

OUR BUSINESS



Business Overview

AIS has operated as a telecommunications service provider for 29 years, starting in 1990 as a concessionaire endowed with the ability to utilize state frequencies under the 25-year Built-Transfer-Operate (BTO) agreement. In 2010, the National Broadcast and Telecommunications Commission (NBTC) was established and began permitting frequency licenses in 2012, marking a major turning point for the telecommunications industry in Thailand. The licensing scheme conforms to the global telecommunication regulation and supports fair competition as well as the development of new technologies such as 3G and 4G that better served the needs of consumers.

AIS remains committed to its vision of being "To become the most-admired Digital Life Service Provider in Thailand" and is looking to enhance daily living via digital technologies through the following missions:

1. Deliver superior products and services to enrich people's daily lives and to improve enterprise capabilities and efficiency.
2. Enhance customer intimacy through the best customer experience.
3. Drive intrapreneurship and employees' professionalism, and promote a positive, lively and agile work culture.
4. Build win-win growth to all stakeholders

AIS, the Digital Life Service Provider



Today, we are a “Digital Life Service Provider” operating three core businesses, namely

1. Mobile Phones Business



4G/3G/2G mobile network service



Prepaid and postpaid service



Mobile phone sales



Roaming and international calls

Mobile Phones Business

Fixed Broadband Business

Digital Service Business

2. Fixed Broadband Business



Started in April 2018, the service provides high-speed home internet utilizing FTTx fiber optics as well as VDO platform.

3. Digital Service Business

Building on mobile phone and high-speed internet services, digital services are targeted to be a new and value added revenue source in the medium and long term in anticipation of a change in consumer behaviors and technology.



Video Platform



Enterprise Cloud



Mobile Money



Internet of Things



Other platforms

In 2019, AIS's total assets were valued at Baht 289,669 million with a market capitalization of Baht 633,287 million, ranked 4th on the Stock Exchange of Thailand.

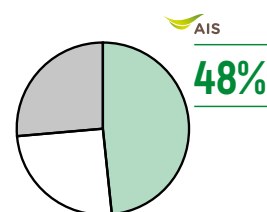
**AIS remained
the largest mobile operator in Thailand.**

**Fixed broadband revenue in 2019,
therefore, grew by 29% Year on Year.**

Leading the Mobile Market

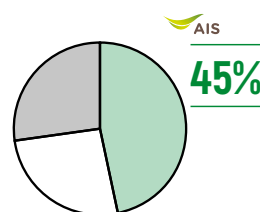


Revenue Market
Share in 2019



Other operators are DTAC and True Move

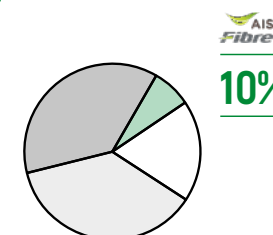
Subscriber Market
Share in 2019



Growing in the Fixed Broadband Market



Subscriber
Market Share in 2019



Other operators are DTAC and True Move

At the end of 2019, AIS remained the largest mobile operator in Thailand, with a revenue market share of 48%, and a total of 42 million subscribers nationwide. The mobile phone services revenue still accounting for more than 71% of total revenue. In the past year, revenue in this area continued to grow by 4.2% YoY. With the mobile spectrum currently available to AIS, we are able to provide quality network services, including 4G, 3G and 2G technology, to over 98% of the population. Over the past year, AIS began preparing to enter the 5G era by carrying out research, and development of 5G technologies with its allies and partners, testing its technology network, technical capability, processes and service and utilization across different industries.

AIS started its fixed broadband business under the "AIS Fibre" brand, with the goal of creating a new source of revenue by leveraging the already established fibre network and the subscriber base from the Company's mobile business. Currently, AIS Fibre is available in 57 cities, covering 7 million households. AIS Fibre has penetrated the market using its strength in providing FTTH technology to connect households to the internet and is ready to support existing ADSL users wishing to upgrade to higher quality technology and the superior speed of up to 1 Gbps. Fixed broadband revenue in 2019, therefore, grew by 29% YoY, accounting for 3.7% of total service revenue. Currently, the total number of subscribers is 1,037,600, accounting for more than 10% of the fixed broadband subscriber market share.

Based on financial performance excluding the effect from TFRS15 adoption

Building on Core Businesses with Digital Services



The third core business of AIS is Digital Services, which involves the development of services using digital technology in a variety of formats, including networks, service platforms and solutions, in order to create digital services for both our corporate and general customers. This is achieved via cooperation with our partners and the development of an integrated business ecosystem in which we grow and succeed together. AIS is currently focused on 5 main areas of business. These are VDO Platform, Business Cloud, Mobile Money, Internet of Things (IoT), and other platform services.

Our digital services are an important propeller enabling AIS to access new sources of revenue in the future in addition to current mobile internet charges. It also allows AIS to be an integrated player via the convergence of products and services from our three core businesses.

Operating Under Licenses Regulated by the NBTC



The majority of AIS's businesses, particularly the mobile phone and fixed broadband businesses, operate under the regulation of the National Broadcast and Telecom Commission (NBTC), which is the regulatory authority formed in accordance with the Frequency Allocation Act 2010. AIS, through a subsidiary, was granted a telecommunications business license, as well as 2100, 1800 and 900MHz spectrum licenses. Moreover, AIS is partnering with TOT to utilize TOT's 2100MHz spectrum. This resulted in AIS having a total of 2x60MHz bandwidth for operations at the end of 2018. AIS is mandated to pay the license fee, Universal Service Obligation (USO) fees, and numbering fees to the NBTC amounting to around 4% of service revenue per year.

Dividend Policy



The Company aims to pay dividend at least 70% of consolidated net profit twice a year. The first of which shall be paid as interim as a result of operation during the first half of the year as approved by the Board of Directors and will be reported to the next general meeting of shareholders whereas the remaining thereof as annual payment which shall be approved by shareholders' meeting as a result of operation in the second half year.

As regards each subsidiary, dividend payment shall be based upon its operating results, financial conditions and other material factors.

In all cases, dividend payment shall be depending on cash flow, investment plan including any other future obligations of the Company and/or subsidiaries. Such dividend shall not exceed the retained earnings of the Company financial statements nor adversely affect the Company and subsidiaries ongoing operations.

Historical Dividend in 5 consecutive years is as follows:

Historical Dividend	2015	2016	2017	2018	2019
Total Dividend Payment (Baht per share)	12.99	10.08	7.08	7.08	7.34
1. Dividend from the first-half-year operation	6.50	5.79	3.51	3.78	3.78
2. Dividend from the second-half-year operation	6.49	4.29	3.57	3.30	3.56
Dividend Payout Ratio	99%	98%	70%	71%	70%

Note: 2015-2016 information is based on former dividend policy 100% of net profit, while 2017 - 2018 dividend payout rate is based on current policy 70% of net profit.

