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中華電信
Chunghwa Telecom

Annual Report 2018

Digital Pioneer Leading the New Frontier

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Chairman and CEO
Yu Cheng

President
Chi-Mau Sheih

Spokesperson
Shui-Yi Kuo
Chief Financial Officer
Tel: +886-2-2394-0043
E-mail: harrison@cht.com.tw

Acting Spokesperson
Hong-Chan Ma
Senior Executive Vice President
Tel: +886-2-2344-5768
E-mail: hcma@cht.com.tw

Fu-Fu Shen
Assistant Vice President
Tel: +886-2-2344-5488
E-mail: ffshen@cht.com.tw

Stock Transfer Agent
Yuanta Securities Co., Ltd.
Registrar & Transfer Agency Department
B1, No. 210, Sec. 3, Chengde Rd., Taipei City 10366
Tel: +886-2-2586-5859
website: http://www.yuanta.com.tw

Auditor
Deloitte & Touche
CPA: Hung-Peng Lin, Ching-Pin Shih
20th Floor, No. 100, Songren Rd., Xinyi Dist.,
Taipei City 11073
Tel: +886-2-2725-9988
website: http://www.deloitte.com.tw

Exchange of ADR Listing
New York Stock Exchange
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website: https://www.nyse.com

ADR Depositary Bank
JPMorgan Depositary Receipts
383 Madison Ave. Floor 11
New York, NY 10179, U.S.A.
Service No. in USA: 1-866-JPM-ADRS
website: https://www.adr.com

Inquiries on ADR Investment
JPMorgan Depositary Receipts, ADR Service
Toll Free in USA: 1-800-990-1135
Tel No. out of USA: 1-651-453-2128
E-mail: jpmorgan.adr@eq-us.com
Ordinary mail: JPMorgan Chase Bank N.A.
P.O. Box 64504
St. Paul, MN 55164-0854, U.S.A.
Express mail: JPMorgan Chase Bank N.A.
1110 Centre Pointe Curve, Suite 101
Mendota Heights, MN 55120-4100, U.S.A.

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1 Letter to Shareholders

Letter to Shareholders

Dear Shareholders:

In 2018, although the overall telecommunication market turmoil continued, emerging businesses prevailed to gain satisfactory market momentum. In order to capture the new wave of market opportunities and significantly enhance corporate competitiveness for the mid-to-long term, we have designed a 3-year strategic transformation plan, "Rise on, Together," into 2021. On the other hand, in the short-term, we also addressed the dynamic market challenges directly and thus successfully solidified our overall market leadership. In 2018, in facing the relatively mature 4G market with price pressure from peers, we actively attracted and retained mobile users with consistent positive net growth commencing the second quarter of 2018, resulting in total mobile subscribers of over 10.594 million as of December 31, 2018. This is a strong testament that we are the primary market leader in terms of total subscriber base and revenue stream respectively. In addition, our mobile network quality was awarded many #1 accolades by various renowned international and domestic institutions such as OpenSignal, Speedtest, Frost & Sullivan, etc. Our optimal network infrastructure is the key differentiating factor as we continue to compete effectively within the mobile market.

We continued to focus on home-centric digital services as a key factor for future smart living. Therefore, we are confident in the broadband market development with expanding digital applications. As part of our broadband strategy, we continued to offer and to migrate users to higher speed services leveraging our advanced optical network enhancement, thus to increase our revenue generation. As of December 31, 2018, total broadband users reached 4.483 million, 1.422 million of who subscribed to a connection speeds of 100Mbps or higher, representing a growth rate of 10% year-over-year. Also, broadband users who subscribed to a connection speed of 300Mbps or higher continued to grow in multiples. In addition, we continued to capitalize on the digital convergence trend by strengthening our Multimedia on Demand, or MOD, service and by actively engaging exclusive contents, such as "2018 FIFA World Cup". As of December 31, 2018, we are excited to see that our MOD subscribers increased to over 2 million, resulting in MOD revenue growth of 27.7% year-over-year, thus significantly enhanced our leadership position as the largest audio/video platform in Taiwan. In January 2019, National Communications Commission, or NCC allowed us to "package MOD channels" freely for fulfilling users' diverse demand, leading to a more favorable environment for MOD operation. In the future, we will continue to deploy broadband and MOD bundled services to increase user stickiness, as well as to develop more innovative applications such as health cloud, smart speaker, etc., in order to achieve our ultimate target of innovating smart home service hub.

As one of the major Information and Communication Technology, or ICT solution providers, enterprise market continued to be a primary focus for us, in which the enterprise market revenue generation as a portion of our total revenue continued to increase on annual basis. In recent years, we have actively recruited and cultivated many talents in the areas of Artificial Intelligence, or AI, big data, blockchain, information security, mobile network, software technology, etc. We also provide enterprise and government entities ICT integrated services including smart city, smart transportation, smart care, big data and security platform, by leveraging our Internet Data Center, or IDC, cloud system, Content Delivery Network, or

Yu Cheng
Chairman and Chief Executive Officer

Chi-Mau Sheih
President

CDN, and other advanced network infrastructure. As an example, for the "Government Agencies' Security Protection and Regional Defense System" service contract, of the total 22 municipal and county administrative regions within Taiwan, we successfully obtained 15 biddings in 2018, totaling about NT$170 million revenue, with potential extended bids for the next two years. Furthermore, after the initiation of our Internet of Things, or IoT platform in 2017, we successfully completed several large-scale bidding projects in 2018 including Environmental Supervision Plan, Changbin Solar Photovoltaic Project, Smart Lighting, AMI Smart Meters, etc., totaling over NT$1 billion revenue. This IoT platform also supports our in-house developed solutions including speech recognition cloud, health cloud, multi-car calling services, etc.

We continue to conduct network related construction and investment in preparation for 5G commercialization and massive demand of bandwidth required by digital services. In 2018, we invested in Southeast Asia - Japan 2 Submarine Cable, or SJC2 undersea cable connecting total 11 countries including Singapore, Thailand, Hong Kong, Taiwan, People's Republic of China, Korea, Japan, etc. We acquired 18Tbps bandwidth capacity with two landing points in Northern and Southern Taiwan to strengthen the backup capability. Our world-class IDC in Banqiao, New Taipei City, has started the second phase of installation in 2017 and has over 70% occupancy in 2018, with the third phase ready for deployment. In addition, global 5G development is on track, and Taiwan closely follows the international trends. For enhanced 5G ecosystem, in January 2018, we formed a pilot team for "Taiwan 5G Industry Development Alliance", consisting of more than 40 domestic and international entities, in building an end-to-end 5G industry chain for innovative applications, as well as building 5G trial network and testing field. We are the only telecommunication service provider with Narrow Band - Internet of Things, or NB-IoT and Category M1, or Cat-M1 dual network throughout Taiwan. We have and will continue to prepare well to realize 5G commercialization in Taiwan by 2020 and combine this advanced infrastructure with our AI, big data, IoT, and broadband audio/video platform to capture the massive digital opportunities.

Financial Performances

Chunghwa Telecom's consolidated revenue for the full year of 2018 was NT$215.48 billion, representing a decrease of 5.3% as compared to the prior year, mainly due to the decrease of voice revenue that resulted from market competition and Voice over Internet Protocol, or VoIP substitution, as well as the decrease of ICT solution revenue. However, mobile handset sales, internet services and MOD accounted for increased revenues.

Consolidated costs and expenses for the full year of 2018 was NT$171.95 billion, representing a decrease of 4.8% as compared to the prior year, mainly due to the decreases in cost of goods sold and ICT project costs. Capital expenditure, or CAPEX, for 2018 was mainly used for supporting our business growths and consolidating our market position, including expanding fiber coverage and enhancing carrier aggregation to boost mobile broadband speeds. Moreover, we further optimized our investment review process and effectively negotiated with vendors for procurement. As a result of the successful execution of our business strategies and effective cost control initiatives, CAPEX spending was NT$28.55 billion, and net income attributable to stockholders of the parent company was NT$35.50 billion, or equivalent to NT$4.58 per share.

In 2018, our overall net reinvestment income was NT$1.77 billion. We continued to focus our strategic investments on consolidating core businesses as well as developing digital economy, including in October, PChome and us jointly invested into "Chunghwa PChome Fund I" as a venture fund to invest in early-stage entrepreneurs for Taiwan digital living; in July, we injected capital to E-sport venture named "4Gamers" in developing Taiwan and Southeast Asia E-sport ecosystem; in October, Mega International Commercial Bank Co., Ltd., Shin Kong Financial Holding, Pxmart Co., Ltd. and Chunghwa Telecom jointly established a preparatory office for the web-only bank, or "Next Bank," initiatives. The first phase funding and professional team members for this initiative are all in place as of the first quarter of 2019, primarily focusing on acquiring internet banking license. Moving forward, we will continue to prudently drive our strategic investments in solidifying our core businesses, deriving new business ventures, accelerating digital innovation, especially in the ASEAN market, in order to further advance our mid-to-long term growth momentum.

Research, Development and Achievements

In 2018, Chunghwa Telecom's research and development efforts covered seven areas of Intelligent Broadband Networking, Cloud Computing, Intelligent Business, Information Security Applications, Artificial Intelligence and Big Data, Internet of Things, and Convergence Services. The main achievements are listed below:

▲ Senior executive team photo taken in March 2019 at The Center of Intelligent Future.

(1) Intelligent Broadband Networking: ST-2 satellite and 5G coexistence solution; first 3rd Generation Partnership Project, or 3GPP standard compliant 5G connection in Taiwan; Multi-access Edge Computing, or MEC solution; "Mobile broadband base station faults prediction" technology; Software Defined Network, or SDN-based solution for enterprise Local Area Network, or LAN networks; cloud and network integrated surveillance;

(2) Cloud Computing: Software-Defined Data Center solution; Cloud Native Platform; hicloud services;

(3) Intelligent Business: transformation and upgrade of CHT's official website; reformation of CHT's official APP; AI-enabled customer service system; order and billing management system; internet banking/investment IT technology; smart voice control service platform;

(4) Information Security Applications: digital identity solution; personal and enterprise security prevention solution;

(5) AI and Big Data: big data analytical solutions; customer journey analysis system; AI voice recognition; natural language processing; image recognition; AI deep learning platform; social media monitoring and analytics;

(6) IoT: IoT platform; smart city solution; NB-IoT terminal solution; health cloud service system; intelligence video surveillance solutions; travel time estimation; fleet management service; abnormal vehicle trajectory analysis; advanced driver assistance system;

(7) Convergence Services: MOD platform with smart cache; Hami Pay's VISA payment and loyalty points service; intelligent eSIM service;

enterprise-sponsored mobile data services; enterprise Wi-Fi services; speech recognition cloud; Augmented Reality; or AR platform; remote collaboration services;

(8) Expanded Core Competencies: in 2018, we applied for 176 patents and obtained 203 patent approvals. In addition, we attained 24 important awards.

High Standards of Corporate Social Responsibility

"Always Ahead" is our brand spirit that leads our corporate social responsibility initiatives. Our long-term primary focuses are "Supporting Minorities", "Corporate Sustainability Development", "Global Environmental Compliances", etc.

As a pioneer for digital inclusion in Taiwan, Chunghwa Telecom initiated 5I Sustainable Development Goals, or "5I SDGs" in compliance to sustainability target of the United Nations. We also incorporated our core mission to remote Taiwan regions with significant resource shortages, by establishing 85 "Digital Good Neighbor" community sites, by promoting "Outpost Taiwan" with cumulatively over 500 youths recording local stories with digital technology and preserving local culture. In 2018, we re-ignited "Outpost in Vietnam" in order to enable youths to better connect with the world and to reduce digital gap between urban and rural areas.

In addition, we continued to proactively expand our industry value chain, such that in 2018, we enacted "ISO 20400 Sustainable Procurement Guidelines & Standards" in order to extend sustainability concept into procurement practices, to incorporate systematic management of "Sustainable Low Carbon Supply Chain" for leading the vast supply chains, and to achieve sustainability targets of environmental protection, corporate governance, labor rights, safety and health, etc.

Chunghwa Telecom will continue to enable related companies to achieve advanced development, to promote knowledge, technology and resource sharing, to attain virtuous cycle of "good-will" via technology, as well as to create more positive social environment, leveraging our core ICT advantages.

Honors and Awards

Chunghwa Telecom has been a well-known household brand due to our nationwide infrastructure and service centers. In order to realize our brand commitment, "Always Ahead," we have always acted in accordance with the highest corporate governance standards. Our focus on fulfilling customer demand and satisfaction has generated additional value for shareholders. Our efforts have been recognized and endorsed by many international and domestic awards.

In 2018, Chunghwa Telecom was the only winner in Taiwan's telecommunication industry to receive the "Brand of the Year" award from the World Brand forum, an honor we won for the fourth consecutive year. In the "Global 500 - Year 2018" ranking from the globally renowned brand valuation consultant, Brand Finance, Chunghwa Telecom was one of the few Taiwanese companies that entered this prestigious ranking and was placed 319th among the world's top 500 brands. Chunghwa Telecom was also included in the Dow Jones Sustainability Index, or DJSI Emerging Markets Index for the 7th consecutive year, reflecting the fact that our sustainability has been recognized by international investors. In addition, we received the "Trusted Brands" Platinum Award in the telecommunication category from Reader's Digest for the 14th year in a row, as well as 1st place in Business Today's Best Brand Award for the telecommunications sector for the 11th year, which demonstrate customers' trust in our innovative and compassionate services. Business Weekly also awarded us 1st place for "Taiwan Top 100 Brand" in the telecommunications category and 3rd place for "Original Brand" in 2018. Furthermore, we received the Platinum Corporate

Award for six consecutive years from The Asset magazine, which reflects our achievements in earnings, management, governance, social and environmental responsibility, as well as investor relations. Last but not least, the renowned global consulting firm Frost & Sullivan awarded us as the Taiwan Mobile Service Provider of the Year, and Taiwan IDC Service Provider of the Year, which are strong testaments to our mobile and data capabilities.

Future Outlook

As ICT technologies is evolving fast, with the continuous emerging of new applications, global telecommunication operators are all confronted with challenges of traditional services being replaced by new services, such as Over-the-Top, or OTTs, resulting in the declining of revenue and profitability in their core business. Commencing 2018, we had initiated business transformation in order to better address such challenges, in terms of corporate talent assets, business development and competitiveness. In 2019, we plan to expand the scope in executing strategic transformation in better responding to the dynamic industry changes and in capturing digital business opportunities.

Under the core principle of "Customer-centric Value Creation", we focus on four areas of transformation, which are "core business", "emerging business", "cost optimization", and "core competency improvement". All of these transformations will be executed by phases with the goal to increase our overall operational performance and to strengthen our corporate fundamentals.

We are also committed to construct new generation network and to provide digital convergence services for consumers, households and enterprises. We will continue to invest in R&D for advanced technology and to recruit and nurture new talents. Given our strategic goals to become "the Engine of Digital Economy and the Pioneer of Innovative Industry", we will collaborate with strategic partners to establish effective and efficient industry ecosystem and pioneer the development of emerging ICT services to expand our domestic and international markets. In addition, we will continue implementing the best corporate governance practices, as well as improve board composition with qualified members, diversity and gender balance, in order to enhance overall corporate operation, for a long-term sustainability development, and to deliver more value to our shareholders, customers, employees and society.

1. Operating Performance in 2018

1.1 2018 Operation Review

As of December 31, 2018, Taiwan local telephone penetration has reached 128.3% (according to NCC's definition and calculation of "local telephone household subscribers as a percentage of total nationwide households"), of which the Company's subscribers totaled 10.421 million, representing a leading market share of 93%. For mobile communication, the nationwide penetration rate has reached 123.8%, of which the Company's subscribers totaled 10.594 million, representing a market share of 36.3%, including 34.1% market share for 4G. The Company continues to maintain its market leadership position in terms of subscriber numbers. For data communication, the total number of household with internet access in Taiwan represents a penetration rate of 80.8% (according to Taiwan Network Information Center report named "Taiwan Broadband Usage Report in 2018"), of which the Company's broadband subscribers (ADSL and FTTx) totaled 4.483 million, representing a market share of 70.8%; HiNet ISP subscribers totaled 4.072 million, representing a market share of 66.6%.

In reviewing overall operating performances in 2018, due to the global economic expansion, Taiwan has performed relatively well in the first half of 2018, but in the second half of 2018, primarily due to the trade war impact between United States and China, Taiwan economic outlook has turned relatively conservative. For 2019, due to uncertain factors such as continued US-China trade war, China economic slowdown, emerging market risks, etc., the global economic outlook is expected to be stable or slightly decline compared to 2018. The Company is well positioned to face the dynamic competitive environment. In 2018, the Company has been actively laying the foundation for 5G services, internet banking, IoT, big data, AI, smart homes, etc. In 2019, the Company also establishes "Strategic Transformation Office" to focus on mid-to-long term sustainable development plans and opportunities, under the corporate spirit of One CHT.

The Company was the first service provider to launch 4G services commencing May 29, 2014, then the Company successfully participated in three mobile spectrum auctions in fiscal years 2013, 2015 and 2017 respectively, obtaining cumulatively the largest bandwidth coverage within the telecommunication industry. The Company currently has spectrum slots of 900MHz, 1800MHz, and 2600MHz, totaling 180 MHz bandwidth, and is considered the best frequency allocation for users' mobile experiences. In July 2018, Speedtest and OpenSignal, both of whom are the globally renowned mobile network authorities, issued the latest Taiwan telecommunication mobile network reports. The Company is awarded #1 Fastest Mobile Network by Speedtest; and is also the winners for both "Download Speed: 4G" and "Download Speed: Overall" from the OpenSignal Report. These awards are strong testaments of the Company's relentless efforts in mobile network constructions with higher quality satisfaction. In December 2018, OpenSignal announced the Company as the #1 winner for both "Download Speed: 4G" and "Download Speed: Overall".

In addition, the Company is actively promoting MOD, in order to enhance content breadth and depth, with Hami Video in providing better digital convergence services. The Company continues to migrate to higher broadband access of FTTx, in enabling government DIGI^{+} national policy, in constructing Gbps network, and in further strengthening nationwide broadband network capabilities. For enterprise services, the Company continues to enhance the operation of various enterprises, especially small and medium enterprises, or SMEs, by providing optimal services for different industries and by innovating higher values.

The strong customer support is the key success factor of Chunghwa Telecom leadership; the Company continues to deliver compassionate services, with innovation and integration, in order to maintain voice business leadership, expand broadband and value-added services, or VAS, and promote enterprise ICT and overseas markets. These efforts shall ensure the Company's leading brand and market share within the Taiwan market and solidify its revenue and customer growths. The Company intends to provide more VAS for domestic fixed communication services. For broadband access with better service quality, the Company focuses on higher speed optical fiber offerings, by constructing faster and stable broadband network environment. As of December 31, 2018, the total broadband subscribers of the Company are approximately 4.483 million, of which, approximately 1.422 million subscribers use 100Mbps and above, representing an increase of 10.9% year-over-year. In addition, FTTx subscribers are approximately 3.602 million, representing an increase of 1.4% year-over-year. Furthermore, the Company is actively promoting MOD by expanding the breadth and depth of the digital content and channels, with HiNet+MOD+Mobile 4G Triple Play integration, in order to provide ubiquitous and seamless digital convergence services across networks, platforms and terminals. As of December 31, 2018, MOD subscribers are approximately 2.01 million, representing an increase of 25.5% year-over-year.

For mobile communication, the Company is the leading player launching 4G high speed services with high quality services and mobile integration, such as Wi-Fi, in providing users more convenient and efficient internet access. In addition, the Company continues to develop mobile VAS and to expand mobile network infrastructure, as well as to promote Hami VAS. As of December 31, 2018, mobile internet customer base has reached approximately 9.626 million.

For internet services, the Company continues to promote HiNet broadband access and home Wi-Fi services for FTTx customers, as well as enhanced VAS including video/audio offerings. In addition, the Company focuses on enhancing customer relations management and membership operation, with integrated content services for increased customer satisfaction and enhanced product portfolio competitive advantage.

For international fixed communications, the Company continues to improve service quality, reduce churn rate, expand international voice wholesale, promote value-saving calling cards, and other integrated marketing sales. In addition, the Company actively expands overseas market, including international leased lines, VAS, overseas ICT services, in order to increase international service revenues.

The Company continues to strengthen overall operating efficiency, including integrating channel subsidiaries as part of the Company's advantage, in providing incremental service sites matching customer demand. In addition, the Company consolidates services into single access point-of-contact, with high quality service certification and onsite service inspection. Furthermore, the Company continues consolidating electronic and paper bills, in order to ensure more convenient and better quality telecommunication services.

For digital channel expansion, the Company integrated online stores and official corporate website in 2018, in providing more convenient and accelerated online processing for all customers, as well as online order and home delivery services, resulting in significantly improved one-stop online full services.

In terms of operating cost discipline, the Company continues internal organization optimization with improved efficiency, and headcount structural enhancement leveraging newly hired talents. In addition, the Company has designed various incentive programs, such as corporate bonus and employee compensation, in order to encourage more employee contributions.

1.2 Capital Expenditure

The Company's total CAPEX for 2018 was NT$28.55 billion, including NT$12.69 billion for domestic fixed communications (access and broadband network), NT$10.66 billion for mobile communications, NT$2.73 billion for internet, NT$1.35 billion for international fixed communications, and NT$1.12 billion for others.

1.3 Revenue, Expenditure & Profit Analysis

Unit: NT$ million

Financial Metrics \ Fiscal Year		2017	2018
Revenue & Expenditure	Revenues	227,514	215,483
	Gross Profit	80,677	75,938
	Income from Operations	46,703	43,644
	Non-Operating Income and Expenses	1,294	1,335
	Income before Income Tax	47,997	44,979
	Net Income	40,043	36,456
	Net Income attributable to Stockholders of the Parent	38,874	35,502
Profitability	Return on Assets (%)	8.92	7.94
	Return on Equity (%)	10.75	9.59
	Pre-tax Income to Paid-in Capital (%)	61.87	57.98
	Net Income Ratio (%)	17.60	16.92
	Earnings Per Share (NT$)	5.01	4.58

Note: The above table is based on consolidated financial reports.

1.4 Research & Development

In order to raise the core competence of Chunghwa Telecom, the Company has continued to invest considerable resources in R&D, with cutting edge technology development through innovation research and partner cooperation. The Company's core R&D focuses on seven key areas of Intelligent Broadband Networking, Cloud Computing, Intelligent Business, Information Security Application, Artificial Intelligence and Big Data, Internet of Things and Convergence Services.

In 2018, the R&D expenditure of the Company totaled NT$3.73 billion, representing 1.73% of the consolidated revenues. The R&D investment complements the Company's ICT development and operation focus in order to maximize the value propositions for all customers.

2. Business Plan Highlights for 2019

2.1 Operation & Strategy Outlook

In facing the dynamic changes of the telecommunication market structure, in 2019, the Company plans to further strengthen overall operation by enhancing core businesses, developing new emerging businesses, improving operational efficiency, extending corporate development, expanding overseas market, emphasizing technology and talents, reinforcing corporate social responsibilities, or CSR, etc. In addition, the Company plans to implement "customer-centric" business transformation, in order to further strengthen user experiences, refine fundamental capabilities and business performances. Focusing on the digital convergence and digital economic opportunities, the Company will partner with key strategic alliances to drive the overall business growth and to become "the Engine of Digital Economy and the Pioneer of Innovative Industry", as well as to maximize values for all customers, shareholders, employees and the society.

- Under the core principle of "Customer-centric Value Creation", the Company will focus on four areas of transformation, including "core business", "emerging business", "cost optimization" and "core competency improvement". All of these transformations will be executed by phases with the goal to increase the Company overall operational performance and to strengthen its corporate fundamentals.
- Leverage the Company's branding, network, channel, customer base, and technology advantages, etc., in providing diverse convergence services for consumer market, household market, and enterprise business.
- Enhance mobile service quality, strengthen fiber network and international undersea cable, continue next generation network construction and better support overall business expansion and evolution.
- Establish pilot team with industry players for 5G end-to-end ecosystem and build testing field in order to accelerate 5G innovative applications, which is expected to be commercialized by 2020.
- MOD will continue to enrich its contents, to attract more subscribers, and to evolve to be the hub of smart homes.
- Pioneer industry sector ecosystem by leveraging IoT platform, collaborate with government's Asia Silicon Valley Development Agency, Forward-looking Infrastructure Development Program, in order to develop leading brand of Taiwan IoT application services.
- By integrating big data and AI technologies, the Company will develop applications for both internal and external usage and innovative AI business model, in order to enhance the competitiveness of the Company and enterprise clients.
- Promote CHT Taipei Data Center located in Banqiao, attract both international and domestic enterprise clients, formulate industry sector ecosystem, and develop cloud business opportunities.
- Apply for web-only banking license, enhance the

Company's capabilities in professional financial services, and formulate digital financial services roadmap.

- Enhance centralized resource planning, operation and management, better manage and control operating cost and expenses, thus continuously increase sustainable profitability.
- Emphasize advanced technology and talent development to establish a solid foundation for the Company's long term differentiated advantages.
- Drive overall corporate development and optimize collaboration of parent and subsidiaries to maximize the overall corporate value.
- Collaborate with government's New Southbound Policy to expand overseas market.
- Continue CSR with telecommunication profession, enabling vendors to establish CSR management system, as well as enabling digital inclusion and environmental protection.

2.2 Key Operating Metrics Outlook

The Company estimates 2019 operating targets as listed below, based on the current evaluation of all business segments:

Key Offerings		Subscribers / Minutes in million
Domestic Fixed Communications	Local	10.19 Subs
	Domestic Long Distance	1,892 Mins
	Broadband Access	4.509 Subs
Mobile Communications	Mobile	11.98 Subs
Internet	HiNet ISP	3.703 Subs
International Fixed Communications	International Long Distance	620 Mins (Note)

Note: Only including outgoing minutes.

2.3 Key Product & Marketing Strategy

The Company's product, pricing, channel and marketing strategies for telecommunication and ICT services are listed below:

(1) Products

In facing the competitive market challenges and certain regulatory limitations, the Company continues to integrate and innovate services for better customer experiences and upgrades, as well as to explore attractive VAS to increase customer Average Revenue Per User, or ARPU. In addition, the Company expanded its product portfolio for digital life VAS in fulfilling digital convergence consumption demand and in enhancing the overall revenue stream.

For domestic fixed communication, the Company leverages IP network in providing video telephone service, integrated services of fixed network, data, mobile, as well as various VAS for telecommunication, entertainment, information, enterprises in order to increase the overall revenue stream. In addition, MOD continued to focus on offering top exclusive content, interactivity, multi-screen, high definition programs (4K, HD) and other diverse applications, in order to increase the overall subscription and revenue.

For mobile communication, the Company continues expanding mobile internet services in order to increase the overall revenue stream. In July 2018, Speedtest and OpenSignal, both of whom are the globally renowned mobile network authorities, issued the latest Taiwan telecommunication mobile network reports. The Company is awarded #1 Fastest Mobile Network by Speedtest; and is also the winners for both "Download Speed: 4G" and "Download Speed: Overall" from the OpenSignal Report. These awards are strong testaments of the Company's relentless efforts in mobile network constructions with higher quality satisfaction. For

2019, the Company plans to continue construction and optimization of 4G high-speed broadband network, optimize service coverage, offer flexible rate packages, provide more diversified mobile VAS such as music (KKBOX, call answer), Hami Pass, Hami Video (movie, TV), e-book (Hami Books, children's books), mobile payment, etc., in order to better fulfill different market segment demands, and consequently to increase customer contribution and revenue stream.

For broadband and internet services, the Company focuses on broadband access upgrade and FTTx services, in order to provide customers faster speed and stable broadband network environment. The Company offers FTTx promotional packages as well as integrated broadband/MOD services in order to enable customers to enjoy one-stop services of internet access+media entertainment. In the future, the Company plans to develop more innovative VAS and diverse digital home services to fulfill customer demand for smart life.

In addition, in fulfilling digital convergence trend, the Company is providing cloud-enabled computing and solution as well as cloud SaaS services (Customer Relation Management, or CRM, Enterprise Resource Planning, or ERP, Point of Sale, or POS, etc.). The Company continues to develop various OTT and multi-screen convergence services, such as video/audio, music, e-book, Hami Pass, mobile payment, etc., as well as personalized, localized and cross-domain applications to provide differentiated digital convergence experiences for all customers.

For enterprise services, the Company leverages ICT product portfolio as the core in developing advanced solutions such as IoT (Intelligent Energy Network, or iEN, Intelligent Video Surveillance Service, or IVS, Intelligent Transportation System, or ITS, eHome, etc.), information security, IDC integration, cloud computing, smart city, and forward-looking infrastructure plan related products for enterprise and government. The Company is also continuing research efforts for emerging services, such as IoT platform, AI, big data, health care, gas cloud, etc., in order to increase mid-to-long term revenue growth momentum.

(2) Pricing

The Company devises competitive product offerings with various rate plans by leveraging its comprehensive product portfolio, large customer base and service innovation. For broadband services, the Company deploys high-speed broadband access promotional plan, broadband+MOD+content bundled package, in order to fulfill the household demand for internet access and entertainment. For mobile communication, the Company designed various voice and mobile internet promotional plans, in order to upgrade customers to better service and product quality.

(3) Sales Channel

In 2018, the Company channel optimization focuses on physical store migration to better location in downtown areas. As of December 31, 2018, the Company has 737 service outlets, of which 469 are directly operated service centers, 268 are exclusive service stores, in order to offer broadband, MOD, mobile, etc. services. For 2019, the Company plans to continue to expand physical store coverage of the commercial metro-areas, especially those in the top 6 municipalities, in order to enhance the overall sales channel competitive advantage.

In 2019, for online channel, the Company continues to expand its official website and APPs for service coverage, optimizes APPs and website self-help services, in order to enable customer-centric services and more convenient access to billing inquiries, contract review, repair status, etc.

(4) Marketing

The Company leverages physical service outlets and online virtual channel, CRM system, data mining, etc., in fulfilling different customer segment demands, as well as in conducting more precise marketing and sales effectiveness. In addition, the Company continues to expand customer point reward program, membership management, in order to increase overall customer loyalty. Furthermore, the Company enhances public relations and demassified advertising by leveraging corporate branding commercials and periodical exhibitions to increase customer loyalty, new product awareness and preference, strengthen purchase intention and accelerate the overall purchase process.

2.4 Impact from Regulatory Changes and Competitive Development

(1) Domestic Taiwan mobile broadband market has experienced rapid development. As of December 31, 2018, total 4G subscribers are over 29.16 million. The Company has maintained its solid market leadership with 4G as core growth driver, although other service providers continue to actively attract mobile customers, the broadband market is expected to experience more intense competition.

(2) NCC completed its mobile broadband 1800MHz and 2100MHz spectrum bidding process as of November 15, 2017. The Company successfully obtained 1800MHz C6-1 slot and 2100MHz E9-E12 slot licensing, with total bidding amount of NT$10.935 billion. As a result, the Company is the provider of the largest bandwidth of 2x25MHz and of the best frequency band for use. In April 2018, the Company was granted the official licenses and commenced 4G internet services. The Company plans to fully leverage the bandwidth advantage in maintaining quality voice service on 3G network, enhancing the overall 4G internet service quality, as well as laying the foundation for mobile IoT, smart city, 5G services, etc.

(3) By December 31, 2018, the domestic cable television operators were asked to complete their digitization. These operators and other fixed network operators tend to use price gap strategy in gaining fixed broadband market resulting in market fluctuation. The Company leverages network quality to encourage migration to services at higher up-stream and down-stream access speeds, in order to fulfill consumer demand for higher quality network services and to further advance future broadband services.

(4) Executive Yuan of Taiwan has adopted "DIGI$^+$ Plan" for years 2017~2025, with primary target of expanding Taiwan’s digital economy scale, increase broadband network, ensure all Taiwan citizens broadband internet access and strengthen Taiwan information technology, etc. Specifically, DIGI$^+$ includes construction of innovative DIGI$^+$ infrastructure for implementing government policy of "2020: 1Gbps coverage 90%; 2025: 2Gbps coverage 90%." These targets tend to significantly impact the Company’s financial and broadband competitiveness. In 2018, in order to fulfill these government policies, the Company continued to migrate customer broadband access to 300M~1Gbps, and further solidified its fixed broadband network competitive advantages.

(5) Fixed broadband services, application VAS and mobile internet access are rapidly attracting consumers to use online services, changing their lifestyle, and increasing their value of life. In addition, free online

communication software is reducing the overall market for traditional voice services. The Company focuses on the growing broadband VAS market for new opportunity development, as well as extensive analysis of customer demand and evolution for preferred services and rate plans, in order to minimize the impact from voice service decline.

(6) On November 16, 2017, the Executive Yuan approved the draft of "Telecommunications Management Act" and the "Digital Communications Act" and submitted them to the Legislative Yuan; on May 24, 2018, the Transportation Committee of the Legislative Yuan has amended and approved the "Digital Communications Act" and has submitted it to the Legislative Yuan. On August 31, 2018, NCC issued the "Green Paper on Communication Policy", to regulate channel uploading and offloading, licensing assessment, competition across platform, horizontal and vertical integration in media, etc. Currently, NCC has finished required consultation, and is in the process of regulation amendment and policy drafting. The future digital convergence related rules tend to be more deregulated, reducing the market entry barriers, changing the original concession/approval system to the registration system. The Company has established a task force to closely monitor the progress and deliver viable solutions to counter the potential competitive market changes due to regulatory reforms.

