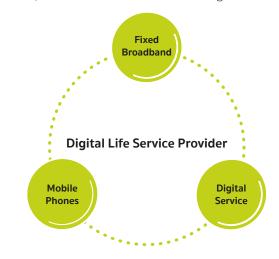
## **OUR BUSINESS**

### **BUSINESS OVERVIEW**

### AIS, the Digital Life Service Provider

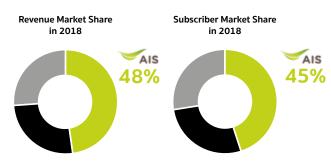
Advanced Info Services Public Company Limited (AIS) has been operating in the telecommunications service industry for the past 28 years. Today, we are a "Digital Life Service Provider" operating three core businesses, namely, mobile phone services, fixed broadband services, and digital service, while providing nationwide telecommunications infrastructure for Thailand.

In 2018, AIS's total assets were valued at Baht 290,505 million with a market capitalization of Baht 512,860 million, ranked fifth on the Stock Exchange of Thailand.



### Growing in the Fixed Broadband Market

In 2015, 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 2018, therefore, grew by 42% YoY, accounting for 3% of core service revenue. Currently, the total number of subscribers is 730,500, accounting for more than 8% of the fixed broadband subscriber market share.



"Other operators are Dtac and True Move"

### Leading the Mobile Market

At the end of 2018, AIS remained the largest mobile operator in Thailand, with a revenue market share of 48%, and a total of 41.2 million subscribers nationwide. AIS has been providing mobile phone services for 28 years, with its mobile phone service revenue still accounting for more than 94% of core service revenue. In the past year, revenue in this area continued to grow by 1.3% 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. AIS also continues to collaborate with its partners and vendors to conduct research and development of our network in order to support new applications and services, an important foundation of our continued leadership in the up-and-coming 5G era. Our mobile services include voice calls, mobile data, WiFi, international direct dialing (IDD), and international roaming.

### Subscriber Market Share in 2018



"Other fixed broadband operators are True, TOT and 3BB"

#### **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 Payment of Not Less Than 70% of Net Profit

AIS aims to pay dividends of at least 70% of consolidated net profit twice a year. The first dividend payment shall be an interim amount based on operations during the first half of the year, whereas the second dividend payment will be based on operations during the second half of the year. The total annual dividend payment shall be approved in the annual shareholders' meeting.

With regard to each subsidiary, dividend payments shall be based upon its operating results, financial conditions and other material factors. In all cases, dividend payments shall be dependent on cash flow and investment plan, including any other future obligations of the Company and/or subsidiaries. Such dividends shall not exceed the retained earnings of the Company's financial statements nor adversely affect the ongoing operations of the Company and its subsidiaries. The past five years of dividend payments are shown below.

	2014	2015	2016	2017	2018
Total dividend payment (Baht per share)	12.00	12.99	10.08	7.08	7.08
1.Interim dividend	6.04	6.50	5.79	3.51	3.78
2.Second half of the year dividend	5.96	6.49	4.29	3.57	3.30
Dividend payout ratio (percentage)	99	99	98	70	71

### **TOP TEN SHAREHOLDERS**

Information as of 16 August 2018, the latest book closing date for the right 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. <sup>1</sup> )	172,311,185	5.80
4.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	123,721,953	4.16
5.	SOCIAL SECURITIES	81,587,800	2.74
6.	STATE STREET BANK EUROPE LIMITED	52,949,864	1.78
7.	STATE STREET BANK AND TRUST COMPANY	18,601,776	0.63
8.	GIC PRIVATE LIMITED	13,484,873	0.45
9.	VAYUPAK FUND 1 BY MFC ASSET MANAGEMENT PCL.	11,076,400	0.37
10.	VAYUPAK FUND 1 BY KRUNG THAI ASSET MANAGEMENT PCL.	11,076,400	0.37
	TOTAL	2,380,881,251	80.08

Note: 1) The information of Thai NVDR Co., Ltd. can be found the SET website (www.set.or.th.). As of 16 August 2018, the shareholders of Thai NVDR are as follows

No.	Name	No. of shares held	% of shareholding
1.	STATE STREET BANK AND TRUST COMPANY	33,779,637	1.14
2.	STATE STREET EUROPE LIMITED	19,676,561	0.66
	TOTAL	53,456,198	1.80

### Major shareholder whose behavior can influence when determining policy or handling operation, are

1. Intouch Holdings Plc., major shareholders of Intouch Holdings Plc. as follows:

No.	Name	Number of shares	Percentage of investment
1.	SINGTEL GLOBAL INVESTMENT PTE LTD 1)	673,348,264	21.00
2.	THE HONGKONG AND SHANGHAI BANKING CORPORATION	509,766,840	15.90
	LIMITED		
3.	THAI NVDR COMPANY LIMITED 2)	381,063,676	11.88
4.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	137,520,271	4.29
5.	ASPEN HOLDINGS LIMITED 3)	102,130,520	3.19
6.	SOCIAL SECURITY OFFICE	44,200,100	1.38
7.	KRUNGSRI DIVIDEND STOCK LTF	32,018,900	1.00
8.	THANACHART DIVIDEND STOCK FUND	31,001,700	0.97
9.	MR. PERMSAK KENGMANA	26,879,500	0.84
10.	STATE STREET EUROPE LIMITED	18,453,828	0.58

