees to become innovators
- Develop digital skills for employees
- Build relationships with organization and focus on developing career path for employees.
- Encourage employees of all levels with opportunities to provide comments, to participate in development of all sectors continually, for new innovation to be developed through new ideas.
- Open the opportunity for employees to learn about new technology on a continual basis.

- Create technological access for community’s well being
- Encourage organizing of activities for employees to collaborate with communities, society, and other agencies, in order to be aware of the issues, and continue to open perspectives and ideas for bringing appropriate technology to help develop or solve problems for the the society and environment

Target

- Develop products and services that promote the 3 products/service sustainability by the year 2023.
- Reduce greenhouse gas emissions to Net Zero by the year 2030.
- Reduce e-waste by 20% by the year 2025 by extending life of electronic devise and improving them for reusage
- Reduce electricity consumption by 5% by the year 2025.
- Reduce water consumption by 5% by the year 2025.
- Having 3 practical innovative projects by the year 2025.
- Having yearly Intellectual Property from the year 2026 onwards
- Generate income from the 1 Billion Baht innovation by year 2025
- Personnel development training on average of 3 courses per person by year 2025
- 100% JAS Online Learning 5 courses per person
- Develop project in promoting access to 3 technological projects annually
- Having model projects that develop in collaboration with various agencies annually

Sustainability Governance Structure

The Board of Directors has assigned the Risk Management Committee for Sustainable Development to be responsible in overseeing and driving the Company's sustainability operations, in order to achieve its goals, and respond to the needs of stakeholders. The Sustainability and Corporate Communications Department will be responsible for following up all related sectors in their participation in achieving the organization's goals of sustainable operations, as well as for evaluating, providing recommendations, and building awareness amongst stakeholders on the organization's guidelines of sustainability operations transparently. Apart from this, the Sustainability and Corporate Communications Department is responsible for reporting in operations progress to Risk Management Committee for Sustainable Development every quarter to ensure that various operations are effectively and efficiently performed.

Assessment of Key Sustainability Issues Management Approach

The Company assesses the key sustainability issues by studying and collecting information from various sustainability contexts, both nationally and internationally, and in which are consistent with the business operations and strategic direction of the Company, covering upon economy and

corporate governance dimension, social dimension, and environment dimensions. Moreover, the Company also accounted for the recommendations and expectations from internal and external stakeholders in evaluating and prioritizing sustainability issues. In that regard, the Company has presented the performance results of all 8 sustainability issues in this report, for the acknowledgement of stakeholders and the public.

1. Identifying Key Sustainability Issues

The Company collects various sustainability issues by taking into account both internal and external factors, as follows:

Internal Factors	External Factors
<ul style="list-style-type: none"> ● Company Strategy ● Risks and Opportunities in Business Operations 	<ul style="list-style-type: none"> ● Sustainability trends in both domestic and international industries ● Context for business operations for operators of the same field of industry ● Sustainability indices and standards such as THIS, DJSI, UNSDG, MSCI, GRI, and Sustainability Reporting Guide

2. Prioritizing the Importance of Issues

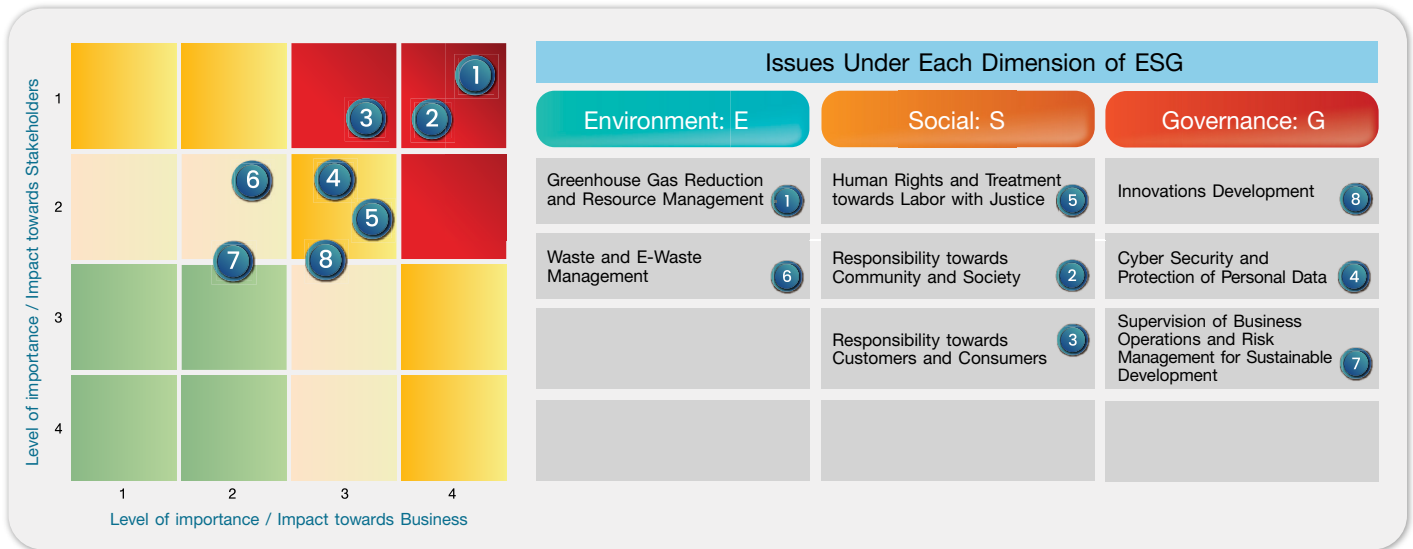
All the 8 key sustainability issues under Step 1 are taken into consideration and prioritized by the Company, based on their impact on the business operations of the Company, as well as their level of importance to stakeholders. The assessment categorizes the impact towards business operations, and towards stakeholders, into 3 levels, consisting of medium, high, and very high levels.

3. Validation

The Company presented the sustainability assessment results to the Board of Directors for approval.

4. Development and Improvement of Communication

The Company continually conducts review of the key sustainability issues, and the disclosure of performance results, to ensure that that the Company’s implementation of sustainability operations is in aligned with the strategies and meets the stakeholders’ expectations.



SDGs Goal	Key Sustainability Issues
<p>1 NO POVERTY Eliminate all forms of poverty in all areas</p>	<ul style="list-style-type: none"> Community and Social Responsibility Management of Energy and Greenhouse Gases
<p>3 GOOD HEALTH AND WELL-BEING Ensure good health and promote well-being for all people under all age groups.</p>	<ul style="list-style-type: none"> Waste and e-waste management
<p>4 QUALITY EDUCATION Ensure inclusive and equitable quality of education for all, and support lifelong learning opportunities.</p>	<ul style="list-style-type: none"> Community and Social Responsibility
<p>5 GENDER EQUALITY Achieve gender equality and empowerment for women girls</p>	<ul style="list-style-type: none"> Human Rights and Treatment towards Labor with Justice and Equality
<p>6 CLEAN WATER AND SANITATION Ensure that water and sanitation is available to all, and is managed sustainably</p>	<ul style="list-style-type: none"> Management of Energy and Greenhouse Gases



SDGs Goal	Key Sustainability Issues
 <p>7 AFFORDABLE AND CLEAN ENERGY Ensure everyone has access to modern, sustainable energy at affordable prices</p>	<ul style="list-style-type: none"> • Management of Energy and Greenhouse Gases
 <p>8 DECENT WORK AND ECONOMIC GROWTH Promote sustained, inclusive, and sustainable economic growth, as well as full and productive employment, and having decent work for all</p>	<ul style="list-style-type: none"> • Human Rights and Treatment towards Labor with Justice and Equality
 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE Build a durable infrastructure and promote comprehensive and sustainable industrial development and promote innovation.</p>	<ul style="list-style-type: none"> • Responsibility towards Customers and Consumers • Innovations Development
 <p>10 REDUCED INEQUALITIES Decrease inequality nationally and internationally</p>	<ul style="list-style-type: none"> • Human Rights and Treatment towards Labor with Justice and Equality
 <p>11 SUSTAINABLE CITIES AND COMMUNITIES Making cities and civilization become inclusive, safe resilient, and sustainable.</p>	<ul style="list-style-type: none"> • Responsibility towards Customers and Consumers • Community and Social Responsibility
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION Ensure a sustainable pattern of production and consumption</p>	<ul style="list-style-type: none"> • Management of Energy and Greenhouse Gases
 <p>13 CLIMATE ACTION Take urgent action in combating climate change and its effects.</p>	<ul style="list-style-type: none"> • Management of Energy and Greenhouse Gases
 <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS Promote peaceful and inclusive society for a sustainable development, while providing access to justice for all, as well as building effective, accountable and inclusive institutions at all levels.</p>	<ul style="list-style-type: none"> • Human Rights and Treatment towards Labor with Justice and Equality • Supervision of Business Operations and Risk Management • Cybersecurity and Protection of Personal Data

3.2 Management of Impact towards Stakeholders in the Business Value Chain

3.2.1 Business Value Chain

The Company’s business structure is categorized into 3 main business groups, namely, High-Speed Internet and Internet TV Services group, Digital Assets and Technology Solutions group, and other business groups. The Company focuses on operations that increase competitiveness, promote working closely together, and sharing of resources for maximum efficiency in the development of new products that are in line for the current era of rapid technological changes.



Partner Recruitment / Purchasing & Procurement	Operations	Product Development, Service and Sales	After Sales Service	Supporting Activities
<ul style="list-style-type: none"> Supervise and take care of network equipment, and Broadband Internet Service 	<ul style="list-style-type: none"> Manage operating systems, information technology networks, and other related systems. 	<ul style="list-style-type: none"> Introduce research and development processes, including the launch of new products and services 	<ul style="list-style-type: none"> Customer Satisfaction Survey 	<ul style="list-style-type: none"> Manage human resources without discrimination by creating equal opportunities of employment.

Partner Recruitment / Purchasing & Procurement	Operations	Product Development, Service and Sales	After Sales Service	Supporting Activities
<ul style="list-style-type: none"> Supervise in testing usage of equipment for customers, such as the Router Modem for operational safety measures 	<ul style="list-style-type: none"> Performance Evaluation of major systems such as MPLS, ME, and MME Plan to expand the network to become countrywide. Define data protection policies and control internet security. 	<ul style="list-style-type: none"> Become a partner or business shareholder with other service providers of products and services to expand service areas Set policies for both online (through internet media such as social media), and offline (through old media such as print media, radio, and television) distribution Marketing a brand and creating new products 	<ul style="list-style-type: none"> Maintain existing customers for continual service provision. Survey and apprehension of opinions or experiences from customers using the service. 	<ul style="list-style-type: none"> Create sustainable and transparent financial and accounting operations Good Corporate Governance

Note:

Multiprotocol Label Switching (MPLS) System – Connecting Head Quarters to Branch Offices

Metro Net (ME) System – Interchange connecting to Node Internet

Main Metro Net System – Main Interchange connecting ME together

3.2.2 Analysis of Stakeholders in the Business Value Chain

Because “Stakeholders” are Our Important People

The Company realizes fair and transparent engagement with all groups of stakeholders is the key to driving the organization towards sustainability. It continues to engage through various channels and events, in order to identify the positive and negative impacts from the business

operations. Moreso, it gathers expectations, suggestions, and opinions from stakeholders to analyze and find responses that meet stakeholders’ expectations directly. This is also an opportunity for the Company to present guidelines of sustainable strategies and operations for the stakeholders’ acknowledgement.

all 6 groups of stakeholders, namely: Shareholders, Employees, Regulators, Customers, Partners, Communities.			
Stakeholders Group	Stakeholders’ Expectations	Response Towards Stakeholders’ Expectations	Type of Engagement / Communication Channel
Shareholder	<ul style="list-style-type: none"> ● Sustainable Growth and Development ● Consistent Dividends Payment ● Good Corporate Governance 	<ul style="list-style-type: none"> ● Promote broadband business based on sustainable development. ● Expanding the range of value-added services ● Pay dividends to shareholders at least annually. ● Have structure of good corporate governance, in which is clear, transparent, and verifiable. 	<ul style="list-style-type: none"> ● Shareholders’ Meeting ● Disclosure of information through the annual report / Company website.
Employees	<ul style="list-style-type: none"> ● Fair compensation, welfare and benefits ● Career advancement, stability and happiness at work 	<ul style="list-style-type: none"> ● No discrimination, and respect equality ● Fast Track Program for employees performing excellently. ● Providence Funds 	<ul style="list-style-type: none"> ● Training, Organizing Seminars ● Performance Evaluation

Stakeholders Group	Stakeholders' Expectations	Response Towards Stakeholders' Expectations	Type of Engagement / Communication Channel
	<ul style="list-style-type: none"> ● Clean and safe working environment ● Human rights and practices relating to labor 	<ul style="list-style-type: none"> ● Continuous development and knowledge training for employees. ● Management of work environment in systematic and standardized manner. ● Compliance towards human rights and employment policies 	<ul style="list-style-type: none"> ● Organizing recreational activities for employees ● Engagement Survey ● Intranet, Electronic Media, JASTALK ● Line OA (HR JAS)
Regulators	<ul style="list-style-type: none"> ● Transparent disclosure of business information ● Strictly develop system of corporate governance and internal control 	<ul style="list-style-type: none"> ● Transparent disclosure of information, while complying to relevant laws and regulations 	<ul style="list-style-type: none"> ● Organize meeting for hearing opinions ● Official agencies participation in audits
Customers	<ul style="list-style-type: none"> ● Having access to quality and reliable services ● Having access to services at anytime, and from anywhere ● Having access to help in using service ● Maximum data security 	<ul style="list-style-type: none"> ● Taking care and maintaining network signal quality on a regular basis ● Network development to cover all areas across the country ● Call Center to serve customers 24 hours a day, 7 days a week ● Regular monitoring of activities that may harm the network 	<ul style="list-style-type: none"> ● Meeting with customers to provide service in assisting or consulting on various fields. ● Customer Satisfaction Survey ● Receiving complaints and suggests through channels provided by the Company ● Website, social media
Partners	<ul style="list-style-type: none"> ● Business partnerships or partnerships using strategies of Growing Together ● Creating Win-Win trade agreements 	<ul style="list-style-type: none"> ● Fair process of selection of partners or business partners, with clearly explained procedures. ● Open negotiation with trading partners to reach mutually beneficial agreement. 	<ul style="list-style-type: none"> ● Training and educative seminars ● Partners Evaluation


Stakeholders Group	Stakeholders' Expectations	Response Towards Stakeholders' Expectations	Type of Engagement / Communication Channel
Community	<ul style="list-style-type: none"> ● Providing services safe for everyone's health in the community. ● Providing assistance to the community for a better quality of life. 	<ul style="list-style-type: none"> ● Build knowledge and understanding for the community. ● Help the community in times of disasters, such as floods 	<ul style="list-style-type: none"> ● Organizing various activities with the community. ● Survey on the impact of business operations towards the community.

3.3 Environmental Sustainability Management

3.3.1 Environmental Policies and Practices

Greenhouse Gas Reduction and Resource Management





2022 Goals: Towards Carbon Neutral

2030 Target: Reduce Greenhouse Gas Emissions to Net Zero

2022 Performance :

● Carbon Concentration (Scopes 1 and 2) of 1.16 TonCO₂eq./MB

● Carbon Concentration (Scopes 1 and 2, and 3) of 1.17 TonCO₂eq./MB

At present, climate change is being monitored by all sectors, whether being the government, private, or public sectors. The global community is in joint agreement to limit the global temperature, to rise no higher than 1.5 Celsius, in which Thailand has set a goal of Net Zero Emission of Greenhouse Gases by the year 2065. Specifically, telecommunication services, as well as BitCoin mining, are among the industries that indirectly generate greenhouse gas emissions from large amounts of electricity consumption, as well as disposing of electronic products that directly affect health and environmental well-being. This makes it another important challenge for sustainable development.

The Company is aware of the importance of managing resource, which could potentially exhaust, and the release of pollution into the environment. Therefore, it is committed to showing responsibility in reducing the impacts from business operations, both directly and indirectly. This could be accomplished through wise usage of energy, and continuously improving the efficiency of resource utilization, in order to reduce greenhouse gas emission into the atmosphere, reduce water usage, control the amount of waste that is toxic to health and the environment, as well as to use it for maximum benefits, in order to conduct business operations alongside with the environment in a sustainable manner.

Operational Guidelines:

- **Establish an Environmental Policy** by striving to conduct business responsibly and reduce the environmental impact.
- **Set a goal to reduce greenhouse gas** emissions both directly and indirectly (Scope 1 and 2).
- **Appointment of Carbon Footprint Management Working Group** by being aware on protection of the ecosystem and reduction of global warming.
- **Promote efficiency of energy consumption**, and consumption of renewable energy, through development of new technologies to help reduce energy usage and reduce greenhouse gas emissions.
- **Optimize efficiency of water consumption**, and treat waste water as according to standards.
- **Build relationships with stakeholders** to promote management and creation of environmentally friendly products.