Securities Information

Registered capital and Paid up capital

Registered Capital : 4,997,459,800 Baht divided by Common shares 4,997,459,800 shares and par 1 Baht per share

Paid up Capital : 2,973,178,632 Baht divided by Common shares 2,973,178,632 shares and par 1 Baht per share

Top Ten Shareholders

(a) Top ten shareholders as of 19 August 2019, the record date to determine the right of shareholder to receive dividend, are as follow:

No.	Name	No. of shares held	% of shareholding
1.	INTOUCH HOLDINGS PLC	1,202,712,000	40.45
2.	SINGTEL STRATEGIC INVESTMENTS PTE LTD	693,359,000	23.32
3.	THAI NVDR CO.,LTD. ¹⁾	194,433,111	6.54
4.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	104,875,677	3.53
5.	SOCIAL SECURITIES	83,327,800	2.80
6.	STATE STREET BANK EUROPE LIMITED	64,711,718	2.18
7.	GIC PRIVATE LIMITED	20,431,500	0.69
8.	STATE STREET BANK AND TRUST COMPANY	18,812,113	0.63
9.	SE ASIA (TYPE B) NOMINEES LLC	12,366,447	0.42
10.	SOUTH EAST ASIA UK (TYPE A) NOMINEES LIMITED	11,849,688	0.40
TOTAL		2,406,879,054	80.96

Note:

1) The information of Thai NVDR Co., Ltd. Can be found the SET website (www.set.or.th). As of 19 August 2019, the shareholders of Thai NVDR are as follows:

	Name	Number of NVDR units	Percentage of investment
1.	STATE STREET BANK AND TRUST COMPANY	31,276,080	1.05
2.	STATE STREET EUROPE LIMITED	29,490,185	0.99
3.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	20,739,857	0.70
TOTAL		81,506,122	2.74



(b) Major shareholder whose behavior can influence when determining policy or handling operation, are

1. Intouch Holdings Plc holds 23.32% in AIS. Major shareholders of Intouch Holdings Plc. are as follows:

	Name	Number of shares	Percentage of investment
1.	SINGTEL GLOBAL INVESTMENT PTE LTD ¹⁾	673,348,264	21.00
2.	THAI NVDR COMPANY LIMITED ²⁾	532,380,897	16.60
3.	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED	320,283,660	9.99
4.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	128,425,755	4.01
5.	SOCIAL SECURITY OFFICE	43,537,600	1.36
6.	KRUNGSRI DIVIDEND STOCK LTF	38,737,100	1.21
7.	UBS AG LONDON BRANCH	28,245,994	0.88
8.	MR. PERMSAK KENGMANA	27,829,500	0.87
9.	STATE STREET EUROPE LIMITED	24,515,815	0.76
10.	KRUNGSRI DIVIDEND STOCK FUND	20,869,600	0.65

Remarks:

1) Singtel Global Investment Pte. Ltd. is an indirect subsidiary of Singapore Telecommunications Ltd.

2) The information of Thai NVDR Co., Ltd. Can be found the SET website (www.set.or.th.)

2. Singtel Strategic Investments Pte Ltd holds 23.32% directly in AIS. The shareholder of Singtel Strategic Investments Pte Ltd is

No.	Name	% of shareholding
1	Singtel Asian Investments Pte Ltd*	100.00

* Singtel Asian Investments Pte Ltd is 100% hold by Singapore Telecommunication Limited (Source: Accounting and Corporate Regulatory Authority (ARCA), Singapore as of 31 December 2019)

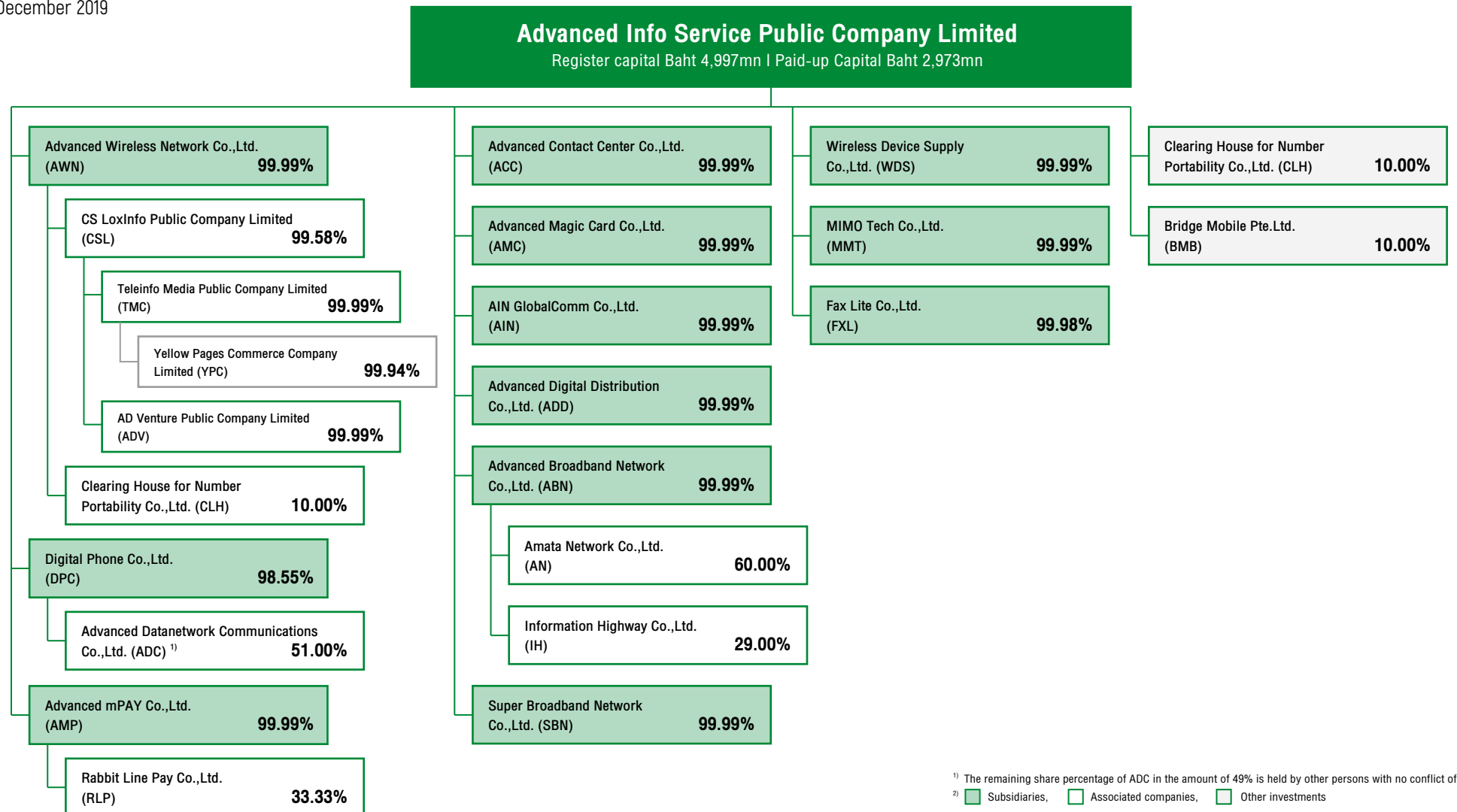
(c) Agreements between major shareholders and the Company concerning topics which affect the issuance of securities or management of the Company's operations.