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

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

Name	% of shareholding
Singtel Asian Investments Pte. Ltd. *	100.00

<sup>\*</sup> Singtel Asian Investments Pte. Ltd. is 100% hold by Singapore Telecommunications Limited (Soure: Accounting and Corporate Regulatory Authority (ARCA), Singapore as of 31 December 2018)

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

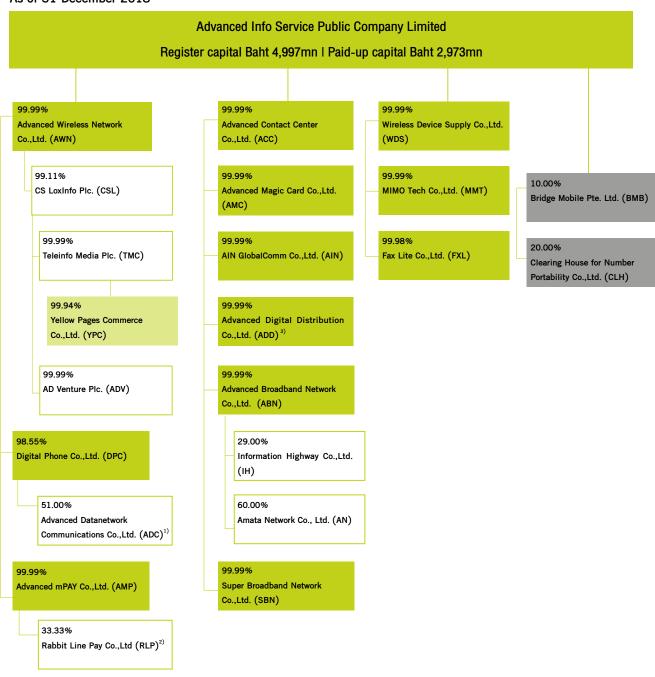
-None-

 $<sup>^{2)}</sup>$  The information of Thai NVDR Co., Ltd.  ${\it ll}$  can found the SET website (www.set.or.th.)

<sup>&</sup>lt;sup>3)</sup> On the list of shareholders provided by the Department of Business Development, Ministry of Commerce, as of 3 January 2019, Aspen Holdings Limited is a company incorporated in Thailand and 99.99% owned by Anderton Investments Pte Ltd., Singapore.

### **BUSINESS STRUCTURE OF AIS**

As of 31 December 2018



#### Note:

<sup>1)</sup> The remaining share percentage of ADC in the amount of 49% is held by other persons with no conflict of interest.

<sup>&</sup>lt;sup>2)</sup> RLP is a joint Venture between AMP and Rabbitpay System Company Limited , LINE Pay Corporation started from 5<sup>th</sup> March 2018

<sup>3)</sup> ADD has been registered since 25 April 2018

### STRUCTURE OF INTUCH GROUP



<sup>1)</sup> Listed Company on the Stock Exchange of Thailand

<sup>2)</sup> Excluded investment in debt security

Excluded investment in debt security. Sin ITV, which ceased operations, and there are ongoing disputes.

with the Permanent Secretary of the Office of the Prime Minister.

\*) Lao Telecommunications Public Company entered into Sale and Purchase Agreement to acquire Vimpelcom Company Limited from the government of Lao PDR in January 2019.

### **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. Anant Kaewruamvongs\* as members.

In 2018, 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 2018 are as follows:

1. Reviewed and concurred with the Company's strategic direction, management structure, 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 report to the Board of Directors for acknowledgement.
- 3. Considered, provided opinions and concurred with dividend payment and the execution of new investment transactions and proposed to the Board of Directors for approval.
- 4. Considered and reviewed the Company's risk management undertaken by the Risk Management Committee and proposed to the Board of Directors for acknowledgement.
- 5. Prepared this Executive Committee Report for the year 2018 and disclosed in the annual report.

Mr. Allen Lew Yoong Keong
Chairman of Executive Committee

<sup>\*</sup> Mr. Anant Kaewruamvongs has resigned from the member of executive committee since 21 January 2019. The Board of Directors appointed Mr. Anek Pana-apichon as the new member.

# REVENUE STRUCTURE & PRODUCTS AND SERVICES

#### Revenue Structure by Service Type

	2016		2017		2018	
	Baht million	Percent	Baht million	Percent	Baht million	Percent
Mobile phone business revenue	119,493	78.54	122,979	77.97	124,601	73.36
Fixed broadband business revenue	860	0.57	3,128	1.98	4,436	2.61
Other services revenue	2,208	1.45	2,476	1.57	4,391	2.59
Core services revenue	122,561	80.55	128,583	81.53	133,429	78.55
Interconnection (IC) and equipment rental revenue	5,665	3.72	4,364	2.77	10,576	6.23
Service revenue	128,226	84.28	132,947	84.29	144,005	84.78
SIM and device sales revenue	23,924	15.72	24,775	15.71	25,851	15.22
Total revenue	152,150	100.00	157,722	100.00	169,856	100.00

#### **Products and Services**

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

#### **Mobile Business**

- 4G/3G/2G mobile network service
- Prepaid and postpaid service
- Mobile phone sales
- Roaming and international calls

#### Fixed Broadband Business

 Fibre broadband for households and SMEs

### **Digital Service Business**

- Video Platform
- Enterprise cloud
- Mobile money
- Internet of Things
- Other platforms

#### 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. AIS's mobile network covers 98%of the population and provides more than 97,000 AIS Super Wi-Fi access

points. AIS also introduced a new technology combining 4G and Wi-Fi under the Next G brand name, providing internet services with speeds of up to 1 Gbps.