- **Organize a project to develop personnel's potential in realizing their responsibilities towards the environment** through organizing trainings, campaigning and promoting environmental activities, for all executives and employees.
- **Transparently disclose environmental performance information** to the public.

Environmental Policies and Practices

The Company manages its business under the Environmental Sustainability Management Policy. The practices under the policy are in line with relevant laws, rules, and regulations, in order to reduce environmental, community and social impact throughout the value chain. This includes operating as according to the law and regulations of both national and international standards, such as the international standard for environmental management systems, ISO 14001, and the international standard for energy management system, ISO 50001, in order to reflect how the Company is committed to reducing and controlling the impact on the environment. This covers the reduction of greenhouse gas emissions, reduction of energy, water and resource consumption, E-waste management, as well as the continual support towards environmental conservation projects.

Moreover, the Company also promotes a culture for employees to be conscious of energy conservation and value resources during usage, in order to gain maximal benefit and efficiency. It has implemented pollution control measures and environmental mitigation measures to reduce waste emissions and conserve energy, to be in accordance with environmental laws and regulations.

Management in Reducing Greenhouse Gas Problems

The Company highly prioritizes problems of climate change, and therefore, it has the policy to encourage employees in understanding the concept of carbon footprint of the products and the organization. This includes reduction of unnecessary energy consumption, such as saving fuel through control vehicle speed, regular maintenance of vehicles and air conditioning, as well as organizing projects to promote planting trees and restoring forest areas, in order to have biodiversity, which are sources of carbon

absorption. Hence, in 2022 the Company set up an account for the organization’s greenhouse gas emission, for the first time. Both direct and indirect data were collected under Scopes 1, 2, and 3, as well as continuous monitoring, reporting, and verifications by Greenhouse Gas Management Certification Body, Faculty of Energy and Environment, University of Phayao, which led to a plan to reduce greenhouse gas emissions as according to international Standards. As result from the mentioned operations, the Company was certified for being a Carbon Footprint for Organization (CFO), by the Greenhouse Gas Management Organization (TGO).

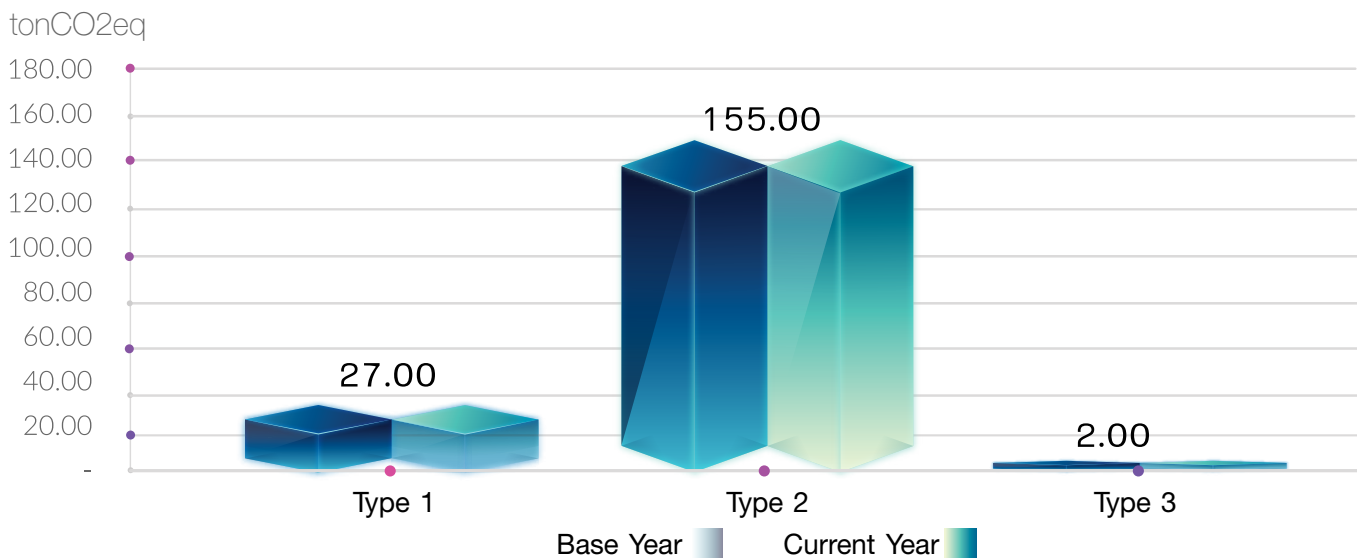
Additionally, the Company also supports the trading of carbon credits to offset the Company’s greenhouse gas emissions, and is determined to portray its intention to become a member of the Thailand Carbon Neutral Network (TCNN), with a common goal of becoming Carbon Neutral by year 2030, and having Net Zero Greenhouse Gas Emissions by year 2050. All of this is in order to cope with the climate changes and to adapt itself in becoming a low-carbon organization for the future.

Performance	Unit	2022	Year 2030 Target
Carbon Intensity (Scope 1 and 2)	TonCO2eq./MB	1.16	Strive to Become Carbon Neutral
Carbon Intensity (Scope 1, 2 and 3)	TonCO2eq./MB	1.17	

Note:

**Currently, it has been verified by an external agency, and is registered with the TGO (only Scopes 1 and 2)

Comparison



Performance in Year 2022*			
Organization's Greenhouse Gas Emissions (TonCO ₂)	Scope 1	Scope 2	Scope 3
		27	155
Includes Scopes 1 and 2**	182		
Includes Scopes 1, 2 and 3	184		

Note:

*Base Year Comparison: January – December 2022

** Currently, it has been verified by an external agency, and is registered with the TGO (only Scopes 1 and 2)

Energy Management

The Company promotes efficient use of energy by campaigning employees to participate in reducing energy consumption during work processes, such as unplugging equipment every time after finished usage, providing maintenance of air conditioning regularly, turning off electricity during lunch breaks, and choosing to use energy-saving devices to save energy. Apart from this, trainings and meetings were held online, as methods to avoid traveling to meetings between service centers, the Provincial Office and Head Office in Nonthaburi.

Energy Management	Performance in Year 2022*			
	Unit	Year 2020	Year 2021	Year 2022
Total Energy Consumption	Kilowatts	162,467	100,156	281,159*
	Baht	921,790	568,395	1,742,070*

Note:

*From October 1, 2022, onwards, the Company started allowing employees to return to work as usual after working from home.

Water Management

The Company realizes the importance of water management, which is one of the most significant resources for consumption. Efficient usage of water reduces resource consumption as well as business costs. It also helps reduce environmental impact surrounding communities. It regularly maintains and inspects the condition of water distribution system within the building, including adjusting water flow rates to suit office buildings, service centers, dining areas of each floor, hand basin and sanitary areas, as well as managing wastewater treatment system. For maximum efficiency of water usage, the Company manages wastewater treatment by reusing treated water and improving the quality of wastewater.

Water Management	Performance in Year 2022*			
	Unit	Year 2020	Year 2021	Year 2022
Water Usage	Cubic Meter	263	261	1,153*
	Baht	5,262	5,220	23,004*

Note:

*From October 1, 2022, onwards, the Company started allowing employees to return to work as usual after working from home.

E-Waste and Waste Management

The Company encourages all employees to have a good consciousness in preserving the environment and being aware of the potential impacts towards business operations and the society. The Company manages its waste sustainably, as according to 3Rs concept, consisting of Reduce, Reuse, and Recycle. In year 2022, the Company implemented programs of resource reduction, waste management, and recycling, such as:

- Purchasing products and services that are environmentally friendly, by selecting products that meet standards, such as buying energy-saving electrical equipment to reduce costs.
- Reuse single-sided paper for maximum benefits, including using the E-slip system instead of printing salary, as a way to reduce paper usage, as well as to reduce transportations in the case of having to send documents to the administrative centers in provinces.

- Campaign to reduce usage of plastic bags, and to promote usage of clothe bags instead.
- Eliminate garbage and waste systematically and timely, which includes sorting garbage and waste before discarding for reuse. For example, the Company campaigns its employees to separate waste before discarding, such as plastic bottles, paper, food scraps, etc.

In addition, the Company is also aware of the impact of many electronic waste products. Since the components of the composite products contain heavy metals that are likely to contaminate the environment and harm the quality of life of consumers, the Company hence gives high importance to e-waste management, through implementing an efficient reusage program for maximal benefits.

E-Waste Reduction Project and Pictures (If Available)

The Company collects unused Routers from users whose contract have expired, and reuses them again by providing services in the form of Lower QoS Packages, and hence, reducing the number of devices that must be disposed of. As for equipment that cannot be reused, they are sent back and sold as scraps to business partners. Year 2022 was the first year that the Company started this project and collected data on the amount of e-waste and copper cables sold back to partners. The Company is committed to reducing wastes that cause pollution, in order to protect the environment sustainably throughout the future.



E-Waste and Waste Management

Selling Scraps Back to Partners	E-Waste	Copper Cable
	Pieces	Meters
Quarter 1/2022	151,647	64,000
Quarter 2/2022	69,079	113,323
Quarter 3/2022	61,838	27,000
Quarter 4/2022	85,613	146,317

3.4 Sustainability Management in the Social Dimension

3.4.1 Social Policy and Guideline

Treating Employees with Fairness and Promoting Progress



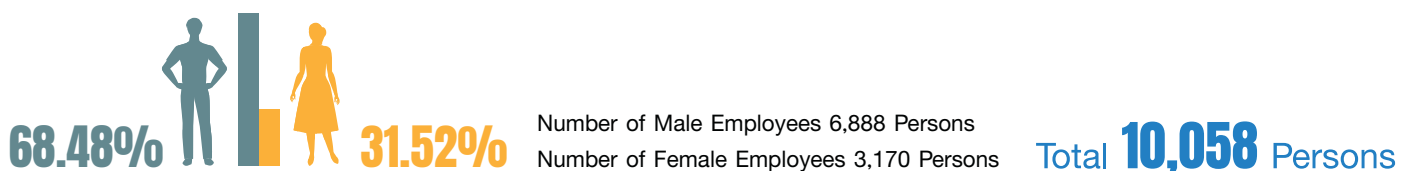
2023 Goal : Number of training hours per person per year = 18 hours

2022 Performance: Employees trained an average of 7 hours per person per year.

Thailand is committed to pushing forward its policies towards the goal of becoming Thailand 4.0, where technology is key towards the full digital transformation of the country. It is inevitable that the use of technology must be integrated into all activities. As a result, the size of the problem regarding readiness of labor skills, especially high-skilled labor, such as IT and engineering, and sufficiency of personnel, has become larger. This has led organizations to face the problem of shortage of skilled workers that match its needs, in which is an obstacle obligating itself for change and for taking leaps and bounds as according to the set goals.

The Company is well aware of the challenges in development of personnel knowledge and expertise. Therefore, it focuses on enhancing skills to be in accordance with the strategies in expanding services towards new businesses, along with strategies to recruit quality personnel, in order to fulfill the readiness of the organization. Furthermore, the Company also focuses on creating career paths, along with promoting well-being, and paying attention to the occupational health of all employees. This is based on respect towards rights, diversity and equal treatment. The Company established a safety and occupational health policy, whereby the Occupational Health and Safety Committee is responsible for ensuring employees operate with the utmost safety.

Men & Women



	Males	Females	
Number of Senior Executives	128	36	
Middle Management	206	139	
Number of Operational Employees	6,554	2,995	
Number of Employees with Disabilities	55	49	

Operational Guidelines:

- Determine strategies for recruiting and developing personnel to be aligned with business direction.
- Provide a variety of online and offline training courses.
- Organize activities to engage employees, in order to cultivate a corporate culture, and pay attention to equal treatment of employees.
- Prepare survey of employee satisfaction to improve human resource operations.
- Set up a labor welfare committee.

Recruitment:

The Company arranges a survey on the sufficiency and needs of personnel in each department, and then uses the survey to plan the appropriate workforce, in order to ensure the organization has personnel with skills that meets work requirements and placing tasks appropriately to the right personnel. This is in accordance to the direction of business strategy, and is sufficient for operations to achieve maximum efficiency. Apart from this, Jasmine Group has also organized the JTS Young Blood Project, and the Cooperative Education Project, as a means to provide students the opportunity for internships and real work experience, allowing for the Company to recruit and get to know personnel better. In 2022 there were 71 students from 31 different institutions participating in the project.



Average cost of recruiting employees as compared to all employees	518.84 Baht
New Hires	15.7%
Internal Transferring	1,044 Persons = 66%

Personnel Development

The Company continues facing challenges in providing courses to develop skills for employees to learn and develop themselves, including for those who conduct work in remote working environments. The Company reinforces necessary skills for online working, important reskills for career growth and for being in alignment with the Company’s strategic direction, along with providing upskill development. Trainings are organized in the form of virtual classes, for employees to be able to participate fully, as if

it were a real classroom training. The Company also provides necessary courses for employees of supervisor level, by focusing on enhancing management skill, marketing planning, team management, as well as having Talents course, promoting competition in usage of new innovations. Emphasis is also placed on providing employees with adaptive skills, flexibility and curiosity, and having an attitude of always being ready to learn new skills, in order to increase competitiveness. There were a

total of 752 people who participated in the Talents Course, in which there were development plan, as well as assessment individual's potential, in order to be promoted to a higher position.

In 2022, the Company provided a total of 194 training courses, divided into 56 virtual class courses, and 138 online courses, of which the employees could learn by themselves through the JAS Online Learning platform. A total of 68,161 hours of training were completed by employees. The Company organized for employees to evaluate their satisfaction towards the courses, including the opportunity to propose courses employees feel interested in learning, so that Human Resources will acknowledge upon it and make further improvements.

Training Program for JAS Group - Talent Development Project

TRAINING

The Company organized Technology Trends Updates Training and Certification Training, in order to increase skills, expertise, and abilities, to guide attitudes into the right direction, and to help perform tasks and obligations, both present and future, to be effective. There are a total of 106 persons in the target group, of which are engineers of managerial level.

Personnel Development 2022	Hours
Total Training Hours	68,161
Average Number of Training Hours per Person	7
By Gender	
• Males	7
• Females	6
By Employee Level	
Senior Management	13
• Males	15
• Females	4
Middle Management	22
• Males	31
• Females	8
Operational Staff	6
• Males	6
• Females	5
Total Budget Used (Baht)	7,904,782
Average total budget per person (Baht)	789

Note: Training data of all executives and employees of the Company and its affiliates in year 2022. There are a total of 10,058 employees, in which the scope of report is based on training data recorded by the central Human Resources into the HR database system.

Caring for Well-Being and Welfare of Employees

The Company pays attention to the well-being of employees to ensure employees have good physical and mental health. The Company respects human rights, and treats employees fairly, without any discrimination, or being gender biased. The Company also prepared a workplace as well as various systems to facilitate work for the 104 disabled employees. The Company has in put into place a Welfare Committee and Labor Union, which consist of employee representatives, and plays an important role in making recommendations to improve the welfare of employees. Moreover, the Company also prepared for welfares such as, life and health insurance benefits for employees, including the establishment of a provident fund to promote employees to save up before retirement. Additionally, the Company also has the “Working from Anywhere”, and the “Flexible Working Hour” policies, in which employees can work anywhere, anytime, and can choose working hours according to suitability to that individual. While the situation of COVID-19 epidemic still severe in 2022, the Company therefore encourages employees to maintain social distancing measures, as well as providing at least 2 doses of vaccines to each employee, in which is closely monitored by Human Resources department.

The Company also developed **JAS Care Application** as a channel for employees to contact and report health problems. In this application, they are also to consult a doctor via VDO Call at any time or anywhere, which is really convenient and safe. Reimbursements for medical expense are deducted through the Company’s Out-Patient-Department (OPD). Meanwhile, the service of delivery of medication to employees’ offices or homes helps companies to take care of employees much more conveniently and quickly. It is another health service that meets the needs of working people in the modern world. This service will be open for usage in the year 2023.

Employee Safety and Occupational Health

The Company has established a safety and occupational health policy, as well as an Occupational Health and Safety Committee to ensure that employees work with the highest safety. It also prepares sufficient safety equipment for operations, as well as monitoring and exchanging for readiness of equipment, in order to be used promptly within that inspection cycle. The Company tracks its operations at least monthly, as well as performing Safety Audit to all departments at least twice a month. The Board of Directors would ten report the results to the Chief Executive Officer (CEO) on a quarterly basis.