(7) On December 29, 2017, the Legislative Yuan approved the "Financial Regulatory Sandbox", in order to promote financial technology innovation, big data application, telecommunication ICT, cloud technology, etc. The Company continues to explore opportunities via big data analysis, as well as alliances for financial innovation and marketing. In December 2018, the Company collaborated with KGI Bank in executing "Financial Inclusion System", which is the first successful domestic case in Taiwan. This is a strong testament that the Company is expanding cross-industry alliances, which is inducive for new Fintech opportunities.

(8) On June 6, 2018, Taiwan President announced "Information and Communication Security Management Act", with key terms including mandating the implementation of information security for all government offices and specific non-government entities, security breach notification/responses, security responsibility levels/measures, audit of the security maintenance plan and implementation of the specific non-government entities, etc. This act and all related regulations commenced on January 1, 2019 and the Company has complied with the implementation. In addition, in order to better seize the government opportunities in enhancing domestic information security industry, the Company has established a subsidiary named "CHT Security Co., Ltd.", or CHTSC, on January 16, 2018, with primary mission of enabling government and enterprise entities in adopting proper information security protection and maintenance plans. The Company better matches the demand and supply for information security industry development in order to expand business opportunities for potential revenue growth, and to strengthen the overall national defensive capabilities. Furthermore, the Company focuses on enabling government entities and commercial businesses in enacting appropriate information security plan and security maintenance.

(9) On November 30, 2018, Legislative Yuan approved the "Unmanned Vehicle Technology

Innovation and Experiment Act", under the similar spirit as the financial regulatory sandbox, by providing experimentation facilities for autonomous vehicle technology, service and business model, in order to advance Taiwan's technology innovation and industry development. The Company works closely with local government for potential autonomous vehicle bidding projects and opportunities, as well as collaborates with other industry partners for autonomous vehicle development and new business potentials.

(10) On June 26, 2017, Department of Transportation amended "Vehicle Safety Testing Directions" Articles 11 and 71, which stipulates that commencing January 1, 2018, all new large passenger vehicle and heavy truck must install vision-aid system, turn/reverse alarm device, in order to increase vehicle safety and to reduce vision blind spots. This new requirement will extend to both new and used vehicles starting January 1, 2019. The Company has deployed vision-aid system, with cloud platform in providing vehicle management, as well as effective information, communication, navigation and control for the vehicles, in order to significantly increase vehicle safety and vehicle owners' rights.

2 Company Profile

Company Profile

Chunghwa Telecom is the largest integrated telecommunication service provider in Taiwan, with leading offerings in domestic and international fixed communication, mobile communication, broadband, and internet services. In addition to these traditional services, the Company also provides information and communication technology services to enterprise customers with big data, information security, cloud computing and IDC capabilities, and is expanding businesses into innovative technology services such as IoT, AI, etc. All of these capabilities and offerings aim to create an optimal communication environment to enable wonderful and convenient digital life-style, as well as to serve as a key partner for other international telecommunication service providers. In recent years, the Company has been actively involved in Corporate Social Responsibility initiatives and has attained various domestic and international awards and recognition. The Company aims to realize its ambitions and implement full scale CSR by upholding the highest standards of governance principles with legalized governance framework.

1. Date of Incorporation

The Company was officially established on July 1, 1996.

2. Company Milestones

2.1 Merger and Acquisitions, Strategic Investments in Affiliated Enterprises for the most recent year and up to the Publication Date of this Annual Report

(1) The Company acquired 70% equity interest in CHIEF Telecom Inc. ("CHIEF") on September 6, 2006. In March 2018, CHIEF issued new shares for employee share options, the Company and its subsidiary Chunghwa Investment Co., Ltd. ("CHI") cooperated with CHIEF for share distribution in May and did not participate in CHIEF capital increase in June 2017. Therefore, as of December 31, 2018, the Company consolidated equity interest in CHIEF has declined to 60%.

(2) The Company established 100% equity interest in Chunghwa Yellow Pages (International) Co., Ltd. on January 2, 2007, now renamed as CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP").

(3) The Company acquired 32% equity interest in Senao International Co., Ltd. ("SENAO") on January 15, 2007. SENAO issued new shares for employee stock options from 2007 to 2014. As of December 31, 2018, the Company's equity interest in SENAO has declined to 28%.

(4) The Company acquired 100% equity interest respectively in Chunghwa System Integration Co., Ltd., Chunghwa Telecom Global, Inc., and Donghwa Telecom Co., Ltd. on December 20, 2007.

(5) The Company increased equity interest in Spring House Entertainment Tech. Inc. ("SHE") from 30% to 56% on January 17, 2008.

(6) The Company established 100% equity interest in Light Era Development Co., Ltd. ("LED") on February 12, 2008.

(7) The Company established 100% equity interest in Chunghwa Telecom Singapore Pte. Ltd. on July 9, 2008.

(8) The Company established 100% equity interest in Chunghwa Telecom Japan Co., Ltd. on October 1, 2008.

(9) The Company increased equity interest in Chunghwa Investment Co., Ltd. ("CHI") from 49% to 89% on September 9, 2009.

(10) The Company established 100% equity interest

in Chunghwa Telecom (China) Co., Ltd. ("CTC") in People's Republic of China on March 28, 2011.

(11) The Company established 100% equity interest in Chunghwa Telecom Vietnam Co., Ltd. on May 31, 2011.

(12) The Company acquired 51% equity interest in Chunghwa Sochamp Technology Inc. ("CHST") on July 1, 2011.

(13) The Company acquired 65% equity interest in Smartfun Digital Co., Ltd. ("SFD") on August 31, 2011.

(14) The Company acquired 75% equity interest in Jiangsu Zhenhua Information Technology Company, LLC. in People's Republic of China on January 9, 2012; Jiangsu Zhenhua Information Technology Company, LLC. has resolved to terminate its operation as of May 2016, and the liquidation process, company dissolution, recovery of investment fund have all been completed as of December 2018.

(15) The Company acquired 51% equity interest in Hua-Xiong Information Technology Co., Ltd. in People's Republic of China on November 23, 2012; Hua-Xiong Information Technology Co., Ltd. has resolved to terminate its operation as of March 2016, and the liquidation process, company dissolution, recovery of investment fund have all been completed as of May 2016.

(16) The Company established 100% equity interest in Honghwa Human Resources Co., Ltd. on January 28, 2013, now renamed as Honghwa International Co., Ltd. ("HHI").

(17) The Company established 75% equity interest in Chunghwa Leading Photonics Tech Co., Ltd. ("CLPT") on July 28, 2016.

(18) The Company established 100% equity interest in Chunghwa Telecom Thailand Co., Ltd. on March 3, 2017.

(19) The Company established 80% equity interest in CHT Security Co., Ltd. ("CHTSC") on December 14, 2017.

For more details, please also see page 82, Chapter III, Section 9, "Comprehensive Shareholding Information Relating to Company, Directors, Management, and Companies Affiliated through Direct and Indirect Investment".

2.2 Status of Corporate Reorganization for the most recent year and up to the Publication Date of this Annual Report

None.

2.3 Significant Shareholding Changes in Directors, Supervisors, or Shareholders with Greater than 10% Shareholding for the most recent year and up to the Publication Date of this Annual Report

None.

2.4 Changes in Managerial Control for the most recent year and up to the Publication Date of this Annual Report

None.

2.5 Material Changes in Business Operation, or Service Offerings for the most recent year and up to the Publication Date of this Annual Report

None.

2.6 Other Matters of Material Significance that could Affect Shareholders' Interest for the most recent year and up to the Publication Date of this Annual Report

None.

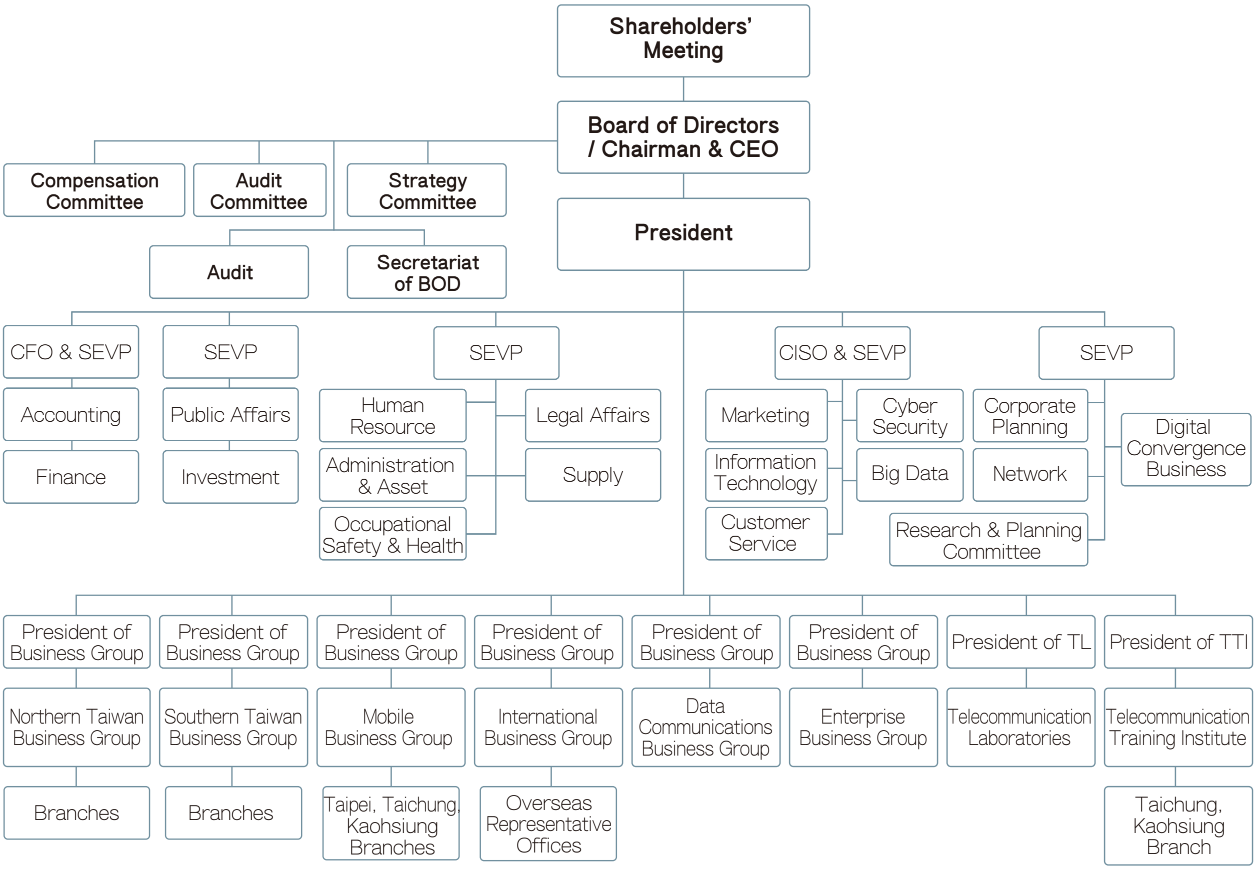
3 Corporate Governance Report

1. Organization Structure
2. Directors, President, Executive Vice Presidents, Senior Vice Presidents, Assistant Vice Presidents, Senior Directors and Department Heads
3. Corporate Governance
4. Certified Public Accountant, or CPA Professional Fees
5. Change of Certified Public Accountant
6. Audit Independence for the most recent year
7. Shareholding Changes of Directors, Supervisors, Management, and Major Shareholders for the most recent year and up to the Publication Date of this Annual Report
8. Relationship among the Top Ten Shareholders
9. Comprehensive Shareholding Information Relating to Company, Directors, Management, and Companies Affiliated through Direct and Indirect Investment

Corporate Governance Report

1. Organization Structure

1.1 Organization Chart



1.2 Principal Lines of Business

- Northern Taiwan Business Group: local telephone, domestic long distance, public phone, leased lines, ADSL, FTTx, intelligent network, MOD, Hami Video, enterprise solution, mobile communication and data communication
- Southern Taiwan Business Group: local telephone, domestic long distance, public phone, leased lines, ADSL, FTTx, intelligent network, MOD, Hami Video, enterprise solution, mobile communication and data communication
- Mobile Business Group: mobile handset, short messaging service, or SMS, value-added services, roaming services, mobile data, mobile VAS (call-answer, multimedia, e-book, mobile payment, digital content), Mobile Virtual Private Network/Mobile Data Virtual Private Network, or MVPN/MDVPN, and Mobile-Internet of Things, or M-IoT and enterprise mobile services
- International Business Group: International Direct Dial, or IDD, Super eCall, international calling card, international internet card (Let u Tour), conference call, TWGate, International Private Leased Circuit, or IPLC, IDC, Internet Protocol Virtual Private Network, or IPVPN, satellite transponder leasing, satellite VAS, satellite mobile communication, enterprise integrated services, etc.
- Data Communications Business Group: internet, data communication, data telecommunication VAS, IDC, cloud computing, IoT, AI, smart care,

big data, multimedia, information system, information security, commercial application, integrated services for government entities and enterprises, etc.

- Enterprise Business Group: ICT solution, ICT project management and implementation, standardized and customized integration services for enterprise clients, cross-domain emerging businesses development, etc.
- Telecommunication Laboratories: primary focus on research and development, including wireless communication, broadband network, digital convergence, network management, customer service information, cyber security, operating

2. Directors, President, Executive Vice Presidents, Senior Directors and Department Heads

2.1 Directors

(1) Director Profile

Title (Note 1)	Nationality	Name	Gender	Date Elected	Tenure (Years)	Date First Elected (Note 2)	Shareholding when Elected	
							Shares	%
Director	R.O.C.	MOTC.	–	June 24, 2016	June 23, 2019	June 11, 1996	2,737,718,976	35.29%
Chairman, Chief Executive Officer, or CEO, and Director	R.O.C.	Yu Cheng (Representative of the MOTC)	M	December 15, 2016	April 21, 2019	June 15, 2007	0	0
President and Director	R.O.C.	Chi-Mau Sheih (Representative of the MOTC)	M	January 4, 2017	June 23, 2019	January 4, 2017	72,054	0
Director	R.O.C.	Yu-Lin Huang (Representative of the MOTC)	M	February 13, 2019	June 23, 2019	February 13, 2019	0	0
Director	R.O.C.	Chen-Yuan Chang (Representative of the MOTC)	M	August 10, 2018	January 22, 2019	August 10, 2018	0	0
Director	R.O.C.	Mu-Han Wang (Representative of the MOTC)	M	November 14, 2017	June 23, 2019	November 14, 2017	0	0
Director	R.O.C.	Shin-Yi Chang (Representative of the MOTC)	M	January 16, 2017	August 9, 2018	January 16, 2017	0	0

strategy, enterprise solutions, accounting information, intelligent internet, cloud computing, etc.

- Telecommunication Training Institute: employee training and education, professional talents selection, relevant training and consultation for operation, management, technology, sales/marketing, commissioned training programs, skill assessment, training material and journal design, publication, registration and distribution, etc.

Vice Presidents, Assistant Vice Presidents, Senior

As of March 31, 2019

Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Major Experience & Education (Note 3)	Other Position	Executives, Directors or Supervisors who are Spouses or within Two Degrees of Kinship		
Shares	%	Shares	%	Shares	%			Title	Name	Relation
2,737,718,976	35.29%	0	0	0	0	–	–	–	–	–
0	0	0	0	0	0	Chairman and Chief Executive Officer, Chunghwa Telecom Co., Ltd. Mid-Career Fellow, Woodrow Wilson School of Princeton University, U.S.A	Independent Director, Formosa Petrochemical Co. Independent Director, Formosa Taffeta Co., Ltd. Independent Director, Formosa Advanced Technologies Co., Ltd. Director, CORNERSTONE VENTURES CO., LTD.	–	–	–
72,054	0	0	0	0	0	President, Chunghwa Telecom Co., Ltd. Master of Business Administration, National Taiwan University	NA	–	–	–
0	0	0	0	0	0	Political Deputy Minister, MOTC University of California, Berkeley, Institute of Civil Engineering, Ph.D.	Director, Taipei Rapid Transit Corporation	–	–	–
0	0	0	0	0	0	Director General, Taiwan Railways Administration, MOTC Ph.D. Department of Traffic and Transportation, National Chiao Tung University	NA	–	–	–
0	0	0	0	0	0	Counselor & Director General, Department of Science and Technology Advisors, MOTC Ph.D., Purdue University, U.S.A	NA	–	–	–
0	0	0	0	0	0	Director, Department of Accounting, MOTC Master of Accounting Institute, National Taiwan University	Director, Taiwan International Ports Co., Ltd. Supervisor, Taipei Rapid Transit Co.	–	–	–

Title (Note 1)	Nationality	Name	Gender	Date Elected	Tenure (Years)	Date First Elected (Note 2)	Shareholding when Elected	
							Shares	%
Director	R.O.C.	Wei-Ming Chang (Representative of the MOTC)	M	August 2, 2017	June 23, 2019	August 2, 2017	0	0
Director	R.O.C.	Yi-Bing Lin (Representative of the MOTC)	M	June 24, 2016	June 23, 2019	May 22, 2009	0	0
Director	R.O.C.	Yih-Yu Lei (Representative of the MOTC)	F	April 27, 2017	June 23, 2019	April 27, 2017	0	0
Director	R.O.C.	Chin-Tsai Pan (Representative of the MOTC)	M	March 22, 2017	June 23, 2019	March 22, 2017	2,000	0
Independent Director	R.O.C.	Kuo-Long Wu	M	June 24, 2016	June 23, 2019	June 24, 2016	0	0
Independent Director	R.O.C.	Lo-Yu Yen	M	June 24, 2016	June 23, 2019	June 24, 2016	0	0
Independent Director	R.O.C.	Jen-Ran Chen	M	June 24, 2016	June 23, 2019	June 24, 2016	0	0
Independent Director	R.O.C.	Yu-Fen Lin	F	June 23, 2017	June 23, 2019	June 23, 2017	0	0
Independent Director	R.O.C.	Chung-Chin Lu	M	June 15, 2018	June 23, 2019	June 15, 2018	0	0

Note 1: For institutional shareholder, the name of the institution and the name of its representatives are listed separately, as shown in the table below.
Note 2: Fill in the first time the person served as director or supervisor, please provide explanation for any gaps within the terms of the office.
Note 3: If any of the current and past experiences involve part of the auditing CPA firms or any of the Company affiliates, please provide details for the person's title and responsibilities.

	Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Major Experience & Education (Note 3)	Other Position	Executives, Directors or Supervisors who are Spouses or within Two Degrees of Kinship		
	Shares	%	Shares	%	Shares	%			Title	Name	Relation
	0	0	0	0	0	0	Director, Department of Planning, DGBAS Master of Accounting, Tamkang University	Director, Chinese B.A.S. Coordination and Development Society	–	–	–
	0	0	0	0	0	0	Vice Chancellor of the University System, National Chiao Tung University Ph.D. in Computer Science, University of Washington	Independent Director, Information Technology Total Services Co., Ltd.	–	–	–
	0	0	0	0	0	0	Master's degrees in Laws, University of Pennsylvania, U.S.A	NA	–	–	–
	2,000	0	0	0	0	0	Executive Director, Chunghwa Telecom Workers' Union Kaohsiung Industrial High School	NA	–	–	–
	0	0	0	0	0	0	Advisor, National Information Infrastructure Enterprise Promotion Association (NII) MS, Computer Science Department, Columbia University of New York, U.S.A. Master of Mathematics, University of Cincinnati, U.S.A.	NA	–	–	–
	0	0	0	0	0	0	Co-founder, AMMA Taipei Cradle Program Master in Accounting, National Cheng Chi University	Independent Director, The Eslite Spectrum Co. Independent Director, Sinyi Realty Inc. Director, Social Enterprise Insights (Taiwan) Director, Chinese Television System Inc.	–	–	–
	0	0	0	0	0	0	Executive Board Director, Pixnet Digital Media Technology Co., Ltd. Master of Sociology, National Taiwan University	Independent Director, Ezfly International Travel Agent Co., Ltd. Director, Trinity Investment Corp. Board Director, Institute of Information Industry	–	–	–
	0	0	0	0	0	0	Managing Partner, Law&Honor Attorneys-At-Law Bachelor of Laws and Bachelor of Political Science, National Taiwan University	Independent Director, Bank SinoPac Co., Ltd. Independent Director, Share Hope Medicine Co., Ltd.	–	–	–
	0	0	0	0	0	0	Professor, National Tsing Hua University Ph.D. Department of Electrical Engineering, University of Southern California, U.S.A.	NA	–	–	–

Table 1: Major Shareholders of Chunghwa Telecom's Institutional Shareholders

Name of Institutional Shareholders (Note 1)	Major Shareholders of the Institutional Shareholders (Note 2)
Ministry of Transportation and Communications, or MOTC	NA
Shin Kong Life Insurance Co., Ltd.	Shin Kong Financial Holding Co., Ltd. (100%)
Fubon Life Insurance Co., Ltd.	Fubon Financial Holding Co., Ltd. (100%)
Chunghwa Post Co., Ltd.	MOTC (100%)
Cathay Life Insurance Co., Ltd.	Cathay Financial Holding Co., Ltd. (100%)
China Life Insurance Co., Ltd.	China Development Financial Holding Corp. (25.33%), KGI Securities Co., Ltd. (9.63%), Videoland Inc. (2.35%), Citibank (Taiwan) in its capacity as Master Custodian for Investment Account of GIC Pte Ltd. (Singapore) (1.57%), JPMorgan Chase Bank N.A. Taipei Branch in custody for Saudi Arabian Monetary Agency (1.53%), Labor Pension Fund of the New Pension System, R.O.C. (1.28%), Zhan Linglang (1.27%), Cathay Life Insurance Co., Ltd. (1.23%), Norges Bank-internal-NBIM PF EQ INTERNAL CFD (1.17%), Vanguard Emerging Markets Stock Index Fund, a series of Vanguard International Equity Index Funds (1.06%)

Note 1: Based on the Company most recent book closure date for shareholder to register as of July 25, 2018.
Note 2: Data sourced from publicly listed company websites.

Table 2: Major Shareholders of Institutional Shareholders mentioned in the above Table 1

Name of Institutional Shareholders	Major Shareholders of the Institutional Shareholders (Note)
Shin Kong Financial Holding Co., Ltd.	Shin Kong Mitsukoshi Department Store Co., Ltd. (4.58%), Shin Kong Medical Foundation (4.12%), Shin Sheng Co., Ltd. (3.97%), Taiwan Shin Kong Co., Ltd. (2.25%), Shinkong Synthetic Fibers Corporation (1.35%), Dedicated Account of Vanguard Emerging Markets Stock Index Fund in custody by Standard Chartered Bank (1.21%), Shin Kong Ocean Enterprise Co., Ltd. (1.11%), Chia Pang Investment Co., Ltd. (1.05%), Wang Tien Woolen Textile Co., Ltd. (1.01%), JPMorgan Chase Bank N.A. Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds (0.98%)
Fubon Financial Holding Co., Ltd.	Taipei City Government (13.11%), Ming Dong Co., Ltd. (8.45%), Dao Ying Co., Ltd. (7.73%), Richard M. Tsai (3.20%), Daniel M. Tsai (3.01%), Hung Fu Investment Co., Ltd. (2.57%), Labor Pension Fund of the New Pension System, R.O.C. (1.76%), Chung Shing Development Co., Ltd. (1.42%), Citibank (Taiwan) in its capacity as Master Custodian for Investment Account of GIC Pte Ltd. (Singapore) (1.36%), Old labor pension fund scheme (1.29%)
Cathay Financial Holding Co., Ltd.	Wan Pao Development Co., Ltd. (16.67%), Lin Yuan Investment Co., Ltd. (14.56%), Labor Pension Fund of the New Pension System, R.O.C. (2.08%), Labor Insurance Fund, R.O.C. (1.36%), Shin Kong Life Insurance Co., Ltd. (1.30%), Citibank (Taiwan) as Directed Trustee For GIC-Government of Singapore (1.22%), TransGlobe Life Insurance Inc. (1.05%), Wan Ta Investment Co., Ltd. (1.05%), Nan Shan Life Insurance Co., Ltd. (1.03%), Fubon Life Insurance Co., Ltd. (1.01%)
China Development Financial Holding Corp.	Shin Wen Investment Co., Ltd. (4.34%), China Life Insurance Co., Ltd. (3.76%), Cathay Life Insurance Co., Ltd. (2.88%), Jing Kwan Investment Co., Ltd. (2.78%), Bank of Taiwan (1.92%), KGI Securities Co., Ltd. (1.89%), Vanguard Emerging Markets Stock Index Fund, a series of Vanguard International Equity Index Funds (1.61%), Government of Singapore (1.52%), Norges Bank-internal-NBIM PF EQ INTERNAL CFD (1.28%), JP Morgan Chase Bank N.A., Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds (1.27%)
KGI Securities Co., Ltd.	China Development Financial Holding Corp. (100%)

Name of Institutional Shareholders	Major Shareholders of the Institutional Shareholders (Note)
Videoland Inc.	Grand Pacific Petrochemical Corporation (62.29%), China Life Insurance Co., Ltd. (9.8%), Songhong Investment Co., Ltd. (6.04%), Liancheng Trade Co., Ltd. (5.64%), International CSRC Investment Holdings Co. (5.64%), Zhenhe Co., Ltd. (3.47%), Lin Rui-Hui (2.82%), Xingcheng Investment Co., Ltd. (1.5%), Hongfu Ltd. (0.99%), Ye Wen-Li (0.73%)

Note: Data sourced from publicly listed company websites, 2017 annual reports, and Department of Commerce, Ministry of Economic Affairs, R.O.C..

(2) Director Independence

As of March 31, 2019

Criteria / Name (Note1)	Meet One of the Following Professional Qualification Requirements, Together with at Least Five Years Work Experience			Independence Criteria (Note 2)										Number of Other Public Companies in which the Individual is Concurrently Serving as an Independent Director
	An Instructor or Higher Position in a Department of Commerce, Law, Finance, Accounting, or Other Academic Department Related to the Business Needs of the Company in a Public or Private Junior College, College or University	A Judge, Public Prosecutor, Attorney, CPA, or Other Professional or Technical Specialist Who has Passed a National Examination and been Awarded a Certificate in a Profession Necessary for the Business of the Company	Have Work Experience in the Areas of Commerce, Law, Finance, or Accounting, or Otherwise Necessary for the Business of the Company	1	2	3	4	5	6	7	8	9	10	
Yu Cheng	-	-	√	-	-	√	√	-	√	√	√	√	-	3
Chi-Mau Sheih	-	-	√	-	-	√	√	-	√	√	√	√	-	0
Yu-Lin Huang	√	-	-	√	-	√	√	-	√	√	√	√	-	0
Mu-Han Wang	-	-	√	√	-	√	√	-	√	√	√	√	-	0
Wei-Ming Chang	-	√	√	√	-	√	√	-	√	√	√	√	-	0
Yi-Bing Lin	√	-	√	√	-	√	√	-	√	√	√	√	-	1
Yih-Yu Lei	-	√	√	√	-	√	√	-	√	√	√	√	-	0
Chin-Tsai Pan	-	-	√	-	-	√	√	-	√	√	√	√	-	0
Kuo-Long Wu	-	-	√	√	√	√	√	√	√	√	√	√	√	0
Lo-Yu Yen	√	√	√	√	√	√	√	√	√	√	√	√	√	2
Jen-Ran Chen	-	-	√	√	√	√	√	√	√	√	√	√	√	1
Yu-Fen Lin	-	√	√	√	√	√	√	√	√	√	√	√	√	2
Chung-Chin Lu	√	-	√	√	-	√	√	-	√	√	√	√	-	0

Note 1: The corresponding boxes are checked only if applicable.
Note 2: Please mark "√" if applicable to the directors or supervisors during the two years prior to being elected or during the term of the office.

Criteria 1: Not an employee of the Company or its affiliates.

Criteria 2: Not a director or supervisor of the Company or any of its affiliates. This does not apply in cases where the person is an independent director of the Company, its parent company, or any subsidiary in which the Company holds, directly or indirectly, more than 50% of the voting shares.

Criteria 3: Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or more of the total number of issued shares of the Company or ranking in the top 10 in shareholdings.

Criteria 4: Not a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of any of the persons in the preceding specified in criteria 1 to 3.

Criteria 5: Neither a director, supervisor, or employee of an entity that directly and/or indirectly holds 5% or more of total number of issued shares of the Company, or rank among the top 5 shareholdings.

Criteria 6: Not a director, supervisor, officer, or shareholder holding 5% or more of the outstanding shares of any entity that has financial or business relations with the Company.

Criteria 7: Not an owner, partner, director, supervisor, officer, or spouse of any of sole proprietorship, partnership, company, or institution that provides commercial, legal, financial or accounting services or consultations to the Company or its affiliates. However, members of the Remuneration and Nomination Committee are not covered by this restriction per Article 7 of the Regulations Governing the Appointment and Exercise of Powers by the Compensation and Nomination Committee of a Company Whose Stock is listed on the Stock Exchange or Traded over the Counter.

Criteria 8: Not a spouse or relative within second degree of kinship to any other directors of the Company.

Criteria 9: Not in contravention to Article 30 of the Company Law.

Criteria 10: Not a governmental, or an institutional shareholder or its representative pursuant to Article 27 of the Company Law.

(3) Director Overall Qualifications

Expertise / Name	Core Competencies							
	Operating Judgment	Accounting & Finance	Operating Management	Crisis Management	Industry Knowledge	Global Market Knowledge	Leadership	Decision -making
Yu Cheng	√	√	√	√	√	√	√	√
Chi-Mau Sheih	√	√	√	√	√	√	√	√
Yu-Lin Huang	√	√	√	√	*	√	√	√
Mu-Han Wang	√	√	√	√	*	√	√	√
Wei-Ming Chang	√	√	√	√	*	√	√	√
Yi-Bing Lin	√	*	√	√	√	√	√	√
Yih-Yu Lei	√	*	√	√	√	√	√	√
Chin-Tsai Pan	*	-	√	√	√	√	√	√
Kuo-Long Wu	√	√	√	√	√	√	√	√
Lo-Yu Yen	√	√	√	√	√	√	√	√
Jen-Ran Chen	√	*	√	√	√	√	√	√
Yu-Fen Lin	√	*	√	√	√	√	√	√
Chung-Chin Lu	√	*	√	√	√	√	√	√

Note: * indicates partial competencies.