AIS provides mobile phone calling and internet services in both prepaid and postpaid formats. At present, AIS has a total customer base of 41.2 million subscribers nationwide, with 8.2 million of these being postpaid subscribers and another 33 million prepaid subscribers. Particularly popular with customers are data packages and postpaid packages sold together with smartphones for various price levels. Additionally, AIS provides international roaming as well as the SIM2Fly, offering saving for roaming on a prepaid SIM with a focus on data usage. We also offer international direct dialing (IDD) services for international calls from Thailand. 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 since 2015, providing services using fibre optic technology, the new technology in the industry. 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 730,500 subscribers.

AIS Fibre offers a variety of packages in various price levels. This includes packages attracting customers interested in upgrading from ADSL and VDSL technology to fibre, and packages providing speeds from 100 Mbps for families, as well as 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 2018, 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 2018, AIS increased interest in its products by offering a variety of additional services to customers, allowing customers to select a daily viewing content package at the price of Baht 5 per day, making viewing times more convenient and cost-effective for customers.

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, such as HBO GO, 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/playbox/











### Enterprise Cloud

In 2018, AIS continued to expand its cloud and other digital solution services for enterprise customers by acquiring CS LoxInfo, thereby enhancing our ability to serve our enterprise customers, in terms of not only products and services but also personnel and expertise, and to make services available to new customer bases. According to business trends in Thailand, enterprise customers have become increasingly active in switching over to digital solutions due to lower investment costs, as well as the added benefit of not having to invest in actual infrastructure, particularly in an era where technology is changing rapidly.

AIS provides end-to-end cloud services spanning Infrastructure-as-a-Service (IaaS), including virtual machine, data storage, and colocation. We also provide big data analytics-as-a-service (DAaaS) to better meet the needs of medium-sized enterprise customers at an in-depth level and allow them to use analytic results to design new products that more effectively increase business opportunity. In addition, we also provide new services, such as disaster recovery-as-a-service to provide data backup and retrieval in case of a disaster, providing customers with business continuity in the event of system failure. Database-as-a-service is also provided for database management, offering the advantage of cloud usage for both expense and performance management. Enterprise Resource Planning Solution (ERP) is another service provided by AIS, particularly for smaller enterprises and corporate customers enabling holistic organizational development and planning so that available resources can be used to their greatest potential and benefit.

The AIS cloud service comes with the best end-to-end security, from network to cloud platform, with ISO27001 certification and supported consultancy services from AIS experts. In addition, AIS colocations are housed in three tier-4 equivalent Data centers in Bangkok and its vicinity, providing support for businesses at all levels. Investors can find more details at https://business.ais.co.th/enterprise.html



### Mobile Money

AIS provides the Mobile Money service platform for both corporate customers via mPay and for general customers via investment in a joint venture company, Rabbit LINE Pay. Corporate customers using mPay are provided with a comprehensive mobile payment platform that allows their customers to use a mobile electronic wallet for the payment of goods and services without merchants and businesses having to invest in their own system or apply for their own operation license. More details can be found at www.ais. co.th/mPAY/gateway

In 2018, AIS entered into a joint investment with VGI and LINE, in order to provide our general customers with the electronic wallet service under the name "Rabbit LINE Pay". This service allows users to pay for products at various participant stores using a QR code without the need to carry cash. There are also a number of promotional activities and free product promotions when customers use Rabbit Line Pay, to help invite yet more customers to sign up for the service. Additionally, these services support the development of a cashless society in line with the government policy to advance the National e-Payment system. The scope and breadth of these services have also been expanded, whereby customers are now able to tie their Rabbit LINE Pay account to a Rabbit Card for BTS ticket payment, so that BTS passengers can deduct fares from their Rabbit Line Pay e-wallet or from a credit or debit card tied to Rabbit Line Pay, providing greater convenience for users.

In addition, AIS has also partnered with SingTel to launch the VIA platform, which is a country-to-country electronic wallet platform. This means that customers using Rabbit LINE Pay can purchase products from participating merchants in Singapore



### IoT or Internet of Things

AIS also provides NB-IoT (Narrow-Band Internet of Things) services; a service solution for connecting multiple types of devices via the AIS internet network. This is a key service that will be supported by 5G technology in the future. In 2018 alone, AIS expanded its NB-IoT network to cover 77 provinces nationwide, and also received the Frost & Sullivan award as Thailand's IoT Solutions Provider of the Year. We aim to fulfill the needs of digital business by providing an international-level standard of technology that will enable developers, startups and enterprises to create IoT solutions that are applicable not only to business and government entities, but also to Thai people as end-users.