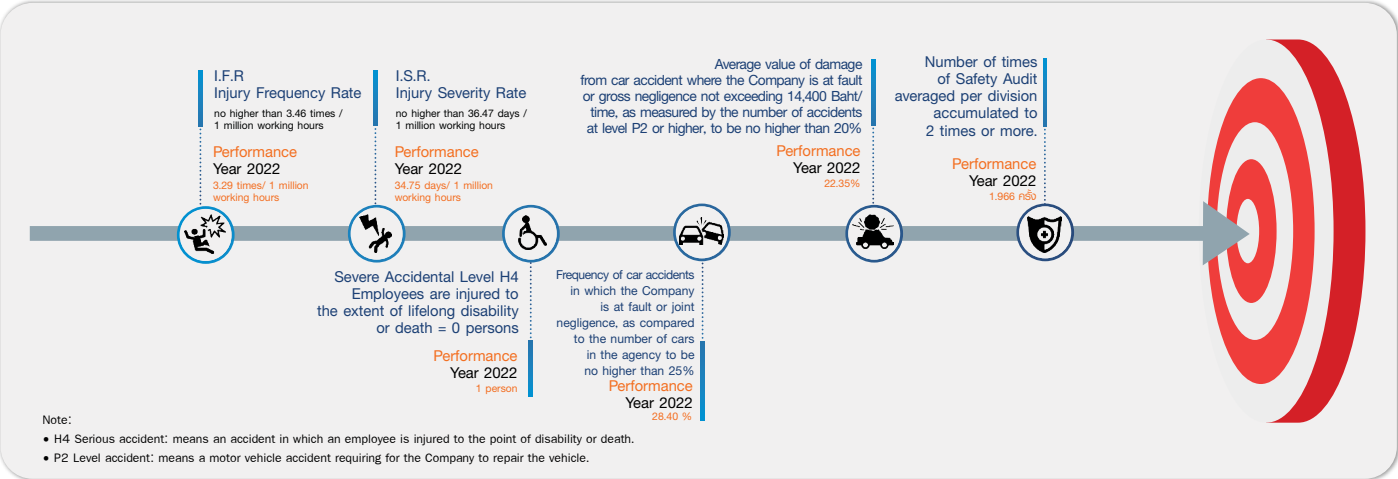
TRAINING

Amount of Safety Training Courses: 2 courses and 45 classes

- 1. Safety in working with electricity and working at heights
- 2. Safety Committee

Number of employees attending the training: 1,122 People

Number of Training Hours: 282 Hours





Organize Safety Day

The Company organizes Safety Day activities on a weekly basis, in order to raise awareness of safety for employees before starting work, and to reduce the risk of accidents from driving. It is also an opportunity to share knowledge and problems encountered during work, as well as suggesting methods to solve problems together. This includes checking the safety of various equipment to be in good working condition and inspecting the condition of vehicle on a daily basis before going to work. It also includes checking the distance according to the specified cycle through the BB CAR vehicle management system. In 2022, 4,163 employees participated in the **Safety Day** activity, representing 100% of all technicians.

Communication Channels for Employees

The Company provides a variety of channels that allow for employees to provide suggestions, report clues, or make complaints. The HR department has an anonymity policy and treats informants fairly.



Creating a good experience for customers



Goal: Customer Satisfaction Score of 100%

Year 2022 Performance: Customer Satisfaction Score of 79%

As a result of COVID-19 virus epidemic, people's lifestyle and behavior have changed significantly. As according to the survey of Internet User's Behavior in Thailand by the Electronic Transactions Development Agency (ETDA), it was found that in 2022, Thai people spent an average of 7 hours and 4 minutes per day accessing the Internet to search for information, watching movies, and listening to music, which portray how using high-speed internet and various Internet TVs has become a part of our daily lives. Nonetheless, even though the demand is increasing, the competition in the telecommunication and information industry remains intense amidst the inflationary state, where customers have started to focus on choosing only quality products, and services with reasonable prices. This challenge has led the Company to drive its business forward by extending services towards base of old customers and deliver value which meets the needs of new customer groups. The Company holds the vision of being the leader in the Telecommunications and Media industry, and therefore is committed to continually develop platforms and solutions that meet the requirements of individual customers and all group. It is also committed to expanding the service network to cover needs in all areas, along with providing Internet TV services under the name "3BB GIGATV", which is a quality TV box for customers to experience world-class entertainment at home.

Operational Guidelines

- Bring forth innovation and modern technology for developing services to create a good experience for customers.
- Deliver products and services that meet standards, such as the Knowledge Management Service of the Call Center 1530, and the Service Standard Manual of the Customer Service Center.
- Train employees prior to operations, in which there is an inspection on every work process, as according to the service standards set by the Company.
- Survey the satisfaction of customers, while using information to improve services.
- Open a variety of channels for receiving complaints and suggestions.

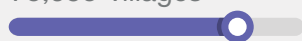
Service Delivery Meeting Needs All in One Place

In 2022, 3BB expanded its scope of high-speed Internet and Internet TV services to cover the whole of Thailand. With an increase by 380,000 service users, as compared to year 2021, it was able to cover a variety of customer groups, such as individual customers, organizations, schools, retail stores, etc. The Company focuses on product design to meet the needs of each customer group at reasonable prices, along with providing efficient after-sales service.

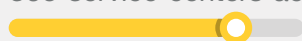
Internet Network covering all 77 provinces



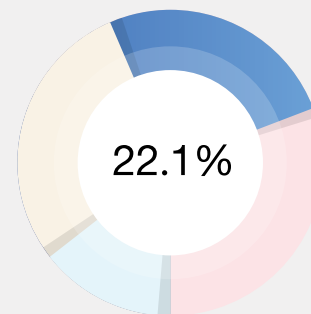
75,086 villages



306 service centers across Thailand



Broadband Internet
business market share of



Internet TV

660,000 users

Home Internet

2.3 million users



Number of Users:
1,975,386 people
 (a **83.50%** increase)

3BB Member Application

The Company launched the 3BB Member Application in 2020, which facilitates customers to be able to study promotions, and other various services, and is available 24/7. In addition, customers can also report a signal outage and pay services securely in real-time through their mobile phone, without having to visit the branch. This reduces the burden of having to travel or having to use paper for issuing payment documents. Moreover, customers can also accumulate Reward Points, in order to redeem various benefits.

Number of Users: 1,975,386 people (a 83.50% increase)

Number of Signal Outage Reports: 228 cases, whereby the Company was able to resolve all reports within the standard time frame set by the Company.

Protection of Customer Privacy

The Company places great importance on the protection of customers' personal information by establishing the Personal Protection Policy, and announcing service terms and conditions to customers before starting to use the service, including disclosures through the website and application. The Company will not use the customer's information beyond the scope of the customer's knowledge and consent. The Company also develops on the security of customer's personal information, to ensure that the information is stored safely, not leaked, or used by criminals. In 2022, the company had zero cases of customer information leak.

Ethical Selection of Movies, Entertainment Media, and Programs

The company realizes that media plays an important role in shaping the behavior of people in society, and hence, it focuses on finding business partners that provide online video streaming services and world-class producers, such as HBO GO, MONOMAX, WETV, Warner Bros, Viacom, to deliver more than 10,000 movies, series and programs, which are quality media meeting the needs of customers of all ages. Additionally, the Company also pays attention to the provision of various copyrighted media, to encourage consumers to have a good entertainment experience, without infringing on intellectual property. The Company has also categorized various media clearly, including identifying programs specifically for children, as well as specifying movie ratings and warnings prior to watching, in order to be in accordance with the law.

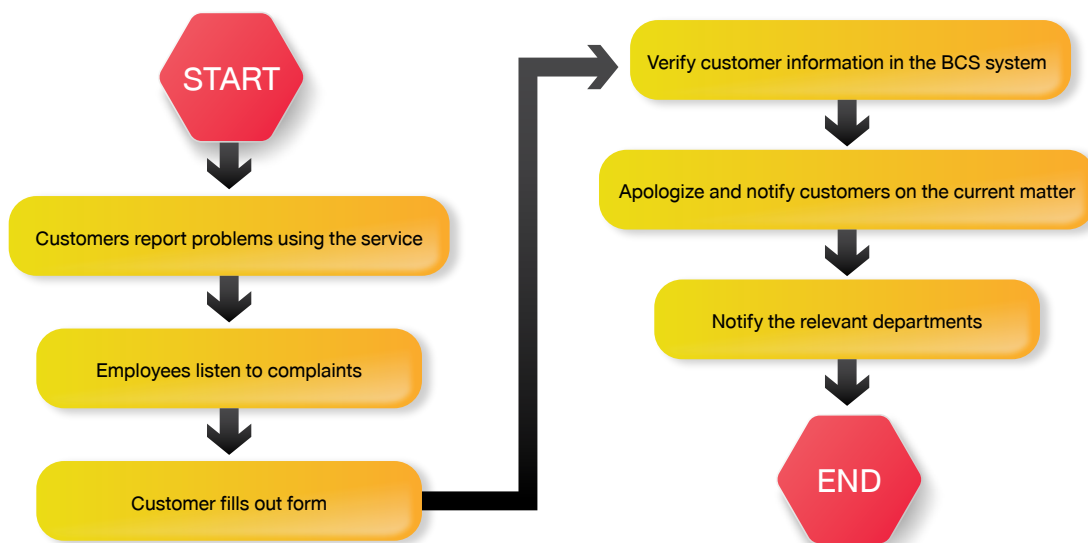
Assessment of Customer Satisfaction

The Company continuously conducts customer satisfaction surveys through its online Satisfaction Assessment System (iCAST), which covers on installation services, changing network services, and troubleshooting solving services. It was found that in 2022, as many as 79% of customers were satisfied with the services, and particularly, the customers were satisfied that the Company was able to fix the problem, while providing on-time, fast and efficient service. The Company has set a Service Level Agreement (SLA) standard for both pre-sales and after-sales services, as well as bringing forth suggestions for improving various processes, and also continuously following up on customer satisfaction assessment results.

Customer Satisfaction Survey Results Channel	
Performance	2022
Service Satisfaction	79%
Fault Remediation	91%
Being On Time	71%

Officials Receiving Complaints and Suggestions

The Company provides a variety of channels for receiving complaints from customers, as well as to facilitate customers, such as the Call Center, e-mail, website, and the 3BB Member Application. The Company has a clear complaint handling process, as well as a clearly defined Service Level Agreement (SLA). Moreover, the Company also summarizes results of corrective actions, and reports them to high-ranking executives on a monthly basis.



Channel	Amount of Complaints / Suggestions (Cases)		
	2020	2021	2022
Call Center 1530	13,936	14,384	10,089
3BB Member Application/Online	139	275	228
Customer Service Center	322	195	106



Target: To create opportunities for internet access, in order to improve quality of life.

Year 2022 Performance: 55 schools were provided installation of Internet access, creating a total of 4,599 schools among the 77 provinces, and 75,086 villages.

Creating Bonds and Developing Together with the Community

Although currently, as many 77.8% of Thai people have access to the Internet, which is higher than the global average of 62.5%, but however, the impact of the COVID-19 epidemic situation was an important catalyst reflecting on the problem of Digital Divide, or the inequality in accessing information and knowledge, especially in schools of remote areas that lack resources for having electronic equipment and high-speed internet. This results in the problem of Learning Loss, in which some students drop out of the education system, leading to quality of life issues, and a lack of human resources with sufficient knowledge and skills, and hence a career which they would be able to support themselves.

The Company, as a leading provider of Broadband Internet and Information Technology, is well aware of its role in using the potential, knowledge, and expertise of the Company in creating a learning society and promoting opportunities to access technology in the digital age, through conducting activities that consist of community participation. This includes listening to opinions from the

community to develop strategies that could help build a strong society, while growing together steadily.

Operational Guidelines

- Set up structures and responsibilities to drive community engagement.
- Define policies and frameworks for community participation.
- Set goals and indicators for success in the implementation of project.
- Carry out community participation activities, and listen to suggestions or comments to improve operations, in order to meet needs.
- Disclose performance information.

In 2022, the Company carried out more than 40 community engagement projects with the value of financial support amounting at 79,017,420.67 Baht, with more than 5,000 employees participating in the activities, counting over 100 hours of participation in social activities, in which were divided into the promotion of a learning society, and the creation of a sharing society.

Proportion of Social Activities



Channels for Receiving Complaints and Suggestions from the Community

Nationwide Customer Service Centers

Call Center 1530

Promoting a Learning Society

The Company is committed to enhancing opportunities to access quality technology, in order to create an Active Learning Society, where everyone can use technology as a tool to instill knowledge, build critical thinking skills, and expand their knowledge on their own at anytime and anywhere, as well as supporting government policies which focus on educational reform, to allow teachers and students living far away to have access to education. In order to reduce the inequality gap, the Company has been implementing the project of **Broadband Internet for free education** for 14 consecutive years. This was accomplished by supporting installation of free internet for schools under the Office of Basic Education Commission (OBEC), so that teachers and students can use high-speed internet for creating teaching materials, as well as using it to search for information at no cost.

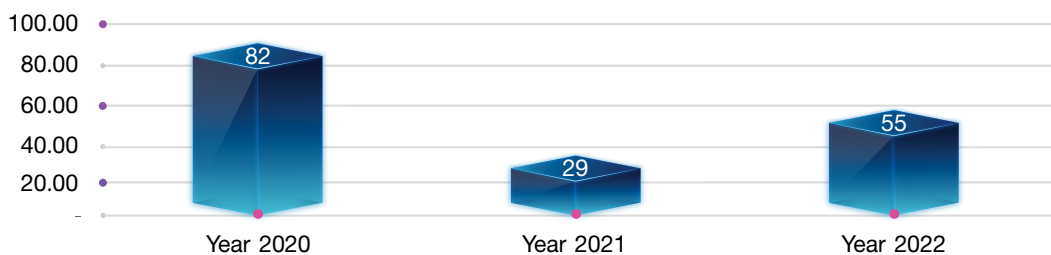


In 2022, 55 schools participated in the project. Budget of 664,000 Baht

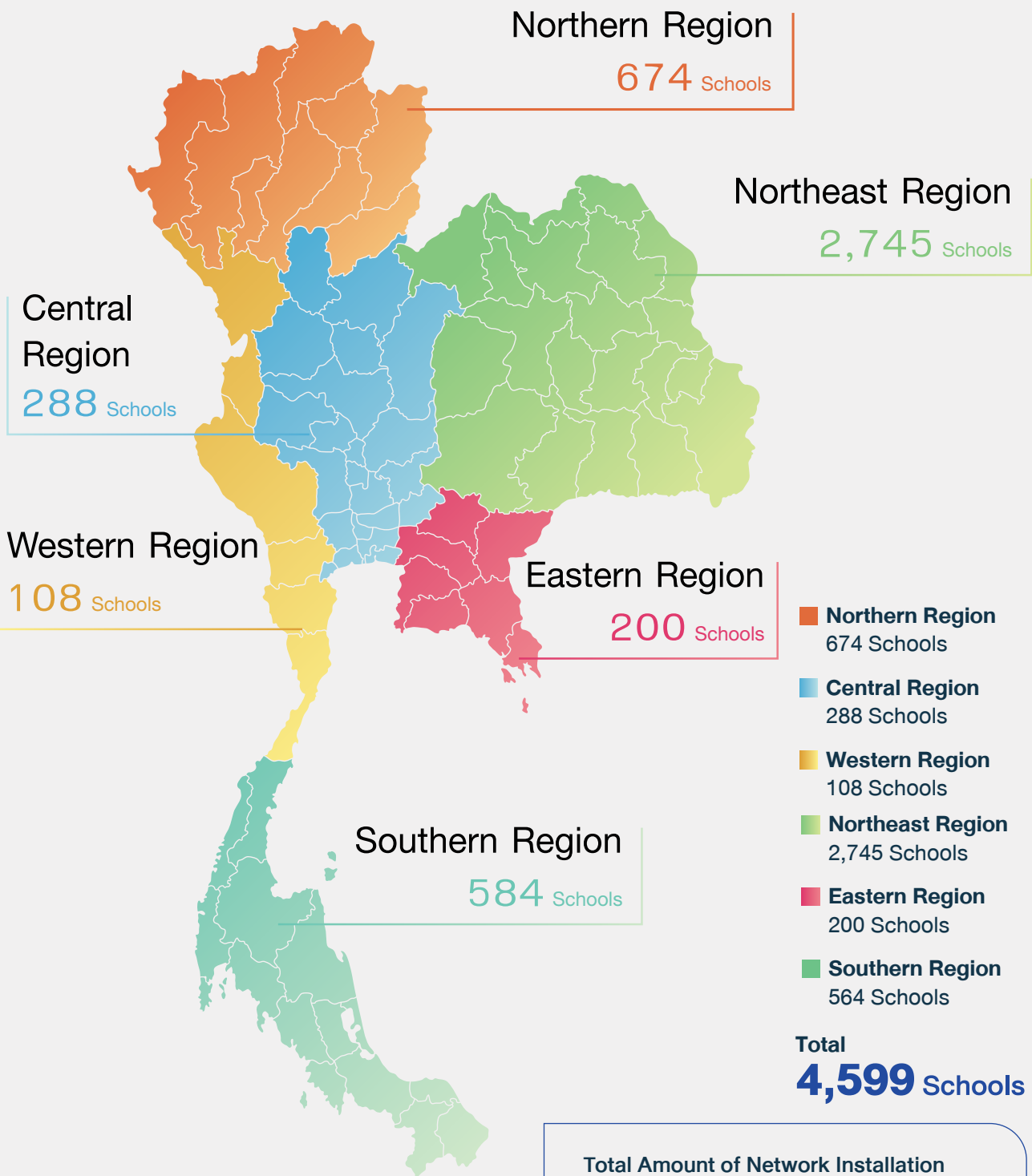
Total of 4,599 Schools
77 Provinces
75,086 Villages

Providing 68,985 teachers and 1,149,750 students with access to educational resources.