2.2 Profiles of President, Executive Vice Presidents, Senior Vice Presidents, Assistant Vice Presidents, Senior Directors and Department Heads

Title (Note 1)	Nationality	Name	Gender	Effective Date	Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement	
					Shares	%	Shares	%	Shares	%
President	R.O.C.	Chi-Mau Sheih	M	January 4, 2017	72,054	0	0	0	0	0
Senior Executive Vice President and Chief Financial Officer	R.O.C.	Shui-Yi Kuo	M	August 9, 2017	0	0	0	0	0	0
Senior Executive Vice President	R.O.C.	Kuo-Feng Lin	M	November 11, 2016	42,771	0	0	0	0	0
Senior Executive Vice President	R.O.C.	Tian-Tsair Su	M	November 15, 2017	32,341	0	0	0	0	0
Senior Executive Vice President	R.O.C.	Hong-Chan Ma	M	August 10, 2018	0	0	0	0	0	0
Vice President	R.O.C.	Kuo-Chiang Chung	M	January 2, 2019	70,456	0	0	0	0	0

As of March 31, 2019

Major Experience & Education (Note 2)	Other Position	Officers who are Spouses or within Two Degrees of Kinship		
		Title	Name	Relation
Senior Executive Vice President, Chunghwa Telecom Master, Business Administration, National Taiwan University	None	–	–	–
Senior Executive Vice President (Investment), Chunghwa Telecom Master, Accounting, National Chengchi University	Director of Chunghwa Investment Co., Ltd. Director of Chunghwa Hsingta Co., Ltd. Director of KingwayTek Technology Co., Ltd. Director of Prime Asia Investments Group Ltd.	–	–	–
President, Mobile Business Group, Chunghwa Telecom Electronic Engineering, Provincial Taipei Institute of Technology	Director of Light Era Development Co., Ltd. Director of Chunghwa Investment Co., Ltd. Director of Chunghwa Precision Test Tech. Co., Ltd. Chairman of Taiwan International Standard Electronics Co., Ltd.	–	–	–
Vice President, Corporate Planning Department, Chunghwa Telecom Master, Electrical Engineering, National Cheng Kung University	Director of Taiwan International Standard Electronics Co., Ltd. Director of Taipei Financial Center Corp. Director of Chunghwa System Integration Co., Ltd. Director of TATUNG TECHNOLOGY INCORPORATION Director of Taoyuan Asia Silicon Valley Innovation Co., Ltd. Chairman of Taiwan Telecommunications Association Chairman of International Telecommunications Development Company	–	–	–
President, Data Communications Business Group, Chunghwa Telecom Master, Management Science, National Chiao Tung University	Director of CHIEF Telecom Inc. Chairman of Chunghwa Sochamp Technology Inc. Director of CHT Security Co., Ltd.	–	–	–
Assistant Vice President, Legal Affairs Department, Chunghwa Telecom Master, Electrical Engineering, National Taiwan University	Supervisor of Light Era Development Co., Ltd. Supervisor of Taiwan Telecommunications Association Supervisor of Chunghwa Telecom Vietnam Co., Ltd.	–	–	–

Title (Note 1)	Nationality	Name	Gender	Effective Date	Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement	
					Shares	%	Shares	%	Shares	%
Vice President	R.O.C.	Shu-Ling Chen	F	September 30, 2017	152	0	0	0	0	0
Vice President	R.O.C.	Shih-Chung Chang	M	March 1, 2017	0	0	0	0	0	0
Vice President	R.O.C.	Hui-Fen Tsai	F	November 30, 2017	62,212	0	35,589	0	0	0
Vice President	R.O.C.	Wen-Wang Tseng	M	January 1, 2015	2,603	0	1,547	0	0	0
Vice President	R.O.C.	Jeu-Yih Jeng	M	December 25, 2018	33,816	0	1,000	0	0	0
Vice President	R.O.C.	Yao-Kun Chou	M	August 13, 2018	34,075	0	0	0	0	0
Vice President	R.O.C.	Ruey-Shu Chiu	M	May 1, 2017	48,249	0	0	0	0	0
Vice President	R.O.C.	Rong-Yih Chen	M	January 2, 2019	0	0	0	0	0	0
Vice President	R.O.C.	Wu-Sung Kao	M	March 16, 2018	0	0	0	0	0	0
Assistant Vice President	R.O.C.	Ru-Kuen Lee	M	January 2, 2019	15,073	0	0	0	0	0
Assistant Vice President	R.O.C.	Ya-Chien Hsueh	F	January 29, 2019	0	0	0	0	0	0
Assistant Vice President	R.O.C.	Lii-Jia Guo	M	March 1, 2018	2,448	0	0	0	0	0
Assistant Vice President	R.O.C.	Fu-Fu Shen	F	February 24, 2015	19,840	0	0	0	0	0

Major Experience & Education (Note 2)	Other Position	Officers who are Spouses or within Two Degrees of Kinship		
		Title	Name	Relation
Assistant Vice President, Accounting Department, Chunghwa Telecom Bachelor, Accounting, Soochow University	Supervisor of Taoyuan Asia Silicon Valley Innovation Co., Ltd. Director of Taiwan Telecommunications Association Supervisor of CHT Security Co., Ltd.	–	–	–
Special Assistant of Chairman, YeaShin International Master, Political Science, Soochow University	Supervisor of Taiwan International Standard Electronics Co., Ltd. Director of Taipei Financial Center Corp. Director of CHYP Multimedia Marketing & Communications Co., Ltd. Director of Taoyuan Asia Silicon Valley Innovation Co., Ltd.	–	–	–
Managing Director, Administration Management Department, Northern Taiwan Business Group, Chunghwa Telecom Master, Business and Management, National Chiao Tung University	Director of Light Era Development Co., Ltd. Director of Taiwan Telecommunications Association Director of International Telecommunications Development Company	–	–	–
Vice President, Occupational Safety & Health Department, Chunghwa Telecom Master, Safety Health and Environment Engineering, National Yunlin University of Science and Technology	None	–	–	–
Assistant Vice President, Information Technology Department, Chunghwa Telecom Ph.D., Computer Science, National Chiao Tung University	Director of International Integrated System, Inc.	–	–	–
Vice President, New Taipei Branch, Chunghwa Telecom Electronic Engineering, Provincial Taipei Institute of Technology	Director of Honghwa International Co., Ltd., Director of So-net Entertainment Taiwan Limited	–	–	–
Vice President, Customer Service Department, Chunghwa Telecom Master, Management Science, National Chiao Tung University	Director of Spring House Entertainment Tech. Inc. Director of Honghwa International Co., Ltd. Supervisor of Dian Zuan Integrating Marketing Co., Ltd. Director of 4Gamers Entertainment Inc.	–	–	–
Assistant Vice President, Corporate Planning Department, Chunghwa Telecom Ph.D., Electrical Engineering, National Tsing Hua University	Director of Honghwa International Co., Ltd.	–	–	–
MOD Executive Director, Chairman Office, Chunghwa Telecom Bachelor, Business Administration, National Taiwan University	None	–	–	–
Assistant Vice President, Corporate Planning Department, Chunghwa Telecom Master, Photonics, National Chiao Tung University	None	–	–	–
Executive Law Director, HTC Corporation Master, Law, Soochow University	None	–	–	–
Managing Director, Accounting Department, Southern Taiwan Business Group, Chunghwa Telecom, Supplementary Open Junior College For Public Administration National Chengchi University	None	–	–	–
Senior Director, Public Affairs Department, Chunghwa Telecom Master, Information System Technology, Indiana University, USA	None	–	–	–

Title (Note 1)	Nationality	Name	Gender	Effective Date	Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement	
					Shares	%	Shares	%	Shares	%
Assistant Vice President	R.O.C.	Yuan-Kai Chen	M	May 8, 2017	22,075	0	0	0	0	0
Assistant Vice President	R.O.C.	Shih-Mo Leu	F	August 31, 2018	38,594	0	0	0	0	0
Assistant Vice President	R.O.C.	Chi-Hsien Huang	M	September 19, 2016	2,000	0	0	0	0	0
Assistant Vice President	R.O.C.	Chih-Hsiung Huang	M	June 30, 2017	3,612	0	0	0	0	0
Assistant Vice President	R.O.C.	Chung-Yung Kang	M	May 5, 2017	79	0	0	0	0	0
Assistant Vice President	R.O.C.	Petrina Chong	F	August 31, 2015	0	0	0	0	0	0
Assistant Vice President	R.O.C.	Vincent Chen	M	November 6, 2017	0	0	0	0	0	0
Assistant Vice President	R.O.C.	Timothy Horng	M	March 20, 2018	0	0	0	0	0	0
Assistant Vice President	R.O.C.	Wen-Ming Chuang	M	August 14, 2018	136	0	0	0	0	0
Assistant Vice President	R.O.C.	I-Fang Wu	F	February 16, 2017	39,136	0	0	0	0	0
Assistant Vice President	R.O.C.	Shu-Ling Chen	F	March 16, 2018	1,000	0	0	0	0	0
Assistant Vice President	R.O.C.	Hui-Chen Wei	F	March 16, 2018	0	0	0	0	0	0
President of Business Group	R.O.C.	Yuan-Kuang Tu	M	November 9, 2017	81,305	0	0	0	0	0

	Major Experience & Education (Note 2)	Other Position	Officers who are Spouses or within Two Degrees of Kinship		
			Title	Name	Relation
	Senior Director, Corporate Planning Department, Chunghwa Telecom Ph.D., Computer Science, National Chiao Tung University	Director of Chunghwa System Integration Co., Ltd. Supervisor of Chunghwa Investment Co., Ltd. Supervisor of CHYP Multimedia Marketing & Communications Co., Ltd. Director of Cornerstone Ventures Co., Ltd.	–	–	–
	Managing Director, Human Resource Department, Northern Taiwan Business Group, Chunghwa Telecom Master, Business and Management, National Chiao Tung University	Director of Taiwan Telecommunications Association	–	–	–
	Senior Finance Director, HTC Corporation Master, Industrial Administration, Carnegie Mellon University, USA	Director of Chunghwa System Integration Co., Ltd. Supervisor of Honghwa International Co., Ltd.	–	–	–
	Managing Director, Convergence Services Laboratory, Telecommunication Laboratories, Chunghwa Telecom Ph.D., Electrical Engineering, National Central University	None	–	–	–
	Managing Director, Internet Services Department, Data Communications Business Group, Chunghwa Telecom Master, Information Management, National Taiwan University	None	–	–	–
	Senior Director, Global Integrated Marketing Communication Center & EC Head Master, Technology Management, National Chengchi University	None	–	–	–
	Senior Manager, Enterprise Innovation Office, Data Communications Business Group, Chunghwa Telecom Master, Business Administration, Strayer College, USA	Director of CHYP Multimedia Marketing & Communications Co., Ltd. Director of Senao International Co., Ltd.	–	–	–
	Managing Director, Marketing Department, Northern Taiwan Business Group, Chunghwa Telecom Bachelor, Public Administration, Tamkang University	Director of Smartfun Digital Co., Ltd.	–	–	–
	Senior Director, Customer Service Department, Chunghwa Telecom Master, Management Science, National Chiao Tung University	None	–	–	–
	Senior Director, Cyber Security Department, Chunghwa Telecom Master, Operation Research, State University of New York at Stony Brook, USA	None	–	–	–
	MOD Senior Director, Chairman Office, Chunghwa Telecom Bachelor, English Language, Fu Jen Catholic University	None	–	–	–
	Senior Director, Chairman Office, Chunghwa Telecom Bachelor, Law, Fu Jen Catholic University	None	–	–	–
	President, Mobile Business Group, Chunghwa Telecom Ph.D., Electrical Engineering, National Taiwan University	Chairman of Chunghwa Leading Photonics Tech Co., Ltd. Director of Honghwa International Co., Ltd. Director of Senao International Co., Ltd. Director of International Telecommunications Development Company Chairman of Chunghwa Telecom Japan Co., Ltd.	–	–	–

Title (Note 1)	Nationality	Name	Gender	Effective Date	Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement	
					Shares	%	Shares	%	Shares	%
President of Branch	R.O.C.	Hui-Pao Huang	M	May 2, 2017	2,246	0	0	0	0	0
President of Branch	R.O.C.	Hung-Chao Tang	M	February 28, 2018	47,584	0	0	0	0	0
President of Branch	R.O.C.	Jinun-Jye Lee	M	February 28, 2018	0	0	0	0	0	0
President of Branch	R.O.C.	Nien-Yee Liu	F	February 24, 2017	30,092	0	0	0	0	0
President of Branch	R.O.C.	Jason Hsu	M	February 28, 2018	42,488	0	0	0	0	0
President of Branch	R.O.C.	Sheng-Haun Chang	M	February 28, 2018	0	0	0	0	0	0
President of Branch	R.O.C.	Jimmy Shih	M	August 8, 2018	11,666	0	0	0	0	0
President of Branch	R.O.C.	Hung-Liang Yin	M	July 28, 2016	3,296	0	0	0	0	0
President of Business Group	R.O.C.	Chau-Young Lin	M	March 20, 2018	12,888	0	0	0	0	0
President of Branch	R.O.C.	Chio-Fu Lai	M	May 5, 2017	10,510	0	0	0	0	0
President of Branch	R.O.C.	Chin-Tu Lin	M	May 11, 2018	577	0	0	0	0	0
President of Branch	R.O.C.	Chia-Hsin Li	M	May 5, 2017	44,048	0	0	0	0	0
President of Branch	R.O.C.	Ching-Chuan Wang	M	May 11, 2018	70,000	0	24,000	0	0	0
President of Branch	R.O.C.	Ker-Chih Hwang	M	March 5, 2018	70,388	0	808	0	0	0
President of Branch	R.O.C.	Huang-Lung Hung	M	March 5, 2018	3,571	0	0	0	0	0

Major Experience & Education (Note 2)	Other Position	Officers who are Spouses or within Two Degrees of Kinship		
		Title	Name	Relation
Vice President, Taipei Branch, Chunghwa Telecom Masteries-Learning Executive Master's Program of Business Administration (EMBA) in Global Chinese Management, Tamkang University	None	-	-	-
President, Hsinchu Branch, Chunghwa Telecom Master, Electronic Engineering, Chung Yuan Christian University	None	-	-	-
Managing Director, Enterprise Business Department, Northern Taiwan Business Group, Chunghwa Telecom Electrical Engineering, Provincial Taipei Institute of Technology	None	-	-	-
Vice President, Taoyuan Branch, Chunghwa Telecom Bachelor, MBA Program, National Chengchi University	None	-	-	-
Vice President, Taoyuan Branch, Chunghwa Telecom Mechanical Engineering, Provincial Taipei Institute of Technology	None	-	-	-
Vice President, Miaoli Branch, Chunghwa Telecom Master, Business and Management, Chung Hua University	None	-	-	-
Managing Director, Customer Access Network Department, Northern Taiwan Business Group, Chunghwa Telecom Bachelor, Business, National Open University	None	-	-	-
Managing Director, Marketing Department, Northern Taiwan Business Group, Chunghwa Telecom Bachelor, Transportation and Communication Management, National Cheng Kung University	None	-	-	-
Vice President, Enterprise Business Group, Chunghwa Telecom Ph.D., Electronic and Computer Engineering, National Taiwan University of Science and Technology	Director of International Integrated System, Inc. Director of CHT Security Co., Ltd. Director of Honghwa International Co., Ltd.	-	-	-
President, Changhua Branch, Chunghwa Telecom Electronic Engineering, Chin-Yi Junior College of Industry	None	-	-	-
President, Yunlin Branch, Chunghwa Telecom Master, Human Resources and Public Relations, Da-Yeh University	None	-	-	-
Vice President, Changhua Branch, Chunghwa Telecom Master, Computer Science, The University of Iowa, USA	None	-	-	-
Vice President, Chiayi Branch, Chunghwa Telecom Master, Business Administration, National Cheng Kung University	None	-	-	-
President, Chiayi Branch, Chunghwa Telecom Master, Electrical Engineering, National Cheng Kung University	None	-	-	-
Vice President, Kaohsiung Branch, Chunghwa Telecom Master, Industrial Information Management, National Cheng Kung University	None	-	-	-

Title (Note 1)	Nationality	Name	Gender	Effective Date	Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement	
					Shares	%	Shares	%	Shares	%
President of Branch	R.O.C.	Yeong-Jienn Maw	M	February 1, 2018	30,192	0	0	0	0	0
President of Branch	R.O.C.	Ru-Dar Yang	M	September 1, 2017	30,816	0	0	0	0	0
President of Business Group	R.O.C.	Li-Show Wu	F	January 1, 2019	32,964	0	0	0	0	0
President of Business Group	R.O.C.	Ming-Shih Chen	M	November 9, 2017	25,641	0	0	0	0	0
President of Branch	R.O.C.	Kuo-Chi Huang	M	January 1, 2019	4,252	0	0	0	0	0
President of Branch	R.O.C.	Chin-Kun Lin	M	May 5, 2017	265	0	0	0	0	0
President of Branch	R.O.C.	Der-Shing Rau	M	September 10, 2013	0	0	0	0	0	0
President of Business Group	R.O.C.	Hsueh-Lan Wu	F	November 15, 2018	0	0	0	0	0	0
President of Business Group	R.O.C.	Rong-Syh Lin	M	November 15, 2018	1,361	0	39,000	0	0	0
President	R.O.C.	Wei-Kuo Hong	M	November 15, 2018	0	0	0	0	0	0

Note 1: Shall include profiles of President, Executive Vice President, Vice President, Department Heads, or any other equivalent positions within the Company.

Note 2: If any of the current and past experiences involve part of the auditing CPA firms or any of the Company affiliates, please provide details for the person's title and responsibilities.

Note 3: Mr. Kuo-Chiang Chung, Vice President of Legal Affairs, concurrently serves as the Company's corporate governance manager since March 19, 2019.

Major Experience & Education (Note 2)	Other Position	Officers who are Spouses or within Two Degrees of Kinship		
		Title	Name	Relation
Managing Director, Marketing Department, Southern Taiwan Business Group, Chunghwa Telecom Master, Business Management, National Sun Yat-Sen University	None	–	–	–
Director, Design & Planning Section, Kaohsiung Branch, Chunghwa Telecom Master, Computer and Communication Engineering, National Kaohsiung First University of Science and Technology	None	–	–	–
Chairman, Honghwa International Corporation Master, Applied Mathematics, National Chiao Tung University	Supervisor of International Telecommunications Development Company	–	–	–
President, Northern Taiwan Business Group, Chunghwa Telecom Ph.D., Electrical Engineering, National Tsing Hua University	Chairman of Smartfun Digital Co., Ltd. Chairman of Donghwa Telecom Co., Ltd. Director of Senao International Co., Ltd. Director of Chunghwa Sochamp Technology Inc.	–	–	–
Managing Director, Engineering Department, Mobile Business Group, Chunghwa Telecom Master, Electronic Engineering Technology, National Central University	None	–	–	–
Vice President, Taichung Branch (Mobile), Chunghwa Telecom Master, Applied Mathematics, National Chung Hsing University	None	–	–	–
Vice President, Kaohsiung Branch (Mobile), Chunghwa Telecom Bachelor, Electronic Engineering, Chung Yuan Christian University	None	–	–	–
Vice President, Enterprise Business Group, Chunghwa Telecom Master, Information Management, National Taiwan University	Chairman of Chunghwa Telecom Vietnam Co., Ltd. Chairman of Chunghwa Telecom Global, Inc. Chairman of Chunghwa Telecom (Thailand) Co., Ltd. Director of VIETTEL-CHT Company Ltd.	–	–	–
President, Telecommunication Laboratories, Chunghwa Telecom Ph.D., Computer Science, National Chiao Tung University	Director of Taiwan International Standard Electronics Co., Ltd. Director of Chunghwa Sochamp Technology Inc. Director of Chunghwa Investment Co., Ltd. Director of CHT Security Co., Ltd.	–	–	–
Vice President, Telecommunication Training Institute, Chunghwa Telecom Ph.D., Industrial Administration, National Tsing Hua University	None	–	–	–

2.3 2018 Remuneration of Directors (including Independent Director), President, Executive Vice Presidents, Assistant Vice Presidents and Other Management Officers

(1) Remuneration of Directors (including Independent Directors)

Title	Name	Remuneration to Directors								Total Remuneration (A+B+C+D) to Net Income (%) (Note 10)	
		Base Compensation (A) (Note 2)		Pension / Severance (B)		Directors Compensation (C) (Note 3)		Professional Fee (D) (Note 4)			
		Parent -only	Consoli- dated (Note 7)	Parent -only	Consoli- dated (Note 7)	Parent -only	Consolidated (Note 7)	Parent -only	Consoli- dated (Note 7)	Parent -only	Consoli- dated (Note 7)
Chairman	Yu Cheng	4,280,000	4,280,000	-	-	38,215,538	38,215,538	1,014,000	1,014,000	0.12%	0.12%
Director	Chi-Mau Sheih										
Director	Chen-Yuan Chang (succeeded on August 10, 2018)										
Director	Shin-Yi Chang (dismissed on August 9, 2018)										
Director	Mu-Han Wang										
Director	Wei-Ming Chang										
Director	Yi-Bing Lin										
Director	Yih-Yu Lei										
Director	Chin-Tsai Pan										
Independent Director	Kuo-Long Wu										
Independent Director	Lo-Yu Yen										
Independent Director	Jen-Ran Chen										
Independent Director	Yu-Fen Lin										
Independent Director	Chung-Chin Lu (succeeded on June 15, 2018)										
MOTC											

* Remuneration to Directors providing service to entities within the Company's most recent financial reporting period (such as serving as non-employee consultants), in a

Unit: NT$

	Remuneration as Concurrent Employees								Total Remuneration (A+B+C+D+E+F+G) to Net Income (%) (Note 10)		Compen-sation from invest-ees other than subsid-iaries (Note 11)
	Salary, Bonuses, and Allowances (E) (Note 5)		Pension / Severance (F)		Employee Compensation (G) (Note 6)						
					Parent-only		Consolidated (Note 7)				
	Parent-only	Consolidated (Note 7)	Parent-only	Consolidated (Note 7)	Cash	Stock	Cash	Stock	Parent -only	Consoli-dated (Note 7)	
		17,952,319	17,952,319	0	-	-	-	-	0.17%	0.17%	-
ddition to remuneration disclosed in the above table: None.											

Remuneration Range (independent directors are excluded from the Company remuneration, all other directors' remuneration are distributed to MOTC, the legal entity represented by the respective directors, not as personal remuneration)

Range of Remuneration	Name of Directors		
	Total of (A+B+C+D)		
	Parent-only (Note 8)	Consolidated (Note 9) H	
Under NT$ 2,000,000	Chen-Yuan Chang, Shin-Yi Chang, Mu-Han Wang, Wei-Ming Chang, Yi-Bing Lin, Yih-Yu Lei, Kuo-Long Wu, Lo-Yu Yen, Jen-Ran Chen, Yu-Fen Lin, Chung-Chin Lu	Same as the left column	
NT$2,000,001 ~ NT$5,000,000			
NT$5,000,001 ~ NT$10,000,000			
NT$10,000,001 ~ NT$15,000,000			
NT$15,000,001 ~ NT$30,000,000			
NT$30,000,001 ~ NT$50,000,000			
NT$50,000,001 ~ NT$100,000,000			
Over NT$100,000,000			
Total			

Note 1: Excluding the independent directors, all other directors are representatives of the MOTC, the legal shareholding entity of the Company. All directors' names are listed separately, Mr. Chi-Mau Sheih, Director and President, is listed under "Remuneration for President, Executive Vice President, Department Head, etc."

Note 2: Refer to fixed part-time compensation in fiscal year 2018.

Note 3: Fill in fiscal year 2018 directors' compensation as approved by BoD, and as distributed to MOTC, the legal shareholding entity represented by the respective directors, not as personal remuneration. All independent directors are excluded from the Company's remuneration program.

Note 4: Refer to directors' professional fees for fiscal year 2018, (including traveling expenses, etc.)

Note 5: Refer to directors who also concurrently work as employees of the Company (including serving as President, Executive Vice President, other manager or employees) in fiscal year 2018, and received remuneration of salary, extra commission, pension/severance payment, all types of bonuses, allowances, traveling fees, special fees, etc. The Company does not have share-based compensation as per IFRS 2, including employee stock option certificate, restricted stock, cash-based share subscription, etc.

Note 6: Refer to directors who also concurrently work as employees of the Company (including serving as President, Executive Vice President, other manager or employees) in fiscal year 2018, and has received employee compensation (including stock and cash). These remunerations as approved by BoD must be fully disclosed.

	Name of Directors	
	Total of (A+B+C+D+E+F+G)	
	Parent-only (Note 8)	Consolidated (Note 9) I
	Chen-Yuan Chang, Shin-Yi Chang, Mu-Han Wang, Wei-Ming Chang, Yi-Bing Lin, Yih-Yu Lei, Kuo-Long Wu, Lo-Yu Yen, Jen-Ran Chen, Yu-Fen Lin, Chung-Chin Lu, Chin-Tsai Pan	Same as the left column
	Yu Cheng, Chi-Mau Sheih	Same as the left column

Note 7: Fully disclose the total amount of various director compensation items on consolidated basis.

Note 8: Fully disclose directors' names in the remuneration range table in accordance to the different remuneration amount of the respective directors.

Note 9: Fully disclose the total amount of various director compensation items on consolidated basis; fully disclose directors' names in the remuneration range table in accordance to the different remuneration amount of the respective directors.

Note 10: Net income for the year refers to net income on the 2018 parent only financial report.

Note 11: a. This column shall clearly state the Company directors' compensation from investees other than subsidiaries.

b. If the Company directors have received compensation from investees other than subsidiaries, then these compensations shall be included into the remuneration range table column I, and the column heading shall be changed to "All Investee Companies".

c. Remuneration refers to directors' compensation and other professional fees from the Company investees other than subsidiaries as the directors serve as directors, or supervisors, managers, or other positions of the investee companies (including compensation as employees, or directors, or supervisors).

*The table above is for remuneration disclosure only, and is different for taxable income, so the table cannot be used for taxable income purpose.

(2) Remuneration of President, Executive Vice President, Senior Directors

Title	Name	Salary (A) (Note 2)		Pension / Severance (B)		Bonuses and Allowances (C) (Note 3)	
		Parent-only	Consolidated (Note 5)	Parent-only	Consolidated (Note 5)	Parent-only	Consolidated (Note 5)
President	Chi-Mau Sheih	26,461,773	28,440,401	12,798,841	12,798,841	39,868,931	41,116,401
Senior Executive Vice President	Shui-Yi Kuo						
	Kuo-Feng Lin						
	Yung-Fong Song (dismissed on October 2, 2018)						
	Hong-Chan Ma (succeeded on August 10, 2018)						
	Tian-Tsair Su						
President of Business Group	Yuan-Kuang Tu						
	Hui-Min Wang (dismissed on February 28, 2018)						
	Chau-Young Lin (succeeded on March 20, 2018)						
	Hsiu-Gu Huang (succeeded on August 9, 2018)						
	Ming-Shih Chen						
	Chih-Cheng Chien (dismissed on November 15, 2018)						
	Hsueh-Lan Wu (succeeded on November 15, 2018)						
	Rong-Syh Lin (succeeded on November 15, 2018)						
President	Chen-Huiung Tsai (dismissed on June 30, 2018)						
	Wei-Kuo Hong (succeeded on November 15, 2018)						

Range of Remuneration	Name of President, Executive Vice President and Senior Directors	
	Parent-only (Note 6)	All Investee Companies (Note 7) E
Under NT$ 2,000,000		
NT$2,000,001 ~ NT$5,000,000	Shui-Yi Kuo, Kuo-Feng Lin, Yung-Fong Song, Hong-Chan Ma, Tian-Tsair Su, Yuan-Kuang Tu, Chau-Young Lin, Hsiu-Gu Huang, Ming-Shih Chen, Chih-Cheng Chien, Hsueh-Lan Wu, Rong-Syh Lin, Wei-Kuo Hong	Kuo-Feng Lin, Yung-Fong Song, Tian-Tsair Su, Chau-Young Lin, Chih-Cheng Chien, Hsueh-Lan Wu, Rong-Syh Lin, Wei-Kuo Hong
NT$5,000,001 ~ NT$10,000,000	Chi-Mau Sheih, Hui-Min Wang, Chen-Huiung Tsai	Chi-Mau Sheih, Shui-Yi Kuo, Hong-Chan Ma, Yuan-Kuang Tu, Hsiu-Gu Huang, Ming-Shih Chen, Hui-Min Wang, Chen-Huiung Tsai
NT$10,000,001 ~ NT$15,000,000		
NT$15,000,001 ~ NT$30,000,000		
NT$30,000,001 ~ NT$50,000,000		
NT$50,000,001 ~ NT$100,000,000		
Over NT$100,000,000		
Total		

Unit: NT$

Employee Compensation (D) (Note 4)				Total Compensation (A+B+C+D) to Net Income (%) (Note 8)		Compensation from Investees other than Subsidiaries (Note 9)
Parent-only		Consolidated (Note 5)		Parent-only	Consolidated (Note 5)	
Cash	Stock	Cash	Stock			
4,960,000	–	5,002,500	–	0.24%	0.25%	456,058

Note 1: The names of the Company President, Executive Vice President, and Department Heads shall be listed separately, with summarized compensation amount as disclosed. Mr. Chi-Mau Sheih, Director and President, is listed under "Remuneration for Directors (including Independent Directors)".

Note 2: Refer to salary and extra commission disbursed to the Company President, Executive Vice President, Department Heads in fiscal year 2018.

Note 3: Refer to the Company President, Executive Vice President, Department Heads received remuneration of all types of bonuses, allowances, traveling fees, special fees, etc. in fiscal year 2018. The Company does not have share-based compensation as per IFRS 2, including employee stock option certificate, restricted stock, cash-based share subscription, etc.

Note 4: Refer to remuneration as approved by BoD and are disbursed to the Company President, Executive Vice President, Department Heads in fiscal year 2018 (including stock and cash).

Note 5: Fully disclose the total amount of various compensation items on consolidated basis that are disbursed to the Company President, Executive Vice President, Department Heads.

Note 6: Fully discloses the Company President, Executive Vice President, Department Heads names in the remuneration range table in accordance to the different remuneration amount of the respective officers.

Note 7: Fully disclose the total amount of various compensation items to the Company President, Executive Vice President, and Department Heads on consolidated basis; fully disclose respective officers' names in the remuneration range table in accordance to the different remuneration amount of the respective officers.

Note 8: Fiscal year net income refers to after-tax income in fiscal year 2018 and on the parent-only basis.

Note 9: a. This column shall clearly state the Company President, Executive Vice President, Department Heads compensation from investees other than subsidiaries.

b. If the Company President, Executive Vice President, Department Heads have received compensation from investees other than subsidiaries, then these compensations shall be included into the remuneration range table column E, and the column heading shall be changed to "All Investee Companies".

c. Remuneration refers to the Company President, Executive Vice President, Department Heads compensation and other professional fees from the Company investees other than subsidiaries as these officers serve as directors, or supervisors, managers, or other positions of the investee companies (including compensation as employees, or directors, or supervisors).

* The table above is for remuneration disclosure only, and is different from taxable income, so the table cannot be used for taxable income purpose.

(3) Remuneration of Managers

(including top 10 managers names, positions and total compensation amount)

As of December 31, 2018

	Title (Note 1)	Name (Note 1)	Compensation in Stock	Compensation in Cash	Total	Total to Net Income (%)
Managers	Senior Executive Vice President	Shui-Yi Kuo	0	16,156,331	16,156,331	0.05%
	Senior Executive Vice President	Kuo-Feng Lin				
	Senior Executive Vice President	Yung-Fong Song (dismissed on October 2, 2018)				
	Senior Executive Vice President	Hong-Chan Ma (succeeded on August 10, 2018)				
	Senior Executive Vice President	Tian-Tsair Su				
	Vice President	Mei-Hui Chu				
	Vice President	Shu-Ling Chen				
	Vice President	Shih-Chung Chang				
	Vice President	Shih-Chang Hung				
	Vice President	Hui-Fen Tsai				
	Vice President	Ming-Fang Li				
	Vice President	Wen-Wang Tseng				
	Vice President	Bao-Shuh Wu (dismissed on February 28, 2018)				
	Vice President	Hsu-Huil He (succeeded on March 1, 2018) (dismissed on December 25, 2018)				
	Vice President	Jeu-Yih Jeng (succeeded on December 25, 2018)				
	Vice President	Yao-Kun Chou (succeeded on August 13, 2018)				
	Vice President	Wen-Chiyh Lin (succeeded on March 20, 2018)				
	Vice President	Ruey-Shu Chiu				
	Vice President	Wu-Sung Kao (succeeded on March 16, 2018)				
	Assistant Vice President	Kuo-Chiang Chung				
	Assistant Vice President	Lii-Jia Guo (succeeded on March 1, 2018)				
	Assistant Vice President	Fu-Fu Shen				
	Assistant Vice President	Yuan-Kai Chen				
	Assistant Vice President	Shih-Mo Leu (succeeded on August 31, 2018)				
	Assistant Vice President	Chi-Hsien Huang				
	Assistant Vice President	Wei-Chiao Wu				
	Assistant Vice President	Rong-Yih Chen				
	Assistant Vice President	Chih-Hsiung Huang				
	Assistant Vice President	Chung-Yung Kang				
	Assistant Vice President	Petrina Chong				
	Assistant Vice President	Vincent Chen				
	Assistant Vice President	Timothy Horng (succeeded on March 20, 2018)				
	Assistant Vice President	Wen-Ming Chuang (succeeded on August 14, 2018)				
	Assistant Vice President	I-Fang Wu				
	Assistant Vice President	Shu-Ling Chen (succeeded on March 16, 2018)				
	Assistant Vice President	Hui-Chen Wei (succeeded on March 16, 2018)				

As of December 31, 2018

	Title (Note 1)	Name (Note 1)	Compensation in Stock	Compensation in Cash	Total	Total to Net Income (%)
Managers	President of Business Group	Yuan-Kuang Tu				
	Vice President of Business Group	Yi-Feng Chang				
	Vice President of Business Group	Ching-Chir Shyur (dismissed on June 30, 2018)				
	Vice President of Business Group	Chih-Chin Yu (succeeded on August 9, 2018)				
	President of Branch	Hui-Pao Huang				
	Vice President of Branch	Ching-Min Cheng				
	Vice President of Branch	Chyi-Tian Chiou				
	Vice President of Branch	Kuan-Chun Hsieh (succeeded on August 8, 2018)				
	President of Branch	Ching-Pei Chen (dismissed on February 28, 2018)				
	President of Branch	Hung-Chao Tang				
	Vice President of Branch	Ching-Wan Hu				
	Vice President of Branch	Pen-Yuang Chang				
	President of Branch	Tsun-Lin Hsiao (dismissed on February 28, 2018)				
	President of Branch	Jinun-Jye Lee (succeeded on February 28, 2018)				
	Vice President of Branch	Chen-Chien Su				
	President of Branch	Nien-Yee Liu				
	Vice President of Branch	Mao-Hsing Lin (succeeded on February 28, 2018)				
	President of Branch	Jason Hsu (succeeded on February 28, 2018)				
	Vice President of Branch	Victoria Liao (succeeded on September 10, 2018)				
	President of Branch	Mao-Lin Li (dismissed on February 28, 2018)				
	President of Branch	Sheng-Haun Chang (succeeded on February 28, 2018)				
	Vice President of Branch	Hung-Hsing Chen (succeeded on February 28, 2018)				
	President of Branch	Jimmy Shih (succeeded on August 8, 2018)				
	Vice President of Branch	Lin-Chuan Weng (dismissed on February 1, 2018)				
	Vice President of Branch	Lai-Ding Chen (succeeded on February 1, 2018)				
	President of Branch	Hung-Liang Yin				
	Vice President of Branch	Walter Chou (dismissed on April 23, 2018)				
	Vice President of Branch	Karen Chin (succeeded on April 23, 2018)				
	President of Business Group	Hui-Min Wang (succeeded on February 28, 2018)				
	President of Business Group	Chau-Young Lin (succeeded on March 20, 2018)				
	Vice President of Business Group	Chin-Chun Chang Chien				
	Vice President of Business Group	Kuan-Hsiung Liang (succeeded on August 20, 2018)				
	Vice President of Business Group	Fu-Tsai Chiang (succeeded on March 5, 2018)				

As of December 31, 2018

	Title (Note 1)	Name (Note 1)	Compensation in Stock	Compensation in Cash	Total	Total to Net Income (%)
Managers	President of Branch	Chio-Fu Lai				
	Vice President of Branch	Yu-Chen Tsai				
	President of Branch	Chin-Tu Lin				
	Vice President of Branch	Tsai-Chen Lan				
	President of Branch	Chia-Hsin Li				
	Vice President of Branch	Wen-Tu Chang (succeeded on September 19, 2018)				
	President of Branch	Ching-Chuan Wang (succeeded on May 11, 2018)				
	Vice President of Branch	Fu-Shun Cheng (dismissed on December 28, 2018)				
	President of Branch	Ker-Chih Hwang				
	Vice President of Branch	Gwo-Shyan Wu				
	Vice President of Branch	Ching-Hsi Wu				
	President of Branch	Huang-Lung Hung (succeeded on March 5, 2018)				
	Vice President of Branch	Chaw-Chia Chang (succeeded on June 26, 2018)				
	President of Branch	Pao-Shan Hung				
	Vice President of Branch	Adorn Yeh				
	President of Branch	Pen-Yen Hsiao (dismissed on February 1, 2018)				
	President of Branch	Yeong-Jienn Maw (succeeded on February 1, 2018)				
	Vice President of Branch	Kuo-Ching Tien				
	President of Branch	Ru-Dar Yang				
	President of Business Group	Hsiu-Gu Huang (succeeded on August 9, 2018)				
	Assistant Vice President of Business Group	Hui-Fen Lin (succeeded on February 7, 2018)				
	President of Business Group	Ming-Shih Chen				
	Vice President of Business Group	Hsueh-Hai Hu				
	Vice President of Business Group	Chih-Chang Kuo				
	President of Branch	Wen-Cheng Chen				
	Vice President of Branch	Jung-Chin Kung				
	President of Branch	Chin-Kun Lin				
	Vice President of Branch	Jen-Shang Lin				
	President of Branch	Der-Shing Rau				
	President of Business Group	Chih-Cheng Chien (dismissed on November 15, 2018)				
	President of Business Group	Hsueh-Lan Wu (succeeded on November 15, 2018)				
	President of Business Group	Rong-Syh Lin (succeeded on November 15, 2018)				
	Vice President of Business Group	Min-Gume Cheng				
	Vice President of Business Group	Quen-Zong Wu (succeeded on July 9, 2018)				
	Vice President of Telecommunication Training Institute	Jung-Kuei Chen				
	Vice President of Telecommunication Training Institute	Hey-Chyi Young				
	President of Telecommunication Training Institute	Chen-Huiung Tsai (dismissed on June 30, 2018)				
	President of Telecommunication Training Institute	Wei-Kuo Hong (succeeded on November 15, 2018)				
	Vice President of Telecommunication Training Institute	Chung-Kuang Chen (dismissed on August 29, 2018)				

Note 1: Disclose full names and titles, with summarized compensation amount.
Note 2: Refer to key employees' compensation as approved by BoD for fiscal year 2018. Fiscal year net income refers to after- tax income in fiscal year 2018 and on the parent-only basis.
Note 3: The definitions of managers are in accordance to Security and Future Bureau Regulation 3-0920001301 issued by Financial Supervisory Commission, or FSC on March 27, 2003, and are listed below:
(1) President and equivalent position
(2) Vice President and equivalent position
(3) Assistant Vice President and equivalent position
(4) Financial Manager and equivalent position
(5) Accounting Manager and equivalent position
(6) Other managers with authorization
Note 4: The Company Chairman and President did not receive any employee remuneration; Executive Vice President (included) and below officers have received employee remuneration.