- None -



Investment structure of AIS group

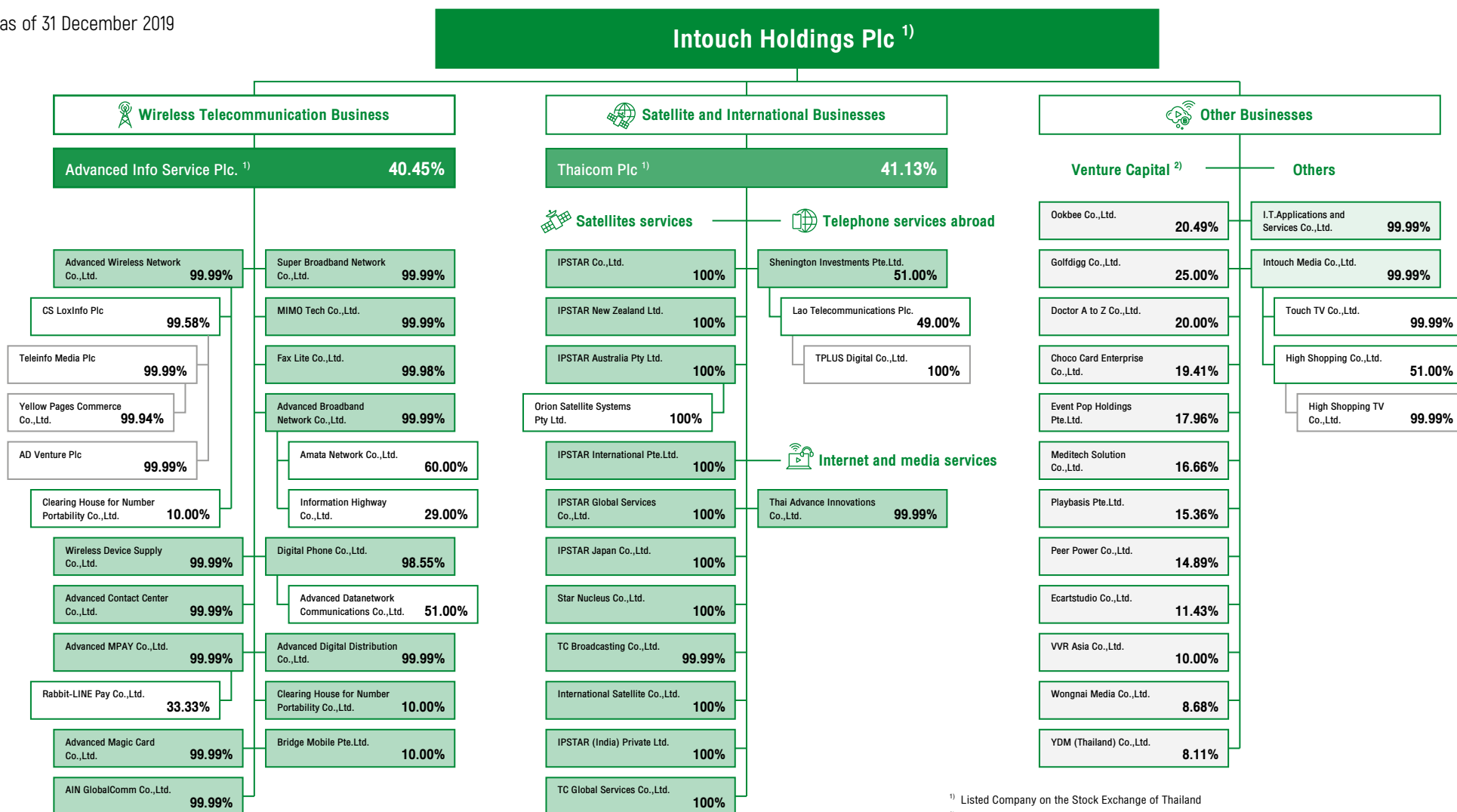
31 December 2019





Investment structure of the mother company (INTUCH)

as of 31 December 2019



¹⁾ Listed Company on the Stock Exchange of Thailand

²⁾ Excluded investment in debt security

³⁾ INTUCH has a stake of 52.92% in ITV, which ceased operations, and there are ongoing disputes with the Permanent Secretary of the Office of the Prime Minister.

Executive Committee Report

The Executive Committee comprises of four (4) highly experienced members namely Mr. Allen Lew Yoong Keong as Chairman, Mr. Gerardo C. Ablaza, Jr., Mr. Somchai Lertsutiwong and Mr. Anek Pana-apichon as members.

In 2019, the Executive Committee held a total of eleven (11) meetings and performed its duties in accordance with the authorities and responsibilities in its Charter. The summary of the Executive Committee's performance for the year 2019 are substantially as follows:

1. Reviewed and concurred with the Company's strategic direction, management structure, and annual business plan and budget and proposed to the Board of Directors for approval.

2. Monitored the financial and operational performance of the Company and reported to the Board of Directors for acknowledgement.

3. Considered, provided opinions and concurred with dividend payment and the execution of investment transactions and proposed to the Board of Directors for approval.

4. Prepared this Executive Committee Report for the year 2019 and disclosed in the annual report.











Mr. Allen Lew Yoong Keong
Chairman of Executive Committee

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Nature of Businesses

Revenue Structure by Service Type

	2017 ●		2018 ●		2019 ●	
 Mobile Phone Business Revenue	122,979 Baht million		124,784 Baht million		130,062 Baht million	
	77.97 Percent		73.46 Percent		70.90 Percent	
 Fixed Broadband Business Revenue	3,128 Baht million		4,436 Baht million		5,722 Baht million	
	1.98 Percent		2.61 Percent		3.12 Percent	
 Other Services Revenue	2,476 Baht million		4,208 Baht million		4,670 Baht million	
	1.57 Percent		2.48 Percent		2.55 Percent	
 Core Services Revenue	128,583 Baht million		133,429 Baht million		140,454 Baht million	
	81.53 Percent		78.55 Percent		76.57 Percent	
 Interconnection (IC) and Equipment Rental Revenue	4,364 Baht million		10,576 Baht million		13,557 Baht million	
	2.77 Percent		6.23 Percent		7.39 Percent	
 Service Revenue	132,947 Baht million		144,005 Baht million		154,010 Baht million	
	84.29 Percent		84.78 Percent		83.96 Percent	
 SIM and Device Sales Revenue	24,775 Baht million		25,851 Baht million		29,422 Baht million	
	15.71 Percent		15.22 Percent		16.04 Percent	
 Total Revenue	157,722 Baht million		169,856 Baht million		183,432 Baht million	
	100.00 Percent		100.00 Percent		100.00 Percent	

Based on financial performance excluding the effect from TFRS15 adoption

Products and Services

Today, AIS is operating 3 core businesses, the key products and services of which can be summarized as follows:

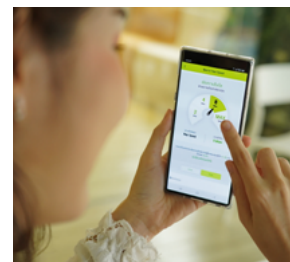
1. Mobile Business



AIS operates 4G/3G/2G mobile services, deployed on spectrum for telecommunications business licenses granted by the NBTC. AIS currently has a total of 2x60MHz spectrum capacity, which consists of 2100, 1800 and 900MHz bands. Also, in 2019, AIS has applied for the allocation of 700MHz spectrum and has the right to obtain license to use them starting from last quarter of 2020 unless otherwise stated by the NBTC. AIS's mobile network covers 98% of the population and provides more than 100,000 AIS Super Wi-Fi access points. AIS also applied Wi-Fi 6, the next generation standard technology that improves connectivity, speed, and reduce interference, together with the development of AIS NEXT G or combination of Wi-Fi and 4G.

AIS provides mobile phone calling and internet services in both prepaid and postpaid formats. At present, AIS has a total customer base of 42 million subscribers nationwide, with 9.1 millions of these being postpaid subscribers and another 32.9 prepaid subscribers. For this year, AIS issue postpaid package, NEXT G FLEXI SPEED, allow customer to configure the speed through "MY AIS APP" according to the preferred data usage. Moreover, AIS provide "READY2FLY"

additional roaming internet package to serve existing customers without having to buy a new SIM for their need of internet usage across the country. Additional information about these products can be found at www.ais.co.th



2. Fixed Broadband Business



AIS has been offering fixed broadband home services under the AIS Fibre brand in 2015, providing services using fibre optic technology. Thanks to investing in fibre optic networks that build upon our current networks used for mobile phone services, AIS Fibre has been able to expand its network quickly, currently covering more than 57 provinces nationwide and serving 1 million subscribers.