Number of Schools



**Year 2020-2021 were years under COVID-19 virus epidemic situation

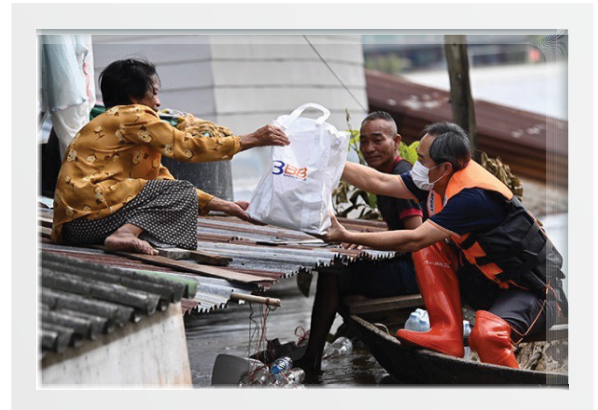


(Information updated as of December 31, 2022)

Creating a Sharing Society

Helping Victims

Jasmine Group believes in creating opportunities for the society to grow together. With the realization that the company can expand its business steadily, it must be based on a strong social foundation. Therefore, the company places importance on social activities, along with providing employees the opportunity to participate in helping the community through donations, and actual field visits, which in addition to providing timely relief of suffering, it also helped build employee engagement in activities, allowing the society to grow together with the organization. In 2022, Thailand faced several flooding problems. The company hence organized activities of Jasmine Group to help flood victims in 10 provinces, consisting of Rayong, Nakhon Ratchasima, Surin, Chaiyaphum, Ubon Ratchathani, Sisaket, Nonthaburi, Chai Nat, Ang Thong, and Phra Nakhon Si Ayutthaya, through donating survival bags, with total budget being over 1,000,000 Baht.





JAS Project: Delivering Calendars and Grants to Support the work of Foundation for the Blind

The Company delivers old desktop calendars that are gathered from the company’s employees, and donates them to the Foundation for the Blind in Thailand, under the Royal Patronage of Her Majesty the Queen, with a donation of 20,000 Baht to the Foundation for the Blind in Thailand under the Royal Patronage of Her Majesty the Queen.

The JAS Project Provides Funding to the Foundation to Provide Opportunities

The Company shares and delivers money to support the foundation to provide opportunities, in the amount of 21,600 Baht to poor children, and youth who lack refuge, orphans, abandoned children, homeless children, and the underprivileged, within the foundation to provide opportunities in Nang Rong District, of Buriram Province.



School Building Construction Project

The Company cooperated with Dr. Phichani Bodharamik Foundation for Children and Seniors to support the construction budget of “Dr. Phichani Bodharamik Foundation for Children and Seniors” for school building at Ban Nong Hin School, Kanchanaburi, and was ready to deliver computer equipment, valuing in the amount of 5,381,918.20 Baht.



Build Customer Engagement and Sharing to Society

The Company also gives customers the opportunity to participate in sharing and creating good deeds, through **the points redemption project, ‘Earn Merit with 3BB’**, which is the 6th consecutive project that the Company has operated. Points are earned by paying service fees, in order to make merit through the 3BB Member Application, by which every 10 points donated equals to 1 Baht redemption. In 2022, there were a total of 152,272 customers donating, totaling to 1,806,346 points, and hence amounting to 1,806,346 Baht, which the Company selected 3 charitable organizations to participate in the project. It consists of the National Institute of Emergency Medicine, the Wildlife Saving Foundation of Thailand, and the project, Live to Smile, of the Children’s Hospital Foundation.

3BB ส่งมอบเงินบริจาคในโครงการ
แลกพอยต์รับบุญ กับ 3BB
ผ่านแอปฯ 3BB Member ปี 65

กว่า 1.8 ล้านบาท

สพด. WARF

3.5 Sustainability Management in Economic Dimension

3.5.1 Economic Policies and Practices Innovation Development



Year 2023 Target: 700,000 users of innovative products

Year 2022 Performance: 660,000 users of innovative products

In the year 2022, the world experienced a recession due to the effects of hyperinflation and the conflict occurring in Ukraine, causing energy costs to rise rapidly around the world, including in Thailand, with rising concerns about global warming and various other pollution, leading to people around the world becoming interested in bringing forth Sustainable Technology. The Company foresees this change and has brought forth advanced technology to serve Solar Cell, with a service model emphasizing quality, while providing options of different add-on services, as well as ongoing customer care, in order to be worthy of being a Sustainable Technology, in which will allow customers to continuously use the service at full efficiency, for a long time to come. It also aims to reduce pollution and reduce expenses for an overall better quality of life. All in all, it would help strengthen the country's economic growth potential in a sustainable manner.

In addition to providing energy services, the Company also foresees technological trends, in which will help customers, partners, and the Company itself to reduce costs, while the quality of service improves. Examples are such as Artificial Intelligence, Blockchain, and Healthcare technologies, in which the Company will develop into products, to reduce operational costs, and improve upon the quality and efficiency of existing products to become more competitive.

This includes marketing in new ways that are more effective and targeted.

The Company also focuses on promoting the creation of a new corporate culture, in order to encourage employees in the Company and partners, including customers, to move in the direction of cooperativeness, as well as to provide all business elements. This also includes communities in which the company has related to, to be able to participate in giving advice or in co-developing new innovations, and

even more so, bringing in new ideas or suggestions to develop with various organizations, which would allow for the release of new products, or even the patenting of IP of the Company that will continue to be the foundation of the Company.

Information and communication technology is an important foundation for driving the economy and society. At present, Broadband Internet has become one of the basic utility services and the demand continues to increase. Hence it has created a change in the behavior of people into a new way of life, or the New Normal. The most popular activity is communicating online, due to measures for employees to work from home, as well as learning online. These were followed by activities such as watching TV shows, watching movies, and listening to music online. Therefore, digital innovations play an immense role in the daily life of people. The development of efficient digital innovations not only opens opportunities to conduct various businesses, but also can help increase the country's economic growth potential, sustainably.

As a leader in the service provision of Broadband Internet and Internet TV, the Company is committed in the development of various products and services, to enhance the quality of life as well as to maintain work/life balance

for consumers. The Company is also focused on further developing digital innovations to adapt to the changing behaviors of current times, as well as to promoting environmentally friendly innovations, because it is aware of the impact, such as release of pollution into the environment, from use of technology in daily life.

Operational Guidelines

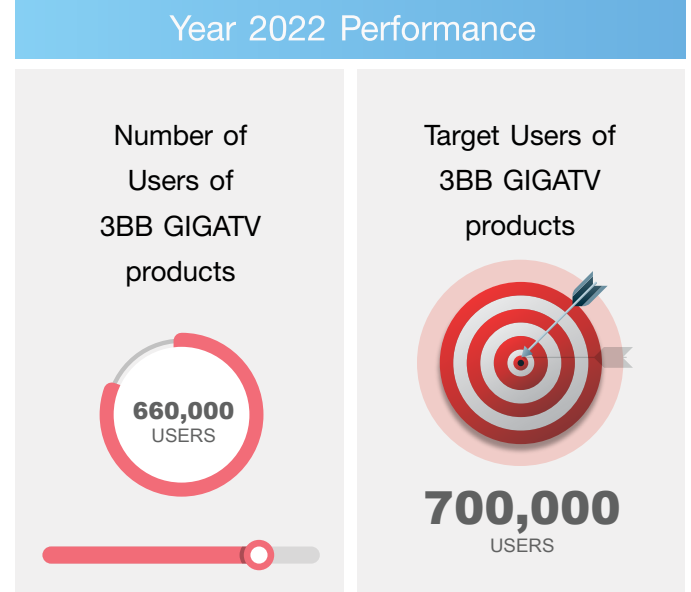
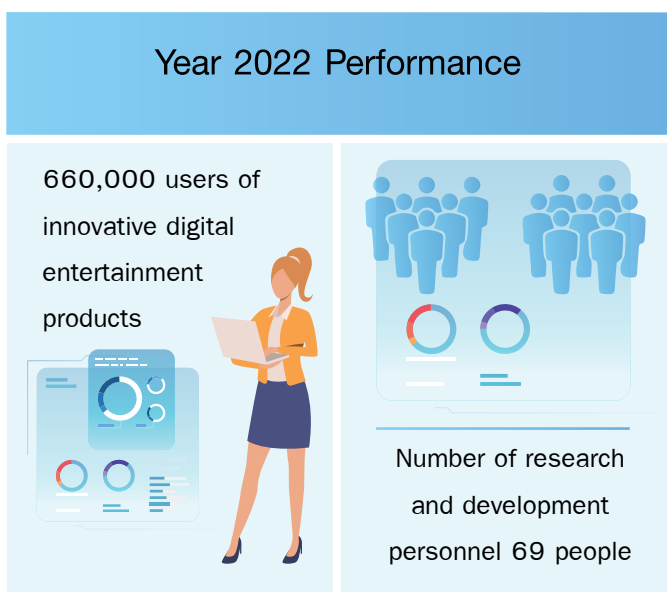
- Focus on developing platforms and solutions to efficiently support the needs of all customer groups.
- Develop innovation in the form of Incremental Innovation, by applying the benefits of existing technologies to maximize efficiency.
- Encourage employees to create new innovations by selection of outstanding projects and applying them to practical applications on a large scale.
- Collaborate with public and private sectors in development of new innovations.
- Set goals and indicators for innovation development.

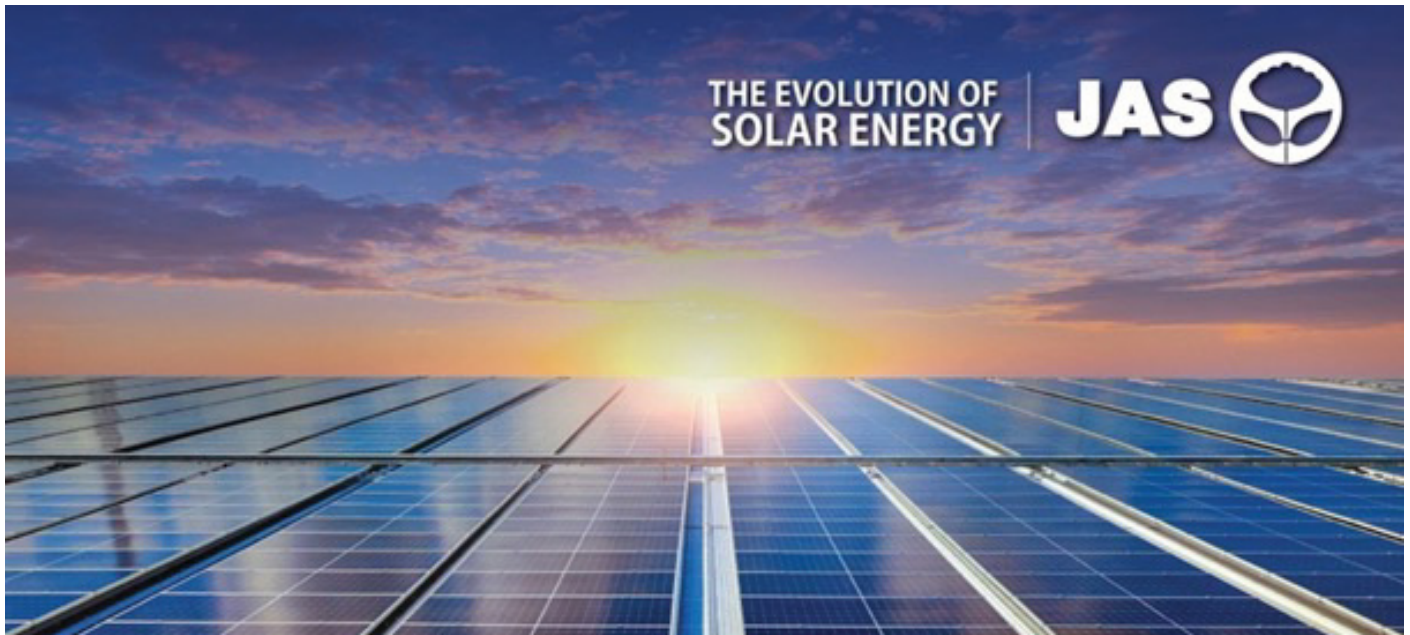
In 2022, the Company developed products and services to meet the needs and lifestyle of modern consumers, who focus on using digital technology in their daily lives, as well as offering environmentally friendly technology for sustainable growth. This year, the Company has improved on the performance of its digital innovative products for entertainment, in which had a large number of consumers being interested in using it, which was around 660,000 consumers. Moreover, the Company also focuses on developing innovations for the environment that emphasize in usage of green energy technology, under the Company’s

clean energy business operation. JAS GREEN is part of this business operation, with its goal being that by year 2023, there will be at least 100 megawatts of consumers receiving services and using such innovations.

Digital Innovation for Entertainment

The Company focuses on developing innovations for Internet TV services, in order to facilitate and create happiness for consumers in the digital age. The innovations aim to be the “Digital Companion” for entertainment viewing, with a detailed design to create uniqueness for the user platform. In this regard, the Company also develops on the efficiency of network and equipment to support stable usage, both through home internet usage and Internet TV usage, until it is able to become a quality TV box under the brand “3BBGIGATV”, which is like bringing entertainment into the house. It can be used seamlessly across multiple devices, can be viewed through all channels, including viewing through TV boxes, websites, and applications on mobile phones, or tablets, and hence, meeting the needs of consumers to be able to view from anywhere, and at any time.





Innovation for the Environment

Due to this age’s digital transformation the Company realizes the impact that is created from mass energy consumption during data management. This causes a rapid depletion in resources available in nature, in which may run out soon in the future. This includes the utilization of various technologies in everyday life that may release pollution into the environment. Therefore, the Company is committed to using green energy, while aiming to utilize technology for improving the environment and reducing the negative impacts on nature in the long run. Solar Cell energy is one of the innovative technologies catching interest from people around the world, with new developments being applied to the technology continuously over time. The highlight of Solar Cell energy is how it can be used to generate electricity without affecting the environment, as it is a clean and renewable natural energy. Also, in 2023, the Company holds the goal of bringing solar cell innovation into business, specifically under the project name, “JAS GREEN”, which aims to install Solar Rooftops for at least 10,000 residential customers and industrial business customers of 50 megawatts, totaling to 100 megawatts.

Year 2023 Target

Number of customers who have installed Solar Rooftop at the household level

10,000

customers

Encourage Creativity in the Organization

The Company is committed to developing people, as it is driven by innovation to become a Digital Workplace. It encourages employees to express creativity, by presenting ideas that help improve business operations efficiently, and that meet the needs of the digital age, and hence a creating a long-term business growth.

Cybersecurity



Year 2022 Target: No cases of data leakage, theft or loss.

Year 2022 Performance: Zero cases of actual data leakage, theft or loss

With the popularity of using technology for communication becoming a part of our everyday, it has resulted in information being exchanged and linked all over the world. This creates a risk from cyber-attacks, and personal data breaches. At present, cyber threats are regarded as a serious problem, as it has a rapidly evolving pattern. Without development towards cybersecurity, data leakage problem occurring to one source could rapidly extend its impact to organizations and stakeholders, whose data networks are connected along the supply chain.

Due to being a business operator who provides Broadband Internet service, as well as complete connectivity solutions, and being an operator in the crypto industry, which is directly related to digital products, the Company is very much aware of risks from cyber-attacks. Therefore, it is committed to developing a strong security system, in order to protect personal information, and prevent cyber threats. This is accomplished by operating as according to the framework of the law, as well as raising security standard levels to be equivalent to international standards.