AIS focuses on creating an ecosystem for IoT services. In 2018, AIS demonstrated its readiness with NB-IoT and eMTC (Enhanced Machine-Type Communication) networks, including a platform and ecosystem via the AIS IoT Alliance

Program (AIAP), by participating in the implementation of IoT solutions that are changing the working style of a variety of industries in the business sector. This can be seen in a multiplicity of both large and small organizations. An example of this is the smart bike solution, the Mobike, used in various locations, such as Chiang Mai province, Kasetsart University, the Ministry of Public Health, and Thammasat University, allowing customers to rent and return bikes using electronic wallet payment. This is a great step in helping to initiate the development of solutions to meet Smart City needs, better facilitating safety and care of the environment. Other examples of this include our collaboration with the "Perfect Smart City" project of Property Perfect PLC and also with the AMATA Smart City Project of Amata Industrial Estate, etc.

In addition, AIS also continues to contribute to the development of innovation in the business sector, such as using IoT in the natural gas pipeline maintenance system of PTT PLC and the introduction of IoT solutions into the flood prevention system of Boon Rawd Brewery Co., Ltd. AIS has also partnered in the development of new capabilities for smaller businesses, such as with Krotron Co., Ltd. and CIRBOX Co., Ltd. in the use of IoT to switch vending machines for Smart Kiosks, etc.

Investors can find more information about our IoT services on our website at http://www.ais.co.th/nb-iot/



#### Other Platform Services

Providing platform services is part of the vision of AIS in working with our partners to develop services that create value for our customers. Relying on the strength of the AIS customer base of over 41 million and our cooperation with business partners possessing specific expertise in a variety of fields, we are able to create new service platforms that focus on specific customer segments, generating revenue both in the form of fees and revenue sharing from services. In the past year, AIS platforms have begun offering commercial services, including gaming platforms, advertising platforms, and insurance sales platforms, among others.

#### Distribution and Distribution Channels and Services

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

AIS Shop Distributors

Direct Sales Online Channels

- 1. AIS Shop: These are service centers managed by AIS and selected distributors who have shown high service potential. There are currently 160 branches operating throughout the country. AIS Shops offer the most comprehensive range of products, services, and after sales services when compared with other channels. They focus on distribution to customers in densely populated urban areas and maintaining a positive image of AIS products and its services.
- **2. Distributors:** AIS has cooperated with a variety of distributors in order to cover the needs of a wide range of customers throughout the country. For example, providing

the AIS brand with an image-level service at more than 430 locations, our "AIS Telewiz" partners have strong potential in downtown city areas. Our "AIS Buddy" distribution partners provide access to district and sub-district areas through more than 1,100 branches at a wide variety of retail outlets and modern trade retailers, such as the JAYMART Group, Computer System, Ibis Plus Network, and Tesco Lotus.

- **3. Direct Sales:** These are performed by the AIS Direct Sales team, with an emphasis on postpaid customers. This channel greatly increases distribution efficiency by offering products and services directly to customers, for example, via sales booths or through activities organized in target group areas. AIS has developed its capabilities and promoted sales with the use of the "AIS Easy App", aiding the direct sales team in selling, registering and providing services to customers more efficiently, conveniently, and speedily.
- **4. Online Channels:** Used to promote and encourage self-service, these channels include the 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.

### Relationship with Customers

AIS is a leader in providing digital services, with a focus on the concept of being the "No. 1 service with heart, for a digital lifestyle". This means offering our customers the highest levels of care and understanding in every detail of our creative services that combine technology with a distinctive human touch. All of this is carried out to meet the rapidly evolving digital needs that pervade our everyday lives. AIS prioritizes speed, convenience and personal data security so that our customers can manage their own services any place, any time, 24 hours a day. Our preference for personalization gives our customers the best possible user experience, while also setting us apart from our competitors and their services to ensure the maximum potential is achieved throughout every aspect of our operations. Our devotion to customer relations can be

categorized into the following 5 key areas:

- 1. Providing services with digital technologies that are utilized in order to raise the bar in terms of the products on offer to our customers, including:
- The "Full-E" service aims at increasing convenience for a full range of services, including monitoring information, making payments, and sending receipts and billing information, all of which are available in one place, through the myAIS application. The application can ease the stress involved with various customer services, such as in cases of losing a bill, being unable to make payment in the allotted time period, not being able to travel to a designated payment office and being unable to look back through traditional service receipts. The "Full-E" service provides assistance in all these areas to ensure a comfortable, time-efficient user experience for our customers, while also reducing the reliance on paper, through incorporating the following services:
  - eBills: Giving customers the opportunity to check their billing information via their mobile phone in the form of an SMS notification that allows immediate access to said information.
  - ePay: Increasing the scope of online payment channels for our customers, enabling them to pay via banking applications, through the 'Rabbit LINE Pay' electronic wallet, and with automated monthly payments from any bank.
  - eReceipt: Letting our customers view receipts through the application for a period of up to three months.
- Taking care of our customer's personal data security in the best possible way is achieved through efficient and highly accurate facial recognition technology, meaning our customers can rest easy, safe in the knowledge that their personal information is safely secured. This technology is set up for a new telephone number registration available at over 20,000 official AIS shops, Telewiz stores and AIS Buddy branches located throughout the country. Furthermore,

AIS is the first organization in Thailand to have installed facial recognition technology at 80 of our service kiosks in 67 of our AIS shops, in order to improve efficiency in terms of registering new telephone numbers.