This year, AIS Fiber worked to ensure the quality of service beyond just speed and stability with the focus to deliver good coverage throughout every room of the home by presenting the SUPER MESH x 3 package, built around MESH WiFi equipment that creates a network throughout the abode. AIS Fiber also devoted attention to E-Sports clients, providing them the Dual Bandwidth option, allowing for separation between home internet usage and gaming usage for improved speed, stability and latency. Other than high speed internet, AIS Fibre offers a world-class content packages allowing customers to view content such as movies, sports and other entertainment via the AIS PLAYBOX. We also aim to offer convergence products combining a wide variety of services in a single package, including home internet, mobile internet, world-class content viewing, and unlimited AIS Super Wi-Fi usage. Additional details can be found here www.ais.co.th/fibre

3. Digital Service Business



In 2019, AIS continued to develop its digital services in order to generate new sources of revenue and to reach our aim of becoming a complete digital life service provider. To achieve this, an emphasis was placed on working with partners who have expertise in each type of service. AIS's digital service business focuses on 5 main areas as follows:

- **Video Platform**

AIS has launched its TV and video distribution services, including various types of entertainment, such as movies, TV dramas, music, karaoke, and games, via the AIS PLAY application, available on both mobile phones and tablets. The service is also available on AIS PLAYBOX via the AIS Fibre service. Additionally, in 2019, AIS increased interest in E-Sport by offer worldwide E-sport streaming channel via AIS PLAY and AISPLAYBOX.

AIS joined with partners to provide OTT services offering a wide variety of content, such as movies, Hollywood series, HOOQ, Netflix, Korean TV programs and drama series via ViU, and world-class NBA basketball, as well as Free TV channels and digital and satellite channels. These are available in the form of both live broadcast and video-on-demand, and can be accessed via both the AIS PLAY and PLAYBOX platforms. Details of the service can be found on our website at <http://www.ais.co.th/aisplay/> and <http://www.ais.co.th/playbox/>

- **Enterprise Cloud**

AIS together with CS Loxinfo, a subsidiary which was rebranded as CSL, aims to create a One-Stop ICT Service with the 3S focuses, comprised of **S-Solutions** that serve Data Centers, the Cloud and ICT, **S-Services** providing complete managed service and **S-System Integration** to support the needs of enterprise customers facing digital transformation by providing products and services in cooperation with relevant world-class partners.

CSL has 9 locations of data center providing services to clients across all regions in Thailand . The data centers have certification of international standard including **ISO 9001, ISO/IEC 20000-1, ISO/IEC 27001, ISO 22301, ISO 50001, ISO 14001 and CSA Star**. CSL is a Carrier Neutral Provider, which allows it to serve as a hub for Internet Exchange, under the name CSL Thai-IX. CSL Thai-IX serves both domestic and international businesses such as IP Transit providers, OTT and various Content service providers, allowing for an efficient and cost effective connectivity and data exchange compared to overseas connections.

Apart from working with world-class Cloud service providers, AIS and CSL also develop Hybrid Cloud Solutions to serve the need of multiple type of cloud services, from Private Cloud and Public Cloud to On-Premises Cloud



solutions. More details on AIS cloud and CSL can be found at <http://business.ais.co.th/cloud/index.html> and <https://www.csl.co.th/csl/>

• Mobile Money

In supporting the national policy on the development of National E-Payment infrastructure towards achieving a cashless society, this year, AIS joined with both domestic and international partners to launch cross border mobile payment, allowing customers travelling abroad to transact based on local currencies, effectively eliminating concerns over exchange rates or the need to carry cash during travels.

AIS also provides the mobile money service platform for both corporate customers via mPay (B2B) and for general customers via a joint venture company, Rabbit LINE Pay (B2C). mPay provides a comprehensive mobile payment platform for corporates who seek to have a mobile electronic wallet offered to their customers, while bypassing the hassle operation of mobile payment system and operating license. More details can be found at www.ais.co.th/mPAY/gateway

• IoT or Internet of Things

In building the IoT services, AIS focused on creating an IoT ecosystem covering equipment, networks, platforms, business solutions and developer communities from public and private alliances formed through the AIS IoT Alliance Program (AIAP). This responds to the rising growth of large, medium and small enterprises transitioning to the digital era and looking to incorporate IoT capabilities into their businesses such as finance, logistics, real estate and Smart Cities.

In 2019, AIS expanded its NB-IoT network nationwide to capture the opportunity of IoT service. The number of IoT devices connected via the AIS network for businesses grew to over 750,000. The IoT development involves partnering for new business models as well as business applications. An example of our IoT commercial service this year was the solution that AIS worked with Thai Vivat Insurance Company to build the NB-IoT Motor Tracker, a usage based insurance (UBI) solution.

As the development of IoT into business is relatively new, AIS also places importance on supporting and jointly



developing IoT innovations with different organizations. In the past year, AIS joined the IoT Association of Thailand and Sri Patum University to organize Thai IoT International Conference, Thailand's first national academic gathering on IoT. We also setup AIS Playgrounds in various universities to serve as incubation centers allowing for development on real environment. Through our continued development of the IoT ecosystem, AIS was awarded the 2019 Thailand IoT Services Provider of the Year recognition by Frost & Sullivan, and the Best Practices Award in IoT for 2 consecutive years. More information about our IoT services can be found on our website at <http://business.ais.co.th/iot>



• Digital Marketing

In cooperation with AD Venture and Teleinfo Media (an affiliate of AIS' subsidiary CS Loxinfo), we utilize AD Venture's online advertisement capabilities, and leverage upon AIS 41 million customer base to provide digital marketing solutions for corporate customers in enhancing their accessibility to consumers in digital era. Our digital marketing platform includes location base SMS platform that allows for advertising of targeted areas, and Thailand Ads Network, or THAN, a collection of ad space on Thailand's 100 most popular websites offering a major digital marketing tool to clients. The digital marketing solutions comprises of digital content creation, website & mobile application development, social media management, digital advertising media management and turnkey marketing campaign solutions.

• Small and Medium Enterprises (SME)

AIS serves small and medium enterprises (SMEs) segment by providing targeted products and services i.e. mobile phones & packages for business communication, online business solution, AIS Fiber broadband services, IoT & software solutions.

AIS also provides privileges specific to SMEs under the AIS Biz Up program, which comprises benefits and special features customized to match the lifestyles of business owners and employees of SMEs. The privileges include products and services from AIS and its partners, discounts from leading businesses, free trials or special pricing and business knowledge sharing for SMEs. More information about our SME solutions can be found at <http://business.ais.co.th/sme> and about Biz Up at <https://business.ais.co.th/bizup>

Distribution and Sale Channels

AIS distribution channels are divided into 4 main categories as follows:

1. AIS Shop: These are service centers managed by AIS and selected high potential distributors, in total of 191 branches nationwide. AIS Shops offer the most comprehensive range of products, services, and after sales services when compared with other channels. AIS Shops strategically locate in densely populated urban areas and have focus on maintaining a positive image of AIS products and its services.

2. Distributors: AIS partners with a number of distributors targeting at different customer segments throughout the country. Our distributors includes "AIS Telewiz" which operates under AIS brand and provides service at more than 431 locations in key city areas. "AIS Buddy" distribution partners provide access to district and sub-district areas through more than 1,179 branches. AIS also distributes our products and services through other retail outlets and modern trade retailers, such as Jaymart, Computer System, Ibis Plus Network, and Tesco Lotus.



Customer Relationship Management (CRM)

3. Direct Sales: AIS also distributes through the AIS Direct Sales team, with an emphasis on postpaid customers, targeting more effectively to selected customer segments, for example, via sales booths or through activities organized in target group areas. AIS supports the direct sales team with the "AIS Easy App", in sales and registration as well as services to customers more effectively.

4. Online Channels: Focused on promoting customer self-service, the online channels include AIS website, AIS Online Store, myAIS application, kiosks, as well as transactions made through various electronic channels, such as ATM, USSD, Chatbot, IVR and social media, etc.

Aiming to provide leading digital services, we deliver the service concept of being the "No. 1 service with heart, for a digital lifestyle". Our service approach focuses on attentive detail and high level of care combining technology with a distinctive human touch in order to deliver speed, convenience, personal data security, self-service and personalization. We work to excel in best customer experience by differentiating our services and enhances digital technology into service operations. Our CRM can be categorized into the following 5 key areas:

1. Leverage digital technologies into customer service, including:

1.1 "Full-E" service covers a full range of services, including checking usage and outstanding payment, billing and payment, as well as receipt, all of which are available through the myAIS application. The application helps easing customer issues, such as losing a bill, missing payment, inconvenient payment station and checking usage record. The "Full-E" service comprises the following features.