Operational Guidelines

- Define Personal Information Protection Policy, in order to maintain privacy and create maximum security on the Internet for customers.
- Set goals for safety protection, in which will be completed by the second quarter of 2022.
- Have experts develop and improve information security system to ensure a more robust system.
- Increase personnel capacity to deal with cyber threats effectively, through training and activities to raise awareness.
- Open channels for receiving complaints and suggestion, in the case of privacy violation or loss of data.

Personal Data Protection Policy

The Company recognizes the importance of protecting the information of customers, both in terms of privacy and data security in the online world. Therefore, a personal data protection policy was established, as according to the legal framework of the Personal Data Protection Act, 2019, in which upgrades security management standards to be equivalent to the international standards, such as the ISO 27001 Information Security Management standards. More details can be found in the section. <https://www.jasmine.com/privacy-policy>

Cybersecurity Development

Through the existing problem of privacy violations occurring around the world, and with such information being used to claim wrongful benefits from cybercriminal groups, the Company is aware such risks may create vulnerability towards customers and stakeholders' information. Therefore, the Company regularly monitors the information security system, while increasing blocking measures, whenever abnormal access to the Company's information is found. This is accomplished by applying systems and tools, such as the Vulnerability Assessment (VA) tools and Firewalls. Not only that, but it also hires external experts to audit, in order to increase confidence and further strengthen technology systems supporting the security of personal data.

Personnel Development for Cyber Threat Response

The Company highly recognizes enhancement of knowledge and creating awareness among its personnel on cybersecurity and personal data protection. It aims to develop and increase the capability of employees in the analysis, detection, and response towards cyber threats efficiently, and in a timely manner. In 2022, the Company organized a training course on dealing with cyber threats, with the training consisting of various topics corresponding to employees at each level and position, and thus for each job, there is a form of training available that suits the specific position. A total of 17,763 personnel participated this training.

Personnel Development for Cyber Threat Response



Number	Course	Type	Target Group	Participants
1	Executive Cyber Resilience Program	Public Course	Cyber Security Management / Security Management	1
2	CQI and IRCA Certified ISO 27001:2013 Lead Auditor Training Course	Public Course	Cyber Security Management / Security Management	2
3	Offensive Security Web Application Expert (OSWE) certification	Public Course	Cyber Security Management / Security Management	1
4	Cyber Security : Preliminary 1	E-learning: JAS Online Learning	All Employees	8,911
5	Cyber Security: Preliminary 2	E-learning: JAS Online Learning	All Employees	8,075
6	Cyber Security : For System Administrators and Developers	E-learning: JAS Online Learning	IT/Engineer	773
Total (Persons)				17,763

Receiving Complaints for Violations of Privacy and Data Loss

The company accepts complaints and suggestions through various channels, from both customers, as well as all stakeholders, whether being an individual customer, or a partner, or even government agency. One of the complaint topics covered is privacy violation and data loss. Based on surveillance, and efforts to improve cyber security system in 2022, the Company received 0 cases of complaints of privacy violation. Similarly, there were no real cases of data leakage, theft, or loss found.

Year 2022 Performance

Number of Complaints About Privacy Violations

0

Cases

Number of Cases of Actual Data Leakage, Theft, or Loss

0

Cases

Good Corporate Governance and Risk Management



- Communicate to stakeholders the policy of good corporate governance through various channels of the Company.
- Measures for notifying clues, or for filing complaints on unlawful acts.



Goal: No corruption, or bribery both by employees and by partners or business alliances

Performance Results: Zero cases of corruption or bribery

Through the recovering of economy as the country fully opens itself, and the restructuring of the Company's business operations, it has led to changes as well as challenges in the implementation of corporate governance and risk management. This is in order to ensure good immunity for the Company, along with a strong foundation that is prompt for business growth, and ability to maintain the market share amidst the consolidation of large telecommunication and information service providers. The Company realizes good corporate governance and risk management across all dimensions of sustainability (ESG risks), will help promote the Company's operations to be efficient, transparent, verifiable, in accordance with the international standards and regulations, while bringing forth maximum benefits to all stakeholders, and a good example for other companies both within and outside of the telecommunication and information industry.

Operational Guidelines

- The Audit and Corporate Governance Committee is responsible for overseeing the implementation of corporate governance.
- The Risk Management Committee is responsible for overseeing risk management of the organization.
- Preparation of Good Corporate Governance and Risk Management Policy, which will be reviewed by the Board of Directors on a regular basis, or at least annually.

Good Corporate Governance

With the structure of the Company being a Holding Company, the Board of Directors therefore appoints representatives of the Company with appropriate experience to be the directors, executive, or controlling person of subsidiary and associated companies, in order for management of subsidiaries and associated companies aligns with the group's business policies. The representatives of the subsidiaries report performance of corporate governance on corporate governance and risk management to the Board of Directors on a quarterly basis.

The Company hence established a Corporate Governance Policy and a Code of Conduct under the framework of laws, rules, and regulations of the regulatory agency, in which was disseminated to stakeholders for their general acknowledgment. The policy covers important matters of good corporate governance, including shareholders' rights, equitable treatment of shareholders, role of stake holders, disclosure of information and transparency, and the responsibilities of Board of Directors. In addition, the Company has established the Board of Directors Charter and Sub-Committee Charter, which covers on the structure, roles, duties, and responsibilities, in order to act as a guideline for organization management, leading to confidence that all operations of the Company are based on fairness, while taking into account the best interests of shareholders, as well as all stakeholders.



For the 4th consecutive year of proudly receiving this award

the Company's project of
“Corporate Governance Report of Thai Listed Companies 2022”
 in which was assessed by the Thai Institute of Directors, received a rating of Directors,
 received a rating of **“very good”** (4 stars), during 2019 to 2022



The project “Assessment of the Quality of the Annual General Meeting of Shareholders” from the Thai Investor Association as assigned by the SEC, whereby the Company received a score of 94%.

Anti-Fraud and Corruption

The Audit and Corporate Governance Committee is responsible for determining all forms of anti-corruption policies and guidelines, in order for business operations to follow good practice and to be in accordance with relevant laws, rules and regulations. In this regard, the Company has prepared a policy against fraud and corruption and

announced it to all stakeholders on the Company's website: www.jasmine.com. In 2022, the Company made corrections and improvements to the Anti-Corruption Policy, in the section of definitions of corruption forms, and in the section of practice guidelines for directors, executives, and employees of the Company, including whistle blowing processes, or filing complaints, in order to be a guideline for the Company's personnel or those involved in the Company's operations to study, understand and strictly adhere to.

The Company announced its intention to join the Anti-Corruption Alliance with the Thai Private Sector Collective Action Against Corruption (CAC) on December 2, 2022, and expects to be able to apply for membership certification successfully by June 2023, in order to demonstrate its intention and determination in fighting against all forms of corruption.

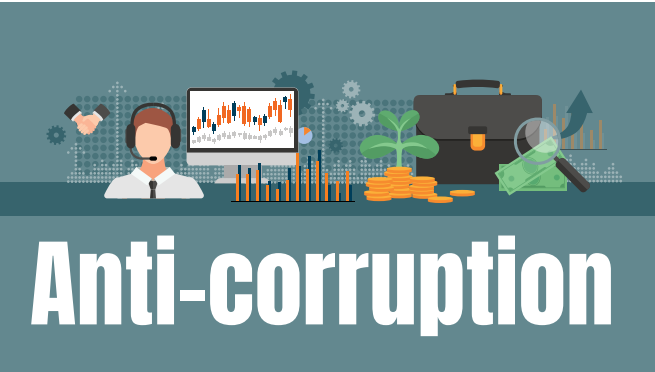
Additionally, the Company has communicated the Anti-Corruption Policy to its business partners, customers, and external agencies, in order to promote transparent and straightforward business operations. A total of 10 business

partners acknowledged the Anti-Corruption Policy and expressed their intention to join forces in combating all forms of corruption. Moreover, the Company has requested for cooperation in refraining from giving gifts to executives or employees of the Company, during festivals or on any other occasions.

The Company has disbursed money to support donations to temples, schools, associations and foundations at a total worth of 548,458 Baht, in which all of it went only towards charity and public benefits. This was done on behalf of the Company and the Company received documentary evidence proving that such activities are in accordance with the donation objectives. Apart from this, the Company is politically neutral, as it has no guidelines which support or help any particular political party, either directly or indirectly.

The Company provides Anti-Corruption training, in which all new employees are required to attend the courses, as well reattending again on an annual basis, to ensure that all employees are informed, understand their roles and responsibilities, and are able to comply with the Company's practices, rules and regulations very well.

In 2022, the Board of Directors and employees of all levels participated in the training as follows:



The graphic features a dark teal background with various icons representing business and ethics: a person with a headset, a bar chart, a briefcase, a magnifying glass, a stack of coins, and a plant. The text 'Anti-corruption' is prominently displayed in white.

Level	Amount (persons)	Percentage
Company Board of Directors	2	28.57
Managers and Employees	61*	82.43*

** Managers and employees of Jasmine International Co., Ltd.

Whistle Blowing and Filing Complaints

The Company has clear measures for directors, executives and employees in notifying clues, or filing complaints, whenever seeing or having evidence, or is suspicious that a particular employee or person acting on behalf of the Company, participated in bribery or corruption, illegal conduction, or violation towards rules, regulations, and policies of the Company, non-compliance with the Company's Code of Conduct. It also provides fairness, and mechanisms to protect whistleblowers or complainants through the following channels:

- Notify clues or complaints to the e-mail of related department
- Notify through the Company website: www.jasmine.com/contact/notifycomplaints
- Inform via Whistleblowing Unit phone number: 02-100-3118-21
- Inform via registered mail sent to: ir-jas@jasmine.com Whistleblowing Unit, Jasmine International Public Company Limited
200, 29th-30th Fl., Moo 4, Chaengwatana Road, Pakkred Sub-district, Pakkred District, Nonthaburi 11120
- Notify to Independent Director at e-mail: vichit_yam@hotmail.com

In 2022, there were a total of 414 filed clues and complaints:

Type	Management Measures			
	Verbal Warning	Written Warning	Employees	Laid Off
Failure to comply with the operating regulations, as specified in the business ethics	199	141	73	1
Discrimination and Harassment	-	-	-	-
Corruption and bribery by employees, partners, or business partners	-	-	-	-

Risk Management

The Board of Directors has appointed the Risk Management Committee to supervise the organization's risk management to be efficient, have good control, and be able to identify and set measures to manage risks adequately. The Company established a Risk Management Policy, including activities determined for controlling, monitoring and analysis of risk factors, which complies with the international standards of The Committee of Sponsoring Organizations of the Treadway Commission (COSO). Meanwhile, the Company takes into account both external and internal factors, including the sustainability dimension, in order to appropriately assess the results of risk management in all aspects, and to be consistent with the Company's policy and strategies. Additionally, the Company also provides training and communicates risk management guidelines through various channels, such as training courses on "Organization Risk Management", to ensure that employees have the knowledge and understanding of risk management and to perform their risk management duties and manage risks at an acceptable level.

The Risk Management Committee will report the operating results to the Board of Directors on a quarterly basis. In addition, the Company has assigned the Audit and Corporate Governance Committee to review the efficiency and appropriateness of risk management process, including risk management policies, work plans, and guidelines that may affect the business operations of the Company. This is processed by meeting with executives who are members of the Risk Management

Committee on a quarterly basis, to ensure that risk management is aligned with the guidelines and strategies, including monitoring on the situations of various internal and external problems.

In 2022, the Company conducted a risk assessment in 5 areas, being Strategic Risk, Corporate Governance Risk, Personnel Risk, Operational Risk, and Financial Risk, along with setting guidelines for risk management, under the Risk Management Framework and Policy. More details can be found in the section: **2.2 Risk Factors for the Company's Business Operations.**

4. Management Discussion and Analysis (MD&A)

Business Overview

The year 2022 witnessed Thailand's reopening of the country post COVID-19 pandemic which had lasted over three years. All sectors have started to be adaptable and gradually returned to pre-pandemic normalcy. School and university students have resumed attending their physical classes, the same as company and shop staff who have come back to their workplaces, although some organizations may continue to adopt a mix of work from home and office. Under such circumstances, certain impacts have been felt by the broadband internet business, which is JAS Group's core business from which the income represents more than 92 percent of its total sales and service income, as the Group has to deal with fiercer competition to retain its customer base as much as possible after the surging demand for broadband internet usage during the severe spreading of the virus has declined to its normal growth. The Company has implemented various strategies to align with the changing consumer lifestyles and rising demand for value added internet services that have pushed up demand for larger bandwidth consumption. A varied range of packages have been rolled out to serve consumers' diverse requirements, such as basic package for saver consumers, premium package for those looking for higher speed of more than 1000 Mbps, or IPTV service package, etc. The number of 3BB subscribers as at the end of 2022 totaled 3.7 million, and if deducted by corporate accounts, WiFi subscribers, barter accounts, internal use accounts, value added service accounts, and non-paying subscribers, the total number of collectible subscribers of 3BB fixed broadband service would be around 2.34 million. While the total number of 3BB subscribers as at year-end 2022 was higher than that of 3.65 million subscribers recorded a year earlier, average revenue per user (ARPU) in 2022 was Bt 587/subscriber/month, a decrease from that of Bt 598/subscriber/month in 2021. Meanwhile, the Company's 3BB GIGATV service has proved to help maintain and expand its customer base to a greater extent instead of retaining customers by only focusing on high-priced packages as earlier targeted. As at the end of 2022, the number of its 3BB GIGATV service subscribers totaled 602,000, a 95 percent surge from 308,000 subscribers recorded as at year-end 2021.

The Group's overall business operation in the past year has been pressured in certain areas, e.g. tougher competition in the broadband internet business and announcement of total divestment of investment in the broadband internet business. Consumers have accordingly been hesitant in choosing the Company's services. It is thus necessary to launch communication programs to restore consumers' confidence. In the meantime, its digital asset & technology solution business on the part of bitcoin mining has drastically been hit by the ongoing interest rate hikes which have dampened capital market and bitcoin prices. In view of this, and despite the good prospects of the Company's telecommunication network service provision where major income comes from domestic and international circuit rental, in 2022, the Company and its subsidiaries posted a net loss of Bt 2,029 million, a 35 percent year-on-year increase in net loss. Earnings before interest, tax, depreciation and amortization (EBITDA) amounted to Bt 12,995 million, a 5 percent year-on-year decline and representing an EBITDA margin of approximately 66 percent, compared to 71 percent in the foregoing year.

On 3 July 2022, the Company's Board meeting resolved to divest the total investment in subsidiary and business related to Triple T Broadband Plc. (TTTBB) together with investment units in Jasmine Broadband Internet Infrastructure Fund (JASIF or the Fund) to Advance Wireless Network Co., Ltd. (AWN), and approval of which was requested from and accordingly given by the Extraordinary General Meeting of Shareholders No. 1/2022 on 23 September 2022. JAS Group will still manage the broadband internet business until the completion of such divestment of investment and investment units expected within the first half of 2023. The proceeds from such divestment transaction are expected to be used for investment in new businesses, such as clean energy, digital healthcare and hygiene, and technology of the future, etc., study and preparation of which is underway. In this regard, clean energy business is anticipated to commence operation in early 2023.

For 2023, the Company will focus on boosting its income from its core business like broadband internet business and strengthening of other businesses of the Group so that it would be well positioned to embrace any emerging changes upon the completion of the divestment transaction. The IPTV service under the 3BB GIGATV business will be carried out under additional collaboration for extension of content service to cover customers of AWN or affiliated companies. The Company will also explore fresh opportunities for new businesses that would help diversify its income generation sources looking forward and try to cut down energy cost of bitcoin mining business to the lowest possible.

The Company has all along realized the importance of environmental, social and governance (ESG) factors and integrated them into its business operation. Its investment in any new business has also taken into account its alignment with the ESG concepts, such as investment in clean energy business. The Company's policies, targets and performance in this issue are as detailed in Sub-Section 3: Driving Business for Sustainability.

Operating Performance

In 2022, the Company and its subsidiaries posted an operating loss of Bt 1,669 million which, when including the adjustment of the provision for rental assurance of the optic fiber cable (OFC) of JASIF due to the change in the assumption of the discount rate and the rental rate increase of Bt 17 million net, foreign exchange (FX) gain of the Company and its subsidiaries of Bt 24 million and deferred tax of the Company and its subsidiaries of Bt 94 million, and deducted by the expected credit losses (allowance for doubtful debts of its subsidiaries) of Bt 494 million, resulted in a net loss of Bt 2,029 million of the Company and its subsidiaries as recorded in the consolidated financial statements for the year 2022, a 35 percent increase from the net loss of Bt 1,501 million posted a year earlier.