- The "Ask Aunjai" virtual agent has been developed to combine artificial intelligence (AI), chatbots, and smart knowledge base technologies in order to respond to customer queries online and through social media platforms, including the AIS website and the myAIS application. The service is available 24 hours a day and has brought an increased sense of humanity, which gives our customers the feeling that they are interacting with an actual member of staff. "Ask Aunjai" improves customer service speed at the same time as providing specific solutions to issues while letting our staff focus on more valuable duties efficiently.
- 2. "AIS Privileges" are seen as a vital component of how we respond to the needs of each individual AIS customer using our services on a daily basis. AIS is therefore committed to the continuous development of new and creative ways of providing both AIS and AIS Fiber customers located throughout the country with rewards in the form of numerous special privilege programs. The "7 great times with AIS Privileges" offers our customers great deals for use across every dimension of their lifestyles, including at restaurants, coffee shops, and shopping malls, as well as at entertainment and tourism establishments. Such special privileges are valuable discounts that can be used anywhere, at any time of day, and we are currently working alongside over 25,000 partner stores country-wide to provide over 15 million privileges each year. AIS customers can also exchange the AIS points they have collected through payment for our services for additional reductions, for example, exchanging points for 30-50% discounts on food and drink at our famous restaurant partners, for reductions on tickets to see movies at Major cinemas throughout the country, for free internet and call packages, and for mobile phone price reductions. As of now, there are 9 million AIS telephone numbers signed up to the AIS points program.

3. "AIS Serenade" is a special privilege program aimed specifically at high spending AIS customers as well as customers who have been using AIS services for a certain length of time, underlining our long-term commitment to these customer groups. The Serenade program has been a constant feature of our company for the past 14 years, and it is one part of our drive to improve the provision of services and privileges under "The Ultimate Life Experience" concept. An increasing number of special rewards are being offered to our Serenade customers, including the maximum possible privileges in terms of services, entertainment, business and many more besides, such as special offers at restaurants, tourist hotspots, exclusive parking spaces, airport lounge access and even personal assistants. Over the past year, AIS has expanded its Serenade Club to 13 different locations across Bangkok and in other large cities, so that we can guarantee the most exclusive experience possible for our Serenade members who have increased in number from 4.5 million to the current total of 5.2 million people.

4. In our quest to strive constantly for the best possible customer experience, AIS has been working hard in terms of developing our analysis and understanding of consumer

behaviors. We have therefore made alterations to our marketing model, including the way we present our products and services by placing an emphasis on "building value" for our customer base. To this end, we have begun utilizing a tool called customer value management (CVM) to study our customers' behavior, in order to respond effectively to their needs. Moreover, this study and analysis allows us to present each customer base with products that are tailor-made to their specific requirements, helping us to increase consumer satisfaction at the same time as carefully managing AIS customer relations.

5. AIS allows customers to register their level of satisfaction with our services across numerous platforms, including telephone ratings, surveys corresponding to satisfaction levels in our stores, or questionnaires arranged by external organizations. These ratings refer to the quality of services on offer from AIS, whether in our stores, 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 can then be used to constantly and consistently develop every facet of the services we provide. From our analysis, we have been able to summarize customer satisfaction levels as follows:

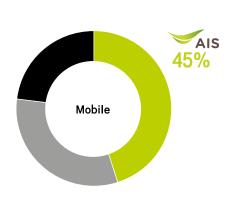
	2018*	2017
Human touch point satisfaction scores	83 percent	88 percent
Non-human touch point satisfaction scores	72 percent	76 percent

<sup>\*</sup>Satisfaction scores for 2018 cannot be compared directly with the results of 2017 due to changes in measurement methods for greater accuracy and relevance. In 2017, the scoring used a 3-point system (1 = very good, 2 = good, 3 = need improvement) whereby the "very good" and "good" ratings were included in our calculation. In 2018, the scoring used a 5-point system (5 = extremely satisfied, 4 = satisfied, 3 = moderate, 2 = unsatisfied, 1 = extremely unsatisfied) and only included the "extremely satisfied" in the calculation.

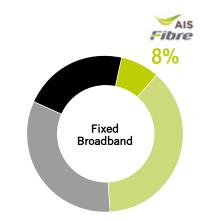
# INDUSTRY COMPETITION 2018 & OUTLOOK 2019

#### Industry Conditions and Competition in 2018

Subscriber market shares in mobile and fixed broadband businesses



"Other operators are Dtac and True Move"



"Other fixed broadband operators are True, TOT and 3BB"

### Complete industry transition from a concession scheme to a license scheme

In the months of August and October, the NBTC auctioned out 1800MHz and 900MHz spectrum licenses, respectively. Part of these were the final lot of frequencies remaining from the previously expired concession. AIS and DTAC were the winners of this spectrum license auction, resulting in the Thai telecommunications system finally completing its transitioning from a concession scheme to a license scheme. In addition to the use of spectrum licenses, all three operators have entered into a business partnership agreement with state enterprises (TOT and CAT), joining together to co-utilize the frequencies of which the state enterprises have the right to operate. This also includes assets delivered under the concessions, such as telecommunications towers and other network equipment, in order to make use of unexpired assets, delay unnecessary repeat investments, and enhance network service efficiency.