- eBills: provides billing information and SMS alert for payment.

- ePay: enables online payment via bank applications, "Rabbit LINE Pay" electronic wallet, and direct debit via banks' credit cards.
- eReceipt: provides viewing of historical record of receipts up to three months.

1.2 Use of Face Recognition to enhanced protection of personal data for customers' new registration through sales channels as well as embed in self service capability in order to validate customer identity.

1.3 "Ask Aunjai", the virtual agent developed through a combination of Artificial Intelligence (AI), Chatbot technology and a Smart Knowledge Base, is able to respond 24 hours to queries from customers online and via social media such as on the AIS website, its Facebook page and on the myAIS application. Such AI Chatbot is also developed with the focus on replicating human touch in corresponding to customers. It also handles end-to-end solution from handling complaints, issue analysis, suggestion and action through the Digital Self Service system, AIS point redemption, present monthly AIS Privileges and even recommend films and music on AIS Play.

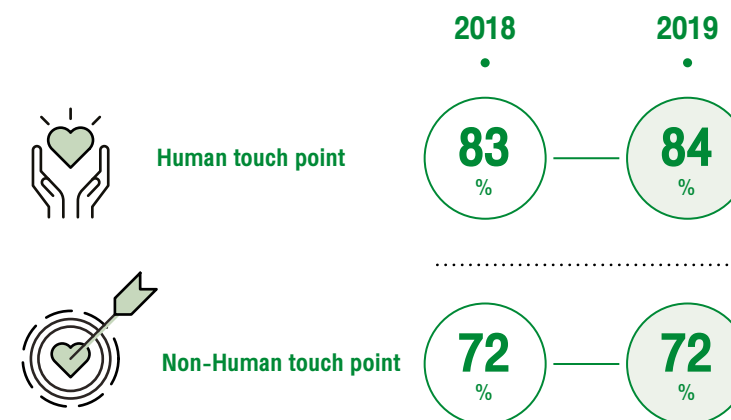
2. "AIS Privileges" is another channel for managing customer relations in cooperation between AIS and its partners. This year, AIS continued to match its customers lifestyles in every dimension with the "7 Wonderful Moments with AIS Privileges" program, which included Coffee Time at famed local cafes across the country at a 10-50% discount, Dining Time offering discounts up to 50% at popular restaurants, Family Time providing privileges for the entire family, Entertaining Time with theater viewings for only 80 Baht, Shopping Time providing privileges at major retailers, Traveling Time enhancing trips and Lucky Time 4 Points, a raffle with AIS. So far, AIS has acquired 28,000 partners offering privileges nationwide and records 17 million uses of such privileges a year. Customers can also use the AIS Points they collect from service usage to receive discounts on LINE Stickers, join raffles for special prizes, discounts on phone packages, internet and even new mobile phones. At present, there are 13 million numbers signed up for the AIS Points program with some 28 million redemptions a year.

3. "AIS Serenade" is a privileges program for the top and longest users of AIS services and was created to retain long term customers. Serenade has been active for 15 years and focuses on 3 factors in particular, 1. Attention to customer demands, 2. Acquiring partners to respond to new demands and 3. Use of technology in all dimensions. The service concept of the program is "The Ultimate Life Experience" and through continual study of customers, we

segment our privileges program into 4 groups, 1. Special Experience (Serenade Club, Personal Assistance, Parking Services, Privileges at the Airport), 2. Digital Life (discounts on smartphones, gadgets), 3. Energy and Inspiration (Gen C athletes, business oriented inspiration rallies) and 4. New Experience (travel and dining). The groupings have helped AIS better address the needs of its 5.2 million Serenade customers.

4. In our striving for the best customer experience, we build-in analysis and insight of consumer behaviors into our marketing tools, an approach to build value for our customers called customer value management (CVM). Such analytic approach allows us to customize product and service presentation to each customer and increase consumer satisfaction.

5. AIS observes customer satisfaction across numerous platforms, including telephone ratings, surveys in our service shops, as well as questionnaires arranged by contracted external agency. These ratings refer to the quality of services on offer from AIS, whether in our shops, at our dealerships, or through our automated service machines, as well as measuring the likelihood of our customers suggesting AIS and our services to others. These data are used to constantly develop every facet of the services we provide. From our survey, the customer satisfaction levels are as follows:

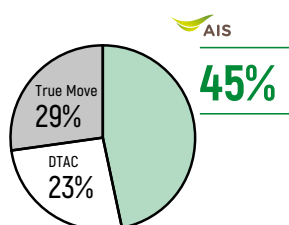


Industry Competition in 2019 and Outlook for 2020

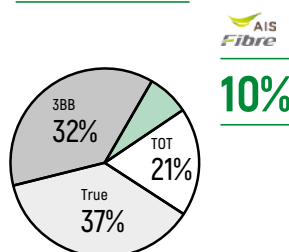
Industry Conditions and Competition in 2019

Subscriber market shares in mobile and fixed broadband businesses

Subscriber Market Share in 2019



Subscriber Market Share in 2019



Mobile phone business growth due to continued increase in 4G usage

The year 2019 saw continued growth in the mobile market overall. Total industry revenue for 2019 was approximately Baht 330 billion, with a growth of 4%. This compares to the previous year's growth of 2%, and was also higher than the 2019 GDP growth of 2.4%. Currently, there are more than 92 million subscribers in the market, an increase of 2%, with mobile phone penetration rates for Thailand at approximately 140% of the population. While the overall industry prepaid users remained about the same, the number of postpaid users grew by about 9%, due mostly to the popularity of postpaid package with mobile phone discount campaigns and data plan that is more suitable for 4G usage. As a result, the proportion of postpaid numbers per total industry numbers grew from 24% last year to 26% this year, and the total number of 4G customers accounted for about 66% of the total market, up from below 60% in 2018.

This increased 4G usage, coupled with price competition and package price adjustments throughout the previous year, has resulted in the ARPU for the entire industry at the end of 2019 growing. Competition was mainly around data price plan with some improvement from the previous year. However, there remained to be offering of fixed-speed unlimited data plans. Bundling attractive discounts on mobile handset with data plan have remained a key strategy for operators in drawing customers looking to purchase handsets in conjunction with postpaid packages.

Industry Trends in 2020

Spectrum allocation as a starting point in preparation for 5G technology



In June of 2019, the NBTC (National Broadcasting and Telecommunications Commission) awarded 700MHz spectrum licenses to AIS, DTAC and TRUE. Each of the three service providers was allocated 2x10MHz bandwidth, providing a starting point for their preparations for soon-to-come 5G technology over the next 1-2 years. Usage of the allocated spectrums can begin with the first payment installment around the end of 2020, unless otherwise determined by the NBTC. The 700MHz spectrum is a standard low-band frequency for 5G, which has outstanding features in terms of coverage, thus allowing service providers to offer 5G services with excellent coverage. As a result of the aforementioned allocations, the payment period for 900MHz licenses has been extended until 2025.

Fixed broadband market upgrades speed to 200-300Mbps



Throughout 2019, the fixed broadband market continued to see revenue growth with the customer base for fixed broadband connectivity growing from 9.2 million households in 2018 to more than 10 million households in 2019, representing an 11% growth this past year. This

means that the number of households in Thailand with fixed broadband connectivity has grown from 43% in 2018 to approximately 47% in 2019 as the demand for internet connectivity in residential areas continues to increase.