Unit: Bt million

Item	2022	2021	% Change
Operating profit	(1,669)	(1,376)	(21)
FX gain (loss)	24	(229)	110
Adjustment of the provision for rental assurance of the OFC of the Fund for the rental rate increase and the discount rate	17	526	(97)
Expected credit losses	(494)	(287)	72
Deferred tax	94	(135)	170
Net profit (loss)	(2,029)	(1,501)	(35)
Earnings (Loss) per share (Bt)	(0.24)	(0.17)	(41)

Performance breakdown by business unit

Performance breakdown by business unit in 2022 and 2021 is as follows:

Unit: Bt million

Business segment	Total revenue		
	2022	2021	% Change
Broadband and Internet TV Business Segment	18,520	19,072	(3)
Digital Asset & Technology Solution Business Segment	1,565	1,136	38
Other businesses	220	163	35
Total	20,305	20,371	(0.3)

Revenue

In 2022, the Company and its subsidiaries recorded total revenue of Bt 20,305 million, comprising sales and service income of Bt 19,700 million, revenue from the reversal of the liability of TTTBB of Bt 81 million, FX gain of Bt 24 million, and other income of Bt 500 million (including the revenue from the management and maintenance of the OFC of Bt 413 million and net gain from the change in the fair value of investment properties of subsidiaries of Bt 33 million), compared to the total revenue in 2021 of Bt 20,371 million, which was a 0.3 percent year-on-year decline. Details are as follows:

Unit: Bt million

Item	2022	2021	% Change
Sales and service income	19,700	19,301	2
Revenue from reversal of liability	81	609	(87)
FX gain	24	-	100
Other income	500	461	8
Total	20,305	20,371	(0.3)

Sales and service income

In 2022, the Company and its subsidiaries' sales and service income amounted to Bt 19,700 million, a 2 percent growth compared to Bt. 19,301 million recorded in 2021. In view of sales and service income structure, the largest proportion or 92 percent came from the Broadband and Internet TV Business Segment and the remaining of 8 percent from the Digital Asset & Technology Solution Business Segment. The sales and service income breakdown by business unit is as follows:

Unit: Bt million			
Business segment	2022	2021	% Change
Broadband and Internet TV Business Segment	18,028	18,033	(0.03)
Digital Asset & Technology Solution Business Segment	1,533	1,131	36
Other businesses	139	137	1
Total	19,700	19,301	2

In 2022, the Broadband and Internet TV Business Segment generated income of Bt 18,028 million, compared to Bt 18,033 million in 2021, representing a 0.03 percent decrease mainly as a result of the intensifying competition in the broadband business. Broadband service providers have strived to implement such a strategy as offering lower-priced basic packages to attract customers, hence impact on TTTBB's revenue and ARPU.

As at year-end 2022, 3BB had a total of 3.7 million subscribers. If deducted by corporate accounts, WiFi subscribers, barter accounts, internal use accounts, value added service accounts, and non-paying subscribers, the total number of collectible subscribers of 3BB fixed broadband service would be around 2.34 million. Meanwhile, the number of its 3BB GIGATV service subscribers totaled 602,000. ARPU in 2022 was Bt 587/subscriber/month.

As regards Digital Asset & Technology Solution Business Segment, in 2022, sales and service income amounted to Bt 1,533 million, a year-on-year growth of Bt 1,131 million or 36 percent, mainly attributable to the increase in revenue from domestic circuit rental service and international personal circuit rental service. Meanwhile, revenue from bitcoin mining business in 2022 generated a total of 179.32695842 bitcoins, increasing by 160.14319404 bitcoins or 1,669.57 percent.

In 2022, other businesses contributed to the sales and service income in the amount of Bt 139 million, going up by 1 percent compared to that of Bt 137 million a year earlier, as a result of the increase in income from office space rental business.

Expenses

In 2022, the Company and its subsidiaries' total expenses amounted to Bt 19,599 million, rising by 5 percent from Bt 18,691 million recorded in the foregoing year. Details are as follows:

Unit: Bt million

Item	2022	2021	% Change
Operating expenses:			
- Cost of sales and services	14,606	13,483	8
- Selling and servicing expenses	976	1,082	(10)
- Administrative expenses	3,523	3,610	(2)
Total operating expenses	19,105	18,175	5
Expected credit losses	494	287	72
FX loss	-	229	(100)
Total expenses	19,599	18,691	5

Operating expenses in 2022 amounted to Bt 19,105 million, increasing by Bt 930 million or 5 percent compared to Bt 18,175 million recorded in 2021, mainly comprising:

1) Cost of sales and services in 2022 amounting to Bt 14,606 million, a Bt 1,123 million or 8 percent increase from that in the previous year of Bt 13,483 million, mainly stemming from:

1.1) Optic fiber cable (OFC) rental fee under the agreement entered into with JASIF totaling Bt 5,389 million (net of depreciation – right-of-use assets, and the OFC rental fee under the rental assurance agreement (20 percent of the OFC) after deduction of amortization of the provision for rental assurance and adjustment of the provision for rental assurance of the OFC of JASIF due to the change in the assumption of the discount rate and the rental rate increase), which went up by Bt 654 million compared to that in 2021.

The effectiveness of the TFRS 16: Leases since 2020 has had impacts on recording of the cost of the OFC rental fee under the main lease agreement (80 percent of the OFC). In 2022, TTTBB recorded depreciation – right-of-use assets of Bt 4,989 million and interest expense of Bt 3,239 million, totaling Bt 8,228 million, compared to the previously recorded as the OFC rental fee under cost of sales and services in the amount of Bt 7,125 million.

1.2) Other costs of sales and services amounting to Bt 9,217 million, which increased by Bt 469 million from those a year earlier mainly due to the increase in the cost of bitcoin mining business, connection circuit rental and content cost, as well as the estimated damages from TTTBB's dispute case with a state enterprise in the amount of Bt 231 million.

Gross profit in 2022 was posted at Bt 5,095 million, a 12 percent year-on-year decline, with gross margin of 26 percent compared to that of 30 percent year-on-year.

2) Selling and servicing expenses and administrative expenses in 2022 totaling Bt 4,499 million, which was a Bt 193 million or 4 percent decline from those of Bt 4,692 million in 2021 attributable to higher efficiency in the Group's cost control and management mainly with decrease in employee benefit expenses, advertising, public relations and sales promotion expenses, and office expenses.

In 2022, the subsidiaries recorded expected credit losses (allowance for doubtful accounts and bad debts) amounting to Bt 494 million, which was a Bt 207 million increase year-on-year, according to TTTBB's policy on provisioning by overdue debt aging profile.

Financial costs

In 2022, the Company and its subsidiaries recorded financial costs of Bt 3,890 million, of which Bt 3,239 million was interest expense from recording of lease liabilities under the main lease agreement (80 percent of the OFC) to comply with the TFRS 16, which if deducted, the Company and its subsidiaries' financial costs in 2022 would be Bt 651 million.

Net profit (loss)

In 2022, the Company and its subsidiaries reported a net loss of Bt 2,029 million, compared to that of Bt 1,501 million in 2021, with the Broadband and Internet TV Business Segment recording a net loss of Bt 2,514 million, the Digital Asset & Technology Solution Business Segment a net loss of Bt 107 million, and other businesses a net profit of Bt 593 million.

Financial Position

Assets

As at 31 December 2022, the Company and its subsidiaries had total assets of Bt 88,120 million, declining by 8 percent compared to Bt 95,822 million recorded a year earlier, comprising:

รายการ	31 December 2022		31 December 2021	
	Bt million	% of total assets	Bt million	% of total assets
Current assets	5,041	6	6,068	6
Property, plant & equipment-net and investment properties	32,538	37	34,005	35
Right-of-use assets	45,884	52	50,488	53
Other non-current assets	4,658	5	5,261	5

Current assets as at the end of 2022 amounted to Bt 5,041 million, a Bt 1,027 million decline year-on-year, mainly due to the decrease in cash and cash deposits with banks as a result of the Group's investment in equipment, repayment of short-term loans and short-term loans from banks, accounts payable for equipment, long-term loans from banks, accounts payable from compromise agreements, payment of principal portion of lease liabilities, and interest expense.

Trade and other receivables amounting to Bt 3,286 million included Bt 2,518 million receivables for service under the co-investor agreement made between JSTC and NT (formerly TOT) where there is a revenue sharing dispute at present. In May 2019, JSTC received the arbitration award from the Arbitration Institute, which ordered TOT to make overdue debt payment together with interest totaling Bt 3,395 million, and interest payment at the rate of 7.5 percent per annum until full settlement is made, and ordered JSTC to pay for damages to TOT amounting to Bt 16 million together with interest at the rate of 7.5 percent per annum until full settlement is made. TOT subsequently filed a petition to revoke the arbitration award from the Arbitration Institute with the Central Administrative Court, and later on 15 February 2023, the Central Administrative Court later upheld the judgment of the Arbitration Institute ordering NT to make overdue debt payment together with interest totaling Bt 3,395 million, and interest payment on the principal of Bt 2,518 million counting from the dispute lodging date (22 December 2014) until full payment is made. The period for appeal against such Central Administrative Court judgment has not yet ended, and so far no party hereto has lodged an appeal with the Supreme Administrative Court.

For the remaining receivables which were mostly trade accounts receivable of TTTBB, the Company set aside allowance for doubtful debts based on the ageing profile of overdue receivables.

Property, plant & equipment–net, and investment properties were recorded at Bt 32,538 million in 2022, representing 37 percent of total assets and declining by Bt 1,467 million or 4 percent year–on–year due to depreciation of building and equipment from the decrease in investment during the year.

Right-of-use assets

With the enforcement of the TFRS 16: Leases since 2020, a lessee is required to recognize assets and liabilities under every lease with a contractual term of over 12 months in the financial statements. The Company and its subsidiaries, as lessees, have entered into lease agreements of assets for use in their business operations. They are thus required to record right–of–use assets under leases.

As at the end of 2022, right–of–use assets amounted to Bt 45,884 million (including right–of–use assets under the lease agreement of JASIF in compliance with the TFRS 16 in the amount of Bt 45,321 million).

Other non–current assets as at the end of 2022 were recorded at Bt 4,658 million (including investment of Bt 3,074 million in JASIF), decreasing by Bt 603 million year–on–year.

Liabilities

As at 31 December 2022, the Company and its subsidiaries recorded total liabilities of Bt 84,539 million, a 6 percent decline from Bt 90,221 million a year earlier, as detailed below:

รายการ	31 December 2022		31 December 2021	
	Bt million	% of total liabilities	Bt million	% of total liabilities
Current liabilities (excluding current portions of long-term liabilities, lease liabilities and provision for rental assurance)	5,888	7	6,709	7
Long term liabilities	9,048	11	7,694	9
Lease liabilities	49,051	58	52,496	58
Provision for rental assurance	17,616	21	20,359	23
Other non-current liabilities	2,936	3	2,963	3
Total liabilities	84,539	100	90,221	100

Current liabilities (excluding current portions of long–term liabilities, lease liabilities and provision for rental assurance) as at the end of 2022 were Bt 5,888 million, declining by Bt 821 million year–on–year, mainly due to the decrease in short–term loans from banks upon refinancing of subsidiaries by entering into long–term loan agreements with banks.

Long–term liabilities (including long–term loans from banks, long–term debentures, accounts payable from compromise agreements and accounts payable for equipment) as at the end of 2022 amounted to Bt 9,048 million, going up by Bt 1,354 million year–on–year, mainly as a result of the Company and its subsidiaries' long–term loans from financial institutions and long–term debentures. In 2022, JTS issued secured, unsubordinated and callable name–registered long–term debentures with debenture–holders' representative worth Bt 740.20 million.

Lease liabilities as at year-end 2022 were Bt 49,051 million, of which Bt 48,815 million was lease liabilities in compliance with the TFRS 16 mainly comprising lease liabilities recorded under the main lease agreement (80 percent of the OFC) of TTTBB.

Provision for rental assurance (set up for liabilities according to the conditions stated in the rental assurance agreement with JASIF for 20 percent of the total OFC) as at the end of 2022 was Bt 17,616 million, a year-on-year decline of Bt 2,743 million.

Other non-current liabilities as at the end of 2022 amounted to Bt 2,936 million, declining by Bt 27 million compared to that a year earlier mainly due to the decrease in deposits received from customers.

Shareholders' equity

As at the end of 2022, the Company and its subsidiaries recorded shareholders' equity of Bt 3,581 million, dropping by Bt 2,019 million year-on-year due to the increase in retained loss.

Capital structure

As at 31 December 2022, the Company and its subsidiaries recorded total liabilities of Bt 84,539 million, equivalent to 96 percent of total assets, and shareholders' equity of Bt 3,581 million, equivalent to 4 percent of total assets. Debt to equity ratio was 23.6 times.

However, the above liabilities included lease liabilities recorded in compliance with the TFRS 16 and liabilities relating to JASIF. If excluding such item in the calculation, debt to equity ratio would be 4.74 times.

Cash flows

As at 31 December 2022, the Company and its subsidiaries had cash and cash equivalent of Bt 723 million, dropping by Bt 830 million year-on-year. Net cash generated and used can be summarized as follows:

Net cash from operating activities	10,273	Bt million
Net cash used in investing activities	(1,762)	Bt million
Net cash used in financing activities	<u>(9,341)</u>	Bt million
Net decrease in cash and cash equivalents	<u><u>(830)</u></u>	Bt million

- Net cash from operating activities amounted to Bt 10,273 million, a Bt 2,003 million year-on-year increase.
- Net cash used in investing activities amounted to Bt 1,762 million, going up by Bt 676 million year-on-year. In 2022, the Group recorded investment in equipment, computer software and investment properties (CAPEX) in the amount of Bt 2,566 million.
- Net cash used in financing activities amounted to Bt 9,341 million, rising by Bt 2,583 million year-on-year. In 2022, the Group made repayment of short-term loans and short-term loans from the banks, accounts payable for equipment, long-term loans from banks, accounts payable from compromise agreements, payment of principal portion of lease liabilities, and interest expense in the total amount of Bt 10,066 million.

Summary of the Consolidated Financial Statements and Significant Financial Ratio

The summary of the statement of financial position, statement of comprehensive income and statement of cash flows during the past 3 years, ended 31 December is presented in the table below.