2.4 Remuneration to Directors, President, Executive Vice President, as Percentage of Net Income for the most recent two years; Remuneration Policy, Budget and Risks

(1) Remuneration of Directors, President, Executive Vice President, and Senior Directors, as Percentage of Net Income:

0.38% in fiscal year 2017, 0.39% in fiscal year 2018.

(2) Remuneration Policy and Guidelines:

A. The Board of Directors approve director remuneration in accordance to the Company's Articles of Incorporation; as adopted by the Board of Directors, directors are paid fixed monthly compensation, but director compensations are not distributed to independent directors.

B. Chief Executive Officer and President are paid salary and bonus as approved by the Board of Directors, but not as part of the employee compensation.

C. The salary of Executive Vice President, Department Heads and Senior Directors are determined by the relevant employee compensation policy; bonus and allowances are determined based on the overall corporate performance and the performances of the individual departments.

(3) Remuneration Budgeting Procedure:

The Compensation Committee shall periodically review and assess remuneration packages for the directors and executive management, then to be approved by the Board of Directors.

(4) Remuneration and Performance:

A. The fixed monthly compensation for directors has taken into consideration the corporate performance target, financial status and the director's respective responsibilities.

B. The remuneration for management executives, employees, Chief Executive Officer and President, has taken into consideration respective expertise and competencies, corporate performance, and financial status. The remuneration of Executive Vice President, Department Heads and Senior Directors are in accordance to executives'performance management and guidelines, and linked to various KPI assessments, such as "corporate performance", "subordinate unit performance", "personal performance", etc.

(5) Remuneration and Risks:

The Company's key strategies are formulated in consideration of various risk assessment. These strategic initiatives shall drive profitability, which are linked to the remuneration of the Company executives. As a result, all the remunerations of Directors, Chairman of the Board, Chief Executive Officer, Executive Vice President, Department Heads and Senior Directors are directly associated with risk control and management.

3. Corporate Governance

3.1 Board of Directors, or BoD Operation

Board of Directors convened 6 meetings (A) in fiscal year 2018, of which attendance is as follows:

Title	Name	Attendance in Person (B)	Attendance by Proxy	Attendance Rate (%) (B/A)	Remarks
Chairman, Chief Executive Officer and Director	Yu Cheng (Representative of the MOTC)	6	0	100%	
Director	Chi-Mau Sheih (Representative of the MOTC)	6	0	100%	
Director	Chen-Yuan Chang (Representative of the MOTC)	1	1	50%	succeeded on August 10, 2018 dismissed on January 22, 2019
Director	Shin-Yi Chang (Representative of the MOTC)	3	1	75%	dismissed on August 9, 2018
Director	Mu-Han Wang (Representative of the MOTC)	5	1	83%	
Director	Wei-Ming Chang (Representative of the MOTC)	6	0	100%	
Director	Yi-Bing Lin (Representative of the MOTC)	5	1	83%	
Director	Yih-Yu Lei (Representative of the MOTC)	4	2	67%	
Director	Chin-Tsai Pan (Representative of the MOTC)	6	0	100%	
Independent Director	Kuo-Long Wu	6	0	100%	
Independent Director	Lo-Yu Yen	6	0	100%	
Independent Director	Jen-Ran Chen	6	0	100%	
Independent Director	Yu-Fen Lin	6	0	100%	
Independent Director	Chung-Chin Lu	3	0	100%	succeeded on June 15, 2018

Other Matters of Importance:

I. If any of the following circumstances occur, it is necessary to specify the dates of the board meetings, sessions, contents of motion, all independent directors' opinions and the Company's responses:

(1) Matters referred to in Article 14-3 of the Securities and Exchange Act.

(2) In addition to item (1), other matters involving objections or expressed reservations by independent directors that were recorded or stated in writing that require a resolution by the board of directors.

II. Any directors' avoidance of motions due to conflict of interest, the directors' names, contents of motion, causes for avoidance and voting should be specified: same as above.

III. Measures have been taken to strengthen the functionality of the board of directors (establishment of Audit Committee, increase transparency) to assist the board in carrying out its various duties; please refer to page 54, Chapter III, Section 3.3, Item 3, "BOD Composition and Responsibilities".

3.2 Audit Committee Operation

Audit Committee convened 13 meetings (A) in fiscal year 2018, of which attendance is as follows:

Title	Name	Attendance in Person (B)	Attendance by Proxy	Attendance Rate (%) (B/A)	Remarks
Independent Director	Lo-Yu Yen	13	0	100%	
Independent Director	Kuo-Long Wu	11	0	85%	
Independent Director	Jen-Ran Chen	13	0	100%	
Independent Director	Yu-Fen Lin	12	0	92%	
Independent Director	Chung-Chin Lu	6	0	75%	succeeded on June 15,2018 should attend 8 times, actually attended 6 times.

Other Matters of Importance:

I. If any of the following circumstances occur, it is necessary to specify the dates of meetings, sessions, contents of motion, resolutions of the Audit Committee and the Company's responses:

(1) Matters referred to in Article 14-5 of the Securities and Exchange Act, which were not approved by the Audit Committee but were approved by two-thirds or more of all directors: None in fiscal year 2018.

(2) In addition to item (1), other matters which were not approved by the Audit Committee but were approved by two-thirds or more of all directors: None in fiscal year 2018.

II. Any independent directors' avoidance of motions due to conflict of interest, the independent directors' names, contents of motion, causes for avoidance and voting should be specified: None in fiscal year 2018.

III. Annual focus work of the Audit Committee:

Meeting Dates	Resolution
2018/03/06	Approve the 2017 annual financial statements
	Approve the 2017 statement of Internal Control System
2018/05/02	Approve the 2018 Q1 financial statements
2018/08/03	Approve the 2018 Q2 financial statements
2018/10/29	Approve the 2018 Q3 financial statements

IV. Communications between independent directors and the Company's Chief Audit Executive and CPAs:

(1) During the meeting of Audit Committee, the independent directors listened to the Chief Audit Executive report about the important findings and the improvement of defects, then provided comments or instructions. Both parties also communicate by telephone or e-mail on regular basis, which was effective for supervising the implementation of internal control.

(2) The independent directors and CPAs met during the meeting of the Audit Committee to exchange information on the financial reporting matters. There were no differences of opinion during these communications.

The Company Audit Committee is established in accordance to Article 14-4 of the Securities and Exchange Act, and comprises of all independent directors, with primary responsibilities of auditing and addressing the following issues:

(i) Adopt or amend internal control system in accordance to Article 14-1 of the Securities and Exchange Act.

(ii) Assessment of the effectiveness of the internal control system.

(iii) Adopt or amend, pursuant to Article 36-1 of the Securities and Exchange Act, of the procedures for handling financial or business activities of a material nature, such as acquisition or disposal of assets, derivatives trading, loaning of funds to others, and endorsements or guarantees for others.

(iv) Directors' conflict of interest.

(v) A material asset or derivatives transaction.

(vi) A material monetary loan, endorsement, or provision of guarantee.

(vii) The offering, issuance, or private placement of any equity-type securities.

(viii) The hiring or dismissal of a CPA, or the compensation given thereto.

(ix) The appointment or discharge of a financial, accounting, or internal auditing supervisor.

(x) Annual and semi-annual financial reports.

(xi) The matters regulated by the Business Mergers and Acquisitions Act.

(xii) The first and third quarter financial reports.

(xiii) Communication and discussion with CPAs.

(xiv) Resolve potential differences of opinions between the Company management and the CPAs.

(xv) Discussing and reporting other financial information and required disclosure under the Securities Exchange Act of USA between the Company management and the CPAs.

(xvi) Approving the CPA firm's annual audit and non-audit services.

(xvii) Any other material matter so required by the Company or the relevant authorities.

3.3 Corporate Governance Implementation Status and Deviations from "the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies"

Evaluation Criteria	Implementation Status			Deviations from "the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
1. Does the Company establish and disclose the proper corporate governance framework based on "Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies"?	√		The Company has adopted "Corporate Governance Best Practice Principles" consisting of 50 principles, in accordance to "Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies". These principles are published on the Company's official website under "Corporate Governance".	None
2. Shareholding structure & shareholders' rights (1) Has the Company established an internal operating procedure to address shareholders' suggestions, doubts, disputes, litigations, with proper implementation based on this procedure?	√		The Company has designated professional shareholder service team responsible for shareholders' suggestions, inquiries, disputes and litigations, with standard operating procedures depending on the nature of the issues.	None
(2) Is the Company fully aware of its major shareholders and the ultimate owners of those shares?	√		As strict compliance to SEC Article 25, the Company submits a monthly report listing the insider shareholdings (directors, managers and major shareholders with over 10% shareholding) to the authorities and publishes on Market Observation Post System, or MOPS.	In accordance to Article 19, "Major Shareholder" refer to shareholding of 5% or more, or top 10 shareholders in terms of shareholding %. The Company obtains its major shareholder list based on the book closure date for shareholder to register.
(3) Does the Company adopt and execute the proper risk management and firewall system within its affiliates?	√		1. The Company's internal control system consists of corporate-level risk management and operational-level execution control. Also, on July 18, 2012, the then CEO approved "Chunghwa Telecom Rules and Procedures on Monitoring and Managing Subsidiaries" as risk control mechanisms. 2. On December 17, 2013, during the 4th meeting of the 7th BoD, "Chunghwa Telecom Rules and Procedures on Conducting Transactions between Group Companies and Related Parties" were amended and approved. It consists of 15 articles and is applicable to related party transactions on procurement & sales, asset disposal, guarantees, loans, etc. 3. On August 9, 2016, during the 2nd meeting of the 8th BoD, "Chunghwa Telecom Rules and Procedures on Investments" were amended and approved. It consists of 41 articles and is applicable to investment strategy, due diligence, valuation, agreement signing, settlement, application, integration, post-investment management, performance review, exit mechanism and penalty, etc.	None
(4) Does the Company establish internal rules against insider trading?	√		The Company has established rules and procedures to prevent and prohibit insider transaction by taking advantage of inside information.	None
3. BoD Composition and Responsibilities (1) Does the BoD develop and implement a diversified policy for the composition of its members?	√		1. In accordance to the Company Article of Incorporation Article 12, the Company BoD shall comprise of 7 to 15 directors, of which at least 1/5 must be expert representatives. Article 12-1, which is in accordance to SEC Article 181-2 and Article 183, stipulates that starting 5th BoD, of the 7 to 15 directors, at least 3 of whom must be independent directors.	None

Evaluation Criteria	Implementation Status			Deviations from "the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
			2. Currently, the Company BoD comprises of 13 directors (including 5 independent directors), and complies with all relevant rules as a public company and in accordance to the Company Law. The Company consistently adheres to diversity principle in selecting directors. For the current 8th BoD, the directors have diverse backgrounds of government, economics and academia, with extensive experiences in commerce, legal, finance, accounting, communication technology, etc. Of the 13 BoDs, two are female directors.	
(2) Does the Company voluntarily establish other functional committees in addition to the Compensation Committee and the Audit Committee?	√		In addition to Compensation Committee and Audit Committee, the Company has also adopted a Strategy Committee for key strategic discussions. The Strategy Committee currently consists of 8 directors.	None
(3) Does the Company establish and implement on annual basis a set of assessment to measure the performance of the BoD?	√		1. The Company BoD has established three functional committees to conduct annual self-evaluation of performances at the end of the year. 2. The director representatives of MOTC participate in the self-evaluation of performances at the end of the year 3. In accordance to the Company Article of Incorporation #22, not more than 0.17% of profit should be distributed as directors' remuneration, so directors can receive fixed part-time compensation on monthly basis. All of these must be approved by the Compensation Committee and the BoD.	None
(4) Does the Company regularly evaluate the independence of CPAs?	√		The Audit Committee is authorized to evaluate the independence of the CPAs on annual basis. 1. The evaluation criteria are as follows: (1) In accordance to U.S. Sarbanes-Oxley Act, the CPA firm must be pre-approved by the Audit Committee prior to annual audit and any other project. (2) In accordance to U.S. Sarbanes-Oxley Act, the CPAs shall report the audit content and independence to the Audit Committee on quarterly basis. (3) Any change of audit CPAs must strictly in compliance to the Company Corporate Governance Principles. (4) Periodically obtain a Confirmation of Independence from the CPAs. 2. The evaluation results are as follows: (1) The CPAs and the Company have complied with the independence requirements as per U.S. SEC and Public Company Accounting Oversight Board, or PCAOB. (2) The CPAs haven't served as auditors for the Company for 5 consecutive years.	None
(5) Has the Company adopted succession plan for key executives?	√		For succession plan of key executives, the Company conducts strict selection, consistent assessment, and systematic development programs for leadership, personality charisma, professional knowledge and management capabilities, by leveraging Mentor and Individual Development Plan, or IDP, in order to discover potentials, breakthrough frameworks and restrictions, accelerate beyond capabilities, personalities, depth and breadth. This entire key executive development program spans 2 to 3 years.	None

Evaluation Criteria	Implementation Status			Deviations from "the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
4. Does the Company set up a corporate governance unit (full or part-time) or appoint designated personnel responsible for corporate governance matters (including but not limited to providing relevant information for directors and supervisors, handling work related to BoD and shareholders' meetings, filing and amending company registration, and drafting minutes of BoD and shareholders' meetings)?	√		The Company has appointed a corporate governance manager, while the secretarial unit of BoD is also responsible for corporate governance-related matters, including BoD's and shareholders' meetings related matters, Company registration filing and amendments, BoD's and shareholders' meeting proceedings. In addition, the corporate governance manager is responsible for implementing requests from the directors, assist the directors in order to ensure BoD proceedings and compliances to all relevant regulations and rules, as well as to ensure seamless communication and interaction among all directors, and between all directors and management executives. The Company's corporate governance managers shall complete the necessary continuing education hours within the required timeline in accordance to the relevant rules.	None
5. Does the Company establish a communication channel and designate a website section for its stakeholders (including but not limited to shareholders, employees, customers and suppliers), as well as handle all CSR related issues?	√		The Company's official website has set up sections for "CSR" and "Stakeholders", as well as Facebook Fan pages for communicating with all stakeholders. In addition, the Company provides customer service hotline, online platform, e-mail, instant message, apps, as multiple and adequate access channels for responding to all stakeholders.	None
6. Does the Company appoint a professional shareholder service agency to handle shareholder meeting affairs?	√		The Company has appointed Registrar & Transfer Agency Department of Yuanta Securities to assist shareholder meeting affairs.	None
7. Information Disclosure (1) Does the Company have a corporate website to disclose all information regarding business, finance and corporate governance?	√		The Company has set up official corporate website, to fully and timely disclose all material information related to business, finance, corporate governance, etc.	None
(2) Does the Company have other information disclosure channels (e.g. English website, designated personnel to handle information collection and disclosure, spokesperson system, webcasting investor conferences, etc.)?	√		The Company has set up an English version of the official corporate website, and designated personnel responsible for Company information collection and disclosure. The Company official spokesperson is the Chief Financial Officer, or CFO, with proper earning conference related material on the official website under "Shareholder" section, including conference recording, financial and operational metrics. These materials are also available on MOPS website.	None
8. Is there any other important information to facilitate a better understanding of the Company's corporate governance practices? (1) Employee rights	√		The Company's human resources policies comply with provisions prescribed under the law, such as the Labor Standards Act, and collective bargaining agreement, in safe guarding employee rights.	None
(2) Employee wellness	√		Engage professional services to assist employees, including psychological, legal, financial, health and management; establish multiple and adequate channels for 2-way communication with employees in order to enhance better understanding and caring.	None

Evaluation Criteria	Implementation Status			Deviations from "the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
(3) Investor relations	√		The Company intends to maximize shareholder value and to treat all shareholders fairly; the Company discloses in a timely manner all specified material information such as financial, operational, insider, etc. onto MOPS. All shareholder meetings are recorded in accordance to the relevant rules, are disclosed on the Company official website and are kept at the Company permanently.	None
(4) Supplier relations	√		The Company adopted "Chunghwa Telecom Procurement Management Regulation", in order to conduct procurement and supplier selection based on qualification, technical specification, competency, credit review, and to sign written agreement for detailed execution. Prior to and during the contractual period, the Company defines, reviews and initiates risk management with the respective suppliers. In addition, for contractors, the Company provides necessary training and certification. Furthermore, the Company conducts annual supplier conferences, exchanges CSR development, surveys feedback, awards supplier excellence, conducts supplier training and education, etc. Commencing 2014, the Company has implemented "Second-party Suppliers Audits", and commencing 2016, the Company conducts annual supplier training and education in order to enhance supplier relations.	None
(5) Rights of stakeholder	√		The Company consistently complies with the latest domestic regulations and international trends, publicly discloses related agreements and details rules, to ensure all stakeholder rights are protected. The Company has established website sections for stakeholders with timely updates and communication channel accesses, so stakeholders can provide immediate feedback and receive effective responses. Employees: http://chtblog.cht.com.tw/mbr/index.jsp Suppliers: https://scm.cht.com.tw/outboard/ Customers: http://www.emome.net/ Investors: http://www.cht.com.tw/ir/mae-smeeting.html	None
(6) Directors' and supervisors' training record	√		Directors' and supervisors' continuing educational training are completed regularly in accordance to Taiwan Stock Exchange Corporation's "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEx Listed Companies"; please refer to Appendix A of this Chapter on "Directors' Continuing Education Records for fiscal year 2018".	None
(7) Implementation of risk management policies and risk assessments	√		1. The Company risk management policy and risk assessment measures are established in accordance to "Chunghwa Telecom Risk Management Rules" approved by BoD. 2. The Company consistently analyzes and rectifies all high risks to ensure achieving business operation targets, financial accuracy, etc.; the Company also utilizes risk management system to register, track and manage, those relevant risks to strengthen overall governance and risk management.	None

<table>
<tr><th rowspan="2">Evaluation Criteria</th><th colspan="3">Implementation Status</th><th rowspan="2">Deviations from "the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons</th></tr>
<tr><th>Yes</th><th>No</th><th>Explanation</th></tr>
<tr><td>(8) Implementation of customer relations policies</td><td>√</td><td></td><td>Advance best-ever total customer services with customer system to understand behavior, to provide technology and innovative services with enhanced values; provide high-quality network for internet communication; active care for customers with convenient and accelerated 2-way communication channels; inspect all physical stores' service quality using "On-site Inspection of Service Quality Protocol"; offer 24x7 call center and online customer services, in order to continue improving customer satisfaction; offer paper-less payment choices (such as short message service, or SMS, e-mail, voice, etc.) in order to adhere to carbon reduction policy.</td><td>None</td></tr>
<tr><td>(9) Insurances for directors and supervisors</td><td>√</td><td></td><td>The Company's directors and supervisors provide professional and objective opinions from their varied professional fields, facilitating the decision making in the best interest of the Company and shareholders. To protect directors and supervisors from individual liability and financial loss brought by third party lawsuits, while conducting their duties, the Company has purchased appropriate insurances for them according to their respective terms of the office, responsibility scopes and potential liabilities in order to minimize potential material damages; insurance execution status are reported to the BoD; the details of the insurances coverage are also informed to the directors.</td><td>None</td></tr>
<tr><td colspan="5">9. Please explain items that have been already improved and priority measures to reinforce matters haven't been improved , in accordance to the results of the Corporate Governance Evaluation System released by the Corporate Governance Center, Taiwan Stock Exchange.</td></tr>
<tr><td>Matters already improved</td><td colspan="4">(1) The BoD established Strategy Committee, consisting of 8 directors, including 4 independent directors, of which responsibilities and operating status are fully disclosed on the corporate website and annual report (Item 2.14).
(2) In 2018, all of the Company's independent directors have completed their continuing education hours in accordance to Taiwan Stock Exchange Corporation's "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEx Listed Companies" (Item 2.25); all other directors except one representative director have also completed all continuing education hours (Item 2.24). The Company shall advocate its continuing education effort in 2019.</td></tr>
<tr><td>Matters to be improved</td><td colspan="4">The Company shall continue and complete all directors continuing education, in accordance to Taiwan Stock Exchange Corporation's "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEx Listed Companies" (Item 2.25).</td></tr>
</table>

3.4 Compensation Committee Composition, Responsibilities and Operations

(1) Compensation Committee Member Profiles

Title (Note 1)	Criteria / Name	Over 5 years of work experience and the following professional qualification requirements			Independence Criteria (Note 2)								Number of Other Public Companies in which the Individual is Concurrently Serving as Compensation Committee Member (Note 2)	Remarks
		An instructor or higher position in a department of commerce, law, finance, accounting, or other academic department related to the business needs of the Company in a public or private junior college, college or university	A judge, public prosecutor, attorney, CPA, or other professional or technical specialist who has passed a national examination and been awarded a certificate in a profession necessary for the business of the Company	Has work experience in the areas of commerce, law, finance, or accounting, or otherwise necessary for the business of the Company	1	2	3	4	5	6	7	8		
Independent Director	Lo-Yu Yen	-	√	√	√	√	√	√	√	√	√	√	0	
Independent Director	Jen-Ran Chen	-	-	√	√	√	√	√	√	√	√	√	0	
Independent Director	Yu-Fen Lin	-	√	√	√	√	√	√	√	√	√	√	0	

Note 1: In the Title column, please fill in director, independent director or other.

Note 2: Please check "√" in the corresponding boxes that apply to a member during the two years prior to being elected or during the term(s) of office.

(1) Not an employee of the Company or any of its affiliates.

(2) Not a director or supervisor of the Company or any of its affiliates; but excluding any person who is an independent director of the Company, or of its parent company, or of any subsidiaries with over 50% of direct or indirect voting shares.

(3) Not an individual shareholder whose total holdings, including those of his/her spouse, minor children, or shares held under others' names, reach or exceed 1% of the total number of outstanding shares of the Company, or an individual who ranks among the top 10 shareholders in terms of the share volume held.

(4) Not a spouse, or relatives within second degree of affinity, or within three degrees of consanguinity, to any person specified in the preceding three sub-paragraphs.

(5) Not a director, supervisor, or employee of any institution that directly or indirectly holds 5% or more of the total number of outstanding shares of the Company, or ranks among the top 5 institutional shareholders in term of share volume held.

(6) Not a director, supervisor, officer, or shareholder holding 5% or more of the shares of a specified company or institution which has a financial or business relationship with the Company.

(7) Not a professional, who is an owner, partner, director, supervisor, or officer and the spouse thereof, of a sole proprietorship, partnership, company, or institution that provides commercial, legal, financial, accounting services or consultation to the Company or to any affiliate of the Company.

(8) Not in contravention to Article 30 of the Company Act.

(2) Compensation Committee Operation

A. Compensation Committee comprises of 3 members currently.

B. Current Compensation Committee Member Terms: June 24, 2016 until June 23, 2019; the committee convened 5 meetings (A) in 2018, of which attendance is as follows:

Title	Name	Attendance in Person (B)	Attendance by Proxy	Attendance Rate (%) (B/A)	Remarks
Independent Director	Jen-Ran Chen	5	0	100%	Scope of Responsibilities: 1. Regularly enact and review directors' and management executives' performance assessments, remuneration related policy, system, standards and structure. 2. Regularly enact and review directors' and management executives' remuneration.
Independent Director	Lo-Yu Yen	5	0	100%	
Independent Director	Yu-Fen Lin	5	0	100%	

Other Matters of Importance:

I. Circumstances where the BoD declines to adopt, or attempts to modify, recommendations from the Compensation Committee, any objection should specify the dates of meetings, sessions, contents of motion, resolution by the BoD, and the Company's response to the Compensation Committee's opinion (for example, where the remuneration passed by BoD exceeds the recommendations of the Compensation Committee, the circumstances and reasons for the difference of opinions shall be specified): None in fiscal year 2018.

II. Circumstances where resolutions of the Compensation Committee were objected to by members, or subject to qualified opinion, with recorded or declared in writing, should specify date of meetings, sessions, contents of motions, all members' opinion and the response to members' opinion: None in fiscal year 2018.

III. Compensation Committee discussions and resolutions:

Compensation Committee convened 5 meetings in 2018

1. 8th BoD 6th Meeting on March 6, 2018
   (1) the Company's fiscal year 2017 directors' and employees' compensation
   (2) the Company's fiscal year 2018 structural compensation adjustment for management executives
2. 8th BoD 7th Meeting on April 25, 2018
   (1) the Company's Chairman of the Board, President compensation adjustment
3. 8th BoD 8th Meeting on July 23, 2018
   (1) performance assessment methodology draft for the Company's management executives
4. 8th BoD 9th Meeting on August 3, 2018
   (1) performance assessment methodology draft for the Company's management executives
5. 8th BoD 10th Meeting on December 22, 2018
   (1) the Company's directors' fixed part-time compensation and attendance fees

3.5 Corporate Social Responsibilities, or CSR

Evaluation Criteria	Implementation Status			Deviations from "the CSR Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
1. Corporate Governance Implementation (1) Does the Company adopt CSR policy and review its implementation?	√		In July 2006, the Company has established "CSR Committee" responsible for CSR policies and implementation; the Committee has commissioned 6 sub-groups to ensure effective execution of sustainability targets. In August 2017, "Corporate Social Responsibility Best-Practice Principles for Chunghwa Telecom Co., Ltd." were approved by the BoD, in order to legalize the governance structure and to further improve full scale CSR execution.	None
(2) Does the Company provide CSR educational training on a regular basis?	√		CSR educational training is held regularly, with increased advocacy of conventional practices.	None
(3) Does the Company set up a CSR unit (full or part-time), with designated personnel authorized by the BoD to be in charge of CSR and related reporting to the BoD?	√		1. The Company has designated a department to be responsible of CSR related efforts, including policy, guidelines, management, planning and execution. 2. All CSR related efforts are directly authorized to management executives by BoD, and execution results are reported to BoD regularly. In addition, these operation and execution are disclosed on the Company annual report and related websites.	None
(4) Does the Company establish a reasonable remuneration policy, and integrate the employee performance appraisal system with its CSR policy, as well as establish an effective reward and disciplinary system?	√		1. The Company BoD has established Compensation Committee who is responsible for compensation policies, practices, benchmarks and structures. 2. Appraisal assessment: appraisal results are used for consideration of salary, bonus and other compensation. 3. Bonus disbursement: based on overall corporate performance, fiscal year 2018 after-tax net profit and employee performance.	None
2. Sustainable Environment Development (1) Does the Company endeavor to utilize advanced and efficient use of renewable resources to reduce their impact on the environment?	√		The Company has adopted "5-Year Environmental Sustainability Development Strategy and Target" and energy savings plan for telecommunication facilities, including energy saving, carbon reduction, "green" procurement, environmental sustainability incentives, etc. The Company intends to focus on executions for increasing resource efficiency and reducing environmental damage.	None
(2) Does the Company establish proper environmental management systems in line with the nature of the Company's business operations?	√		The Company has adopted proper environmental management system in line with its business operation: 1. EARTH: Innovative environmental sustainability development management system for internal management of power, water, lighting equipment, resource recycling, tree planting, etc. 2. Green energy savings total solution: use online system to dynamically manage air conditioning energy, by leveraging iEN and "Power Operation Support System", or POSS. 3. Management system certification: (1) ISO14001 (Environmental Management system) certification (2) ISO50001 (Energy Management System) certification	None

Evaluation Criteria	Implementation Status			Deviations from "the CSR Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
(3) Does the Company monitor the impact of climate change on its operations and conduct greenhouse gas emission inventory plan, as well as adopt corporate strategies for energy conservation and carbon reduction?	√		1. Commencing 2008, the Company was the first telecom provider within Taiwan to initiate "Greenhouse Gases Inventory Plan". 2. The Company has adopted "5-Year Environmental Sustainability Development Strategy and Target", for full scale planning and implementation of energy savings for work environment and facility offices, to systematize management of power, water, lighting equipments, resource recycling, tree planting, etc. 3. Commencing 2015, the Company incorporated greenhouse gas reduction into risk management, in order to proactively conduct carbon reduction plan, replace older equipments with high energy consumption. 4. The Company joined Carbon Disclosure Project, or CDP, Supply Chain membership in 2017, in order to better collaborate with suppliers to achieve carbon sustainability.	None
3. Preserving Public Welfare (1) Does the Company formulate appropriate management policies and procedures according to relevant regulations and the International Bill of Human Rights?	√		1. The Company fully supports and voluntarily complies with all relevant bills of human rights, including United Nation's, or UN Universal Declaration of Human Rights, or UDHR, International Labor Organization Declaration on Fundamental Principles and Rights at Work, Global Compact, etc. 2. The Company publicly discloses human rights policies, adopts appropriate internal policies and procedures according to relevant regulations and the International Bill of Human Rights, with annual review and audit of the execution performance. 3. The Company is the only telecom provider with labor union, and signed collective bargaining agreement, in accordance to "Labor Standards Act". 4. The Company has surpassed the employment of disadvantaged groups: in fiscal year 2018, the Company employee headcount of disabilities was about 3.84 times of the legal quota.	None
(2) Has the Company set up an employee appeals system to handle complaints with appropriate resolution?	√		The Company has adopted various appeals systems including appraisal complaints, sexual harassment petition. Any employee can file appeal or petition via dedicated telephone line, e-mail, dedicated fax line, etc. In addition, the Company maintains strict whistleblower confidentiality and proper handling of the investigation outcome.	None
(3) Does the Company provide a healthy and safe working environment, with training on health and safety for its employees on a regular basis?	√		1. The Company has in place designated safety and health management teams in charge of all occupational safety and health management plan and procedures, promote safe, healthy, comfortable and friendly work environment. 2. The Company's Telecommunication Training Institute is in charge of employee education and training of occupational safety and health related affairs, including advocacy and drills. 3. The Company has engaged doctors and employed professional nursing staff to conduct on-site health related services. 4. The Company pays for various health examination packages for employees, and develops Employee Assistance Programs, or EAP for 1-on-1 professional consultation. In fiscal year 2018, these services were used by 463 employees. 5. Commencing July 2006, the Company was the first in telecommunication sector to offer "parental leave with payment". 6. The Company offers reasonable leaves for family care, sickness, miscarriage prevention, pre-natal examination, maternity and paternity, as well as on-site breast-feeding rooms, etc.	None