Nonetheless, total industry revenue saw a growth of only 2%, with a total value of approximately Baht 58 billion due to intense price competition. Throughout the past year, all service providers continued to offer steep half-price discounts in order to prevent existing customers from canceling or changing service providers, as well as to attract new customers. Discount campaigns were also utilized in an effort to appeal to customers from other service providers. Although an entry industry price remained in a range of Baht 500-600 per month, service providers continued to upgrade internet speeds from 50 Mbps to 200 Mbps towards the end of the year. Besides, service providers began offering packages with speeds of 1 Gbps for more affordable prices at Baht 800-1,000. As a result, industry ARPU saw a decrease from the previous year. Service providers with other available services apart from high-speed internet also continued to offer convergence packages to customers, combining a variety of services into the same package, including high-speed internet, internet SIMs for mobile phones, and content, with the aim of generating long-term quality customers.

Investment in 5G technology to create new business models and revenue sources



In December of 2019, the NBTC officially announced the rules and procedures for awarding the license of frequency spectra for mobile telecommunications businesses in the 700 MHz, 1800 MHz, 2600 MHz and 26 GHz spectrum. These procedures contain details of each type of spectrum license, starting price, payment terms and conditions, etc. Each spectrum comes with a 15-year license period and the auction will be held on February 16, 2020. Mobile service providers have been actively preparing for 5G technology, in collaboration with equipment vendors, universities and partners in different industrial sectors, through research and development, testing, and trial of potential commercial use cases. Business alliances are also being sought out for the creation of new business models that will support growth across a variety of industries. For consumer market, 5G technology is designed support high-definition video streaming services, cloud gaming, and the provision of interactive content driven by augmented reality/virtual reality (AR/VR). For the business market, there are potential new services that address various industries, including the manufacturing, service, and agricultural sectors, with services such as automated manufacturing process, remote control machinery, smart home solutions, etc. In



the early stage, the expansion of 5G network is expected in the Eastern Economic Corridor (EEC) area as well as in the key smart cities area. The 5G supported devices will also start to be available to Thai market.

Mobile telecom market continues to grow with rising 4G usage



Growth in mobile market is expected to continue in tandem with rising demand for data usage due to the continued popularity of social media, games, and video streaming as urban areas and communities continue to expand. While industry mobile user base is expected to have low growth, 4G usage will be the key growth driving factor with a current 4G adoption ratio at about 66% of industry customer base, up from 59% in 2018. However, the economic outlook could pressure consumer spending and hence industry competition in 2020 is likely to continue with offers of value-for-money price plans to attract customers and marketing campaigns offering mobile phone discounts. The trend of prepaid to postpaid migration is also likely to continue as service providers focus on the expansion of postpaid subscriber bases due to higher ARPU with postpaid than with prepaid base.

Fixed broadband market expands, supported by wireless home internet services



The continued rise of urbanization rates will boost consumer demand for high-speed internet services. This, along with the fact that the ratio of households with fixed broadband connectivity still has the potential to increase from its current level of 47%, means that all service providers must continue to focus on expansion of coverage for home internet services. While major services continue to be provided via FTTx technology with speeds of up to 1 Gbps, investment must be considered in areas where market demand and investment worth are clear. In certain suburban or rural areas that may be more remote and that have limitations in regard to the costs of fiber cables, 5G technology can help to provide additional coverage, enabling broadband access via the 5G network, also known as WTTx, or Fixed Wireless Access services. This means the use of 5G routers for home internet signal reception instead of the rather limited fiber cables, which will result in service providers being better able to manage network installation costs to suit the specific areas and needs of consumers.

Business direction over three years

Technology developments have accelerated industrial changes by bringing about new ways of providing products and services. Within a couple years, telecommunication sector will start to see commercial use of technologies such as 3D media, virtual reality, hologram or real-time broadcast, and many more that enriches customers' experiences. 5G technology is the most recent development that offers such capabilities and enables the aforementioned to be widely used and commercialized. As much as technology advancement alters products and services offered as well as how they are consumed, it also poses risk to business disruption due to emerging new business models and how to service customers. As new digital players, term as Over the Top (OTT), are springing and taking deeper customer engagement above and beyond simple connectivity, telecommunication tends to become more of a wagon to attain service rather than the end service itself.

Although digital transformation poses structural changes in many industries, it gives rises to new innovations. Likewise, AIS aims to reinforce its goal of being 'Digital Life Service Provider' by enhancing its core businesses; mobile services, broadband services, and digital solutions, and strive for innovative offerings that enrich Thai's lives and support business operations and build Thailand competitiveness. AIS sees technology as a competitive edge to strengthen capabilities and drive sustainable growth in Thailand.

Reinforce core business and maintain leadership with quality service and operational excellence



Thailand has constantly been having a growing mobile internet usage resulting from the rise of affordable smartphones and digitalized platforms that are playing an increasingly important role in Thai people's life. Telecommunication network advancement will be compulsory as technologies become more interwoven into people everyday lives. As a leading mobile service provider in Thailand, AIS is driven to continue investing to advance mobile network and service capability including its current 4G service and the future 5G service through research and development with partners. It is expected that 4G service will continue running in parallel with 5G over the next three years. Efficiencies as well as intelligence in network and service embedding virtualization, cloud base, AI, and data analytics will be key in maintaining leadership and running operational excellence.



Progressing into 5G technology, AIS will strive to cultivate the technology knowledge and use cases through studies and partnering with industry's experts in order to enhance 5G ecosystem in Thailand. As 5G prime features include speed, ultra-low latency, massive connectivity, it will bring about many new services for both consumers and corporate uses such as 3D video, work and play in the cloud, augmented reality, industry automation, mission critical application, smart city/home/car. AIS will take lead in bringing richer media and entertainment and serving at a more personalized level through enhanced data analytics. For enterprises, AIS aim to facilitate the use of 5G technology in industries-specific process automation and customer data management. AIS intend to use its network expertise and knowledge to address industry-specific needs as well as innovating revenue-generating models.

Grow access to home broadband leveraging both fixed and mobile infrastructure



Quality home broadband has become more essential in Thai households as digital services developments has increased its importance. There has been a growing demand for ultra-high resolution streaming of video, contents and games. The needs are pushing for a faster, more reliable, and higher-capacity network. AIS aims to continue expanding its broadband network availability into urbanizing areas leveraging on its currently available mobile network fibre infrastructure. With the capability of 5G technology, home broadband can benefit from deploying 5G as Fixed Wireless Access (FWA), which enable connectivity in areas where fiber is prohibitively expensive or where there are geographic limitations in building and maintaining the infrastructure. FWA can reduce the setup cost and time as it does not require physical fiber optics layout as last mile, but rather connected via mobile equipment.

With growing access to home, AIS aims to provide more services to family in the future being home entertainment, home security and automation, etc. Consumers tend to be more connected relentlessly and seamlessly on multiple devices. AIS believes in providing consistent service availability and quality both indoor and outdoor for customers and their families. Today, AIS continue to reach out to the existing mobile subscriber base to offer home broadband offering bundled package of mobile, home internet, AIS PLAY, which offers video contents and OTT programs.

Drive new value added digital services to customer's changing lifestyle and strengthen enterprise's competencies



While connectivity has become a necessity, platforms and services has become the focus of user utility. The importance will no longer be on the means to connect, but rather the destination or the services that customers need to reach. AIS aim to expand its offerings and be customer's Digital Life Service with added new services that are personalized, real-time and predictive including services like video, mobile money, IoT, Cloud, and other services such as game and insurance. By building strong partnership, increasing convenience and platform usability, AIS targets to grow its digital service user base. Revenue model will range from subscription base, fee base to advertising model.

AIS also aims to play a major role in addressing the growing needs of enterprise's digital transformation. AIS will reinforce its offerings advancements, including improving its cloud service capability, encouraging partnership with leading ICT providers, and expanding its data centers capacity to capture the potential demand

for cloud service. The services will allow enterprises to optimize cost efficiency, ensure system reliability and security, and strengthen their capability, which will complement to Thailand's competitive advantage in economic development.