### Continued growth of 4G usage, but revenue restrained by unlimited plans

At the end of 2018, customers using 4G technology accounted for approximately 60% of industry subscriber base, showing growth from the previous year when numbers were below 50%. However, revenue in the mobile phone industry showed a growth rate of approximately 3%; down from the previous year's growth rate of 6%. In Thailand, the mobile phone user penetration rate was within the 130-140% range, reflecting a fairly saturated market in terms of number of users. These numbers have resulted in service provider competition for the retention of existing customers, as well as continual competition for customer share in the market. Meanwhile, price competition in the past year focused on offering unlimited data usage packages, particularly fixed-speed unlimited data packages, ranging from 1-6 Mbps, with these gaining greater popularity among customers due to the ability to use data without limit concerns. Unfortunately, however, the nature of such packages has placed pressure on the industry's overall revenue growth, causing service

providers to begin a reduction of such package offers, especially towards the end of the year, and instead highlight packages that provide maximum 4G speed along with appropriate data amounts according to package prices selected by the customer.

Attractive discounts on handset prices have remained a key strategy for operators in drawing customers looking to purchase handsets in conjunction with specific packages (bundles packages), especially in relation to postpaid customer campaigns. However, overall spending by mobile operators in marketing campaigns, including the aforementioned discounts, is likely to decrease from the previous year, with a focus instead on more area-based marketing, reflecting tighter control of campaign and cost effectiveness.

### Postpaid migration continues, driven by increased smartphone and social media usage

In 2018, total market data usage rates continued to increase, with a customer data usage of over 10 GB/data sub/month thanks to social media applications and the growth of the e-commerce market, along with smartphone usage rate growth to around 77%. All of these factors have helped to encourage customer need for constant internet connectivity, resulting in the continued trend of prepaid to postpaid migration throughout the past year, with the proportion of postpaid numbers per total numbers at 26% this year, compared to 22% in 2017, causing the ARPU for the entire industry to grow by approximately 2% from last year to Baht 240 during of this year.

### Fixed broadband market increases as fibre service demand grows

Throughout the past year, the fixed broadband market has continued to see revenue growth at more than 10%, as the demand for internet connectivity in residential areas continues to increase. The overall market grew

from 8.2 million connected households in 2017 to over 9.3 million in 2018, or 43% of households with fixed broadband connectivity. Service providers continue to focus on expanding fibre service coverage, along with seeking out new customers while still maintaining their existing customer base, by using more concentrated pricing strategies, such as issuing fibre packages of 10 Mbps at a starting price of Baht 250. Incumbents have also tried to offer steep discounts to existing customers in the event of customers looking to cancel or change service providers. For these reasons, the industry ARPU in 2018 has decreased to approximately Baht 580. However, in order to meet the needs of households requiring internet usage for many family members or connections for multiple devices, service providers continue to offer high-speed fibre packages, such as 1 Gbps packages for the price of Baht 2,999. Additionally, service providers with other available services apart from high-speed internet continue to offer convergence packages, combining a variety of services into the same package, including high-speed internet, internet SIMs for mobile phones, and content. Such offers highlight the value of overall packages being greater than simply high-speed internet packages alone, and have more recently greatly increased in popularity with consumers.

#### Industry Trends in 2019

### Mobile phone market continues to expand due to 4G services and competition continues.

Throughout 2019, it is expected that the mobile phone market will continue to expand due to 4G usage for video content and social media. In addition, a gradual reduction of fixed-speed unlimited data packages is expected to help operator revenue to improve gradually. Nonetheless, competition in the mobile phone market is set to continue in 2019, with expectations that operators will tend towards marketing strategies that focus on quality customers in order to control costs and expenses and to generate increased cash flow to support license

payments and future investments. 4G network quality, both in terms of coverage and speed, is still a key factor in customers' service choices and decision-making process. In addition, brand image and various other privileges will be more important to competitiveness in areas where the network quality of operators is not very dissimilar. Current trends also show that operators are increasingly utilizing modern technology to learn about customer behaviors, helping them to provide better products and services for each customer.

In terms of spectrum demand in order to provide more services, when considering spectrum allocation in the past year and the relatively low level of interest in bidding on said spectrums, it is expected that operators have retained sufficient frequencies to serve their customers for a certain period of time. Additionally, existing conditions and auction prices may not be sufficiently attractive or may not yet create enough additional value for business operations at this time. Not only that, but currently there are increased numbers of customers switching from 3G to 4G usage, making it possible to allocate more frequencies between technologies. Therefore, demand for additional spectrum auctions for 4G services may yet remain unclear in 2019.

#### Preparations for 5G technology

Over the next 2–3 years, the trends for 5G technology usage will become clearer, whereby cooperation between both government and private enterprises to create greater awareness and education about technology and to seek out new business models together will be important factors in the increased emergence of 5G technology for maximum benefit. This also includes greater clarity with regard to frequency allocation, as appropriate frequency allocation will help encourage more effective investment in 5G technology and enhance the country's growth in a wide variety of businesses and industries. According to current standards, frequency bands that

can be used to provide 5G technology services consist of those below 1GHz (Low Band), such as 700MHz; those in the range between 1GHz and 6GHz (Mid Band), such as 2.6GHz and 3.4 – 3.8GHz; as well as frequency bands above 24GHz (High Band), such as 26-28GHz, etc. It is therefore expected that operators, in collaboration with their partners, will begin increased preparation of their networks to support 5G technology. This includes, for example, plans for investment in Massive MIMO, which allows the transmitting and receiving of data signals using multiple antennas, as well as continued communications with the NBTC regarding opportunities to start the testing of 5G technology in some areas before going ahead with actual investment and commercial usage. This would also allow service providers to contribute information to the NBTC regarding the current industry conditions and financial burdens placed on operators, which would support the NBTC in effective planning of spectrum allocation and usage in the country.