Evaluation Criteria	Implementation Status			Deviations from "the CSR Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
(4) Does the Company setup a regular communication mechanism with employees, including informing them of any operational changes that may have significant impact on them?	√		1. The Company offers multiple communication channels with employees on a regular basis: (1) Employees have the right to propose, petition and join labor union, etc. (2) The Company branches hold at least one labor union meeting every 3 months, with ad hoc meetings if necessary. (3) Directors of the labor union can be invited to attend Personnel Evaluation Committee, Review Committee, operation reporting, etc. (4) A designated director of labor is part of the overall BoD. (5) From time to time, the Company Chairman of BoD and President communicate directly with directors and representatives of the labor union, in person and over the telephone, in order to ensure consensus and cooperation. 2. Internal corporate website provides various labor-relate regulations and operational changes in order to enable employees to better understand company dynamics, regulations and their respective rights.	None
(5) Does the Company provide its employees with career development and training sessions?	√		1. The Company has established a comprehensive career training program: including management programs, 18 different professional programs; with continued review and modification of education and training content, in order to better assist employee career development. 2. The Company has established a life-long learning notion and gratifying learning environment; leveraging e-learning system to encourage all employees learning experiences.	None
(6) Does the Company establish any consumer rights protection policies and appeals procedures related to R&D, procurement, production, operations and services?	√		1. The Company provides supplier appeals channel, and a transparent procurement environment. 2. The Company has established "Corporate Marketing Rules" in accordance to relevant regulations, various business rules and service contracts, in order to ensure consumer rights. 3. Protect consumer privacy: (1) adopt management system in accordance to the relevant regulations; (2) designate responsible unit; (3) consumer basic information classified as "Highly Confidential"; (4) all employees must sign "Business Confidentiality Agreement", with direct supervisor bearing joint liability; (5) privacy protection as part of employee's key performance indicators, or KPIs, for appraisal purpose; (6) passed international security and privacy protection certification (such as ISO27001, BS10012.) 4. Electromagnetic, or EM wave reduction management: (1) base station strictly complies with the authority's safety standards; (2) consumer can apply for free professional measurement and inspection; (3) commission Taiwan Telecommunication Industry Development Association to convey to the public the correct understanding about EM waves and to minimize unwarranted panics. 5. Provide diverse channels to address customer issues and appeals, including physical store, customer service dedicated line, network platform, etc. The appeals procedure leverages proper SOP and targets 3 working days for satisfactory response and resolution. 6. Conduct customer satisfaction survey, timely improve service quality; use big data analysis to enhance products, services and functionalities.	None

Evaluation Criteria	Implementation Status			Deviations from "the CSR Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
(7) Does the Company advertise and label its product and services according to relevant regulations and international standards?	√		The Company is in full compliance with relevant telecom laws and regulations in providing its products, services and rates, and details corporate rules and service contracts, as well as disclosing them on the corporate website for communication.	None
(8) Does the Company evaluate the prospective suppliers' track record on environmental and social issues?	√		1. Supplier Management: (1) The Company has enacted "Code of CSR for Suppliers of Chunghwa Telecom" mandating all suppliers to comply and to execute. (2) The Company commissioned SGS as the external certification company to conduct "Supplier Dual Audit" for key suppliers, including background analysis and field audit, in order to establish a sustainable supplier chain management (3) The Company hosts annual supplier exchange conference, including education/training, supplier award ceremony, and professional or academia keynote speakers to share their experiences. 2. Supplier Self-Statement: During project bidding process, the bidding supplier must provide Self-Statement of ethical conduct, material sourcing, environmental protection, occupational safety, energy saving, carbon reduction, etc.	None
(9) Do the contracts between the Company and its major suppliers include termination clauses which come into force once the suppliers breach CSR policy and cause significant impact on the environment and society?	√		The Company's "General Terms and Conditions of Project Bidding" clearly states that "The Company can terminate or revoke the contract if the supplier significantly violates or breaches CSR policy, ethical conduct, etc."	None
4. Enhancing Information Disclosure (1) Does the Company disclose relevant and reliable information of CSR on its website and MOPS?	√		The Company provides relevant and reliable information of CSR on its website, MOPS, corporate annual report and CSR annual report.	None
(2) Does the Company adopt CSR policy, review its implementation, with proper disclosure in the corporate annual report?	√		In August 2017, "Corporate Social Responsibility Best-Practice Principles for Chunghwa Telecom Co., Ltd." was approved by BoD, in order to further improve CSR structure, execution, review and management, as well as proper disclosure in the corporate annual report.	None
(3) Does the Company set up units (full or part-time) to be in charge of CSR and employee ethical conducts, with related reporting to the BoD on regular basis, as well as proper disclosure in the corporate annual report?	√		The Company has designated Public Relations department to be responsible for CSR related efforts, including policy, guidelines, management, planning and execution. In addition, Human Resources department is responsible for employee ethical conduct. The related operating status and performances are reported to the BoD on regular basis.	None
(4) Does the Company disclose CSR policy and implementation within the annual report on regular basis?	√		The Company discloses all relevant CSR implementation plan and performance results within the CSR annual report and related websites on regular basis.	None

<table>
<tr><th rowspan="2">Evaluation Criteria</th><th colspan="3">Implementation Status</th><th rowspan="2">Deviations from "the CSR Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons</th></tr>
<tr><th>Yes</th><th>No</th><th>Explanation</th></tr>
<tr><td>(5) Does the Company formulate appropriate management policies and procedures of ensuring human rights, according to relevant regulations and the International Bill of Human Rights, with proper disclosure in the corporate annual report?</td><td>√</td><td></td><td>The Company publicly discloses human rights policies and considers human rights one of the key success factors of its operation. In addition, the Company fully supports and voluntarily complies to UN's Global Compact, with regular reviews of its corporate human rights effectiveness, and full disclosure of all relevant information within the corporate annual report.</td><td>None</td></tr>
<tr><td>(6) Does the Company establish a reasonable remuneration policy, and integrate the employee performance appraisal system with its CSR policy, with proper disclosure in the corporate annual report?</td><td>√</td><td></td><td>The Company BoD has established Compensation Committee who is responsible for compensation policies, practices, benchmarks and structures. The appraisal results and bonuses are linked to overall corporate performance, fiscal year 2018 after-tax net profit and individual employee performance, with proper disclosure in the corporate annual report.</td><td>None</td></tr>
<tr><td>(7) Does the Company official website and annual report disclose employee safety, work environment protection, and related implementation?</td><td>√</td><td></td><td>The Company values employee safety, work environment protection, as well as consistent disclosure of all related implementation on the official website and within the annual report.</td><td>None</td></tr>
<tr><td>(8) Has the Company disclosed annual carbon dioxide and other greenhouse gas emission level for the most recent 2 years?</td><td>√</td><td></td><td>Unit: t-CO2e
<table><tr><th>Year</th><th>2016</th><th>2017</th></tr><tr><td>Direct Emissions (Scope 1)</td><td>27,345.62</td><td>30,873.98</td></tr><tr><td>Indirect Emissions (Scope 2)</td><td>811,826.45</td><td>802,113.48</td></tr><tr><td>Total Emissions (Scope 1+Scope 2)</td><td>839,172.07</td><td>832,987.46</td></tr></table></td><td>None</td></tr>
<tr><td>(9) Has the Company enacted relevant management policies regarding carbon reduction, greenhouse gas emission reduction, water usage reduction and other waste material?</td><td>√</td><td></td><td>1. Management:
(1) Commencing 2015, the Company incorporated greenhouse gas reduction into risk management and keeps controlling and managing.
(2) Commencing 2008, the Company conducts "Greenhouse Gases Inventory Plan" on annual basis.
(3) Use EARTH, internally-developed innovative environmental sustainability development management system, to systematize internal management.
2. Energy savings:
(1) The Company has adopted "5-Year Environmental Sustainability Development Strategy and Target", and proactively implementing energy saving and carbon reduction plan.
(2) Implementing total green energy savings solution, use online system to dynamically manage air conditioning energy, by leveraging iEN and POSS.
3. Waste reduction:
Continue to promote consumer electronic billing, merged billing, water recycling and reuse, electronic document system, etc.
4. Win-win:
The Company joined Carbon Disclosure Project, or CDP, Supply Chain membership in 2017, in order to better collaborate with suppliers to achieve carbon sustainability.</td><td>None</td></tr>
<tr><td>(10) Has the Company obtained ISO14001, ISO50001 or equivalent environmental or energy management certification?</td><td>√</td><td></td><td>The Company has successfully obtained ISO14001 (Environmental Management system) and ISO50001 (Energy Management System) certifications.</td><td>None</td></tr>
</table>

Evaluation Criteria	Implementation Status			Deviations from "the CSR Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
(11) Does the Company properly disclose its stakeholder identity, key issues, communication channel and responses, etc. within the corporate annual report?	√		The Company actively communicates with all stakeholders, collects detailed information, systematically analyzes and responds, as well as properly discloses within the CSR annual report for identification process, stakeholder identity, key issues, communication channel and responses.	None

5. If the Company has established the CSR principles based on "Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies", please describe any discrepancy between the Principles and their implementation:
No discrepancy found.

6. Other important information to facilitate better understanding of the Company's CSR practices:
(1) CSR Enactment
In August 2017, "Corporate Social Responsibility Best-Practice Principles for Chunghwa Telecom Co., Ltd." was approved by BoD.
(2) The Company's mission of "bridge digital divide" and "create digital opportunities" are driving its service excellence, while encouraging "corporate volunteers" to actively participate in local community services, with detailed execution as listed below:
- Outpost Taiwan
- Digital Good Neighbors
- Chunghwa Telecom Eye Social Innovative Call Center
- Read with You - Community Network Tutoring
- Telecommunication universal services
- "Voice-based Personal Assistant" APP upgrade for visually-impaired

(3) Social Investment Summary:
Including cash donation and non-cash charities of commercial events, in-kind donation, corporate volunteering, charity short messages sending, free-of-charge services, convenient services for the disabled, totaling social investment of NT$815 million in fiscal year 2018.

7. Detailed statement below if the CSR reports were verified by external certification institutions:
The Company published "2017 CSR Annual Report" according to the latest reporting structure as stipulated by Global Reporting Initiative, or GRI, and Telecommunication Sector Supplement, with all relevant data verified by SGS Taiwan, thus complies to GRI A+ and AA1000 AS 2008 standards with substantive, comprehensive and responsive contents, as well as official certification statement.

3.6 Ethical Corporate Management

Evaluation Criteria	Implementation Status			Deviations from "the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
1. Enactment of ethical corporate management policies and programs (1) Does the Company declare its ethical corporate management policies and procedures in its official charter and material documents issued externally, as well as BoD and management commitment to its implementation?	√		The Company has enacted "Chunghwa Telecom Ethical Management Best Practice Principles" as the baseline policy for all directors, executive management and employees, as well as distributing to all corporate levels and affiliates for execution.	None
(2) Does the Company establish policies to prevent unethical conduct with clear statements regarding relevant procedures, code of conduct, punishment for violation, rules of appeal, and the commitment to implement the policies?	√		The Company has adopted "Chunghwa Telecom Procedures for Ethical Management and Guidelines for Conduct" in preventing any unethical acts including breach of ethics, illegal acts, or breach of fiduciary duty, and in formulating clear and effective reward and penalty with appeals procedure, as well as distributing to all corporate levels and affiliates for execution.	None
(3) Does the Company adopt measures to prevent high-risk unethical misconducts as specified in Article 7 Paragraph 2 of "Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies?"	√		The Company cannot offer illegal political donations, improper charitable donations or sponsorship, offer and accept any bribes, conduct businesses with any unethical agents, suppliers, clients or other counterparties; if any of these counterparties are found of unethical conducts, then the Company must terminate or revoke all business relations and list the counterparties onto "blacklist". The Company directors, managers, employees shall promise to conduct business with the highest ethical standards, and to rigorously and thoroughly enforce such standards, as detailed in the Company's "Code of Conduct", "Appraisal System", "Reward/Penalty Standards" and other internal policies.	None
2. Implementation of ethical corporate management (1) Does the Company evaluate business partners' ethical records and incorporate ethics-related clauses in business contracts?	√		During project bidding process, the bidding supplier must review "General Terms and Conditions of Project Bidding", fill in "Participating Bidding Supplier Preliminary Information Review Forms", provide statement of no unethical records, and strictly comply with ethical management standards. If the Company receives any reports of unethical conducts and verifies its facts, then the Company can terminate or revoke the contract if the supplier violates or breaches ethical conduct.	None
(2) Does the Company establish a dedicated unit (full or part-time) supervised by the Board to be in charge of Ethical Corporate Management Best Practice Principles and related reporting to the BoD?		√	The Human Resources Department of the Company is responsible for corporate ethical management, including policy development, code of conduct enactment, supervision and implementation, BoD report of ethical management operation and execution 1-2 times per year.	The Company has designated departments responsible for enacting, enforcing and supervising the ethical corporate management policies.
(3) Does the Company establish policies to prevent conflicts of interest and providing channels to report such conflicts?	√		The Company has established "Code of Ethics", and in place dedicated telephone, fax, e-mail for reporting violations, as well as internal auditors periodically and randomly examines the Company's compliances.	None

Evaluation Criteria	Implementation Status			Deviations from "the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
	Yes	No	Explanation	
(4) Has the Company established effective accounting and internal control systems to facilitate ethical corporate management, with internal/external CPAs auditing the process on regular basis?	√		1. The Company has established rigorous accounting systems and a dedicated accounting department. Financial statements are in compliance to international accounting standards, reporting guidelines approved by FSC, and other legal requirements. 2. The Company has established the control activities of enterprise level internal control system, with "Code of Conducts", which are amended according to relevant environmental changes and regulations. No major violations of ethical standards are found by both internal and external audits this year.	None
(5) Does the Company regularly hold internal and external educational trainings on ethical corporate management?	√		The Company organizes education training and awareness programs on annual basis, with online exams to be passed, in order to strengthen integrity and ethical standards. In 2018, all employees participated in digital learning program of "Code of Ethics" and "Ethical Corporate Management Best Practice Principles", with online "Comprehensive Exam", of which a score of 100 indicates completion. The total course study and exam spans about 1 hour. All employees excluding those with proper excuses (such as childbirth leave, injury, or long-term sick leave) have all completed the exam, representing 100% completion rate. The Company shall continue to enhance corporate management, risk control, ethical management corporate culture for long-term sustainable corporate management.	None
3. Reporting ethical violations (1) Does the Company establish a reporting and incentive system to facilitate the processing of complaints, and assigning personnel or unit to handle the cases?	√		The Company has enacted "Operational Rules for Handling Cases in Violation of Code of Ethics" to handle violation of the ethical corporate management rules, with the following reporting channels for internal and external use: 1. Address: Room 503, No. 21-3, Sec.1 Hsinyi Rd, Taipei 10048, R.O.C. 2. Reporting telephone: 0800-080998 3. Reporting fax: (02)23570007 4. Reporting e-mail: chthr@cht.com.tw The violation cases are stipulated by division of power and responsibilities, with designated personnel for processing.	None
(2) Does the Company establish standard operating procedures for confidential reporting and investigation?	√		The Company has established "Implementation of the Violation of Code of Ethic Case Investigation and Handling Principles", which enacts active investigation, confidentiality, and disciplinary measures according to the Company rules.	None
(3) Does the Company provide proper whistleblower protection?	√		The Company has established "Implementation of the Violation of Code of Ethic Case Investigation and Handling Principles", with objective, fair, confidential and sensitive investigation, in order to protect the whistleblower from any improper treatment.	None
4. Enhancing information disclosure (1) Does the Company disclose relevant and reliable ethical corporate management related information on its website and MOPS?	√		The Company has fully disclosed all ethical corporate management related content, status and performances onto its official website and the MOPS website.	None

<table>
<tr><th rowspan="2">Evaluation Criteria</th><th colspan="3">Implementation Status</th><th rowspan="2">Deviations from "the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons</th></tr>
<tr><th>Yes</th><th>No</th><th>Explanation</th></tr>
<tr><td colspan="5">5. If the Company has established the ethical corporate management policies based on the "Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies", please describe any discrepancy between the policies and their implementation:
In order to establish an ethical corporate culture and business operation, the Company has reviewed extensively the "Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies", has adopted the relevant principles for the Company to implement, with no discrepancies.</td></tr>
<tr><td colspan="5">6. Other important information to facilitate a better understanding of the Company's ethical corporate management practices: (e.g., review and amendment of the policies)
(1) The Company has enacted "Chunghwa Telecom Ethical Corporate Management Best Practice Principles" and has regular review process for any amendments to the principles, by consistently monitoring developments in domestic and international ethical corporate management standards, and by encouraging directors, management and employees to share their recommendations, in order to improve the overall performance of corporate business ethics.
(2) The Company has adopted "Code of Corporate Social Responsibility for Suppliers of Chunghwa Telecom Co., Ltd." which fully discloses the corporate ethical principles. In addition, these principles are communicated and emphasized in the procurement bidding documents and the annual supplier partner exchange conference, so the suppliers have clear understanding of the Company's ethical management policies and practices with integrity, transparency and responsibilities. Furthermore, the Company expects the suppliers to adopt "Ethical Corporate Management Best Practice Principles", or enact similar code of ethics, with proper disclosure.</td></tr>
</table>

3.7 Access to Corporate Governance Rules and Procedures

The Company has established "Chunghwa Telecom Corporate Governance Best Practice Principles", which is available on the Company website: http://www.cht.com.tw/aboutus/cog.html, for shareholder access and review.

3.8 Other Important Information to Facilitate Better Understanding of the Company's Corporate Governance Practices

(1) Material Information Disclosure Procedure of the Company.

The Company has enacted "Chunghwa Telecom Insider Trading Prevention and Control" which clearly specifies material information disclosure, insider trading management, and strict compliance to all relevant rules, regulations, TWSE, TPEx, in order to prohibit insider trading, any improper information disclosure, and to ensure accurate and timely disclosure. Below are some key terms:

A. Target audience and coverage scope of material information.

B. Corporate confidentiality procedure.

C. Designated and responsible unit.

D. The Company material information disclosure procedure.

(2) In fiscal year 2018, the Company President has undertaken 6 hours of corporate governance related courses and training. In addition, some management has also participated in similar courses and training. In the future, the Company expects to continue such courses and training for senior executives and management.

3.9 Internal Control Systems

(1) Statement of Internal Control System

Chunghwa Telecom Co., Ltd.
Statement of Internal Control System

Date：March 19, 2019

Based on the results of self-assessments, Chunghwa Telecom Co., Ltd. states the following with regard to its internal control system during the year 2018:

1. Our board of directors and management are responsible for establishing, implementing, and maintaining an adequate internal control system. Our internal control is a process designed to provide reasonable assurance over the effectiveness and efficiency of our operations (including profitability, performance and safeguarding of assets), reliability, timeliness, transparency of our reporting, and compliance with applicable rulings, laws and regulations.
2. An internal control system has inherent limitations. No matter how perfectly designed, an effective internal control system can provide only reasonable assurance of accomplishing its stated objectives. Moreover, the effectiveness of an internal control system may be subject to changes due to extenuating circumstances beyond our control. Nevertheless, our internal control system contains self-monitoring mechanisms, and we take immediate remedial actions in response to any identified deficiencies.
3. We evaluate the design and operating effectiveness of its internal control system based on the criteria provided in the Regulations Governing the Establishment of Internal Control Systems by Public Companies (herein below, the "Regulations"). The criteria adopted by the Regulations identify five key components of managerial internal control: (1) control environment, (2) risk assessment, (3) control activities, (4) information and communication, and (5) monitoring activities. Each component contains certain elements which stated in the Regulations.
4. We have evaluated the design and operating effectiveness of its internal control system according to the aforesaid Regulations.
5. Based on the results of such evaluation, we believe that, on December 31, 2018, it has maintained, in all material respects, an effective internal control system (that includes the supervision and management of our subsidiaries), to provide reasonable assurance over our operational effectiveness and efficiency, reliability, timeliness, transparency of reporting, and compliance with applicable rulings, laws and regulations.
6. This Statement is an integral part of our annual report for the year 2018 and prospectus, and will be made public. Any falsehood, concealment, or other illegality in the content made public will entail legal liability under Articles 20, 32, 171, and 174 of the Securities and Exchange Law.
7. This statement was passed by the board of directors in their meeting held on March 19, 2019, with none of the thirteen attending directors expressing dissenting opinions, and the remainder all affirming the content of this Statement.

Chunghwa Telecom Co., Ltd.

Yu Cheng,
Chairman and Chief Executive Officer

Chi-Mau Sheih,
President

(2) Auditor Review Report

The Company did not engage CPAs to conduct internal control review in accordance to the "Regulations Governing Establishment of Internal Control Systems by Public Companies", primarily because the Company also trades American Depositary Shares on the New York Stock Exchange of the United States, which stipulates that internal controls system must comply with U.S. Sarbanes-Oxley Act. As a result, the Company has engaged qualified CPAs to review and assess the internal control system accordingly, and no material flaws are discovered that may significantly impact financial reporting.

3.10 Any Penalties for Violations of Regulations or the Company's Internal Control Systems; Major Defects and the Status of Corrections of the Internal Control Systems for fiscal year 2018 and up to the Publication Date of this Annual Report

(1) During May 9 to May 15, 2018 Mother's Day NT$499 promotion, the Company conducted 18 violations of the Labor Standard Law, total penalty amounted to NT$7.12 million. The Company has initiated appeal, administrative litigation and other administrative remedy procedures. As of March 31. 2019, the total penalty was NT$5.44 million.

(2) Due to committee appraisal dispute within the Company Data Communication Business Group, the Department of Labor has determined the improper adjudication of the committee by the Company, so the Company is fined a total penalty amount of NT$30,000.

(3) Regarding certain employees being indicted by the judicial authorities in the relevant bidding projects, the Company has engaged Assessment Committee for review of any violations of administrative responsibilities in accordance to the Company rules, and depending on the specific circumstances, the Company has determined possible penalties such as transfer, downgrade, major demerit,demerit, warning, etc. The relevant improvement measures are as follows:

A. Company policy:

As a descent publicly listed company, the Company's employees strictly follows all relevant rules, in order to completely fulfill all of the enterprise clients' requirements for quality and timeliness as the core principle in bidding projects, and to strictly control the operation and risks of bidding projects.

B. Control mechanism:

optimize the SOPs for bidding projects, enhance customers/suppliers credit line and credit reporting, prohibit non-profitable/high risk bidding projects, prohibit all related party transactions, suppliers pricing inquiries/comparison/bargain, etc., strictly control the operation and risks of bidding projects.

C. Employee training for bidding project management:

In 2018 and 2019, the Company has conducted individual briefing sessions for key amendments to bidding projects management operation; in 2018, the Company has also conducted 5 courses for bidding project managements, and in 2019, the Company has planned 6 courses for bidding project managements.

D. Feedback on improvement measures:

- Implement all employee ethical conduct exams, with the indictment as a case study for textbook material and exam questions, demonstrate the Company compliance and demand for all employees' ethical management, in order to enable all employees to fully understand all ethical conducts and to avoid any misconduct.

- Conducted 6 discussion sessions for nationwide bidding project management, in order to collect all feedback regarding bidding project management, and continue to amend and enhance the related bidding project management methodology.

3.11 Major Resolutions of Shareholders' Meetings and Board Meetings for fiscal year 2018 and up to the Publication Date of this Annual Report

(1) Major Resolutions and Execution Status of 2018 General Shareholders' Meeting

A. The Company's 2017 business report and financial statements.

B. The Company's 2017 earnings distribution status: for 2017 earnings distribution, cash dividend paid to the shareholders totaled NT$37,204,713,630 (representing NT$4.796 per share); July 29, 2018 is the ex-dividend date, August 24, 2018 is the dividend payment record date, all dividends have been paid on August 24, 2018.

C. The Company amendment of Articles of Incorporation.
Status: approved by Ministry of Economic Affairs on August 23, 2018, with proper registration and disclosure on the Company website.

D. Supplementary election of the independent director for 8th BoD
Candidate elected: independent director, Mr. Chung-Chin Lu.
Status: approved by Ministry of Economic Affairs on July 20, 2018, with proper registration and disclosure on the Company website.

E. Shareholder propositions

- NT$499 Promotion

In 2018, although the Mother's Day promotion sales were widely accepted by the consumers, the overall event still caused certain challenges. In order to minimize the adverse effects and prevent any similar events from happening in the future, the Company has conducted thorough review and has implemented detailed measures:

(1) More prudent planning for any future promotional sales: comprehensive and careful consideration of all aspects of the promotion event, including content design, number of applicant estimation, physical store traffic flow accommodation, application process optimization, financial evaluation, etc.

(2) Enhanced protection of employee rights: prior to any promotion event, the product branch office must communicate extensively with the relevant channel unit, including assessment of manpower demand, manpower support and dispatch plan, in order to prevent any significant overtime for the employees.

(3) Strictly compliance to the relevant regulations of the Department of Labor, ensure the overtime employees' rights and interests: for employees working overtime during the promotion event, the Company will provide overtime payment in accordance to the Labor Standard Law Article 24-1-3, and equivalent hours of vacation leave; for significant overtime (beyond the 13th hour), the Company also provides one-time bonus of NT$1,500. The Company sincerely appreciates all the dedication and hard work from its employees and workers' unions.

(4) After the Mothers' Day Promotion, the Company conducted comprehensive review of the overall event.

(5) For the penalty fines from the Department of Labor, the Company has initiated administrative

remedy procedures.

- MOD

(1) The Company is collaborating with other system vendors in researching and improving the overall MOD platform, with next generation platform very close to completion (unified platform) under the relentless efforts of the Company employees and all other partners. The next generation set-top box is capable of Android system and 4K services, so the viewers can enjoy 4K high definition quality of the FIFA World Cup; in the beginning of 2018, the Company cooperates with Netflix exclusively for 4K super definition exclusive content, with more than 1,000 hours of 4K content, and is ranked number 1 in Taiwan. The Company will continue to focus on MOD technology advancement for now and in the future, in order to provide the best experiences of home entertainment.

(2) The Company positions its MOD platform for home entertainment center, with MOD+OTT APP services and 3C branded vendor collaboration. The Company has deployed OTT video, music, games, and other VAS services to be seamlessly connected onto the MOD platform. In the future, the Company plans to connect the set-top boxes to IoT, in order to provide health care, home security, smart home appliances, smart home applications, etc. The Company expects more broadband application services, with increased MOD platform value, in order to continue lead the domestic digital convergence development.

(3) Commencing August 2017, the Company leverages all available channels to promote MOD, subscribers increased from 1.361 million as of end of July 2017 to more than 1.5 million by November 2017, and reached 1.6 million target by end of December 2017. Then in March 2018, the subscriber base is more than 1.7 million and continues to increase. Commencing April 1, 2018, the Company initiated FIFA World Cup promotion with expanded partner alliances (such as Taiwan Sports Lottery), resulting in MOD subscribers of 1.86 million by end of FIFA World Cup in August 2018. The MOD subscriber is 2.01 million as of December 31, 2018.

(4) In terms of appropriate KPI determination, in 2018, the Company provides discount rates for employee referrals, the employee ID is used to link to the referrals and to recognize as individual performance, in order to incentivize all employees.

(2) Major Resolutions of Board Meetings

A. January 30, 2018:

(1) The Company's condensed financial forecast of 2018.

(2) Supplementary election of the Company's independent director of 8th Board of Directors.

B. March 13, 2018:

(1) The 2017 operational report and financial statements of the Company.

(2) The 2017 Internal Control Statement for the purpose of domestic regulatory and Sarbanes-Oxley Act compliance of the Company.

(3) The 2017 earnings distribution of the Company.

(4) The 2017 earning distribution for remuneration to directors and employees.

(5) The executive management of salary structure adjustment for 2018.

(6) The amendment to the Articles 2 of Incorporation of the Company.

(7) The commencement of implementation of the Company's "Employee Stock Ownership Plan" for another three years from April 2018.

(8) Nomination for the candidates of independent director of the 8th Board of Directors.

(9) The agenda of 2018 Annual General Meeting.

C. May 3, 2018:

(1) The review and approval of the nominations

for the Company's slate of candidates for the supplementary election of independent director of the 8th Board of Directors.

(2) To amend Article 1, 6 and 17 of the Employees' Pension, Consolation Pay and Severance Pay Guidelines of Chunghwa Telecom.

(3) The adjustment of the Company's Chairman's and President's compensation.

D. August 7, 2018:

(1) The Consolidated Financial Statements for the Six Months Ended June 30, 2017

(2) Performance Administration Regulations for the Company's senior executives.

(3) The establishment of the Company's Indonesian Office and the revocation of the Company's European and Thai Offices.

(4) Conduct evaluation on the preparation of the Internet banking company.

E. November 6, 2018:

(1) The Company's 2019 Internal Audit Plan.

(2) The amendment to the "Powers and Duties Chart of BOD and the Management" of the Company.

F. December 11, 2018:

(1) The Company's business operation plan (including budget) for year 2019 and development plan for mid to long term.

(2) The amendment to certain articles of the Company's "Accounting System".

G. January 29, 2019:

(1) The Company's condensed financial forecast of 2019.

(2) The Company's investment proposal for Internet banking project.

(3) The Company's facility office in Nangang relocated to the new site, construction of new commercial building, purchase of facility office.

(4) The amendment of the Company's "Corporate Culture Special Reward Guidelines".

(5) The distribution of one-time employee bonus.

(6) The election of 2019 BoD of 13 candidates (including 5 independent directors) at the Shareholders' Meeting.

H. March 19, 2019:

(1) The 2018 operational report and financial statements of the Company.

(2) The 2018 Internal Control Statement for the purpose of domestic regulatory and Sarbanes-Oxley Act compliance of the Company.

(3) The 2018 earnings distribution of the Company.

(4) The amendment of the procedure for the acquisition and disposal of corporate assets.

(5) The 2018 earnings distribution for remuneration to directors and employees.

(6) The agenda of 2019 Annual General Meeting.

(7) The amendment to the Articles 2 of Incorporation of the Company.

(8) The amendment to the"Powers and Duties Chart of BOD and the Management"of the Company.

(9) Mr. Kuo-Chiang Chung, Vice President of Legal Affairs, shall concurrently serve as the Company's corporate governance manager.

3.12 Major Dissenting Comments among Directors over Board Meeting Resolutions for fiscal year 2018 and up to the Publication Date of this Annual Report

None.

3.13 Resignation/Dismissal of Key Officers (including Chairman, President, Accounting Manager, Financial Manager, Internal Auditor and R&D Manager) for fiscal year 2018 and up to the Publication Date of this Annual Report

None.

4. Certified Public Accountant, or CPA, Professional Fees

Accounting Firm	Name of CPA	Audit Period	Remarks
Deloitte & Touche	Ching-Pin Shih and Hung-Peng Lin	January 1 ~ December 31, 2018	

CPA Professional Fee Range

Unit: NT$'000

Fee Range	Fee Items	Audit Fee	Non-audit Fee	Total
1	Under NT$ 2,000,000	-	-	-
2	NT$2,000,001 ~ NT$4,000,000	-	-	-
3	NT$4,000,001 ~ NT$6,000,000	-	-	-
4	NT$6,000,001 ~ NT$8,000,000	-	-	-
5	NT$8,000,001 ~ NT$10,000,000	-	-	-
6	Over NT$10,000,000	26,988	-	26,988

4.1 If non-audit fees paid to CPAs, their accounting firm and its affiliates are more than one-fourth of total audit fees, specify the amount of audit and non-audit fees, as well as the scope of non-audit services

Not applicable.

4.2 If the audit fees of the year in which the Company changes CPA firm is lower than that of the prior year, specify the amount of audit fee before and after, the fee reduction percentage, and the reasons

Not applicable as the Company did not change CPA firm in 2018.

4.3 If the audit fee dropped year on year by more than 15%, specify the amount, percentage, and reasons for the reduction

The audit fee in 2018 for the Company was NT$26.988 million, representing a decrease of 1.2% compared to previous year.

5. Change of Certified Public Accountant

The Company did not change CPA in 2018.

6. Audit Independence for the most recent year

None.