Integrating technology to improve business processes and uplift people development



Driving toward digital age, AIS aims to utilize technology to reinforce its competitiveness in offerings with data analytics, efficient RPA processes, and skilled human resources. Firstly, Customer Value Management (CVM) and customer relationship will be improved with data management and customers will be reached with suitable offerings in a more personalized channel. AIS will not only be able to offer the right product mix with added services and platforms that AIS already has, but also be able to personalized the bundles meeting the increasingly diversified needs. Secondly, AIS will integrate technologies such as RPA, Artificial Intelligence (AI), and Machine Learning (ML) to enhance its customer services and internal processes. Automation can help fill the gap given its efficiency, on-demand availability, and

reduce human errors. Moreover, technology integration will allow AIS to achieve cost optimization. Lastly, People has been one of the key focuses in achieving long-term and sustainable success especially amid the radical changing competitive landscape. AIS encourages its employees to be active with growth mindset and open to rapid changes. AIS Innovation Center and digital learning platform, which gives on-demand and variety digital courses, have been introduced to shape personnel knowledge and skills. Reinforcing such programs, AIS' people will be ready to employ technology and innovation in their work process and; therefore, collectively move toward its goal of being 'Digital Life Service Provider' with ease.

Risk factors

To identify the risks that have the potential to impact AIS's business objectives including AIS's group companies, goals and opportunities, AIS considers the following factors:

1. Internal and external factors such as human resources, changes in technology and regulations, customers behaviors as well as the business environment
2. Extreme events or ongoing conditions that have adverse effects on the Company's work practices or business competitiveness including floods, fires or other natural disasters
3. Past events, current exposures and future trends which may effect to AIS's and its group business operation
4. Significant movements in the economy, society and environment in both short term and long term
5. The causes of such potentially adverse events which may effect to AIS's and its group business operation
6. New initiatives or new products and services that AIS is seeking to develop
7. Opportunities to identify new value adding activities.

1 Risk identification process



Management and employees identify risks in both corporate level and functional level



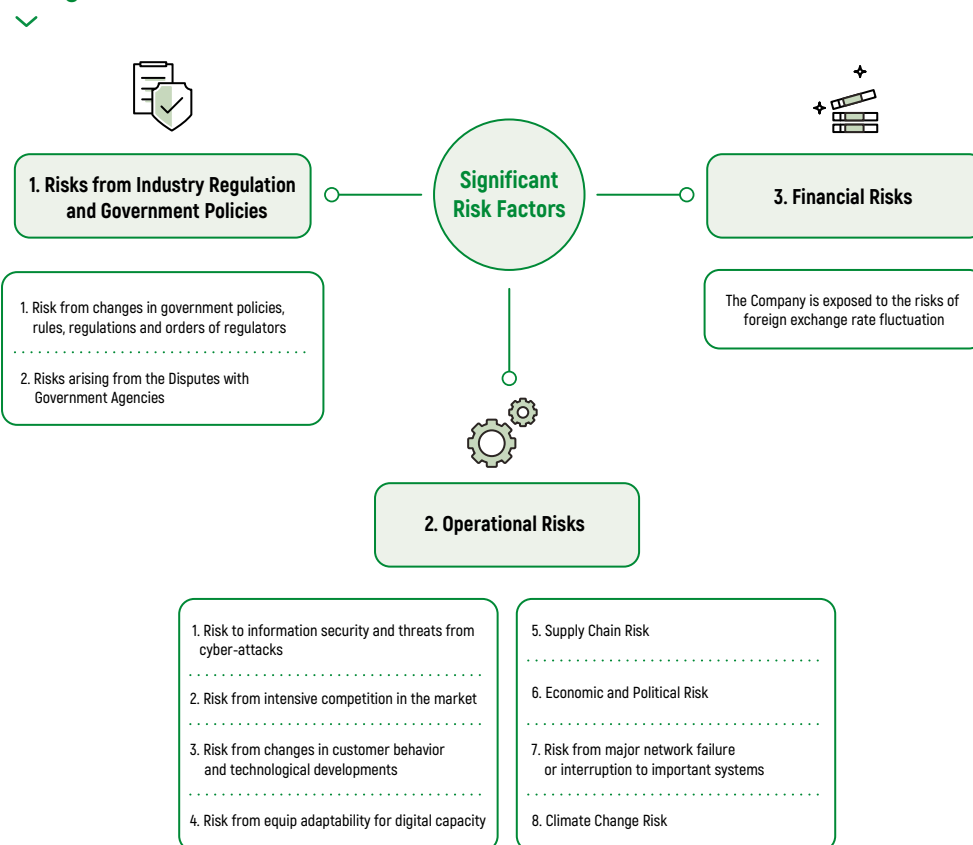
A Risk Management Working Group considers and selects identified risks and proposes them to the Risk Management Committee as corporate risks



The Risk Management Committee considers the proposed risks and prioritizes them based on their likelihood and potential impact. The process includes the definition of acceptable risk levels, (Risk appetite and tolerance), as well as the identification of mitigation and risk management actions. The Risk Management Committee then proposes its plan to Audit and Risk Committee and the Board of Directors for acknowledgement.

Significant risk factors that arise from the changing environment can be classified as follows:

2 Significant risk factors



Risks from Industry Regulation and Government Policies

1. Risk from changes in government policies, rules, regulations and orders of regulators

AIS operates under the supervision of government agencies such as NBTC, the organization responsible for regulating the operators under granted license in the industry and with the legal authority to issue rules, regulations and orders to regulate the licensees. The rules, regulations, and orders issued in the future, such as those that relate to fixing the tariff structure and service fees, or issuing rules and measures for consumer protection, have the potential to affect the Company's business operations, reduce the Company's ability to generate profit and/or increase the cost of services.

For any work directly related to the government agencies, AIS has a dedicated unit which is responsible for regularly monitoring the issuance and change of regulations and then reporting on such changes to the management and coordinating with the relevant departments to ensure they are informed promptly and ready to respond. The unit's role includes performing as an intermediary to coordinate with government agencies and ensuring that it is given all the necessary information on the business impact of its regulations. Through this unit, the Company also has the opportunity to make comments or suggestions and/or raise our concerns or opposition to the enactment of the laws, rules, regulations and/or orders in the event that they are deemed likely to have a serious impact on the Company's operations, or to have been unlawfully conducted. Furthermore, the Company, as a service provider which is a direct stakeholder, would be invited to provide our opinion and comments on the drafts of laws, rules, regulations and/or orders which will be issued for enforcement in the future.

The Potential Impact of Risks	Risk Movement from 2018
Business operations, revenue and cost, company's reputation	No significant changes



2. Risks arising from the Disputes with Government Agencies

In the past, AIS operated the business of providing telecommunications services under license or concession agreements with State Enterprises. This required the transfer of assets in which the Company had invested for use in its business operations to the government contracting parties as well as the implementation of a revenue sharing model at the specified rate. Formerly, AIS had many disputes arising from disagreements in the interpretation of the Agreements such as amount of revenue to be shared. Furthermore in some cases, NBTC issues announcements, regulations or orders which impacts to conducting business operations or have concerns for compliance and to an extent that it could affect to business operation or operating income of the company and/or increase the service costs. In many cases, AIS exercised our right under the law to sue the NBTC in a court of law in order to contest the legitimacy of the various actions undertaken by the NBTC.

(Information and additional details are shown under the topic Report on Important Disputes in Form 56 – 1)

AIS has established a department that is directly responsible for coordinating with government agencies so that the Company as a contract party can conduct its business correctly and completely in compliance with the relevant contract. In the event of a conflict issue, the Company shall enter into negotiations with the aim of seeking a prompt settlement. In the event that the issue cannot be resolved through negotiation, such dispute will be taken to the dispute resolution process by the arbitral tribunal as specified in the Agreement. In addition, the matter will be taken before a court which has the jurisdiction to consider a final decision.