Item	Consolidated Financial Statements					
	2022		2021		2020 (Restated)	
	Million Baht	%	Million Baht	%	Million Baht	%
Statement of Financial Position						
Assets						
Current assets						
Cash and cash equivalents	723	0.82	1,553	1.62	1,127	1.12
Restricted bank deposits redeemable within one year	14	0.02	16	0.02	17	0.02
Trade and other receivables	3,286	3.73	3,397	3.55	3,199	3.17
Account receivable - Revenue department	440	0.50	435	0.45	259	0.26
Undue input tax	321	0.36	353	0.37	313	0.31
Prepaid expenses	219	0.25	270	0.28	319	0.32
Other current assets	37	0.04	45	0.05	26	0.03
Total current assets	5,040	5.72	6,069	6.34	5,260	5.23
Non-current assets						
Restricted banks deposits	309	0.35	261	0.27	245	0.24
Investments in associates	3,074	3.49	3,351	3.50	3,669	3.65
Advance payments for assets	161	0.18	115	0.12	-	-
Investment properties	1,298	1.47	1,259	1.31	1,236	1.23
Property, plant and equipment	31,240	35.45	32,746	34.17	33,205	33.02
Right-of-use assets	45,884	52.07	50,488	52.69	55,694	55.37
Deferred tax assets	98	0.11	19	0.02	-	-
Withholding tax deducted at source	119	0.14	349	0.36	411	0.41
Other non-current assets	897	1.02	1,165	1.22	853	0.85
Total non-current assets	83,080	94.28	89,753	93.66	95,313	94.77
Total assets	88,120	100.00	95,822	100.00	100,573	100.00

Item	Consolidated Financial Statements					
	2022		2021		2020 (Restated)	
	Million Baht	%	Million Baht	%	Million Baht	%
Statement of Financial Position (Continued)						
Liabilities and shareholders' equity						
Current liabilities						
Short-term loans from banks	1,213	1.38	2,682	2.80	1,768	1.76
Trade and other payables	3,565	4.05	2,792	2.91	3,274	3.26
Short-term loans	-	-	60	0.06	300	0.30
Current portion of long-term liabilities	12,861	14.59	9,333	9.74	11,715	11.64
Withholding tax payable	27	0.03	22	0.02	219	0.22
Income tax payable	39	0.04	49	0.05	47	0.05
Undue output tax	398	0.45	354	0.37	337	0.34
Advances received from customers	626	0.71	710	0.74	681	0.67
Other current liabilities	20	0.02	41	0.04	24	0.02
Total current liabilities	18,749	21.27	16,043	16.73	18,365	18.26
Non-current liabilities						
Trade and other payables-net of current portion	216	0.25	-	-	-	-
Long-term liabilities – net of current portion	62,856	71.33	71,215	74.32	73,984	73.56
Provision for long-term employee benefits	816	0.93	840	0.88	828	0.82
Provision for entry fee for laying the optical fiber cables	785	0.89	792	0.83	792	0.79
Provision for expenses and rental fee relating to subduct for optic fiber cables relocation	347	0.39	347	0.36	347	0.35
Deferred tax liabilities	558	0.63	573	0.60	95	0.09
Deposits received from customers	192	0.22	390	0.41	427	0.42
Other non-current liabilities	20	0.02	21	0.02	48	0.05
Total non-current liabilities	65,790	74.66	74,178	77.42	76,521	76.08
Total liabilities	84,539	95.93	90,221	94.15	94,886	94.34
Shareholders' equity						
Issued and fully paid-up						
8,592,816,071 Ordinary Shares of Bt 0.5 each	4,296	4.49	4,296	4.27	4,083	5.84
Premium on ordinary shares	9,029	10.25	9,029	9.42	9,029	8.98
Retained earnings						
Appropriated						
Statutory reserve – the Company	485	0.55	485	0.51	485	0.48
Statutory reserve – subsidiaries	1,105	1.25	1,105	1.15	1,105	1.10
Unappropriated (deficit)	(14,014)	(15.90)	(12,030)	(12.55)	(10,529)	(10.47)
Other components of shareholders' equity	1,551	1.76	1,551	1.62	259	0.26
Equity attributable to owners of the Company	2,452	2.79	4,437	4.63	4,645	4.62
Non-controlling interests of the subsidiaries	1,129	1.28	1,164	1.22	1,042	1.04
Total shareholders' equity	3,581	4.07	5,601	5.85	5,687	5.66
Total liabilities and shareholders' equity	88,120	100.00	95,822	100.00	100,573	100.00

Item	Consolidated Financial Statements					
	2022		2021		2020 (Restated)	
	Million Baht	%	Million Baht	%	Million Baht	%
Statement of comprehensive income						
Profit or loss :						
Revenues						
Sales and service income	19,700	97.02	19,301	94.75	18,795	97.74
Other income						
Management and maintenance income of the OFCs	413	2.03	401	1.97	390	2.03
Revenue from reversal of liability	81	0.40	609	2.98	-	-
Gains on exchange	24	0.12	-	-	-	-
Others	87	0.43	60	0.30	45	0.23
Total other income	605	2.98	1,070	5.25	435	2.26
Total revenues	20,305	100.00	20,371	100.00	19,230	100.00
Expenses						
Cost of sales and services	14,606	71.93	13,483	66.18	13,461	70.00
Selling and servicing expenses	976	4.81	1,082	5.31	1,301	6.77
Administrative expenses	3,523	17.35	3,610	17.72	4,018	20.89
Expected credit losses	494	2.43	287	1.41	300	1.56
Loss on litigation from reversal of judgment by the Supreme Court	-	-	-	-	10	0.05
Losses on exchange	-	-	229	1.13	83	0.43
Total expenses	19,599	96.52	18,691	91.75	19,173	99.70
Operating profit	706	3.48	1,680	8.25	57	0.30
Share of profit from investments in associates	1,152	5.67	1,126	5.53	1,100	5.72
Finance income	5	0.03	2	0.01	32	0.17
Finance cost	(3,890)	(19.16)	(3,929)	(19.29)	(4,156)	(21.61)
Profit (loss) before income tax	(2,027)	(9.98)	(1,121)	(5.50)	(2,967)	(15.42)
Income tax	(36)	(0.18)	(263)	(1.29)	(155)	(0.81)
Profit (loss) for the year	(2,063)	(10.16)	(1,384)	(6.79)	(3,122)	(16.23)
Other comprehensive income :						
Other comprehensive income not to be reclassified to profit or loss in subsequent periods						
Actuarial gains (losses)	44	0.22	-	-	7	0.03
Changes in revaluation of assets	-	-	1,622	7.96	-	-
Income tax effect	-	-	(324)	(1.59)	-	-
Other comprehensive income for the year	44	0.22	1,298	6.37	7	0.03
Total comprehensive income for the year	(2,019)	(9.94)	(86)	(0.42)	(3,116)	(16.20)

Item	Consolidated Financial Statements					
	2022		2021		2020 (Restated)	
	Million Baht	%	Million Baht	%	Million Baht	%
Statement of comprehensive income (Continued)						
Profit (loss) attributable to:						
Equity holders of the Company	(2,029)	(9.99)	(1,501)	(7.37)	(3,134)	(16.30)
Non-controlling interests of the subsidiaries	(35)	(0.17)	117	0.58	12	0.07
	(2,063)	(10.16)	(1,384)	(6.79)	(3,122)	(16.23)
Total comprehensive income attributable to:						
Equity holders of the Company	(1,984)	(9.77)	(208)	(1.02)	(3,125)	(16.25)
Non-controlling interests of the subsidiaries	(35)	(0.17)	122	0.60	9	0.05
	(2,019)	(9.94)	(86)	(0.42)	(3,116)	(16.20)
Earnings (loss) per share						
Basic earnings (loss) per share						
Profit (loss) attributable to equity holders of the Company	(0.24)		(0.17)		(0.37)	
Statement of cash flows						
Net cash flows from operating activities	10,273		8,270		2,211	
Net cash flows from (used in) investing activities	(1,762)		(1,086)		(416)	
Net cash flows used in financing activities	(9,341)		(6,758)		(23,676)	
Net increase (decrease) in cash and cash equivalents	(830)		426		(21,881)	
Cash and cash equivalents at beginning of year	1,553		1,127		23,008	
Cash and cash equivalents at end of year	723		1,553		1,127	

Financial Ratio

Significant financial ratios that reflect financial position and operating results of major businesses of the Company and the subsidiaries during the past 3 years, ended 31 December are presented in the table below.

Item	Consolidated Financial Statements			
	2022	2021	2020 (Restated)	
Liquidity Ratio				
Current Ratio	(Time)	0.27	0.38	0.29
Quick Ratio	(Time)	0.21	0.31	0.24
Cash Ratio	(Time)	0.59	0.48	0.12
Receivable Turnover	(Time)	5.90	5.85	5.90
Average Collection Period	(Day)	61	62	61
Inventory Turnover	(Time)	-	-	-
Holding Period	(Day)	-	-	-
Payable Turnover	(Time)	4.44	4.45	4.65
Average Payment Period	(Day)	81	81	77
Cash Cycle	(Day)	(20)	(19)	(16)
Profitability Ratio				
Gross Profit Margin	%	25.86	30.14	28.38
Operating Profit Margin	%	(8.47)	(7.13)	(14.61)
Other Profit Margin	%	2.98	5.25	2.26
Cash to Profitability Ratio	%	(615.63)	(601.10)	(80.54)
Net Profit Margin	%	(9.99)	(7.37)	(16.30)
Return on Equity	%	(44.19)	(26.59)	(23.33)
Efficiency Ratio				
Return on Assets	%	(2.21)	(1.53)	(3.68)
Return on Fixed Assets	%	10.58	10.84	11.92
Total Assets Turnover	(Time)	0.22	0.21	0.23
Financial Policy Ratio				
Debt to Equity Ratio	(Time)	23.60	16.11	16.69
Interest Coverage Ratio	(Time)	2.65	2.17	0.57
Leverage Ratio (Cash Basis)	(Time)	0.80	0.72	0.08
% Growth Ratio				
Total Assets	%	(8.04)	(4.72)	43.93
Total Liabilities	%	(6.30)	(4.92)	94.88
Sales and Service Income	%	2.07	2.69	3.41
Operating Expenses	%	(4.10)	(11.78)	5.27
Net Profit (Loss)	%	(35.18)	52.12	(143.14)

5. General Information and Other Material Information

5.1 General Information

Information of the References

- Registrar : Thailand Securities Depository Co.,Ltd.
No. 93, Ratchadaphisek Road,
Khwaeng Dindaeng, Dindaeng District,
Bangkok 10400
Tel. (66) 0 2009 9000
Fax (66) 0 2009-94766
- Auditor : EY Office Limited
No.193/136-137, 33rd Floor, Lake Rajada Office Complex,
New Rajadapisek Road, Bangkok 10110
Tel. (66) 0 2264 0777 and (66) 0 2661 9190
Fax (66) 0 2264 0789-90 and (66) 0 2661 9192
- Legal Advisor : Weerawong, Chinnavat & Partners Ltd.
22nd Floor, Mercury Tower, 540 Ploenchit Road, Khwaeng
Lumpini, Pathumwan District, Bangkok 10330
Tel. (66) 0 2264 8000
Fax (66) 0 2657 2222

5.2 Other Significant Information

- None -

5.3 Legal Disputes

On 17 September 2002, the Central Bankruptcy Court ordered the Company to undergo the business rehabilitation and later, on 7 August 2003, the Court ordered the approval of the business rehabilitation plan of the Company. Following the Court's approval, the Company had complied with all the requirements in the plan. As a result, the Court issued an order to terminate the Company's business rehabilitation on 14 September 2006. However, certain foreign creditors of the Company lodged objections to the Central Bankruptcy Court's approval of the business rehabilitation plan of the Company with the Supreme Court. Subsequently, on 19 August 2013, the Company acknowledged the Supreme Court's ruling, not approving the business rehabilitation plan of the Company (the "Business Rehabilitation Plan") and cancelling the business rehabilitation order. That ruling overturned the ruling of the Central Bankruptcy Court, dated 7 August 2003. The Company subsequently asked its legal advisor, Weerawong, Chinnavat & Peangpanor Limited (the "Legal Advisor"), to provide a legal opinion on the consequences of the Supreme Court ruling for the Company.

The Legal Advisor had reviewed the Supreme Court's ruling, the Central Bankruptcy Court's ruling, the Business Rehabilitation Plan and other documents submitted to it by the Company, regarding the amounts of debt, various methods of debt repayment, and the value of shares and other assets, transferred to the creditors in accordance with the Business Rehabilitation Plan. Furthermore, the Legal Advisor attended several meetings with the relevant officers of the Company to gather additional facts. The Legal Advisor provided the Company with its legal opinion on 30 October 2013, concluding that the Supreme Court's ruling rendered the Business Rehabilitation Plan, along with the official receiver's orders, regarding debt repayments, voided for both the creditors and the Company. Thus, the creditors' claims against the Company, as a debtor, will revert to their former conditions prior to 17 September 2002, the date on which the Court ordered the Company to undergo the business rehabilitation. However, since the creditors' debts were repaid through various methods in accordance with the Business Rehabilitation Plan – such as in cash, by transferring shares or other assets, and by converting debts into equity, the Legal Advisor, after reviewing the applicable laws and assessing the current value of the assets, opined that the creditors, whose debts arose before the date on which the court issued the order for the Company to undergo the business rehabilitation, will be entitled to make claims against the Company for additional repayments of their debts, calculated as of the date on which the legal opinion was issued, in an aggregate amount of not exceeding Bt 1,343 mn.

The Legal Advisor further opined that as a long time had passed, whether and to what extent the Company will be required to repay any debt to a particular creditor will depend on whether such creditor will make a claim against the Company and whether it can prove to the extent that the Company owes the amount claimed to it. If there is a dispute between them on any issue, the matter will have to be resolved further in the court.

In August, 2014, five creditors filed lawsuits, petitioning the Central Intellectual Property and International Trade Court (the "Central Intellectual Property Court") to order the Company to make debt repayments under loan agreements, guarantee agreements and rehabilitation agreements, totaling Bt 526 mn, USD 25 mn and JPY 1,736 mn as a consequence of the Supreme Court's ruling not approving the business rehabilitation plan of the Company and cancelling the business rehabilitation order as detailed above.

Subsequently, on 30 May 2018, the Central Intellectual Property Court issued judgment on the case between the Company and a creditor that filed the lawsuits, ordering the Company to make debt payments of approximately Bt 418 mn (comprising the principal of Bt 235 mn and the interest of Bt 183 mn). The Central Intellectual Property Court ordered that the Company make debt repayment, totaling approximately JPY 1,049 mn together with interest in accordance with the conditions stipulated in the judgment (the interest TIBOR interest rate plus 1.5 percent per annum, the deferred interest TIBOR interest plus 1.0 percent per annum and default interest TIBOR interest rate plus 2.0, plus 1.5 per annum), starting from the date following the filing of the case until the full payment is made. Subsequently, the Company filed an appeal on 14 September 2018. Later, on 19 March 2020, the Company entered into compromise agreement with this creditor. Finally, on 29 June 2020, the Central Intellectual Property Court read the judgment of the Court of Appeal that affirmed the judgment of the Central Intellectual Property Court. The case was finalized.

On 21 June 2018, the Central Intellectual Property Court issued a judgment on the case between the Company and another creditor that filed the lawsuits, requesting the Company to make debt payment, totaling approximately Bt 108 mn (comprising the principal of Bt 57 mn and the interest of Bt 51 mn), ordering the Company to make debts payment, totaling approximately USD 2 mn net with the value of assets and cash received in accordance with

the rehabilitation plan of JIOC and the Company, totaling approximately Bt 28 mn ; therefore, the remaining debts to be paid totaled approximately Bt 28 mn together with the interest due under the lawsuit (LIBOR interest rate plus 4.0 percent per annum), starting from 15 September 2003 until the full payment is made. Subsequently, on 19 October 2018, the Company filed an appeal to the Court of Appeal for Specialized Cases. Later, on 18 May 2020, the Company entered into compromise agreement with the creditor. Finally, on 7 September 2020, the Central Intellectual Property Court read the judgment of the Court of Appeal that affirmed its judgment. The case was finalized.

On 18 October 2018, the Central Intellectual Property Court issued a judgment on the case between the Company and another creditor that filed the lawsuit, requesting the Company to pay debts, totaling approximately JPY 1,211 mn and USD 4 mn., together with the interest of 7.5 percent per annum of the principal of approximately JPY 993.79 mn and USD 3.048 mn , respectively, starting from the date following the filing of the case until the full payment is made. Later, on 13 January 2020, the Company entered into compromise agreement with the creditor. Finally, on 21 July 2020, the Central Intellectual Property Court read the judgment of the Court of Appeal that affirmed its judgment. The case was; therefore, finalized.

On 17 December 2018, the Central Intellectual Property Court issued a judgment on the case between the Company and another creditor that filed the lawsuit, requesting the Company to make debt payment, totaling approximately USD 13 mn and JPY 524 mn, ordering the Company to pay debts A) totaling approximately USD 10 mn net with the value of assets and cash received in accordance with the rehabilitation plan of JIOC and the Company, totaling approximately Bt 151 mn with the interest LIBOR interest rate plus 4.0 percent per annum, starting from 18 September 2002 to 31 December 2003 and the interest LIBOR interest rate plus 4.5 percent per annum, maximum interest rate up to 7.5 percent per annum, starting from 1 January 2004, until the full payment is made; B) totaling approximately JPY 461 mn net with the value of assets and cash received in accordance with the rehabilitation plan of JIOC and the Company, totaling approximately Bt 55 mn with the interest TIBOR interest rate plus 4.0 percent per annum, starting from 18 September 2002 to 31 December 2003 and the interest TIBOR interest rate plus 4.5 percent per annum, maximum interest rate up to 7.5 percent per annum, starting from 1 January 2004, until the full payment is made. On 11 December 2019, the Company entered into a compromise agreement with the creditor. Finally, on 20 July 2020, the Central Intellectual Property Court read the judgment of the Court of Appeal and granted approval. The case was finalized.

On 13 March 2019, the Company entered into a compromise agreement with another creditor that filed a lawsuit, requesting the Company to make debt payment, totaling approximately Bt 240 mn (comprising the principal of Bt 115 mn and the interest of Bt 125 mn). The Company was demanded to pay the interest, totaling approximately USD 6 mn. The upfront payment of Bt 14 million is to be paid within 2 July 2019, and the remaining amount is to be paid in 6 installments on a semi-annual basis with the interest rate of 5 percent per annum, starting from 2 July 2019 until a full payment is made. The debt should be settled within 1 August 2022. The case was finalized.

According to the compromise agreements the Company entered into with its 5 creditors, the Company shall have to pay the principal and the interest, totaling approximately Bt 347 mn, USD 26 mn and JPY 2,207 mn, together with the interests in accordance with the agreements until full payment is made. Full payment is to be made in installments, within 20 July 2025 in accordance with the conditions stipulated in the agreements.