7. Shareholding Changes of Directors, Supervisors, Management, and Major Shareholders with Shareholding of 10% and more for the most recent year and up to the Publication Date of this Annual Report

7.1 Shareholding Changes of directors, managers and major shareholders

Title	Name	2018		As of March 31, 2019	
		Shares Increase (Decrease)	Pledged Shares Increase (Decrease)	Shares Increase (Decrease)	Pledged Shares Increase (Decrease)
Major Shareholder & Director	MOTC (Note 1)	0	0	0	0
Chairman, Chief Executive Officer and Director	Yu Cheng (Note 2)	0	0	0	0
President and Director	Chi-Mau Sheih (Note 2)	0	0	0	0
Director	Yu-Lin Huang (Note 2) (succeeded on February 13, 2019)	–	–	0	0
Director	Chen-Yuan Chang (Note 2) (succeeded on August 10, 2018; dismissed on January 22, 2019)	0	0	0	0
Director	Shin-Yi Chang (Note 2) (dismissed on August 9, 2018)	0	0	–	–
Director	Mu-Han Wang (Note 2)	0	0	0	0
Director	Wei-Ming Chang (Note 2)	0	0	0	0
Director	Yi-Bing Lin (Note 2)	0	0	0	0
Director	Yih-Yu Lei (Note 2)	0	0	0	0
Director	Chin-Tsai Pan (Note 2)	0	0	0	0
Independent Director	Kuo-Long Wu	0	0	0	0
Independent Director	Lo-Yu Yen	0	0	0	0
Independent Director	Jen-Ran Chen	0	0	0	0
Independent Director	Yu-Fen Lin	0	0	0	0
Independent Director	Chung-Chin Lu (succeeded on June 15, 2018)	0	0	0	0
President	Chi-Mau Sheih	0	0	0	0
Senior Executive Vice President	Shui-Yi Kuo	0	0	0	0
Senior Executive Vice President	Kuo-Feng Lin	0	0	0	0
Senior Executive Vice President	Yung-Fong Song (dismissed on October 2, 2018)	0	0	–	–
Senior Executive Vice President	Hong-Chan Ma (succeeded on August 10, 2018)	0	0	0	0
Senior Executive Vice President	Tian-Tsair Su	0	0	0	0
Vice President	Mei-Hui Chu (dismissed on January 1, 2019)	0	0	–	–

Title	Name	2018		As of March 31, 2019	
		Shares Increase (Decrease)	Pledged Shares Increase (Decrease)	Shares Increase (Decrease)	Pledged Shares Increase (Decrease)
Vice President	Kuo-Chiang Chung (succeeded on January 2, 2019) (Note 3)	0	0	0	0
Vice President	Shu-Ling Chen	0	0	0	0
Vice President	Shih-Chung Chang	0	0	0	0
Vice President	Shih-Chang Hung (dismissed on February 28, 2019)	0	0	0	0
Vice President	Hui-Fen Tsai	0	0	0	0
Vice President	Ming-Fang Li (dismissed on January 1, 2019)	0	0	–	–
Vice President	Wen-Wang Tseng	0	0	0	0
Vice President	Bao-Shuh Wu (dismissed on February 28, 2018)	0	0	–	–
Vice President	Hsu-Hui He (succeeded on March 1, 2018; dismissed on December 25, 2018)	0	0	–	–
Vice President	Jeu-Yih Jeng (succeeded on December 25, 2018)	0	0	0	0
Vice President	Yao-Kun Chou (succeeded on August 13, 2018)	0	0	0	0
Vice President	Ruey-Shu Chiu	0	0	0	0
Vice President	Rong-Yih Chen (succeeded on January 2, 2019)	0	0	0	0
Vice President	Wu-Sung Kao (succeeded on March 16, 2018)	0	0	0	0
Assistant Vice President	Ru-Kuen Lee (succeeded on January 2, 2019)	0	0	0	0
Assistant Vice President	Ya-Chien Hsueh (succeeded on January 29, 2019)	0	0	0	0
Assistant Vice President	Lii-Jia Guo (succeeded on March 1, 2018)	0	0	0	0
Assistant Vice President	Fu-Fu Shen	0	0	0	0
Assistant Vice President	Yuan-Kai Chen	0	0	0	0
Assistant Vice President	Shih-Mo Leu (succeeded on August 31, 2018)	0	0	0	0
Assistant Vice President	Chi-Hsien Huang	0	0	0	0
Assistant Vice President	Wei-Chiao Wu (dismissed on February 28, 2019)	0	0	0	0
Assistant Vice President	Chih-Hsiung Huang	0	0	0	0
Assistant Vice President	Chung-Yung Kang	0	0	0	0
Assistant Vice President	Petrina Chong	0	0	0	0
Assistant Vice President	Vincent Chen	0	0	0	0
Assistant Vice President	Timothy Horng (succeeded on March 20, 2018)	0	0	0	0
Assistant Vice President	Wen-Ming Chuang (succeeded on August 14, 2018)	0	0	0	0
Assistant Vice President	I-Fang Wu	0	0	0	0
Assistant Vice President	Shu-Ling Chen (succeeded on March 16, 2018)	0	0	0	0

Title	Name	2018		As of March 31, 2019	
		Shares Increase (Decrease)	Pledged Shares Increase (Decrease)	Shares Increase (Decrease)	Pledged Shares Increase (Decrease)
Assistant Vice President	Hui-Chen Wei (succeeded on March 16, 2018)	0	0	0	0
President of Business Group	Yuan-Kuang Tu	0	0	0	0
Vice President of Business Group	Ching-Chir Shyur (dismissed on June 30, 2018)	0	0	–	–
Vice President of Business Group	Chih-Chin Yu (succeeded on August 9, 2018)	0	0	0	0
Vice President of Business Group	Yi-Feng Chang (dismissed on January 1, 2019)	(10,000)	0	–	–
Vice President of Business Group	Wen-Chiyh Lin (succeeded on January 2, 2019)	0	0	0	0
President of Branch	Hui-Pao Huang	0	0	0	0
Vice President of Branch	Ching-Min Cheng	0	0	0	0
Vice President of Branch	Kuan-Chun Hsieh (succeeded on August 8, 2018)	0	0	0	0
Vice President of Branch	Chyi-Tian Chiou	0	0	0	0
President of Branch	Ching-Pei Chen (dismissed on February 28, 2018)	0	0	–	–
President of Branch	Hung-Chao Tang	0	0	0	0
Vice President of Branch	Ching-Wan Hu	0	0	0	0
Vice President of Branch	Pen-Yuang Chang (succeeded on August 13,2018)	0	0	0	0
President of Branch	Tsun-Lin Hsiao (dismissed on February 28, 2018)	0	0	–	–
President of Branch	Jinun-Jye Lee (succeeded on February 28, 2018)	0	0	0	0
Vice President of Branch	Chen-Chien Su	0	0	0	0
President of Branch	Nien-Yee Liu	0	0	0	0
Vice President of Branch	Mao-Hsing Lin (succeeded on February 28, 2018)	0	0	0	0
President of Branch	Jason Hsu (succeeded on February 28, 2018)	0	0	0	0
Vice President of Branch	Victoria Liao (succeeded on September 10, 2018)	0	0	0	0
President of Branch	Mao-Lin Li (dismissed on February 28, 2018)	0	0	–	–
President of Branch	Sheng-Haun Chang (succeeded on February 28, 2018)	0	0	0	0
Vice President of Branch	Hung-Hsing Chen (succeeded on February 28, 2018)	0	0	0	0
President of Branch	Jimmy Shih (succeeded on August 8, 2018)	0	0	0	0
Vice President of Branch	Lin-Chuan Weng (dismissed on February 1, 2018)	0	0	–	–
Vice President of Branch	Lai-Ding Chen (succeeded on February 1, 2018) (dismissed on February 1, 2019)	0	0	0	0
Vice President of Branch	Ling Chao (succeeded on March 15, 2019)	0	0	0	0

Title	Name	2018		As of March 31, 2019	
		Shares Increase (Decrease)	Pledged Shares Increase (Decrease)	Shares Increase (Decrease)	Pledged Shares Increase (Decrease)
President of Branch	Hung-Liang Yin	0	0	0	0
Vice President of Branch	Walter Chou (dismissed on April 23, 2018)	0	0	–	–
Vice President of Branch	Karen Chin (succeeded on April 23, 2018)	(1,000)	0	0	0
President of Business Group	Hui-Min Wang (dismissed on February 28, 2018)	0	0	–	–
President of Business Group	Chau-Young Lin (succeeded on March 20, 2018)	0	0	0	0
Vice President of Business Group	Fu-Tsai Chiang (succeeded on March 5, 2018)	0	0	0	0
Vice President of Business Group	Chin-Chun Chang Chien	0	0	0	0
Vice President of Business Group	Kuan-Hsiung Liang (succeeded on August 20, 2018)	0	0	0	0
President of Branch	Chio-Fu Lai	0	0	0	0
Vice President of Branch	Yu-Chen Tsai	(2,149)	0	0	0
President of Branch	Shu-Fan Chen (dismissed on May 11, 2018)	0	0	–	–
President of Branch	Chin-Tu Lin (succeeded on May 11, 2018)	0	0	0	0
Vice President of Branch	Tsai-Chen Lan	0	0	0	0
President of Branch	Chia-Hsin Li	0	0	0	0
Vice President of Branch	Wen-Tu Chang (succeeded on September 19, 2018)	0	0	0	0
President of Branch	Ching-Chuan Wang (succeeded on May 11, 2018)	0	0	0	0
Vice President of Branch	Fu-Shun Cheng (dismissed on December 28, 2018)	0	0	–	–
President of Branch	Ker-Chih Hwang	0	0	0	0
Vice President of Branch	Ching-Hsi Wu (dismissed on January 1, 2019)	0	0	–	–
Vice President of Branch	Jung-Huang Huang (succeeded on January 16, 2019)	0	0	0	0
Vice President of Branch	Gwo-Shyan Wu	0	0	0	0
President of Branch	Huang-Lung Hung (succeeded on March 5, 2018)	0	0	0	0
Vice President of Branch	Chaw-Chia Chang (succeeded on June 26, 2018)	0	0	0	0
President of Branch	Pao-Shan Hung (dismissed on January 1, 2019)	0	0	–	–
Vice President of Branch	Adorn Yeh	0	0	0	0
President of Branch	Pen-Yen Hsiao (dismissed on February 1, 2018)	0	0	–	–
President of Branch	Yeong-Jienn Maw (succeeded on February 1, 2018)	0	0	0	0
Vice President of Branch	Kuo-Ching Tien (dismissed on January 1, 2019)	0	0	–	–

Title	Name	2018		As of March 31, 2019	
		Shares Increase (Decrease)	Pledged Shares Increase (Decrease)	Shares Increase (Decrease)	Pledged Shares Increase (Decrease)
Vice President of Branch	Rong-Shuen Huang (succeeded on January 18, 2019)	0	0	0	0
President of Branch	Ru-Dar Yang	0	0	0	0
President of Business Group	Hsiu-Gu Huang (succeeded on August 9, 2018; dismissed on January 1, 2019)	0	0	–	–
President of Business Group	Li-Show Wu (succeeded on January 1, 2019)	0	0	0	0
Assistant Vice President of Business Group	Hui-Fen Lin (succeeded on February 7, 2018)	0	0	0	0
President of Business Group	Ming-Shih Chen	0	0	0	0
Vice President of Business Group	Hsueh-Hai Hu	0	0	0	0
Vice President of Business Group	Chih-Chang Kuo	0	0	0	0
President of Branch	Wen-Cheng Chen (dismissed on January 1, 2019)	0	0	–	–
President of Branch	Kuo-Chi Huang (succeeded on January 1, 2019)	0	0	0	0
Vice President of Branch	Jung-Chin Kung	0	0	0	0
President of Branch	Chin-Kun Lin	0	0	0	0
Vice President of Branch	Jen-Shang Lin	0	0	0	0
President of Branch	Der-Shing Rau	0	0	0	0
President of Business Group	Chih-Cheng Chien (dismissed on November 15, 2018)	0	0	–	–
President of Business Group	Hsueh-Lan Wu (succeeded on November 15, 2018)	(30,492)	0	0	0
President of Business Group	Rong-Syh Lin (succeeded on November 15, 2018)	0	0	0	0
Vice President of Business Group	Min-Gume Cheng	0	0	0	0
Vice President of Business Group	Quen-Zong Wu (succeeded on July 9, 2018)	0	0	0	0
Vice President of Telecommunication Laboratories	Jung-Kuei Chen	0	0	0	0
Vice President of Telecommunication Laboratories	Hey-Chyi Young	0	0	0	0
President of Telecommunication Training Institute	Chen-Huiung Tsai (dismissed on June 30, 2018)	0	0	–	–
President of Telecommunication Training Institute	Wei-Kuo Hong (succeeded on November 15, 2018)	0	0	0	0
Vice President of Telecommunication Training Institute	Chung-Kuang Chen (dismissed on August 29, 2018)	0	0	–	–
Vice President of Telecommunication Training Institute	Hong-Bin Chiou (succeeded on January 14, 2019)	0	0	0	0

Notes:
1. Major shareholders with 10% and more shareholding of the Company
2. Representatives of MOTC
3. Mr. Kuo-Chiang Chung, Vice President of Legal Affairs, concurrently serves as the Company's corporate governance manager since March 19, 2019.

7.2 Shareholding Transfer

None.

7.3 Shareholding Pledged

None.

8. Relationship among the Top Ten Shareholders

Record Date: July 25, 2018

Name (Note 1)	Current Shareholding		Spouses' and Minors' Shareholding		Shareholding by Nominee Arrangement		Name and Relationship Between the Company's Top Ten Shareholders, or Spouses or Relatives Within Two Degrees (Note 3)		Remarks
	Shares	%	Shares	%	Shares	%	Name	Relationship	
Ministry of Transportation and Communications	2,737,718,976	35.29%	NA	NA	0	0%	Chunghwa Post	MOTC owns 100%	–
Representative of MOTC Chia-Lung Lin	0	0%	0	0%	0	0%	None	None	–
Shin Kong Life Insurance Co., Ltd.	543,451,184	7.01%	NA	NA	0	0%	None	None	–
Representative of Shin Kong Life Tung-Chin Wu	0	0%	0	0%	0	0%	None	None	–
CTBC Bank Trust Account - CHT Employee Stock Ownership Trust Plan	309,875,265	3.99%	NA	NA	NA	NA	None	None	–
JP Morgan Chase Bank, N.A., acting as depositary and representative of CHT ADRS	242,779,120	3.13%	NA	NA	NA	NA	None	None	–
Fubon Life Insurance Co., Ltd.	192,668,087	2.48%	NA	NA	0	0%	None	None	–
Representative of Fubon Life Insurance Richard M. Tsai	0	0%	0	0%	0	0%	None	None	–
Chunghwa Post Co., Ltd.	143,468,719	1.85%	NA	NA	0	0%	MOTC	The only shareholder of Chunghwa Post	–
Representative of Chunghwa Post Chien-Hung Wei	0	0%	0	0%	0	0%	None	None	–
Labor Pension Fund of the New Labor Pension System, R.O.C.	127,270,000	1.64%	NA	NA	NA	NA	None	None	–
Labor Insurance Fund, R.O.C.	120,978,644	1.56%	NA	NA	NA	NA	None	None	–
Cathay Life Insurance Co., Ltd.	111,862,848	1.44%	NA	NA	0	0%	None	None	–
Representative of Cathay Life Insurance Tiao-Kuei Huang	7,272	0.00009%	0	0%	0	0%	None	None	–
China Life Insurance Company, Ltd.	109,632,038	1.41%	NA	NA	0	0%	None	None	–
Representative of China Life Insurance Alan Wang	0	0%	0	0%	0	0%	None	None	–

Note 1: All top 10 shareholders are listed above; for institutional shareholder, the name of the institution and the name of its representatives are listed separately.
Note 2: Shareholding percentage is calculated by aggregating the total shares of oneself, one's spouse/minor children and nominees.
Note 3: The shareholders listed above include both institutions and individuals, of which we disclose the relationships between the parties in accordance to "Regulations Governing the Preparation of Financial Reports by Securities Issuers".

9. Comprehensive Shareholding Information Relating to Company, Directors, Management, and Companies Affiliated through Direct and Indirect Investment

Unit: Share; %

Affiliated Companies (Note)	Investments of the Company		Direct or Indirect Investments		Total Investments	
	Shares	%	Shares	%	Shares	%
Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia")	1,301	100%	–	–	1,301	100%
CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	15,000,000	100%	–	–	15,000,000	100%
Donghwa Telecom Co., Ltd. ("DHT")	402,590,005	100%	–	–	402,590,005	100%
Chunghwa Telecom Global, Inc. ("CHTG")	6,000,000	100%	–	–	6,000,000	100%
Chunghwa System Integration Co., Ltd. ("CHSI")	60,000,000	100%	–	–	60,000,000	100%
Light Era Development Co., Ltd. ("LED")	300,000,000	100%	–	–	300,000,000	100%
Chunghwa Telecom Singapore Pte., Ltd. ("CHTS")	26,382,976	100%	–	–	26,382,976	100%
Chunghwa Telecom Japan Co., Ltd. ("CHTJ")	1,000	100%	–	–	1,000	100%
Chunghwa Telecom Vietnam Co., Ltd. ("CHTV")	-	100%	–	–	–	100%
Honghwa International Co., Ltd. ("HHI")	18,000,000	100%	–	–	18,000,000	100%
Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT")	1,000,000	100%			1,000,000	100%
Chunghwa Investment Co., Ltd. ("CHI")	68,085,000	89%	–	–	68,085,000	89%
CHT Security Co., Ltd. ("CHTSC")	24,000,000	80%	–	–	24,000,000	80%
Chunghwa Leading Photonics Tech. Co., Ltd. ("CLPT")	7,050,000	75%	–	–	7,050,000	75%
CHIEF Telecom Inc. ("CHIEF")	39,425,803	57%	2,078,000	3%	41,503,803	60%
Smartfun Digital Co., Ltd. ("SFD")	6,500,000	65%	–	–	6,500,000	65%
Spring House Entertainment Tech. Inc. ("SHE")	10,277,443	56%	–	–	10,277,443	56%
Chunghwa Sochamp Technology Inc. ("CHST")	2,040,000	51%	–	–	2,040,000	51%
Senao International Co., Ltd. ("SENAO")	71,773,155	28%	1,001,000	0%	72,774,155	28%
CHUNGHWA PCHOME FUND I CO., LTD.	20,000,000	50%	–	–	20,000,000	50%
Cornerstone Ventures Co., Ltd.	490,000	49%	–	–	490,000	49%
Taiwan International Standard Electronics Co., Ltd. ("TISE")	1,760,000	40%	–	–	1,760,000	40%
International Integrated System, Inc. ("IISI")	22,498,442	32%	–	–	22,498,442	32%
KKBOX Taiwan Co., Ltd. ("KKBOX TW")	4,438,286	30%	–	–	4,438,286	30%
So-net Entertainment Taiwan Limited ("So-net")	9,429,000	30%	–	–	9,429,000	30%
Viettel-CHT Co., Ltd. ("Viettel-CHT")	-	30%	–	–	–	30%
KingwayTek Technology Co., Ltd. ("KWT")	6,992,858	26%	–	–	6,992,858	26%
Taiwan International Ports Logistics Corporation ("TIPL")	8,000,000	27%	–	–	8,000,000	27%
UUPON Inc. ("UUPON")	5,400,000	15%	2,400,000	7%	7,800,000	22%
Alliance Digital Tech Co., Ltd. ("ADT")	6,000,000	14%	–	–	6,000,000	14%

Note: Investment accounted for using equity-method.

Appendix A

Directors' Continuing Education Records for fiscal year 2018

Title	Name	Appointment Date	Education Period		Organizer	Course Title	Edu-cation Hours	In Compli-ance to Regula-tions? (Note)
			From	To				
DeaChairman, Chief Executive Officer and Director	Yu Cheng	December 15, 2016	November 16, 2018	November 16, 2018	Securities & Futures Institute	What benefits can community analysis bring to the organization	6	Y
			November 16, 2018	November 16, 2018	Dharma Drum Mountain Humanities and Social Improvement Foundation	Emphasis on corporate ethics and innovative management thinking		
Director	Chi-Mau Sheih	January 4, 2017	July 13, 2018	July 13, 2018	Taiwan Corporate Governance Association	How do directors fulfill their loyal obligations	6	Y
			July 20, 2018	July 20, 2018	Taiwan Corporate Governance Association	Enterprise internal control and risk management 2018 Global top 10 risk analysis		
Director	Mu-Han Wang	November 14, 2017	January 19, 2018	January 19, 2018	Taiwan Corporate Governance Association	Company law amends new trends and analysis	12	Y
			January 26, 2018	January 26, 2018	Taiwan Corporate Governance Association	Annual report key messages and responsibilities		
			February 7, 2018	February 7, 2018	Taiwan Corporate Governance Association	Strategy of enterprise management and news crisis management		
			May 25, 2018	May 25, 2018	Taiwan Corporate Governance Association	Global trends analysis risks and opportunities		
Director	Wei-Ming Chang	August 2, 2017	March 30, 2018	March 30, 2018	Taiwan Corporate Governance Association	Board operation and responsibility	6	Y
			May 29, 2018	May 29, 2018	Taiwan Corporate Governance Association	How directors decide how to avoid breach of trust and unconventional transactions		
Director	Yi-Bing Lin	May 22, 2009	April 20, 2018	April 20, 2018	Taiwan Corporate Governance Association	Development trend and important norms of money laundering and fear prevention	6	Y
			November 30, 2018	November 30, 2018	Taiwan Corporate Governance Association	Director responsibility and risk management under the latest corporate governance blueprint		
Director	Yih-Yu Lei	April 27, 2017	October 30, 2018	October 30, 2018	Taiwan Corporate Governance Association	From the height of directors and supervisors, look at internal control	6	Y
			November 22, 2018	November 22, 2018	Securities & Futures Institute	Analysis and decision-making of corporate financial information		

Title	Name	Appointment Date	Education Period		Organizer	Course Title	Edu-cation Hours	In Compli-ance to Regula-tions? (Note)
			From	To				
Director	Chin-Tsai Pan	March 22, 2017	February 2, 2018	February 2, 2018	Taiwan Corporate Governance Association	Discussion on the legal issues of instant messaging	15	Y
			March 2, 2018	March 2, 2018	Taiwan Corporate Governance Association	In the rapidly changing environment of science and technology, directors lead the way for companies to respond		
			June 27, 2018	June 27, 2018	Taipei Foundation of Finance	Business opportunities and challenges brought by digital technology trends		
			June 28, 2018	June 28, 2018	Taipei Foundation of Finance	How do directors pay due diligence and loyalty obligations		
			October 26, 2018	October 26, 2018	Taiwan Corporate Governance Association	Board operation and responsibility		
Independent Director	Kuo-Long Wu	June 24, 2016	December 14, 2018	December 14, 2018	Taiwan Corporate Governance Association	How to effectively play the role of directors and implement corporate governance	6	Y
			December 20, 2018	December 20, 2018	Securities & Futures Institute	Money laundering prevention and legal compliance		
Independent Director	Lo-Yu Yen	June 24, 2016	August 27, 2018	August 27, 2018	Taiwan Corporate Governance Association	Malaysia market overview and future trends	15	Y
			September 4, 2018	September 4, 2018	Taiwan Academy of Banking and Finance	Trust industry supervisor (including on-the-job) workshop		
			October 2, 2018	October 2, 2018	Taiwan Corporate Governance Association	Corporate law amendments and unfinished business		
			October 8, 2018	October 8, 2018	Taiwan Corporate Governance Association	Southeast Asia investment Malaysian local real estate market watch		
Independent Director	Jen-Ran Chen	June 24, 2016	January 19, 2018	January 19, 2018	Taiwan Corporate Governance Association	Company law amends new trends and analysis	21	Y
			February 2, 2018	February 2, 2018	Taiwan Corporate Governance Association	Discussion on the legal issues of instant messaging		
			June 12, 2018	June 12, 2018	Taiwan Corporate Governance Association	Corporate governance and corporate social responsibility development trends and model practice		
			June 27, 2018	June 27, 2018	Taipei Foundation of Finance	Business opportunities and challenges brought by digital technology trends		
			October 30, 2018	October 30, 2018	Taiwan Corporate Governance Association	From the height of directors and supervisors, look at internal control		
			November 9, 2018	November 9, 2018	Taiwan Corporate Governance Association	Large analysis of business operation risks		
			December 20, 2018	December 20, 2018	Securities & Futures Institute	Money laundering prevention and legal compliance		

Title	Name	Appointment Date	Education Period		Organizer	Course Title	Edu-cation Hours	In Compli-ance to Regula-tions? (Note)
			From	To				
Independent Director	Yu-Fen Lin	June 23, 2017	March 8, 2018	March 8, 2018	Securities & Futures Institute	Money laundering prevention and legal compliance	15	Y
			May 4, 2018	May 4, 2018	Taiwan Corporate Governance Association	Audit committee operations practice		
			June 26, 2018	June 26, 2018	Taiwan Corporate Governance Association	How does the supervisor supervise the company fraud detection and establishment of a whistle mechanism to strengthen corporate governance		
			July 27, 2018	July 27, 2018	Taiwan Corporate Governance Association	Tax issues before and after corporate mergers and acquisitions		
			September 28, 2018	September 28, 20188	Taiwan Corporate Governance Association	How does the director of the non-financial background review the financial background review the financial report		
Independent Director	Chung-Chin Lu	June 15, 2018	August 1, 2018	August 1, 2018	Securities & Futures Institute	Discussion on the important issues of the latest company law	30	Y
			August 2, 2018	August 2, 2018	Securities & Futures Institute	Discussion on the issues of human resources and M&A integration in the process of enterprise M&A		
			August 9, 2018	August 9, 2018	Securities & Futures Institute	Corporate strategy and key performance indicators		
			August 21, 2018	August 21, 2018	Securities & Futures Institute	Independent director and functional committee operational practice		
			August 23, 2018	August 23, 2018	Securities & Futures Institute	Discussion on the strategy of rewarding employees and the application of tools		
			August 28, 2018	August 29, 2018	Securities & Futures Institute	Director and supervisor (including independent director) practical workshop		
			October 3, 2018	October 3, 2018	Taipei Foundation of Finance	Third-party payment supervision concept and legal advice		

Note: Refer to compliance with respect to "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEx Listed Companies", in terms of education hours, scope, system, arrangement and disclosure.

Appendix B

Management Continuing Education Records for fiscal year 2018

Title	Name	Appointment Date	Education Period		Organizer	Course Title	Education Hours
			From	To			
President	Chi-Mau Sheih	January 4, 2017	March 30, 2018	March 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			May 25, 2018	May 25, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			June 28, 2018	June 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			July 13, 2018	July 13, 2018	Taiwan Corporate Governance Association	How do directors fulfill their loyal obligations	3
			July 20, 2018	July 20, 2018	Taiwan Corporate Governance Association	Enterprise internal control and risk management 2018 global top 10 risk analysis	3

Title	Name	Appointment Date	Education Period		Organizer	Course Title	Education Hours
			From	To			
			July 27, 2018	July 27, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			September 28, 2018	September 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			November 30, 2018	November 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Shui-Yi Kuo	August 9, 2017	December 28, 2018	December 28, 2018	Investment Department, Chunghwa Telecom	How to uphold fiduciary duties and key responsibilities as a board member, with case studies.	3
Senior Executive Vice President	Kuo-Feng Lin	November 11, 2016	March 30, 2018	March 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Kuo-Feng Lin	November 11, 2016	May 25, 2018	May 25, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Kuo-Feng Lin	November 11, 2016	July 27, 2018	July 27, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Kuo-Feng Lin	November 11, 2016	September 28, 2018	September 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Kuo-Feng Lin	November 11, 2016	November 30, 2018	November 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Hong-Chan Ma	August 10, 2018	March 30, 2018	March 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Hong-Chan Ma	August 10, 2018	June 28, 2018	June 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Hong-Chan Ma	August 10, 2018	July 27, 2018	July 27, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Hong-Chan Ma	August 10, 2018	September 28, 2018	September 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Hong-Chan Ma	August 10, 2018	November 30, 2018	November 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Hong-Chan Ma	August 10, 2018	December 28, 2018	December 28, 2018	Investment Department, Chunghwa Telecom	How to uphold fiduciary duties and key responsibilities as a board member, with case studies.	3
Senior Executive Vice President	Tian-Tsair Su	November 15, 2017	July 27, 2018	July 27, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Tian-Tsair Su	November 15, 2017	September 28, 2018	September 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
Senior Executive Vice President	Yung-Fong Song	succeeded on August 9, 2017; dismissed on October 2, 2018	April 26, 2018	April 26, 2018	Telecommunication Training Institute, Chunghwa Telecom	Series live course of new management knowledge	1
President of Business Group	Yuan-Kuang Tu	November 9, 2017	March 30, 2018	March 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
President of Business Group	Yuan-Kuang Tu	November 9, 2017	May 25, 2018	May 25, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
President of Business Group	Yuan-Kuang Tu	November 9, 2017	June 28, 2018	June 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
President of Business Group	Yuan-Kuang Tu	November 9, 2017	July 27, 2018	July 27, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3

Title	Name	Appointment Date	Education Period		Organizer	Course Title	Education Hours
			From	To			
			September 28, 2018	September 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			November 30, 2018	November 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			December 28, 2018	December 28, 2018	Investment Department, Chunghwa Telecom	How to uphold fiduciary duties and key responsibilities as a board member, with case studies.	3
President of Business Group	Chau-Young Lin	March 20, 2018	March 30, 2018	March 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			May 25, 2018	May 25, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			June 28, 2018	June 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			July 27, 2018	July 27, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			September 28, 2018	September 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			November 30, 2018	November 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			December 28, 2018	December 28, 2018	Investment Department, Chunghwa Telecom	How to uphold fiduciary duties and key responsibilities as a board member, with case studies.	3
President of Business Group	Ming-Shih Chen	November 9, 2017	March 30, 2018	March 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			May 25, 2018	May 25, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			June 28, 2018	June 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			July 27, 2018	July 27, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			September 28, 2018	Septembe r 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			November 30, 2018	November 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
President of Business Group	Hsueh-Lan Wu	November 15, 2018	December 28, 2018	December 28, 2018	Investment Department, Chunghwa Telecom	How to uphold fiduciary duties and key responsibilities as a board member, with case studies.	3
President of Business Group	Rong-Syh Lin	November 15, 2018	December 28, 2018	December 28, 2018	Investment Department, Chunghwa Telecom	How to uphold fiduciary duties and key responsibilities as a board member, with case studies.	3
President	Wei-Kuo Hong	November 15, 2018	June 21, 2018	June 21, 2018	Telecommunication Training Institute, Chunghwa Telecom	Communication Technology Forum	6
			June 25, 2018	June 25, 2018	Telecommunication Training Institute, Chunghwa Telecom	Strategic human resources Seminar	4
			June 28, 2018	June 28, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3
			November 30, 2018	November 30, 2018	Telecommunication Training Institute, Chunghwa Telecom	Manager management seminar	3

4 Capital Review

1. Capital and Shares
2. Corporate Bonds
3. Preferred Shares
4. Overseas Depository Receipts
5. Employee Stock Options
6. List of Executives Receiving Employee Stock Options and Top Ten Employees with Stock Options up to the Publication Date of this Annual Report
7. Employee Restricted Stock Shares
8. List of Executives Receiving Restricted Shares and Top Ten Employees with Restricted Shares up to the Publication Date of this Annual Report
9. Shares Issuance for Mergers and Acquisitions
10. Funding Use Plan and Execution

Capital Review

1. Capital and Shares

1.1 Source of Capital

As of March 31, 2019

Month/ Year	Par Value (NT$)	Authorized Capital		Paid-in Capital		Remarks		
		Shares	Amount(NT$)	Shares	Amount(NT$)	Sources of Capital	Capital Paid-in by Assets Other than Cash	Other
Jul 1996	34	9,647,724,900	96,477,249,000	9,647,724,900	96,477,249,000	assumed capital from Ministry of Transportation, Directorate General of Telecommuni-cations	–	–
May 2006	10	9,647,724,902	96,477,249,020	9,647,724,902	96,477,249,020	capital increase of 2 special shares purchased by MOTC	–	–
Aug 2006	10	9,647,724,902	96,477,249,020	9,455,724,902	94,557,249,020	treasury shares cancellation	–	–
Oct 2006	10	12,000,000,002	120,000,000,020	9,667,845,095	96,678,450,950	earnings to capital increase	–	FSC Document No. 0950126724 June 27, 2006
Aug 2007	10	12,000,000,002	120,000,000,020	10,634,629,604	106,346,296,040	capital surplus to capital increase	–	SEF Authorization No. 09601199260 August 22, 2007
Nov 2007	10	12,000,000,002	120,000,000,020	9,667,845,095	96,678,450,950	capital reduction by cash	–	SEF Authorization No. 09601280910 November 15, 2007
Mar 2008	10	12,000,000,002	120,000,000,020	9,557,776,914	95,577,769,140	treasury shares cancellation	–	SEF Authorization No. 09701049860 February 29, 2008
Nov 2008	10	12,000,000,002	120,000,000,020	11,608,363,565	116,083,635,650	earnings and capital surplus to capital increase	–	SEF Authorization No. 09701293050 November 19, 2008
Jan 2009	10	12,000,000,002	120,000,000,020	9,696,808,183	96,968,081,830	capital reduction by cash	–	SEF Authorization No. 0980100609 January 14, 2009
Apr 2009	10	12,000,000,002	120,000,000,020	9,696,808,181	96,968,081,810	special shares cancellation	–	SEF Authorization No. 09801077020 April 23, 2009
Sep 2009	10	12,000,000,000	120,000,000,000	10,666,488,999	106,664,889,990	capital surplus to capital increase	–	SEF Authorization No. 09801205990 September 7, 2009
Nov 2009	10	12,000,000,000	120,000,000,000	9,696,808,181	96,968,081,810	capital reduction by cash	–	SEF Authorization No. 09801261140 November 11, 2009
Nov 2010	10	12,000,000,000	120,000,000,000	7,757,446,545	77,574,465,450	capital reduction by cash	–	SEF Authorization No. 09901266330 November 29, 2010

Share / Type	Authorized Capital			Remarks
	Issued Shares	Un-issued Shares	Total Shares	
Common	7,757,446,545	4,242,553,455	12,000,000,000	Listed

1.2 Shareholder Structure

As of July 25, 2018

Shareholder Structure / Amount	Government Agencies	Financial Institutions	Other Institutions	Individuals	Foreign Institutions & Individuals	Total
Number of Shareholders	9	53	943	266,419	1,207	268,631
Shareholding (shares)	3,124,769,965	1,437,193,070	565,339,588	1,376,347,081	1,253,796,841	7,757,446,545
Shareholding %	40.28%	18.53%	7.29%	17.74%	16.16%	100.00%

Note: Based on the most recent book closure date for shareholder to register.