### Continued fibre service expansion, creating advantages with convergence services

The fixed broadband market is expected to continue growing at a similar rate to the previous year, at about 10%, due to the demand for internet connectivity in the home and the ratio of households with fixed broadband that can still expand from current levels of about 43%. It is also expected that operators will continue to focus on the expansion of fibre services and encourage upgrades to fibre technology for customers still using old technology. At the same time, package value and attractiveness, including effective after-sales services, will become increasingly important to customers' decision-making processes. It is therefore expected that service providers offering convergence packages will create increased advantages and attract greater numbers of customers than those offering fixed broadband services only.

## THREE-YEAR BUSINESS DIRECTION

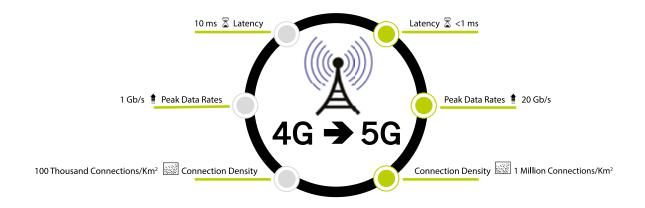
As quickly-evolving digital technologies and more sophisticated customer needs continue to emerge, they play a greater role than ever in structural changes for telecommunications operators, ushering the industry into an era of digital transformation. The wider abilities and range of choices of technologies have altered customer behavior to seek access to more comprehensive services as well as providing greater opportunity for mobile operators to access a broader marketplace. In light of these trends, AIS has redefined aspects of its business model from that of a traditional mobile service provider to that of a "Digital Life Service Provider", operating three main businesses, namely, mobile phone services, fixed broadband, and digital services, in order to enrich the daily lives and business capabilities of individuals, and the competitive edge of the country. To this end, we have focused on Digital Transformation in order to take advantage of technologies that expand our capabilities and efficiency, and to achieve sustainable growth in the digital era.

### Creating a quality mobile network to deliver a superior user experience

With the rapid growth of smartphone usage and faster connections via 4G networks, it is expected that mobile internet usage will continue to increase and expand its roles beyond the need for basic internet connections

and data transmission. We see that digital platforms have empowered the way that people live and work, and thus have become a necessity for many consumers. In our market leadership position, AIS will continue to focus on improving the quality of 4G networks through research and development with our partners, utilizing modern technology to increase network efficiency, both in terms of coverage and capacity, and providing excellent customer service.

Additionally, over the next 3-5 years, 5G technology standards will become clearer, specifically in terms of frequency and types of services that correspond to speed (Enhanced Mobile Broadband), ultra-low latency, and multiple connectivity (Massive Machine-Type Communications). This includes Network Function Virtualization (NFV), helping networks become more efficient and flexible as well as reducing unit costs. Because of this, 5G technology will allow our company to help support business operations in a variety of industries other than just telecommunications, such as by providing NB-IoT (Narrow-Band Internet of Things) services, which will be one of the most important services to be fully developed when the 5G service is launched. As such, AIS has already begun to create awareness of these technological changes to all its business sectors and is ready to support 5G services,



maximizing the efficiency of the country in general. Obviously, the spectrum of frequencies that can be utilized as well as the supported devices, applications and new revenue-generating models will be important factors in determining appropriate levels of investment in the long term.

### Meeting the demand for high-speed internet with fibre optic network and technology

In addition to internet connection via the mobile phone network, demand for household internet connections has steadily increased, with digital services in the future likely to develop beyond current limits in terms of the quality of services and more. These include, for example, higher resolution content, such as 4K and 8K content which require higher speed internet connections than the currently widely used full HD streaming. These requirements can be fulfilled with fibre technology, which provides faster and more reliable connections than ADSL technology. AIS sees the potential growth of this market and has set the target of becoming one of the major service providers. Utilizing nationwide fibre optics from its mobile networks, AIS Fibre will continue to tap into new urban areas and provide services to underserved areas that still lack quality high-speed internet access and/or who still use old ADSL technology. We will focus on providing a variety of services through the Fixed-Mobile Convergence (FMC) model, through which AIS can offer fixed broadband access along with mobile phone packages and other interesting content to meet the needs of entire families comprehensively. In this regard, AIS's investment in fibre optic networks builds upon our current network used for mobile phone services, which is available nationwide. The coverage expansion of fibre optic technology will allow AIS to deliver services that capture growth opportunities according to future trends with economies of scale.

## Creating new revenue sources from digital services to general customers and enhancing the potential of enterprises with end-to-end ICT solutions

Due to the rapid development of smartphone quality, both in terms of hardware and software, as well as AIS's quality 4G network, smartphones have become the main communication device used by consumers in their everyday lives. Additionally, smartphones have also become a major channel for watching content of various kinds as well as for the payment of goods and services via a wide variety of applications. AIS expects that this trend will continue with increased changes in consumer behaviour and therefore continues to focus on developing its platforms for video content (AIS PLAY) and mobile payment channels (Rabbit LINE Pay). This will allow us as an organization to create products and services that are attractive to customers and to provide opportunity for increased company revenue by adding new business models and by leveraging our customer base and platform data.