Summary of Legal Disputes of the Subsidiaries

1. TTTBB

In December 2010, TT&T had filed a statement of claim to the Thai Arbitration Institute, demanding TTTBB for the payment of approximately Bt 1,496 mn, plus the interest at a rate of 7.5 percent per annum, until the full amount is settled. Subsequently, TTTBB filed an objection and a counterclaim for damages suffered and penalty, amounting to Bt 3,477 mn. Later, on 29 July 2014, the arbitration tribunal unanimously agreed that TT&T was in breach of the agreement, and the Chairman of the arbitration tribunal rendered the award, stating that the compensation and penalty which TT&T shall be liable to TTTBB, and the outstanding network rental service fee to be paid by TTTBB shall be set off against each other and extinguished, while the other claims shall be dismissed.

On 12 November 2014, TT&T filed a petition with the Civil Court, seeking to annul the Thai Arbitration Institute's order. Then, the Civil Court proposed to the President of the Supreme Court for the consideration on the jurisdiction. The President of the Supreme Court opined that the case was not under the jurisdiction of the Bankruptcy Court. Subsequently, on 29 November 2016, the Official Receiver relevant to the bankruptcy case of TT&T filed an appeal with the Civil Court, requesting not to conduct the case and dispose of the case from the directory, and the Civil Court ordered to dispose the case.

In July 2010, TT&T requested the Official Receiver in business rehabilitation case to place a notice, demanding TTTBB to make payment for all the debts incurred prior to the date of the Central Bankruptcy Court's approval of TT&T's undergoing of the business rehabilitation, amounting to approximately Bt 90 mn and the outstanding network rental service fee, amounting to approximately Bt 646 mn. Later, the Official Receiver in the bankruptcy case of TT&T submitted a letter, dated 9 August 2016, to TTTBB, notifying TTTBB to pay TT&T the outstanding debts of approximately Bt 1,157 mn, which arose from the same obligation for which the notice from the Official Receiver in the business rehabilitation case of TT&T sent to TTTBB in 2010. The Official Receiver explained that the investigation under the business rehabilitation was superseded when the debtor was in receivership and the investigation will be reconsidered under the Bankruptcy law which nearly 90 percent of the claim was leased line service payable which TTTBB paid to TT&T through the offset debt payable and the assignment of promissory notes in 2009. The remaining balance is not equal to the liabilities that TTTBB recorded in the accounts. Subsequently, the Official Receiver in the bankruptcy case of TT&T submitted a confirmation letter, dated 7 December 2021 to TTTBB, notifying TTTBB to pay TT&T the outstanding debts as per stated in the letter of the Official Receiver, dated 9 August 2016, in the amount of Bt 1,152 mn together with the interest of 7.5 percent per annum of the principal of Bt 723 mn, from 16 March 2016 to 10 April 2021; and 5 percent per annum from 11 April 2021 until the full payment is settled. Later, on 15 August 2022, TTTBB filed a petition to object the said confirmation letter to the Central Bankruptcy Court. The case is currently under the consideration of the Court.

As at 31 December 2022, TTTBB had commercial disputes with a state enterprise and has been sued for damages of approximately Bt 193 mn. (as at 31 December 2021 : Bt 443 mn). At present, the cases are under consideration of the Court. The Group's management believes that the disputes will not have a significant impact on the Group's financial statements.

2. Ji-NET

Ji-NET received a letter, dated 13 December 2010 from the Official Receiver in the business rehabilitation case of TT&T, ordering it to pay TT&T leased line costs payable for the period from March 2005 to March 2008, amounting to Bt 20 mn, with interest from the due date until full payment is made. Ji-NET objected to the order with the Central Bankruptcy Court. Subsequently, on 20 October 2015, the Central Bankruptcy Court issued a judgment affirming the order of the Official Receiver. Ji-NET filed an appeal against the order of the Central Bankruptcy Court with the Supreme Court. On 6 November 2018, the Supreme Court read the judgment, rejecting Ji-NET's appeal.

On 7 September 2016, the Official Receiver in TT&T bankruptcy case sent a letter, requesting Ji-NET to pay TT&T leased line costs, amounting to Bt 27.76 mn which arose from the same obligation for which the notice from the Official Receiver in the business rehabilitation case of TT&T sent to Ji-NET as mentioned above. Later, the Official Receiver in TT&T bankruptcy case ordered Ji-NET to pay debts. Ji-NET submitted notices, rejecting the order of the Official Receiver with the Central Bankruptcy Court. Subsequently, on 8 October 2020, the Central Bankruptcy Court issued an order, dismissing Ji-NET's complaint. Ji-NET did not file an appeal. The case was finalized.

3. SHW

SHW received a letter, dated 8 November 2010 from the Official Receiver in the business rehabilitation case of TT&T, ordering it to pay TT&T leased line costs payable for the period from July 2006 to April 2008, amounting to Bt 24 mn, with interest of Bt 5 mn, calculated until 31 March 2010, and additional interest from the due date until full payment is made. Subsequently, the Official Receiver ordered SHW to pay the leased line costs payable to TT&T. SHW filed a complaint with the Central Bankruptcy Court, alleging that the Official Receiver had illegally served a letter on SHW. The Court subsequently issued an order, dismissing SHW's complaint and SHW filed an appeal against the Central Bankruptcy Court with the Supreme Court. On 3 October 2017, the Central Bankruptcy Court read the judgment of the Supreme Court, which affirmed the judgment of the Central Bankruptcy Court.

On 7 September 2016, the Official Receiver in TT&T bankruptcy case sent a letter, requesting SHW to pay TT&T leased line costs, amounting to Bt 39.37 mn, which arose from the same obligation for which the notice from the Official Receiver in the business rehabilitation case of TT&T sent to SHW as stated above. Subsequently, the Official Receiver in TT&T bankruptcy case issued an order to collect debts from SHW, following TT&T rehabilitation case. SHW; therefore, submitted notices, objecting the order of the Official Receiver to the Central Bankruptcy Court. Later, on 19 August 2020, the Central Bankruptcy Court issued an order, dismissing SHW's complaint. SHW; then, filed an appeal to the Court of Appeal for Specialize Cases. On 17 February 2021, the Central Bankruptcy Court read the order of the Court of Appeal for Specialized Cases that rejected SHW's appeal.

4. ACU

In June 2014, TT&T, through PCL Planner Co., Ltd.—rehabilitation plan administrator of TT&T, filed a lawsuit against ACU in a civil case, with the Nonthaburi Provincial Court, petitioning the Court to order ACU to transfer approximately 868 million shares in TTTBB to the shareholders of TT&T or the successors, as stipulated in the memorandum of understanding. Furthermore, for the same case, TT&T also submitted a petition, requesting for an interlocutory injunction order, prohibiting ACU from distributing, transferring, pledging or creating any encumbrance over the assets of TTTBB. In this same petition, TT&T also requested the Court to enjoin ACU—as a shareholder of TTTBB—from resolving any issue in connection with the distribution, transfer or creation of any encumbrance over the assets of TTTBB. On 9 September 2014, the Court dismissed TT&T's petition for the interlocutory injunction order. The Company's legal advisors were of the opinion that the Memorandum of Understanding (the MOU), regarding the subscription for new shares of TTTBB, dated 13 September 2006 had already been invalid since 19 June 2008 as stated in the MOU. On 15 September 2015, the Nonthaburi Provincial Court issued the judgment to dismiss the case. Subsequently, TT&T lodged a notice of appeal. On 31 August 2016, the Nonthaburi Provincial Court read the judgment of the Court of Appeal that affirmed the Nonthaburi Provincial Court's judgment. The case was finalized.

In July 2014, 3 individuals who were the employees of TT&T filed a lawsuit against ACU with the Nonthaburi Municipal Court, requesting ACU to transfer the newly-issued and/or the existing shares of TTTBB held by ACU, totaling 94,237 shares. Subsequently, on 12 December 2014, the 3 plaintiffs filed a petition, requesting the Court to temporary dispose the case as the plaintiffs wished to wait for the result of another case that TT&T filed against ACU with the Nonthaburi Provincial Court, requesting ACU to transfer TTTBB shares to TT&T's shareholders as stipulated in the MOU. The Nonthaburi Municipal Court ordered the temporary disposal of the case. Later, on 18 January 2018, the 3 plaintiffs filed an appeal to withdraw the case. The Nonthaburi

Municipal Court approved the appeal and disposed the case from the directory.

On 25 September 2014, ACU filed a lawsuit against TT&T and related individuals and juristic persons, a total of 13 persons, with the Nonthaburi Provincial Court, claiming damages in the amount of Bt 6,350 mn on the grounds that the 13 defendants jointly committed a wrongful act against ACU by intentionally filing the lawsuit and the petition for an interlocutory injunction order while the establishment of the Jasmine Broadband Internet Infrastructure Fund was in process, which has caused damage to ACU. On 18 January 2018, ACU filed a petition, withdrawing the claim against 3 individuals. The petition was later on, approved by the Nonthaburi Provincial Court. At present, the case is still being considered by the Nonthaburi Provincial Court.

On 7 August 2019, four individuals filed a lawsuit against ACU with the Nonthaburi Provincial Court, claiming that ACU has not complied with the Memorandum of Understanding, regarding the exercise of the right to purchase ordinary shares of TTTBB and requested ACU to return the 5,868,073 newly issued registered ordinary shares of TTTBB to the four plaintiffs. If ACU is unable to return the shares to the four plaintiffs, ACU shall pay the compensation together with interest, including the previous dividend that the plaintiffs should receive, together totaling approximately Bt 29 mn. At present, the case is being considered by the Nonthaburi Provincial Court.

On 3 December 2019, ACU filed a lawsuit against 4 individuals with the Civil Court, claiming damages in the amount of Bt 305 mn on the grounds that the 4 defendants jointly committed a wrongful act by filing a lawsuit against ACU in bad faith, which has caused damage to ACU. Subsequently, on 14 June 2022, the Civil Court read the judgment to dismiss the case. ACU; then, filed an appeal against the judgment of the Civil Court on 26 August 2022. The case is currently being considered by the Court of Appeal.

On 14 December 2020, 4 individuals filed a lawsuit against ACU with the Civil Court, claiming damages in the amount of BT 8 mn on the ground that ACU committed a wrongful act by filing a lawsuit against the 4 individuals to the Civil Court in bad faith. Subsequently, on 14 September 2022, the Civil Court read the judgment dismissal of the case. The 4 individuals then filed an appeal against the judgment of the Civil Court on 6 January 2023. The case is currently being considered by the Court of Appeal.

On 29 July 2021, six individuals filed a lawsuit against ACU with the Civil Court. They claimed that ACU has not complied with the Memorandum of Understanding, regarding the exercise of the right to purchase ordinary shares of TTTBB and requested ACU to pay compensation, totaling approximately Bt 13.9 mn. At present, the case is being considered by the Civil Court.

On 23 August 2021, two individuals filed a lawsuit against ACU with the Nonthaburi Provincial Court. They claimed that ACU has not complied with the Memorandum of Understanding, regarding the exercise of the right to purchase ordinary shares of TTTBB and requested ACU to pay compensation, totaling approximately Bt 17.6 mn. At present, the case is being considered by the Nonthaburi Provincial Court.

On 23 August 2021, four individuals filed a lawsuit against ACU with the Nonthaburi Provincial Court, claiming that ACU has not complied with the Memorandum of Understanding, regarding the exercise of the right to purchase ordinary shares of TTTBB and requested ACU to pay compensation, totaling approximately Bt 8.9 mn. At present, the case is being considered by the Nonthaburi Provincial Court.

For the cases that the individuals who are the shareholders of TT&T have jointly filed 4 lawsuits against ACU, claiming that ACU has not complied with the Memorandum of Understanding, regarding the exercise of the right to purchase ordinary shares of TTTBB, the plaintiffs in those cases have also filed petitions for class action proceedings. The courts in those 4 cases have already dismissed the petitions. The plaintiffs then appeal to the Court of Appeal. Furthermore, the Court of Appeal has already issued a judgment affirming the dismissal for 1 of the 4 cases. At present, the rest of petitions and the cases are under the court's consideration.

5. JSTC and TLDT

On 22 December 2014, JSTC submitted the dispute in connection with a co-investor agreement on the building of the submarine optical fiber cable to the Arbitration Institute, Office of Dispute Resolution, Office of the Judiciary, asking TOT to pay revenue sharing, totaling Bt 3,395 mn.

On 19 August 2016, TOT submitted a dispute proposal to the Arbitration Institute, asking JSTC to return excess revenue sharing, received based on the co-investor agreement and to pay opportunity costs, together amounting to approximately Bt 9,931 mn.

In May 2019, JSTC received the Arbitration Award from the Arbitration Institute, which ordered TOT to make full payment of debt, amounting to Bt 2,518 mn, plus interest, amounting to Bt 877 mn (at a rate of 7.5 percent per annum until the date the dispute was submitted), totaling approximately Bt 3,395 mn, plus interest at a rate of 7.5 percent per annum until full payment is made. The award also ordered JSTC to pay damages, amounting to Bt 16 mn to TOT, together with interest at a rate of 7.5 percent per annum until full payment is made. On 26 July 2019, TOT filed a petition to revoke the Arbitration Award from the Arbitration Institute with the Central Administrative Court. Subsequently, on 15 February 2023, the Central Administrative Court issued a judgment as per the majority votes of the arbitrators, forcing NT (previously known as "TOT") to make payment in the amount of approximately Bt 3,395 mn, together with the interest of 7.5 percent per annum of the principal of Bt 2,518 mn, from the date of the submission of the dispute (22 December 2014) until the full payment is settled. At present, the period for submitting an appeal against the order of the Central Administrative Court has not yet expired and no party has filed such appeal to the Supreme Administrative Court.

On 26 August 2016, TOT submitted a dispute proposal to the Arbitration Institute, asking TLDT and JSTC to jointly or to separately pay costs of repairing or procuring equipment and overseas training, together with damages including interest, and business opportunity costs, under the co-investor agreement on the building of the submarine optical fiber cable and the addendum to the agreement, totaling approximately Bt 258 mn. Subsequently, in November 2019, TLDT and JSTC received the Arbitration Award from the Arbitration Institute, which ordered TLDT and JSTC to pay costs and damages, together with interest, calculated until the date of the Arbitration Award, totaling to Bt 24.9 mn, to TOT by settlement with outstanding receivable between TOT and TLDT together with interest, calculated until the date of the Arbitration Award, totaling Bt 25 mn. The balance that TLDT will receive from TOT is Bt 0.1 mn together with interest of 7.5 percent per annum until full payment is made. On 29 January 2020, TOT filed a petition to revoke the Arbitration Award from the Arbitration Institute with the Central Administrative Court. At present, the case is being considered by the Central Administrative Court.

6. JTS

In September and December 2013, JTS entered into agreements with two government agencies to sell tablet personal computers in Zone 4 (Northern and North-eastern regions). However, JTS was unable to deliver tablets to the two government agencies as scheduled in the relevant agreements due to a massive fire at a production facility where a part for the tablets was produced. Subsequently, in 2014, the counterparties under the agreements submitted letters to JTS, requesting the termination of the sale and purchase of tablet agreements with JTS and the payment of the penalty as stipulated in the agreements.

In November 2014 and March 2015, the two government agencies filed a lawsuit, requesting JTS to pay a penalty for its inability to deliver tablet as stipulated in the agreements and to make payment under the performance bonds, together with interest at the rate of 7.5 percent per annum, totaling approximately Bt 195 mn. On 22 February 2018, the Central Administrative Court issued a judgment on the case between JTS and the government agency who filed the lawsuit, requesting JTS to pay penalties totaling approximately Bt 5.4 mn. The Central Administrative Court issued a judgment, ordering JTS to pay penalties, totaling approximately Bt 2.66 mn to the government agency. On 23 March 2018, JTS filed an appeal with the Supreme Administrative Court. Subsequently, on 5 October 2021, the Central Administrative Court read the judgment of the Supreme

Administrative Court that reversed the judgment of the Administrative Court, ordering to dismiss the case. The case was finalized. In addition, on 4 May 2018, the Central Administrative Court issued a judgment on the case between JTS and another government agency that filed the lawsuit, requesting JTS to pay penalties and make payment, totaling approximately Bt 190 mn. The Central Administrative Court issued a judgment, ordering JTS to pay penalties, totaling approximately Bt 7.2 mn, together with interest at the rate of 7.5 percent per annum, starting from the date following the filing of the case until the full payment is made to the government agency. On 4 June 2018, JTS filed appeals to the Supreme Administrative Court. At present, the cases are under consideration of the Supreme Administrative Court.

Moreover, in the event that JTS is required to pay penalties and compensation to the two government agencies, JTS can reclaim all losses from the local company who is the seller of the tablets to JTS, in accordance with a condition, stipulated in the sale and purchase of the tablet agreements. (For more details, please see JTS Form 56-1 One Report).