1.3 Shareholding Distribution

As of July 25, 2018

Shareholding Range (Unit: Share)	Number of Shareholders	Shareholding (shares)	Shareholding (%)
1-999	67,663	22,963,360	0.30%
1,000-5,000	147,262	305,623,755	3.94%
5,001-10,000	23,468	180,227,410	2.32%
10,001-15,000	8,847	110,956,351	1.43%
15,001-20,000	5,461	98,060,866	1.26%
20,001-30,000	6,112	152,466,605	1.97%
30,001-40,000	3,430	119,518,967	1.54%
40,001-50,000	2,074	93,685,855	1.21%
50,001-100,000	2,693	182,918,554	2.36%
100,001-200,000	826	113,724,038	1.47%
200,001-400,000	296	80,592,881	1.04%
400,001-600,000	120	58,920,389	0.76%
600,001-800,000	65	45,195,847	0.58%
800,001-1,000,000	44	39,877,014	0.51%
1,000,001-999,999,999	269	3,414,995,677	44.02%
>1,000,000,000	1	2,737,718,976	35.29%
Total	268,631	7,757,446,545	100.00%

Note: based on the most recent book closure date for shareholder to register

1.4 Major Shareholders

As of July 25, 2018

Major Shareholder \ Shareholding	Shares	%
MOTC	2,737,718,976	35.29%
Shin Kong Life Insurance Co., Ltd.	543,451,184	7.01%
CTBC Bank Trust Account - CHT Employee Stock Ownership Trust Plan	309,875,265	3.99%
JP Morgan Chase Bank, N.A., acting as depositary andrepresentative of CHT ADRS	242,779,120	3.13%
Fubon Life Insurance Co., Ltd.	192,668,087	2.48%
Chunghwa Post Co., Ltd.	143,468,719	1.85%
Labor Pension Fund of the New Pension System, R.O.C.	127,270,000	1.64%
Labor Insurance Fund, R.O.C.	120,978,644	1.56%
Cathay Life Insurance Co., Ltd.	111,862,848	1.44%
China Life Insurance Co., Ltd.	109,632,038	1.41%

Note: Based on the most recent book closure date for shareholder to register.

1.5 Share Price, Net Value, Earnings, Dividends and Related Information in recent 2 years

Items			2017	2018	2019 (As of March 31)
Market Price per Share	Highest (Note 1)		111.00	115.00	109.50
	Lowest (Note 1)		99.50	104.50	106.00
	Average (Note 1)		104.16	108.96	107.12
Net Worth per Share	Before Distribution		47.04	48.54	-
	After Distribution		42.24	-	-
Earnings per Share	Weighted Average Shares		7,757,446,545	7,757,446,545	7,757,446,545
	Earnings Per Share		5.01	4.58	-
Dividends per Share	Cash Dividends		4.796	4.479 (Note 2)	-
	Stock Dividends	From Retained Earnings	0	0 (Note 2)	-
		From Additional Paid-in Capital	0	0 (Note 2)	-
	Accumulated Undistributed Dividends		0	0	-
Return on Investment (Note 3)	Price / Earnings Ratio		20.79	23.79 (Note 2)	-
	Price / Dividend Ratio		21.72	24.33 (Note 2)	-
	Cash Dividend Yield Rate%		4.6	4.11 (Note 2)	-

Notes:
1. Data sourced from Taiwan Stock Exchange, or TWSE.
2. 2018 dividends distribution to be approved by shareholders at Annual General Meeting, or AGM, in 2019.
3. Price / Earnings Ratio = Average Market Price / Earnings per Share
   Price / Dividend Ratio = Average Market Price / Cash Dividends per Share
   Cash Dividend Yield Rate = Cash Dividends per Share / Average Market Price (2017=NT$104.16, 2018=NT$108.96)

1.6 Dividend Policy and Discussion

(1) Dividend Policy

In accordance with the Chunghwa's Articles of Incorporation, Chunghwa must pay all outstanding taxes, offset deficits in prior years and set aside a legal reserve equal to 10% of its net income before distributing a dividend or making any other distribution to stockholders, except when the accumulated amount of such legal reserve equals to Chunghwa's total issued capital, and depending on its business needs or requirements, may also set aside or reverse special reserves. No less than 50% of the remaining earnings comprising remaining balance of net income, if any, plus cumulative undistributed earnings shall be distributed as stockholders' dividends, of which cash dividends to be distributed shall not be less than 50% of the total amount of dividends to be distributed. If cash dividend to be distributed is less than $0.10 per share, such cash dividend shall be distributed in the form of common stocks.

Dividend distribution is dependent on the actual profitability, capital expenditure plan, cash status and other conditions for the relevant year, as well as a resolution adopted at the shareholders' meeting.

The Company is not permitted to distribute dividends or make other distributions to stockholders in any year in which the Company does not have any net income or unappropriated earnings (excluding reserves).

If the Company does not incur a loss, the Company is permitted to make distributions on a pro rata basis to its stockholders of additional common shares or cash by the legal reserve, the premium derived from the issuance of new shares and the income from endowments received by the Company.

(2) Dividend Distribution

Below is the dividend distribution from years 2002 to 2019; the appropriation amount for 2018 has yet to be approved at the 2019 AGM.

Unit: NT$/share

Year	Cash Dividend		Stock Dividend
	From Retained Earnings	From Additional Paid-in Capital	
2002	4.0	0	0
2003	4.5	0	0
2004	4.7	0	0
2005	4.3	0	0.2
2006	3.58	0	1.0
2007	4.26	0	2.1
2008	3.83	0	1.0
2009	4.06	0	0
2010	5.5243	0	0
2011	5.4608	0	0
2012	4.6295	0.7205	0
2013	2.3881	2.1370	0
2014	4.8564	0	0
2015	5.4852	0	0
2016	4.9419	0	0
2017	4.796	0	0
2018	4.479	0	0

(3) Expected Material Changes in Dividend Policy

None.

1.7 Impact of Stock Dividend Distribution on Business Performance and Earnings Per Share for Year 2018

No stock dividend to be distributed based on 2018 shareholder meeting, so not applicable.

1.8 Remuneration of Employees and Directors

(1) Remuneration Description of Employees and Directors according to the Articles of Incorporation

If the Company incurs positive earnings for the relevant year, then the employees are entitled to 1.7% to 4.3% of the distributable earnings as employee compensation; the directors are entitled to no more than 0.17% of the distributable earnings as director compensation. If the Company has cumulative deficits, then the Company must first retain the necessary earnings to offset the deficits. The aforementioned compensation may, subject to a resolution which is adopted by a majority vote at a meeting of the board of directors attended by two-third of total number of directors, be distributed to employees in way of cash or shares. In addition, a report of such distribution shall be submitted to the shareholders' meeting. The first two provisions apply retrospectively to fiscal year 2015 in computing compensations for employees and board of directors.

(2) The Remuneration Basis for Employees, Directors, and Supervisors; Accounting Treatment for the Differences between Estimated and Actual amount of Remuneration

The Company conducts all employees and directors' remuneration in accordance to the Articles of Incorporation and "Employee Compensation Distribution Guidelines of Chunghwa Telecom Co., Ltd.", as well as historical remuneration payment and future estimates. After the fiscal year end, if the remuneration amount changes materially prior to the official release of the annual financial report approved by the Board of Director, the changes shall be adjusted as part of the previous fiscal year. Else if the remuneration amount changes materially after the official release of the annual financial report, the changes shall be adjusted as part of the current fiscal year.

(3) 2018 Remuneration Approved in the Board of Directors Meeting

A. Employees and directors' compensation in the form of cash or stock. The Board of Directors have approved employee cash compensation of NT$1,404,263,673, and directors cash compensation of NT$38,215,538.

B. The amount of any employee compensation distributed in stocks; and the size of this amount as a percentage of the net income stated in the parent only financial reports or individual financial reports for the current period; and the size of this amount as a percentage of the total employee compensation.

No employee compensation in the form of stock is distributed for the year of 2018.

(4) 2017 Actual Distribution of Employees and Directors Compensation (including number of shares, monetary amount, and stock price)

Items	Actual Distribution(NT$)	2018 Approved Distribution by BoD (NT$)	Differences (NT$)
Employees cash compensation	1,596,011,737	1,596,011,737	None
Employees stock compensation	0	0	None
Directors compensation	40,750,052	40,750,052	None

Notes:
1. In accordance to 2017 directors and employees cash compensation, approved by Board of Directors in 2018.
2. In 2017, the Company's Board of Directors consists of 5 independent directors, 13 directors (of whom, 2 directors succeeded in January 2017, 1 succeeded in March 2017, 1 succeeded in April 2017, 1 succeeded in June 2017, 1 succeeded in August 2017, 1 succeeded in November 2017; 2 directors dismissed in January 2017, 1 dismissed in March 2017, 2 dismissed in August 2017, 1 dismissed in November 2017).
3. The independent directors are not entitled to any cash compensation; the compensation is calculated on pro-rata basis in terms of days of service for newly elected directors within the year; the annual cash compensation for each director is NT$5,307,532.
4. The 13 directors are representatives from MOTC, so their cash compensation are distributed to MOTC.
5. The Company's director representatives from the government entities, chief executive officer and president are not entitled to employee compensation.

1.9 Share Repurchase by the Company

None.

2. Corporate Bonds

None.

3. Preferred Shares

None.

4. Overseas Depository Receipts

Issuing date \ Item	Issuance and Trade Market	Issuance Amount (US$ billion)	Issuance Price per Unit (US$)	Number of Issuance Units	DR-Represented Securities	Number of DR-Represented Securities (shares)
Initial Public Offering 07/17/2003	NYSE	1.58	14.24	110,975,000	common shares	1,109,750,000
Additional Issuance 08/09/2005	NYSE	2.56	18.98	135,068,200	common shares	1,350,682,000
Additional Issuance 09/28/2006	NYSE	0.96	16.99	56,434,790	common shares	564,347,900
Additional Issuance 10/31/2006	NYSE	-		4,920,862	common shares	49,208,623
Additional Issuance 09/07/2007	NYSE	-	-	30,409,227	common shares	304,092,271
Capital Reduction by Cash 01/09/2008	NYSE	-	-	-30,709,825	common shares	-307,098,254
Additional Issuance 12/03/2008	NYSE	-	-	33,131,017	common shares	331,310,172
Capital Reduction by Cash 03/20/2009	NYSE	-	-	-56,025,734	common shares	-560,257,344
Additional Issuance 09/18/2009	NYSE	-	-	11,258,465	common shares	112,584,650
Capital Reduction by Cash 02/08/2010	NYSE	-	-	-26,860,182	common shares	-268,601,820
Capital Reduction by Cash 01/25/2011	NYSE	-	-	-53,720,364	common shares	-537,203,639
Rights & Liabilities of DR Holders	Same with common shareholders					
Trustee	NA					
Depositary	JPMorgan Chase Bank, N.A.					
Custodian	JPMorgan Chase Bank, N.A., Taipei Branch					
Outstanding Units	23,503,659 (As of 03/31/2019)					
Related Fee for Issuance and Maintenance	The MOTC paid for the issuance in July 2003, August 2005 and September 2006. The shareholders paid for the issuance by stock dividend in October 2006, September 2007, December 2008 and September 2009. The shareholders also paid for the capital reduction with cash in January 2008, March 2009, February 2010 and January 2011. The Company paid for registration and related maintenance fees.					
Key Terms of the Deposit Agreement and the Custodian Agreement	As Per the Deposit Agreement and the Custodian Agreement					

Market price	2018	Highest	US$39.30
		Lowest	US$34.07
		Average	US$36.0624
	01/01/2019~ 03/31/2019	Highest	US$35.55
		Lowest	US$34.20
		Average	US$34.8313

Note: Data sourced from Bloomberg, based on closing market prices.

5. Employee Stock Options

None.

6. List of Executives Receiving Employee Stock Options and Top Ten Employees with Stock Options up to the Publication Date of this Annual Report

None.

7. Employee Restricted Stock Shares

None.

8. List of Executives Receiving Restricted Shares and Top Ten Employees with Restricted Shares up to the Publication Date of this Annual Report

None.

9. Shares Issuance for Mergers and Acquisitions

None.

10. Funding Use Plan and Execution

None, as the Company has not incurred any fund raising activity.

5 Operational Highlights

1. Business Overview
2. Markets & Sales Overview
3. Human Resources
4. Environmental Protection Expenditure
5. Employee Relations
6. Major Contracts

Operational Highlights

1. Business Overview

1.1 Business Scope

We are the largest telecommunications service provider in Taiwan, with leading offerings in domestic and international fixed communication, mobile communication and internet services.

(1) Revenue Breakdown

As of December 31, 2018, domestic fixed communications revenues accounted for 31% of total revenues, mobile communications revenues accounted for 46.9%, internet business revenues accounted for 13.8%, international fixed communications revenues accounted for 6.2%, and other revenues accounted for 2.1%. Of which, the local and domestic long distance telephone revenues continue to decrease; broadband access revenue slightly decreased due to competitive pricing; enterprise solution revenue affected primarily because of increased selectivity in project bidding for higher profitability. As a result, revenue contribution from domestic fixed communications declined compared to the previous year; revenue contribution from mobile communications declined compared to the previous year primarily due to slower growth of mobile internet; but revenue contribution from internet business increased compared to the previous year primarily due to growths of application value-added services and government services.

(2) Current Products/Services

A. Household Market

- Domestic Fixed Communications Services
  - Local Telephone: call service, call waiting, call transfer, three-way calling, speed dial, wake-up call, do-not-interrupt, call answer, incoming call filter, direct call, 1288 informa tion inquiry, shorthand coding application and other value-added services.
  - Domestic Long Distance Telephone: operator-assisted long distance call, subscriber toll dialing, or STD.
  - Intelligent Network, or IN: 0800 Advanced Free Phone, or AFP, 0203 Mass Announcement, or MA, 099 Personal Number, 0204 Premium Rate Service, or PRS, etc.
- Domestic Leased Circuits
  - Asymmetric Digital Subscriber Line, or ADSL: install additional equipment at user telephone terminal using ADSL technology, in order to provide internet connection and MOD/OTT multimedia services.
  - FTTx Fiber Access: utilize various optical network equipment, with Ethernet or Very-high-bit-rate Digital Subscriber Line, or VDSL technology, in providing high speed internet access, MOD/OTT multimedia and other data communication services.
- Internet and Other VAS Services
  - Internet Service Provider, or ISP: HiNet is the Company's ISP brand, primarily offering broadband access (ADSL and FTTx), fixed line, and dial-up services.
  - VAS: gaming, music, video, anti-virus, anti-hacking, anti-porn, mobile internet gatekeeping, game accelerator, etc.
- MOD/Internet Protocol Television, or IPTV Services
  - MOD is a multimedia on demand platform in providing customers of the Company and other telecommunication service providers channel programs, on-demand programs, and other content from third-party operators (such as TV channels, Video on Demand, or VOD, HD/4K super high definition content, and other applications.)
  - Hami Video and IPTV are cross-network

multi-screen products leveraging video services from fixed network, data and mobile network.

- International Fixed Communications Services
  - International telephone, including international direct call with 009, super value-saving international call with 019.

B. Consumer Market

- Mobile Communications Services
  - 3G Mobile (terminated as of December 31, 2018): voice calls, data (including multimedia) services and real-time video application.
  - 4G Mobile: 4G LTE is a mobile broadband communication technology, with higher up-stream and down-stream access speed compared to 3G, so consumers can enjoy higher definition and faster multimedia services and internet access.
  - Mobile VAS: including integrated services of text/multimedia message, call answer, video streaming, video call, GPS, as well as digital content from 4G mobile internet, such as Hami Pass, Hami Video, KKBOX music, e-Book, mobile payment, etc.
  - OTT Convergence: integrate data and mobile multi-screen video content, such as Hami Video, in order to fulfill all diversified demand by providing live channel and on-demand video (for movies, drama, animation, kids programs, etc.)
- Wi-Fi: Wi-Fi internet access widely available by leveraging all publicly installed wireless Access Point, or AP software, hardware, and using HiNet, emome, Chunghwa Telecom membership for account validation.
- International Fixed Communications Services: international telephone, including international direct call with 009, super value-saving international call with 019, international prepaid calling card, E-Call card, etc.

C. Enterprise Market

The Company provides enterprise clients with ICT services, in order to fulfill their demand and enable them to achieve their respective strategic and operational targets.

- Enterprise Integrated Services: enterprise voice and data integrated services, enterprise digitization, cloud SaaS services (CRM, ERP, POS, etc.)
- Enterprise Mobile Services: mobile virtual private network, or MVPN, enterprise text message, mobile data virtual private network, or MDVPN, mobile DM, disaster emergency response message, mobile instant message, or Qmi, mobile device maintenance and management, or MDMM, mobile video conference, IoT, sponsored data, esafe, etc.
- Enterprise Data Services: data circuits, domestic data exchange (data exchange and VAS), HiNet Enterprise internet access, messaging (text, email, fax), enterprise information security, enterprise VPN and VAS, IDC and cloud services (integrated data center, broadband services, hicloud CaaS, virtual private cloud, or VPC, CaaS-based VPC, CVPC, Box^e data file, S3 cloud storage, desk cloud, Microsoft cloud, etc.), digital content (domain name registration and FunPlay), platform leasing (data voice, enterprise learning, One-Time Password, or OTP dynamic passcode, enterprise audio/video platform, etc.), IoT (iEN, IVS, ITS, eHome, etc.), government services (e-Procurement, real estate property, road supervision, railway tickets booking, etc.), big data analysis, etc.
- International Enterprise Services: international voice services (international enterprise hotline 009, international voice resale, receiver paid phone, international conference call, international interactive voice response, or IVR, international enterprise calling card, etc.), international data services (international private leased circuit, or IPLC, internet - protocol virtual private network, or IPVPN, TWGate, IDC, MPLS VPN, EZ VPN, SSL VPN, internet IP, etc.), international VAS (international remote backup system, international video conferencing, ICT construction and

maintenance, EZ Conference HD, etc.), international satellite services (satellite frequency converter leasing, satellite VAS, satellite mobile communication, enterprise ICT, etc.)

(3) Planned New Products/Services

A. Household Market

- Higher-speed broadband access and VAS for continued IP network and digital convergence trend.
- Expand and integrate HiNet VAS (such as video, healthy and secure network access, anti-hacking, game accelerator, etc.) in order to increase the competitiveness of the overall product offering and to enhance overall user loyalty.
- Introduce domestic and international top video content such as Netflix, enhance 4K video/audio content and quality, in order to ensure unique competitive advantages compared to CATV.
- Leverage innovative user experiences to increase differentiated services, with diversified OTT services and MOD set-top boxes, as well as smart homes infrastructure for digital convergence application services, in order to develop IoT, home care, entertainment within MOD advancement, and to maintain the Company leadership position with more flexible revenue model and sales channel.

B. Consumer Market

- Enhance Hami Video service offering by increasing content attractiveness and user experiences, developing popular curation, improving customization and social network sharing, in order to provide users with on-demand multi-screen OTT services for unified pricing charge.
- Promote Hami VAS, such as music, Hami Pass, Hami Books, Hami Video, mobile payment, etc., in order to expand user traffic with more mobile applications.
- Promote Near-Field Communication, or NFC application by integrating ICT platform and online-to-offline, O2O, in order to improve merchant operational efficiency and consumer mobile lifestyle.
- Develop mobile access and Wi-Fi dual network integration, with Hami VAS, in order to maintain the Company's leading position in internet services.

C. Enterprise Market

- Develop esafe service in order to increase effective communication for better collaboration, enterprise operational efficiency and internal management control.
- Develop enterprise anti-hacking solutions for better cyber-security measures, integrated management and control, as well as reduced management cost.
- Continue integrating network and cloud, in order to provide network security, system platform security and detection, terminal security, data protection, advanced persistent threat, or APT solution, identity validation, access control and management, security operation center, or SOC outsourcing, security consulting, etc.
- Develop IDC integration, by leveraging network resources and integrating transmission, submarine cable, internet, VPN, international broadband and underseas cable, to establish high-standard regional infrastructure such as Banqiao IDC center, in order to provide enterprises with high-speed and high-quality network, cloud and VAS applications matching international standards.
- Develop enterprise private cloud solution with more flexibility and greater reliability, by accelerating private cloud construction with application and operating environment, and by integrating SDN and Network Function Virtualization, or NFV technology, flexible management, and dynamic software configured network.
- Develop integrated surveillance solution, by providing single access for overall surveillance

of IDC, all software/hardware/virtual resource status, and all other necessary IT operating performances.

- Expand IoT application and IoT intelligent network platform for cross-functional collaboration and application, by providing clients with accelerated and convenient development model, in order to enable clients in realizing the diverse creative applications over the open IoT platform infrastructure, including smart agriculture, smart manufacturing, smart transportation, smart city and digital innovations.
- Integrate smart gas meter and communication device, or CD, transmit gas meter operating data to gas cloud using NB-IoT and IoT intelligent network platform, in order to provide gas companies with remote access and smart gas meters' operation, thus reducing labor cost and increasing safety.
- Enhance advanced AI research and development, with in-depth local demand application services, by providing smart security solutions such as vehicle recognition, facial recognition, traffic prediction; by developing AI speech recognition cloud solutions with collaboration from domestic terminal and content providers.
- Expand big data, internet advertising solutions; continue to develop traffic flow, public sentiment, internet advertising, big data analysis, and cross-functional applications; develop Fintech related applications by collaborating with various financial services through Financial Inclusion System.
- Provide audio/video service platform including channel, VOD, smart video dashboard, etc., in order to enable consumers to access live events, enterprises to access internal training or establish audio/video brands.

1.2 Industry Overview

(1) Industry Status and Development

The global penetration of mobile devices such as smartphones and tablets are becoming more popular and mature, and social networks are also becoming more prevalent. All of these trends and cloud computing, 4G, digital TV, e-Commerce, interactive sensor, wearables, etc. will be driving the growth for technology and telecommunication. Broadband network access, mobile communication and IPTV are key performance indicators of the telecommunication industry:

A. For the broadband market, according to NCC statistics, as of December 31, 2018, total number of households in Taiwan is approximately 8.734 million, while the total broadband subscribers in Taiwan is approximately 5.762 million (including Public Wireless Local Area Network, or PWLAN). For household users, according to Taiwan Network Information Center report named "Taiwan Broadband Usage Report in 2018,"the total number of household with internet access in Taiwan represent a penetration rate of 80.8%.

B. According to NCC statistics, as of December 31, 2018, total number of mobile subscribers in Taiwan reached approximately 29.22 million, representing a penetration rate of 123.8%, of which 4G subscribers reached approximately 27.69 million, representing a penetration rate of 117.4%.

C. Gartner predicts that AI will be the key service offering in 2020. IDC also projects that global AI market value (including software, hardware and related services) will reach approximately US$46.0 billion in 2020, representing a compounded growth rate of 54%. In accordance to McKinsey, in the next three years, AI will be driving three key industries of high-tech, telecommunication and financial services.

(2) Industry Value Chain

A. AI technology and digital convergence are driving ICT growth; telecommunication industry is becoming more integrated with more diversified application. This tends to expand the telecommunication industry value chain, enable more innovative, more diverse and more customized services in fulfilling user demand and in gaining market advantage. In addition, content provider/integrator, application service provider, network equipment vendor and terminal equipment vendor are becoming more valued partners of Chunghwa Telecom as the Company expands its digital convergence product portfolio.

B. In 2018, the Company is actively laying the foundation for 5G, internet banking, IoT, big data, AI, smart homes, etc., in offering digital convergence services to individual consumers, households, and enterprises. We continue to improve our core business competitiveness, but also focus on ICT value-added services and overseas investment, as well as strengthen our core competency, develop digital economy, deepen Taiwan market, expand ASEAN new market, and enable valued partners via alliance, joint cooperation and investment, in maximizing our enterprise value. In the future, we will continue investments into fixed-line, mobile, data and ICT services, with integration of cloud, big data, information security and AI technology, in order to seamlessly enhance the overall cooperation from our upper, middle, and down-stream suppliers and to provide more innovative and superior experiences for our users.

(3) Product Development Trends and Competitive Landscape

A. Domestic Fixed Communications Services

- Local and Domestic Long Distance Telephone: as of December 31, 2018, Taiwan local telephone penetration has reached 128.3%. However, local telephone has been declining slightly due to traffic migration to mobile communication, free communication software, and VoIP, although the Company continues to maintain a leading subscriber market share at 93%. The average market share by minutes in the local and domestic long distance telephone market was approximately 84.0% and 82.9% respectively.
- Broadband Internet Access:
  - The government has promoted the availability of universal telecommunication services in remote areas, including digital infrastructure, broadband access, greater than 90% nationwide coverage with Mega-level (Gbps) bandwidth access. As of December 31, 2018, the Company's fixed network broadband coverage has reached 96.8% for 35Mbps, 95.1% for 60Mbps, 91.3% for 100Mbps, and 48.4% for 1Gbps (immediate installation availability within 1 week). The Company plans to continue to build out optical network for accelerated transmission speed in order to fulfill domestic user demand.
  - As of December 31, 2018, the Company's broadband household subscribers have reached approximately 4.079 million (excluding MOD, HiLink), representing a market share of 70.8%. Of these subscribers, higher speed subscribers have increased significantly, with FTTx as the primary chosen product for approximately 3.602 million subscribers, of which 1.422 million subscribers use 100Mbps and above.
  - Data Circuits Business: data circuits business has been impacted by broadband internet access and competition, as of December 31, 2018, the Company data circuits market share was approximately 55.1%.
- MOD/IPTV Services
  - As of December 31, 2018, Taiwan market has a total of 5.077 million household subscribers of cable television, of which 76% uses one of the five multiple-system operators (China Network Systems Co., Ltd., Kbro Co., Ltd., TWM Broadband, Taiwan Fixed Network Co., Ltd., Taiwan Optical Platform Co., Ltd.) with digitalization over 90%. Specifically, digital set-top box subscribers are approximately 99.46% and are estimated to reach 100% by 2019. In

addition, channel providers have been broadcasting HD audio/video content, interactive and customized television programs and applications, resulting in more intensive competition for the Company's MOD services.

- MOD provides over 206 set of channels, including 187 high definitions, or HD broadcasting channels and over 25,000 hours of on-demand programs. In addition, the Company continues to optimize its user interface, or UI, design quality content and packaged offerings that cater to customer needs, leverage OTT technology to develop new services such as interactive gaming, advertising and 4K viewing, in order to better fulfill market demand. As of December 31, 2018, the Company had approximately 2.01 million MOD subscribers.

B. Mobile Communications Services

- Although the overall mobile market continues to be very competitive, the domestic mobile operators' subscriber market shares are relatively stable, of which the Company is the largest provider in terms of both subscribers and revenue. As of December 31, 2018, the Company has total mobile subscribers of 10.594 million (including pre-paid), representing a market share of 36.3%.
- Mobile communication broadband services are more demanding primarily due to mobile technology evolution and higher penetration of tablets and smart phones such as iPhone / Android; many service providers have launched 4G LTE services in order to fulfill customers' demand for higher speed internet access.
- The Company plans to continue construction and optimization of 4G LTE network, optimize service coverage, and construct more Wi-Fi hotspots, in order to offer integrated wireless broadband internet access and more diversified services such as KKBOX, Hami Pass, Hami Video, Hami Books, etc., and consequently to increase customer contribution and revenue stream.
- International telecommunication service providers and some domestic radio and television content providers have been actively developing OTT convergence services, including Google, Apple, Amazon, etc., especially for services such as communication, music, games, video, and other digital convergence services for domestic and international markets.

C. Internet and Other VAS Services

- Taiwan's broadband access penetration rate is relatively high with intense competition, primarily because both telecommunication service providers and cable broadband operators offer broadband access with faster speed and better quality of service. As of December 31, 2018, the Company's HiNet subscribers totaled approximately 4.072 million, representing a market share of 66.6%.
- As the gaming market value continues to increase, the Company has introduced gaming accelerator for professional players to gain key timing advantages in winning the games.

D. International Fixed Communications Services

- The Company is the leading provider of international fixed communication services, as of December 31, 2018, the Company has a market share of 70.3% by minutes.
- The Company has offered various prepaid card services, especially targeting the large foreign laborer market within Taiwan. For retaining existing customers and acquiring new customers, the Company has designed various 4G and voice offering packages with short and long expiration periods as needed. In addition, as the 3G licensing expired by end of 2018, the Company focuses on 3G migration to 4G offerings, by collaborating with local public and private entities for holiday festivities, and by enhancing overall customer services, in order to further promote the prepaid card business.
- The Company expands voice resale business to certain labor exporting countries in Middle East

and Asia Pacific. In addition, the Company constructs IPX network platform for 4G/LTE international data roaming and forms collaboration with international service providers using Voice over IP network, in order to increase third-party transfers and the overall traffic volume.

1.3 Research and Development

(1) Major R&D Expenditure for the most recent year:

Unit: NT$'000

Item/Fiscal Year	2017	2018	2019 (as of March 31, 2019) (Note)
R&D expenses	3,885,920	3,725,249	920,959
Consolidated revenues	227,514,183	215,483,158	51,331,161
R&D expenses as a % of consolidated revenues	1.71%	1.73%	1.79%

Note: Un-audited internal figures for March 31, 2019.

(2) Major R&D Achievements for the most recent year and up to the Publication Date of this Annual Report

In 2018, the Company's R&D focuses on Intelligent Broadband Networking, Cloud Computing, Intelligent Business, Information Security Application, Big Data, Internet of Things, and Convergence Services. The main achievements are listed below:

A. Intelligent Broadband Networking

- ST-2 satellite and 5G coexistence solution were completed in 2018. The result is used as the reference for NCC 5G spectrum policy.
- The first 3GPP standard compliant 5G connection in Taiwan was completed in 2018. All the LTE 2DL~6DL CA standards and four sets of 5G NR spectrum standards required by CHT were finalized and promoted respectively.
- The Multi-access Edge Computing, or MEC solution, was completed in 2018. It consists of traffic local breakout function, meets the high-bandwidth needs, with low-latency applications, security enhancement and applicable to new enterprise businesses.
- "4G base station faults prediction" technology uses deep learning technology to accurately predict base station faults in the next seven days, therefore reduces 11% work loading and improves the mobile network quality.
- SDN-based solution for enterprise LAN networks (a.k.a. EyeLAN): this pioneering solution has been deployed within CHT headquarter building in Taipei since August 2018, and proves itself a successful new functional network. EyeLAN can be applied to various business segments, such as enterprise and campus.
- The Company collaborated on SDN controller, white-box equipment for 200Gbps transmission, and virtualized access network with Japan NTT (Nippon Telegraph and Telephone Corporation). These research achievements can be applied on telecom clouds and data centers to reduce deployment costs.
- "Optical Exchange Cabinet Airflow Circulation Optimization Solution" can effectively reduce the temperature inside the cabinet, improve the stability of equipment operation and provide better quality of broadband circuit.
- Network operation and maintenance solutions support the Company's innovative services including "NHI health care assistant network", "myFreescan Health cloud", "MOD 4K quality video multicasting", "2nd phase of the Taiwan High Speed Rail, or THSRC mobile Wi-Fi project", "Bus stop Wi-Fi service over 4G MDVPN", "Home wireless network with modern meshed AP" and "300M broadband service with

multi-port G.fast" provisioning.

- Quality optimization and smart management of 4G transmission networks: significantly boosted downlink rate with refreshing and satisfying user experience when accessing 4G network. CHT was honorably ranked number 1 on OpenSignal, Speedtest and NCC network speed evaluation in 2018.
- "EyeSee" enterprise supervision platform: monitors and manages the full-scale virtual & physical resources and infrastructure status. The solution can be utilized for various lucrative business applications or projects.

B. Cloud Computing

- Software-Defined Data Center solution (ECoreCloud): applied in CHT private cloud, telecom cloud as well as enterprise private cloud, won the ICT Month Innovative Elite award 2018.
- Heterogeneous Software-defined Network Controller: won the Gold Medal Award of Taiwan Innotech Expo 2018.
- Cloud Native Platform: expediting CHT cloud native computing development, supporting AIoT services.
- Cloud Business and Operations Supporting System, or Cloud BOSS: released several new features such as Graphics Processing Unit, or GPU, Solid-state Disk, or SSD, etc., in supporting hicloud and has been selected the "Best Choice" in Industrial Development Bureau Inter-Entity Supply Contracts for four straight years.
- National Development Council Government Cloud: providing government users with dedicated resource pool, antivirus services, data centers redundancy, IPv6, etc.