The Potential Impact of Risks	Risk Movement from 2018
Financial status and company's reputation	No significant changes

Operational Risks

1. Risk to information security and threats from cyber-attacks

The Company has rapidly developed a variety of products and services to serve customers' needs and increase their convenience. While technology is essential in developing and improving these products and services, the application of advanced technology may also come with a risk of information technology. Such risks result from the complexity of the technology itself, gaps in the skill and knowledge levels of the Company's employees, the potential deficiency of the Company's own system, and external threats or cyber-attacks.

- If an information security system is insufficient or incomplete, it can have a serious impact on the company, especially if important data including personal data of our customers are compromised.
- The threat from cyber-attacks, e.g. DDoS attacks, website phishing, malware/viruses, etc, may cause severe business disruption.

To ensure the effectiveness of the Company's information security, AIS regularly reviews and revises the security policy of the Company's IT system in the following ways:

- Apply suitable international standards and align with the Cybersecurity Act and Personal Data Protection Act.
- Extend and expand security appliance tools to cover significant systems
- Enhance information security measures, e.g., by reviewing the access control procedure; maintaining a closed working environment; and building IT awareness across the entire Company.
- Enhance staff competencies related to Cybersecurity

The Potential Impact of Risks	Risk Movement from 2018
Financial revenue, business or IT systems disruption and company's reputation	Emerging risk



2. Risk from intensive competition in the market

Faced with the intense competition of the telecommunication industry, operators continue to expand their networks to satisfy customer needs, including the provision of mobile packages bundled with various mobile devices, especially introducing unlimited data packages to attract customers. However, this causes aggressive price competition.

AIS is incorporating the following steps into its risk management plan:

- Strive to gain innovation leadership in providing products and services.
- Introduce Fixed Mobile Convergence (FMC) products by continually expanding the Company's Fixed Broadband network to enhance network quality and coverage.
- Enhance the quality of after sales services to maintain the customer base and attract new customers, especially through the Serenade Privileges program. The Company has defined strategies to develop the benefits of Serenade in many areas, e.g., expanding the Serenade Club, focusing on Serenade device offerings, expanding the privileges from the Top-Trend partners, such as dining, traveling, and entertainment.
- Develops strategies for maintaining the customer base and offering products and services to meet the needs of customers by using Advanced Analytics Tools.

The Potential Impact of Risks	Risk Movement from 2018
Financial revenue, market share and company's reputation	Increasing

3. Risk from changes in customer behavior and technological developments

Changes and advances in technology, especially digital technology, enable service providers to launch new products with new business model. These developments also change consumer

behavior, because customers have more choices from the new services in the digital world. This, therefore, forces the Company to adapt and develop its business plan to accommodate the changing technologies and new innovations in order to maintain its existing customer base, generate revenue from new channels, and ensure long-term sustainability.

AIS is incorporating the following steps into its risk management plan:

- Define the key strategies, both short-term and long-term, to respond to the changing customer behavior and technologies.
- Enhance the digital customer service system, e.g., increase engagement with customers via a fully online system, build AI/Chatbot capabilities, and implement Robotic Process Automation for customer services.
- Bundle product and service offerings of mobile, fixed broadband and digital content in a new model which provides added value to reduce complexity and create cost savings for customers, while also attracting new customers.
- Build the capability of gaining customer insights with Data Analytics to provide customers with product and service offerings according to their needs and at the right price.
- Develop the network infrastructure, customer service systems, and support systems by incorporating new technology such as cloud technology.
- Grow the corporate business and content business, e.g., by expanding the IoT business and creating and driving a complete Cloud Business Ecosystem.
- Transform the organizational structure and develop the competency of employees to support the key strategies of the Company.

The Potential Impact of Risks	Risk Movement from 2018
Financial revenue, market share and company's reputation	Emerging risk



4. Risk from equip adaptability for digital capacity

Due to the rapidly changing technology and customer behaviors, telecommunication service providers need to improve their service capabilities in order to be able to respond quickly to customer needs. If the Company cannot develop the necessary skills or capabilities in a timely manner, it will impact to the Company's business advantage both in its current businesses and in new businesses in the future.

AIS is incorporating the following steps into its risk management plan:

- Recruit employees with new abilities that meet the needs of the Company including development of necessary skills or capabilities that can be applied in new businesses in the future.
- Collaborate with world-class institutions that have specific expertise to lay the foundations for developing the requisite knowledge and prepare high-potential employees for the digital business age including the implementation of a succession plan and a culture transformation to ensure readiness for the emerging risk in the digital era.

The Potential Impact of Risks	Risk Movement from 2018
Company's reputation and market share	No significant changes

5. Supply Chain Risk

The Company needs to purchase network and base station equipment including maintenance services from a small number of vendors/suppliers which have the relevant technology. If those vendors/suppliers are unable to deliver the products or services, it may affect our business.

AIS is incorporating the following steps into its risk management plan:

- Apply a multi-vendor purchasing policy for major equipment and services.
- Establish an approved vendor/supplier list of vendors/suppliers that pass the Company's quality standards (Multi-vendor).
- Control the equipment and spare parts inventory at a suitable level in order to avoid shortages.

The Potential Impact of Risks	Risk Movement from 2018
Financial revenue, business or IT system disruption, and company's reputation	No significant changes

6. Economic and Political Risk

Change in economic and political defines both business risk and opportunity for The Company. This will cause adverse effect to demand and supply in economic system and effect to purchasing power of our customers. However, the communication via voice or data service, now is the part of daily life of people and the price are affordable. Impact from economic and political to The Company still in the acceptable level.

The Potential Impact of Risks	Risk Movement from 2018
Cost and/or revenue	No significant changes

7. Risk from major network failure or interruption to important systems

In the event of any uncontrollable disaster, natural disaster, or any crisis event which affects the Company, potentially leading to the interruption of primary operating systems and business activities, AIS applies the Business Continuity Management (BCM) policy at both the enterprise and departmental level. The Company also conducts an Annual Review and carries out exercises to practice and test the Business Continuity Plan. In addition, AIS received international ISO 22301:2012 Business Continuity Management System certification in recognition of the completion and implementation of the Company's Business Continuity Management System to cope with crisis situations and maintain the organization's sustainable development.

The Potential Impact of Risks	Risk Movement from 2018
Company's Reputation and Unachieved operations	No significant changes

8. Climate Change Risk

Climate change is one of the global issues that has the potential impact on our business operation, infrastructure and supply chain. The Company as a telecommunication service provider and electronic distributor foresee the essential of dealing with this issue, we adopt our infrastructure design to ensure the continuity and efficiency of our services delivered to our customers and reduce the waste from business operations that will impact to environment e.g. Apply the standard EIA-222C to our telecom tower to support higher wind speed than Thailand historical records, Raise the height of base station refer to the level of heavy flooding in Year 2011. The company has project implementation of the electronic collecting waste method, and also take accountability to manage our processes those have the consequent impact to climate to comply with our sustainability development guideline and international standard practices in 2020 project proposed as follows:

- Manage of electronic waste from business operations, evaluating and sorting electronic condition to recycling process
- Set greenhouse gas (GHG) emissions target from both direct and indirect
- Increase the portion of usage from renewable energy e.g. solar energy

The Potential Impact of Risks	Risk Movement from 2018
Business disruption, maintenance cost and company's reputation	Emerging risk

Financial Risks

1. Risks from exchange rate fluctuation

The Company is exposed to the risks of foreign exchange rate fluctuation due to International Roaming revenues and expenditures being in foreign currencies and parts of the network expenditures also being in foreign currencies.

AIS is incorporating the following steps into its risk management plan:

- Use Forward Contracts which specify that the exchange rate at the time of the contract date will apply to the future delivery of the contracted services
- Use existing foreign currency deposits (Natural Hedge) to make payments for goods and services in foreign currencies.

The Potential Impact of Risks	Risk Movement from 2018
Cost and/or revenue	No significant changes