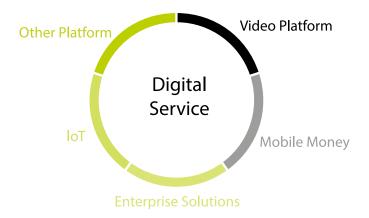
At the same time, while the business world grows ever more digital, cloud systems and ICT solutions are key factors in enabling digital transformation and play a major role in creating compelling value for enterprises of all shapes and sizes. To support these growing needs, AIS has stepped further into the enterprise business segment, acquiring CS Loxinfo and partnering with leading providers in the ICT industry while also expanding its IDC services to new locations. With its extensive mobile network, the company aims to capture growth potential by providing a variety of comprehensive end-to-end services, such as ICT solutions, IDCs, and cloud services. These services will enhance business capability, optimize cost efficiency, and ensure system security for corporate customers. Additionally, this type

of ICT development also serves to enhance the country's economic development and competitive advantage amid the fast-changing environment of the business world of today.

### Personnel development for the digital age and leveraging technologies to improve operational efficiency

With the goal of developing the capabilities of our organization, AIS continues to utilize technology in our operations and comprehensive customer services. We truly believe that our employees are a major key to our long-term, sustainable success. To this end, we introduced the AIS Innovation Center in order to build

staff competency and encourage a growth mindset, ushering in a digital culture and learning platform that allows our employees to respond to rapid changes and disruptive innovation. In the very near future, Predictive Analytics Tools and Customer Value Management (CVM) will evolve to the next level. Machine learning and Artificial Intelligence (AI) will be integrated into our services and operations, resulting in improved sales and efficiency. This increased digital transformation will allow the company to offer products and services that better meet the needs of each and every one of our customers.



### **RISK FACTORS**

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

- Internal and external factors such as human resources, changes in technology and regulations, customers behaviors as well as the business environment
- 2. Extreme events such as floods, fires or other natural disasters or ongoing conditions that have adverse effects on the Company's work practices or business competitiveness

- 3. Past events, current exposures and future trends
- 4. Significant movements in the economy, society and environment
- 5. The causes of such potentially adverse events
- 6. New initiatives or new products and services that AIS is seeking to develop
- 7. Opportunities to identify new value adding activities.

### Risk identification process

Management and employees identify their own functional risks.

A Risk Management Working Group considers and selects identified functional 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 assessment of the risks according to acceptable risk levels, risk appetite, risk tolerance, as well as the identification of mitigation actions. The Risk Management Committee then proposes its plan to the Board of Directors for acknowledgement.

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

## 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 NBTC, the organization responsible for regulating the telecommunications 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 NBTC, 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 NBTC 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 telecommunications 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 2017
Business operations, revenue and cost, company's	No significant changes
reputation	

### 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. Most of the disputes related to the amount of revenue to be shared. Furthermore in some cases, NBTC used its authority to issue announcements, regulations or orders which were an obstacle to conducting business operations to an extent that it could reduce the profitability of the company and/or increase the service costs. In many cases, AIS

exercised our right 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 2017
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:

- Review Information Security Policy regularly
- Apply international standards, e.g. PCI-DSS, ISO 27001:2013 ISM etc
- Extend and expand security appliance tools to cover all 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

The Potential Impact of Risks	Risk Movement from 2017
Financial revenue, business or IT systems disruption	Increasing and emerging risk
and company's reputation	

### 2. 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, in 2018, 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 2017
Company's Reputation and Unachieved operations	No significant changes

### 3. Risk from intensive competition in the market

Faced with the high intensity 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:

- 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 2017
Financial revenue, market share and company's	Increasing
reputation	

### 4. 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 2017
Financial revenue, market share and company's reputation	Increasing and emerging risk

### 5. Risk from talent acquisition for digital disruption

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 offering scholarships to high-potential employees to promote the development of talent 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 2017
Company's reputation and market share	No significant changes

### 6. 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 2017
Financial revenue, business or IT system disruption, and company's reputation	New risk in 2018

### 7. Climate Change Risk

Climate change is one of the global issues that has the potential impact to our business operation, infrastructure and supply chain. The Company as a telecommunication service provider foresee the essential of dealing with this issues, we adopt our infrastructure design to ensure the continuity and efficiency of our services delivered to our customers 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 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 e.g.

- 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 2017
Business or IT system disruption, and company's	Emerging risk
reputation	

#### 8. 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 2017
Cost and/or revenue	No significant changes

#### 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 2017
Cost and/or revenue	No significant changes

### 2. Liquidity risks

AIS has liabilities and loans from financial institutions and debentures, including continued investment in network expansion. Therefore, there may be liquidity risks caused by the Company being unable to provide sufficient working capital to operate the business in the time required.

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

- Make cash projections and regularly update financial projections
  - Prepare pre-binding and non-binding credit lines
  - Use short-term loans as working capital
  - Have a variety funding sources
  - Maintain excess cash reserves for business operations

The Potential Impact of Risks	Risk Movement from 2017
Creditability	No significant changes