C. Intelligent Business

- Transformation and upgrade of CHT official website; providing a convenient way for online purchase with delivery service implementation and improved customer satisfaction.
- Reformation of CHT's official APP, including visually impaired assistance function, improvement of log-in process, simplified the process of most-frequently-used functions, as well as increase in usage and performance (active customer year-over-year growth up 55% and double the query usage).
- Self-Developing Chatbot: combining AI technology to provide the text interaction mode of customer-self-service.
- Intelligent IVR navigation process: provide the fast and convenient way by using self-developed AI voice-recognition technology.
- Accomplish the new service order and billing management functions, supporting iPhone eSIM service & eSIM One-Number service (Apple Watch and iPhone shared mobile data usage).
- In accordance with the national spectrum management policy, accomplish the "3G Sunset Acceptance Processing" function, providing 3G to 4G self-service and guiding/accepting customers to sign the contract renewal agreement.
- Short-message billing functions: achieve environmentally-friendly goal of paper and mailing cost savings.
- Smart voice control service platform: integrate terminal device partners, voice and text conversion solution-providers, semantic understanding and content service providers, establishing the ecosystem of localized voice control services.

D. Information Security Application

- New CA and Combi Card Products: fulfill the digital identity business demand and for the deployment of future mobile digital identity market requirement.
- GPro- Using AI Technology: to improve the detection capabilities, in addition to strengthening the security defense mechanism.
- Blockchain OTG (on-time guarantee insurance) System: won the Gold Medal Award of Taiwan Innotech Expo 2018.
- CloudPasco (a high-security web browsing solution for enterprises): to solve web browsing security issues concerned by most enterprises

and received ICT Month Innovative Elite Award 2018.

E. Artificial Intelligence and Big Data

- Big data analytical solutions: provide user-friendly interface with rich machine learning algorithms & Application Programming Interface, or APIs for intelligent services such as smart IoT services.
- Customer journey analysis system: apply to potential customer list and incoming line intention forecast, improve customer self-service ratio.
- Research and development facial recognition, human body recognition, and traffic flow of people analysis; supporting applications of police business, port, smart street lights, and pavilion flow of people.
- Artificial Intelligence deep learning platform: provide comprehensive services for model development and training, model version control and deployment.
- Social media monitoring and analytics: provide social media monitoring solution to support CHT's risk assessment of public opinion monitoring, marketing activities promotion, community management and apply to large enterprise public opinion monitoring.

F. Internet of Things

- IoT Smart Platform open for trial: provide 1 cloud platform, 2 interfaces, 3 core services, 4 more segments, 5 kinds of intelligence and cooperate with industries to build IoT ecosystem.
- NB-IoT Terminal: provide quick connections and management services, enable customers to save time.
- Smart City Intelligent Operation Center, or IOC Solutions: provide operation monitoring, intelligent management and decision-making services to enhance the operational efficiency of City Governments or Industrial Parks.
- Intelligence Video Surveillance Solutions: integrates AI image recognition, big data retrieval, embedded vehicle identification and other technologies.
- Abnormal Vehicle Trajectory Analysis: combine big data analysis and deep learning technology to discover suspicious vehicles and to assist crime prevention.
- Health Cloud Service System: provide sharing and exchange of health information across different regions, organizations, platforms, and has been used in the A+ Industrial Innovation R&D Program of Department of Industrial Technology, or DOIT, and smart city Taiwan project of Industrial Development Bureau, or IDB.
- Smart Environment Services: provides photovoltaic, or PV power generation monitoring, sewage monitoring and building energy management, which are developed and integrated as the intelligent Environment Network, or iEN services. Develop AMI Head-End Server, or HES to manage the smart power meters which have been applied to Taiwan Power Company Advanced Metering Infrastructure, or TPC AMI project.
- Traffic Big Data Analytics Technologies: provide traffic information, including travel time, traffic volume, congestion status and Origin-Destination, or OD. It has been applied to several government programs, such as "Congestion Relief on Major Traffic Arteries Project", "Smart City Taiwan Project" and "Intelligent Traffic Control Project".
- Fleet Management Service: provide driving video solution for enterprise customers. Tour bus dynamic information management system provides monitoring, abnormal alarm, operational analysis functions.

G. Convergence Services

- Developed MOD Video Platform & 4K Set-Top Box in providing flexibility of service functionalities for business.
- Launched smart cache service and CDN video content delivery quality measurement system, which can highly reduce backbone network bandwidth and maintenance manpower.

- Launched Hami Pay's VISA payment service: to expand Hami Pay's customer base and increase Hami Pay penetration rate.
- Launched Taiwan's first intelligent eSIM service which supports call waiting for two numbers on one phone.
- Launched One-Number service that enables iPhone and Apple Watch to share one telephone number, billing, call terminating services, call minutes' volume and internet traffic.
- Assisted National Science and Technology Center for Disaster Reduction, or NCDR on establishing a national communication interface standard for disaster crisis and emergency medical information system to enhance government's core capacity on disaster prevention.
- Augmented Reality platform core technologies: provide AR services, and has been successfully applied to domestic electromechanical enterprises.

1.4 Corporate Development Plan

(1) Long-term Corporate Development Plan

A. Maintain core telecommunication business market position, advance next generation network, by providing full services of voice, data and video communication, in order to fulfill the life and work demand from individual consumers, households and enterprises.

B. Expand the scope of new businesses by optimizing resources and alliances to build industry ecosystem, and to develop various intelligence-enabled services for enterprises and consumers, increase enterprises operating efficiency, enhance consumer life well-being, expand domestic and international markets, for pioneering intelligent life and enabling digital economy.

C. Enhance corporate operating cost and procurement efficiency, increase productivity ratio vis-à-vis resource allocation, optimize total Capex investment, by leveraging intelligence, digitalization, network virtualization, SDN-related advanced technologies.

(2) Short-term Corporate Development Plan

A. Expand FTTx broadband business and encourage customers increase access speed while maintaining high quality network services with integrated offerings.

B. Continue to develop and expand integrated services of fixed communication, mobile, data and value-added services.

C. Advance the integrated network of fixed and mobile communication, by optimizing network resources and enhancing network quality.

D. Expand MOD and Hami Video services, by introducing preferred contents and channel for seamless audio/video experiences anytime and anywhere.

E. Provide accelerated and convenient mobile data transmission services for enterprise clients, as well as collaborate with information content providers to develop mobile ICT VAS.

F. Enhance precision marketing and effectively manage online social media by leveraging big data analysis and CRM platform, in order to improve branding image, strengthen customer relations and deliver product sales target.

G. Enhance marketing of integrated services and ICT services for enterprise clients.

H. Develop IoT platform with diverse and innovative applications suitable in fulfilling various demands from multiple industries.

I. Expand various cyber security solutions targeting households, enterprises and government entities.

J. Actively compete for project bidding opportunities by designing advanced IDC/cloud hardware /software total solution in accordance to client requirements.

K. Develop internally, or cooperate with third-party partners to develop total solutions for enterprise clients in the areas of AR/Virtual Reality, or VR, AI, big data, Fintech, health care, gas cloud and other innovative applications.

L. Expand overseas market with the Company's affiliates and strategic partners.

2. Markets & Sales Overview

2.1 Market Analysis

The Taiwan telecommunication market is relatively competitive, customers have high expectations of telecommunication service quality and pricing. The Company follows closely the market dynamic and consumption trend, in order to develop more appealing and innovative products with appropriate pricing plan.

(1) Household Market

A. Domestic Fixed Communications Services

Key offerings and regions: local telephone, domestic long distance, broadband access; all nationwide throughout Taiwan

- Market share including enterprise market: as of December 31, 2018, local telephone subscribers accounted for 93.0%, domestic long distance call minutes accounted for 82.9% and broadband access subscribers accounted for 70.8%.
- Future market demand and supply, market growth trend, competitive advantages and disadvantages:
  - The Company offers diverse broadband internet access, as of December 31, 2018, the total broadband subscribers are approximately 4.483 million, of which, approximately 1.422 million subscribers use FTTx 100Mbps and above, representing an increase of 10.9% year-over-year. The Company plans to continue offering higher speed and better quality FTTB and FTTH optical network access in order to fulfill customers' increasing demand for bandwidth.
  - Local and domestic long distance telephone revenue slightly decreased due to traffic migration to mobile telephone, free communication software and VoIP, while broadband access slightly decreased due to pricing pressure and market competition, all these were partially offset by growth in ICT revenues generated by enterprises, resulting in a decline of 6.2% year-over-year for the domestic fixed communication revenue.
- Countermeasures:
  - Construct FTTx next generation network, or NGN, gradually migrate to VoIP, and provide value-added and integrated services.
  - Enhance CRM, formulate precise customer segmentation with integrated marketing plan and improved customer value.
  - Develop and promote fixed communication VAS, such as 1288 information inquiry, call answer, incoming call filter, etc. in order to increase revenue generation.
  - Closely monitor VoIP development and impact, and formulate action plan accordingly.
  - Launch higher speed FTTx services, in order to fulfill customer demand and develop new applications for IoT.
  - Expand MOD services and integrated marketing for broadband internet access.

B. Internet and Other VAS Services

- Market share including enterprise market: as of December 31, 2018, HiNet subscribers accounted for 66.6%.
- Future market demand and supply, market growth trend, competitive advantages and disadvantages:

  The broadband access penetration rate is relatively high, combined with the consolidation of telecommunication providers and cable operators, which will likely increase broadband market competition. The Company plans to develop multimedia, high definition audio/video content such as MOD, HD and OTT, in order to increase revenue generation.
- Countermeasures:
  - Expand digital convergence, multi-screen integrated services, provide differentiated

products and increase customer value.

- Expand MOD and HiNet VAS such as video, game, cyber security, etc., in order to increase revenue stream.
- Expand higher speed internet access and various application VAS, increase broadband penetration rate with FTTx 100M and above as key offering, in order to facilitate broadband customer migration.
- Analyze customer attributes and service demand using CRM platform, promote digital convergence, multi-screen integrated services (such as FTTx, mobile internet, MOD, etc.), precision marketing to increase number of customers and to enhance traffic and revenue stream.

C. MOD/IPTV Services

Key offerings and regions: nationwide throughout Taiwan.

- Market share: as of December 31, 2018, total MOD subscribers are approximately 2.01 million, representing a penetration rate of 23.0% (MOD subscribers/Total households), and a market share of 28.4% (MOD subscribers / (MOD subscribers + CATV subscribers).
- Future market demand and supply, market growth trend, competitive advantages and disadvantages:
  - Currently, MOD primarily offers television channel and on-demand video. In the future, as the Company continues to expand customer base, the Company will provide more multi-screen content services.
  - MOD advantages: customized channel subscription package, 4K and HD quality, on-demand video, multi-screen availability; MOD app enables customers to download and view their preferred MOD programs at anytime and anywhere.
  - Due to regulation restrictions, the Company currently cannot directly operate or act as an agent for television channels, which adversely impact its business. In the long term, such restriction may not be conducive for the overall development and competitiveness of the domestic film and television industry.
- Countermeasures:
  - Expand digital convergence, multi-screen integrated services, provide differentiated products and increase customer value.
  - Expand MOD/OTT and HiNet VAS such as video, game, cyber security, etc., in order to increase revenue stream.
  - Expand MOD services and integrated marketing for broadband internet access.

D. International Fixed Communications Services

Key offerings and regions: international long distance; nationwide throughout Taiwan and overseas to about 230 countries

- Market share including enterprise market: as of December 31, 2018, international long distance call minutes accounted for 70.3%.
- Future market demand and supply, market growth trend, competitive advantages and disadvantages: international fixed communications revenue in 2018 declined 1.0% year-over-year, primarily due to the decrease of international network revenue from the availability of free communication software, but partially offset by the growths of international leased lines, international data exchange and international ICT services.
- Countermeasures:
  - Continue to improve services for existing customer base with increasing focus on wholesale in order to mitigate pricing decline.
  - Promote hotline service package, enhance Ideal Card bundled services.

(2) Consumer Market

A. Mobile Communications Services

Key offerings and regions: nationwide throughout Taiwan, international roaming outside of Taiwan.

- Market share including enterprise market: as of December 31, 2018, mobile communication subscribers accounted for 36.3%.

- Future market demand and supply, market growth trend, competitive advantages and disadvantages:
  - As of December 31, 2018, mobile communication penetration rate has reached 123.8%.
  - In 2018, the Company focused on expanding mobile internet services, with cross-business integration and more competitive product design; as of December 31, 2018, mobile internet customer base has reached approximately 9.626 million, representing an increase of 15.9% year-over-year.
  - The Company continues infrastructure construction based on user experience and establishing differentiated quality and value with successful customer migration from 3G to 4G. The Company's mobile network design and construction focus on "widest coverage", especially for high population density areas and most bustling commercial districts with high and low frequency integration, in order to enable the optimal coverage for customers' seamless voice call, mobile internet access and other commercial use. The Company has successfully participated in three mobile spectrum auctions in fiscal years 2013, 2015 and 2017 respectively, obtaining cumulatively the largest bandwidth coverage within the telecommunication industry. The Company currently has spectrum slots of 900MHz, 1800MHz, and 2600MHz, totaling 180 MHz bandwidth, and is considered the best frequency allocation for users' mobile experiences.
  - Although mobile voice revenue has decreased slightly due to market competition and substitution from VoIP, the Company's continued 4G expansion, data usage promotion, combined with flexible pricing plan and Hami VAS, have successfully attracted more customers, resulting in solid revenue generation.
- Countermeasures:
  - Leverage bandwidth advantage, accelerate construction, improve customer experiences, expand mobile customer base and increase ARPU.
  - Introduce high, mid and low smartphone pricing plan for different customer segment, continue VAS optimization and management, innovate new offerings for incremental revenue stream, in order to achieve the overall revenue target.
  - Expand market of the Millennials by leveraging online stores, in order to increase digital marketing efficiency and new customer acquisition.
  - Provide customers better quality services with cross-network integration and channel partner alliances.

B. International Fixed Communications Services

Key offerings and regions: international long distance telephone, international roaming outside of Taiwan.

- Future market demand and supply, market growth trend, competitive advantages and disadvantages: international fixed communications revenue has been adversely affected primarily due to customer migration to VoIP-based technology and the decline of unit price, partially offset by the Company's overseas market expansion. The Company plans to retain existing customer and further develop new customers in order to solidify international fixed communications revenue.
- Countermeasures:
  - Continue to improve services for existing customers in order to mitigate the decline of unit price.
  - Promote hotline service package, enhance Ideal Card bundled services for foreign labors' international calling card market.

(3) Enterprise Market

A. Domestic and international fixed communications, mobile communications, internet and other VAS service.

Key offerings and regions: nationwide Taiwan (international roaming available)

- Future market demand and supply, market growth trend, competitive advantages and disadvantages:
  - Continue to provide higher speed, better quality enterprise broadband, IDC, etc., in order to fulfill enterprise demand for broadband internet access and cloud application, etc.
  - Domestic fixed communications and mobile communications revenue for 2018 have decreased slightly compared to the previous year primarily due to customer migration to free communication software and VoIP-based services, as well as market competition.
  - International leased line market share was 65.1%, with revenue increased 18.2% year-over-year. International data revenue (IPLC and IPVPN) increased 12.4% year-over-year. The Company plans to continue to improve services for existing customers, while develop new customers in Southeast Asia market, in order to facilitate data business revenue generation.
- Countermeasures:
  - Provide customers better quality services, increase customer loyalty and value with cross-network integration and channel partner alliances.
  - Continue to develop enterprise communication integration and VAS, in order to increase VAS revenue generation.
  - Expand international data and leased line businesses, expand domestic and international ICT and enterprise innovative applications, in order to increase telecommunication service revenue.

B. Enterprise ICT services (IoT, IDC, cloud, enterprise information security, Network Managed Services, mobile ICT, etc.)

Key offerings and regions: nationwide throughout Taiwan; of which mobile IoT services, the Company is the only telecommunication service provider in Taiwan capable of NB-IoT and LTE Cat-M1 service for both domestic and overseas markets.

- Future market demand and supply, market growth trend, competitive advantages and disadvantages:
  - The Company has competitive advantage in technology, telecommunication, large-scale project execution and integration, renowned brand, nationwide service channels, providing enterprises with advanced ICT services and enabling enterprises to achieve their respective strategic and operational targets.
  - Applications such as IoT, enterprise information security, mobile ICT are driving demand as both higher speed internet access and diverse mobile device penetration rates increase.
  - The competitors typically use lower pricing strategy in deploying enterprise ICT services and in seizing enterprise market opportunities.
- Countermeasures:
  - Expand fixed network broadband, mobile internet access, digital convergence and other enterprise VAS, in order to increase customer value and the Company revenue generation.
  - Expand IoT, enterprise information security, IDC, cloud, mobile ICT, etc., in order to fulfill enterprise clients demand with innovative applications and VAS.
  - Provide mobile IoT communication services, enable enterprises to adopt various mobile solutions and collaborate with global telecommunication service providers in offering terminals for international roaming, enterprise terminal management, IoT solutions, etc.
  - Expand and discover qualified alliance partners, in providing sector-specific ICT total solution for enterprise clients; actively compete for project bidding opportunities from government entities.

2.2 Main Features and Production Process of Major Products

The Company's leading offerings are domestic and international fixed communications, mobile communications, and internet services, for individual consumers, households and enterprises. The Company's main product features and production process are: service positioning, network planning, construction, and post-maintenance.

2.3 Supply of Raw Materials

Not applicable as the Company is not a manufacturer.

2.4 Major Suppliers/Customers Accounting for above 10% (inclusive) of Purchases/Sales in the most recent 2 Years

None.

2.5 Production Volume in the most recent 2 Years (Equipment)

Key Offerings		2017	2018
Domestic Fixed Communications	Domestic Network	16,705,980 subscribers	16,936,487 subscribers
	Long Distance Network	1,390,766 subscribers	1,390,766 subscribers
	Broadband Access Network (ADSL+FTTx)	10,729,187 ports	10,720,890 ports
	MOD (Set-Top box)	2,510,240 set	2,565,800 set
Mobile Communications	Mobile Network	18,800,000 subscribers	18,820,000 subscribers
Internet	HiNet BRAS	5,664,000 ports	5,516,000 ports
International Fixed Communications	International Network	191,436 subscribers	191,436 subscribers

Notes: MOD equipment volume detailed explanation (including multiple-access for single household and spares): cumulative purchases of 2,510,240 set as of 2017, incremental purchase of 556,560 set in 2018 and incremental replacement of 501,000 set, resulting in total installed base of 2,565,800 set.

2.6 Sales Volume for the most recent 2 Years

Key Offerings		2017		2018	
		Subscribers/ Minutes in millions	Revenue (NT$ billions)	Subscribers/ Minutes in millions	Revenue (NT$ billions)
Domestic Fixed Communication	Domestic Network	10.687 Subs	29.60	10.421 Subs	27.57
	Long Distance Network	2,382.2 Mins	2.65	2,087.3 Mins	2.43
	Broadband Access Network (ADSL+FTTx)	4.467 Subs	18.68	4.483 Subs	18.30
	MOD	1.602 Subs	2.55	2.01 Subs	3.26
Mobile Communications	Mobile Services	10.452 Subs	75.82	10.594 Subs	63.91
Internet Network	HiNet	3.733 Subs	28.92	3.684 Subs	29.81
International Fixed Communications	International Network	854.2 Mins (Note)	13.55	764.6 Mins (Note)	13.43

Note: Only including outgoing minutes.

3. Human Resources

Year		2017	2018	2019 (as of March 31, 2019)
Number of Employees (including domestic and international)		22,469 (Note 1)	22,134 (Note 2)	21,920 (Note 2)
Average Age		51.11	51.28	51.04
Average Years of Service		26.38	26.39	25.79
Breakdown of Education Level (%)	Ph.D.	1.11	1.16	1.16
	Masters	25.77	26.98	27.56
	Bachelors	51.29	50.95	50.87
	Senior High School	19.87	19.07	18.67
	Below (and include) Middle School	1.96	1.84	1.74

Note 1: Including 9 personnel who are not qualified as the Company employees in accordance to TWSE, but are board members of the Company.
Note 2: Including 10 personnel who are not qualified as the Company employees in accordance to TWSE, but are board members of the Company.

4. Environmental Protection Expenditure

4.1 Loss or Penalty due to Environmental Pollution for the most recent year and up to the Publication Date of this Annual Report

None.

4.2 Countermeasures and Potential Cost

(1) Environmental Protection and Pollution Prevention

A. Implement all necessary preventative measures and ensure that all telecommunication engineering construction strictly comply with all the applicable laws of air pollution, noise pollution, waste disposal, etc.; all units of Chunghwa Telecom are responsible for supervising the relevant vendors in full cooperation.

B. For telecommunication engineering works surrounding the roads, the Company shall strive its best to avoid the heavy traffic flow hours, use low-noise equipment, in order to minimize the adverse effect on the living environment for all residents.

C. Lead acid battery for telecommunications can only be recycled to the qualified vendors properly registered with the Environmental Protection Agency, or EPA, and proper documents delivery manifest in sextuplicate issued by EPA for lead-acid battery disposal are filed for audit tracking.

(2) Enhance Environmental Protection Measures for Telecommunication Engineering Construction

A. Incorporate environmental protection and pollution prevention into the planning stage of telecommunication lines design, with proper budget and construction details; once the construction starts, the Company shall strictly execute all on-site pollution prevention measures.

B. Strengthen on-site environmental protection: for any telecommunication pipeline excavation, the Company shall eliminate waste soil falling onto the ground, and prevent any potential pollution during transit.

C. Strictly control and manage all facility office air and noise pollution; for any additional equipment purchase, aside from strictly require all manufacturers comply their respective products with the relevant environmental laws, also require contractors to comply with the relevant environmental laws and quality for their respective construction.

(3) Enhance Energy Saving Measures in Facility Office

A. Utilize central surveillance system to monitor and manage telecommunication data office temperature and traffic loading, in order to maintain the temperature between 27~30°C and to prevent traffic overloading.

B. Adopt high sensible heat packaged air conditioner in consideration of facility office thermal loading characteristics, in order to improve air conditioning efficiency.

C. New equipment procurements focus on high-efficiency, some equipment with extra variable-frequency drive; accelerate the replacement of old and energy-consuming equipment, thus significantly reducing overall energy consumption.

D. Air conditioning utilizes high sensible heat energy-saving air conditioning unit, energy-saving cooling water tower and motors of variable-frequency with temperature control, in order to significantly reduce operating power.

E. Optimize power supply equipment operation and avoid low loading usage.

F. Utilize natural ventilation and air conditioning for base stations situated in suburbs.

G. For remote areas or suburbs with lower temperature and better air quality, the Company can modify air conditioning system by introducing lower temperature and external air, so energy usage can be significantly reduced, especially during winter period.

H. Improve heat dissipation capability of the telecommunication equipment, thus moderately increase ambient temperature while effectively reduce the power consumption of air conditioning system.

I. Plan and design all new air conditioning system with many energy saving options, such as separation of cold and hot aisles, frequency conversion return fan, induced ventilation system and variable Air Volume air-supply system, etc.

J. Flexibly adjust air conditioning system, air flow volume or air duct configuration position in accordance to heat generation level of the telecommunication equipment.

K. Optimize switching, broadband and transmission circuits, consolidate and eliminate high energy-consuming products.

L. Consolidate telecommunication data office equipment in concert with telecommunication equipment replacement, in order to improve overall operating efficiency.

5. Employee Relations

5.1 Workplace Environment and Employee Safety

(1) All of the Company's Level 1 and 2 branch offices have in place designated Occupational Safety and Health Department in charge of all occupational safety and health management plan and procedures, in accordance to the relevant regulations. Occupational Safety and Health Department focus on appropriate work environment, hazard recognition, all safety and health management evaluation and control, automated checking and operating environment surveillance for mechanical equipment, in order to create safe, healthy, comfortable and friendly work environment.

(2) The Company established three corporate training centers in Banqiao, Taichung and Kaohsiung, for conducting regular safety and health training and drills for employees and contractors, in order to improve occupational safety awareness, safety and health skills and responsiveness, thus further ensure the overall safety of all employees and contractors.

(3) The Company has engaged doctors and employed professional nursing staff to conduct

on-site health related services in order to ensure the employee well-being, including plan and implement health education, health promotion and sanitary guidelines, work-related injury prevention, health consultation, first aid, emergency response, health examination analysis, evaluation and management.

(4) The Company pays for various health examination packages for employees depending on their respective age and health risk factors. In addition, the Company promotes healthy activities, establishes sports and leisure facilities and develops employee assistance programs, or EAP.

(5) In order to enhance safety and health management efficiency and effectiveness, and to match international safety and health standards, the Company's 26 branches with Level 1 and 2 status have all passed OHSAS18001 international certification with annual re-evaluation as of December 31, 2018. The Company intends to continue to enhance its safety and health management culture by leveraging the Plan-Do-Check-Act system.

5.2 Employee Behavior and Ethical Standards

(1) The Company has established "Code of Ethics" that all directors, managers and employees are expected to adhere and to advocate in accordance to the highest ethical standards and responsibilities, below are some specific requirements:

A. Honesty and integrity

B. Avoid conflict of interest

C. No personal interest gain

D. Employee care

E. Strict confidentiality

F. Corporate disclosures based on comprehensiveness, fairness, accuracy, promptness and forthrightness

G. Treat all clients, vendors and competitors fairly and equally

H. Ensure proper and effective use of corporate assets

I. Comply with all laws and regulations

J. All insider trading are prohibited

K. All corruption and bribery are prohibited

L. Implement environmental protection and healthy/safe workplace environment

M. Report and properly handle any violation of the Code of Ethics

N. Comprehend and strictly comply with the Code of Ethics

(2) The "Code of Ethics" can be accessed under "Corporate Governance" within the corporate website and internal "Human Resources" website; the Company conducts annual "Code of Ethics" reviews and online testing, in order to strengthen employees' ethics and value.

(3) The Company has established "Assessment Points for the Staff of Chunghwa Telecom Co., Ltd." and "Reward and Punishment Standard for the Staff of Chunghwa Telecom Co., Ltd.", primarily for employee assessment, rewards and penalties. All employees must comprehend and strictly comply with these rules, which are fully disclosed on the Company Enterprise Information Portal website for employee reviews. For any employee related matters, the Company shall convene employee review meeting in accordance to the rules.

(4) The Company has established "Employee Suggestion Reward Operation Points", in order to encourage all employees to actively make suggestions, participate in research and development, reduce cost and expenses, increase productivity, and contribute to a positive and innovative corporate culture.

5.3 Employee Welfare Policy

(1) The Company has provided employee labor insurances in accordance to the regulations, and in case of any claims, the Company shall actively notify and assist all employees throughout the application process in order to ensure the employees' welfare rights.

(2) Manage medical insurances for employees and

related family dependents.

(3) Organize all types of hiking, travel, excursion, sports games, lucky draws, etc., depending on employees' physical attributes, interest and feedback, in order to ensure the proper development of employees' physical and mental health.

(4) The Company provides employee benefits in order to assist Employee Welfare Committee to offer various employee subsidies (such as marriage, birth, employee children education, employee children education scholarship, retirement, death of employee and related family dependents, etc.), 3-major holiday perks, employee recreational activities, birthday parties, group insurance, etc.

(5) In cooperating with national birth policy, and in retaining younger talents, as well as in enhancing corporate image and better caring for younger generation employees, commencing 2018, the Company has implemented child care subsidy for ages 0~6, of which each employee is subsidized NT$5,000 per year. The child care subsidy system has been standardized within the Company, with automatic subsidy distribution as long as the employee qualifies with children aged 0~6. In addition, any approved corporate child care subsidy from the local government shall also be refunded to the eligible employees by the Company.

(6) The Company establishes Employee Share Trust in order to increase employee welfare benefits, enhance corporate coherence, share the success of business operation and ensure better living after employee retirement or departure. The Trust consists of pro-rata share-based bonus in reference to the employee's monthly salary.

(7) The Company is required under the Employment Insurance Act to pay 6 months of allowances for employees who have taken the Parental leave. Employees are further entitled under company policies to receive additional monthly allowances totaling half the sum assured under the Labor Insurance during child care leave.

5.4 Overseas Delegation and Workshop

The Company has arranged overseas delegations and research opportunities in accordance to its annual budget; for 2018, total number of employees going abroad was 403.

5.5 Employee Training and Education Program

(1) Employee Training and Education Status

The Company strives to provide all employees an open and diverse learning environment, primarily focusing on education training and professional development. The employees can improve their knowledge with access to internal and external training programs, e-learning, knowledge management system, and guidance from their supervisors and colleagues. Also, the employees can experience many types of training programs such as new recruits orientation, management and supervisory training, professional knowledge and technology development, marketing and customer relations training, safety and health training, computer training, etc. In addition, employees can cultivate their development through job rotation, special projects assignment and overseas assignment to better combine their personal and professional lives.

A. Employee Training: New Recruits and On-the-Job

- New Recruits Training: in order to ensure all newly hired employees can seamlessly join the Company with basic understanding of the Company's operating guidelines, culture, organization, business nature, safety, employee rights and responsibilities, etc., the respective department of the Company shall arrange new recruit's orientation programs and relevant e-learning digital programs.
- Employee On-the-Job Training
  - The Company's HR team is in charge of planning and execution of employees' on-the-job training with the relevant

assessment in order to enable all employees to achieve successful career development, to enhance their professional knowledge, to improve their service attitude and the overall performances.

- The employee training and education program primarily divides into two categories: professional and managerial; both of which leverage e-learning programs, community learning, knowledge management system and the relevant e-learning satisfaction survey.
- The related fees for employee training and education amounted to NT$565.966 million, including training academy, professional development, self-learning, external training, etc. Based on total employees of 22,134, this represents an average fee of NT$25,570 per headcount for employee training and education.
- The Company has Telecommunication Training Institutes in Banqiao, Taichung and Kaohsiung, and has designed various training programs on annual basis, in accordance to the overall corporate plan. In 2018, the Telecommunication Training Institutes have conducted 1,502 classes, with 72,831 attendances, totaling training fees of NT$502.370 million. For details, please see the table below:

	Training Categories	# of Classes	# of Attendances	Total # of Man-Hour	Fees (NT$' 000)
1	Management & Supervisory	257	13,488	68,124	68,576
2	Professional Knowledge & Technology	576	19,448	147,531	148,510
3	Marketing & Customer Services	158	9,114	71,118	71,590
4	Safety & Health	122	6,536	40,104	40,370
5	Computer	389	24,245	148,862	149,850
6	e-learning	–	–	439,176	23,474
	Total	1,502	72,831	914,915	502,370

- The Company has conducted certification training for Managerial Assessment of Proficiency, or MAP, according to international standards, in order to effectively train high-potential management team and to increase the Company's competitive advantages.

B. Employee Professional Development:

- The Company has constituted "Studying at Universities and Colleges (including research institutes) for the Staff of Chunghwa Telecom Co., Ltd.", in order to encourage all eligible employees to further their professional development.
- The Company has constituted "Studying at Universities and Colleges (including research institutes) for the Staff of Chunghwa Telecom Co., Ltd.", in order to develop talented employees for telecommunication business, technology and management. The detailed program participants and fees for academic year 2017~2018 are listed below:

Categories / Items	Specialty	Bachelor	Master	Ph.D.	Total
# of Applications	9	38	268	61	376
Fees (NT$)	70,982	318,151	5,740,910	170,634	6,300,677

Note: The above table listed all subsidized applications are for academic year 2017~2018, first semester (September 1, 2017 to January 31, 2018), and second semester (February 1, 2018 to June 30, 2018).

(2) Financial Reporting Related Employees with the Mandatory Certification:

A. International internal auditor certification:
6 personnel in audit department

B. Taiwan internal auditor certification:
5 personnel in audit department; 5 personnel in accounting department

C. International internal control certification:
3 personnel in audit department

D. Taiwan certified public accountant:
Chief Financial Officer and 7 personnel in accounting department, totaling 8.

5.6 Retirements

Retirement Policy and Implementation:

(1) The Company has constituted "The Employees' Pension, Consolation Pay and Severance Pay Guidelines of Chunghwa Telecom", which was in accordance to the relevant Labor Standards Act and Labor Pension Act. For those employees who have retired prior to the privatization of Chunghwa Telecom, their respective retirement benefits are issued by the central government entity.

(2) The Labor Standard Act Article 56-1 stipulates monthly provisions for retirement pension, while Article 56-2 stipulates that commencing March 31, 2018, one-time pension reserve can be allotted to the full balance, and must be managed appropriately by the Company's Employee Retirement Fund Supervisory Committee, and deposited into Bank of Taiwan under the committee's name.

(3) In accordance to the Labor Pension Act, the Company contributes a monthly pension rate of no less than 6% of employees' monthly salary. These contributions are deposited directly into the employees' pension accounts held under the Bureau of Labor Insurance.

(4) In 2018, officially retired employees amounted to 525, other voluntary retirement personnel are 198, totaling 723 personnel, and all have completed the retirement procedures.

5.7 Employee Negotiation and Employee Benefits Protection

(1) The Company values employees as one of the most important assets, since the completion of privatization, the Company not only has complied to the labor union agreements, but has also implemented 2-year maternity leave, birth allowance, employee children education funding, employee stock trust, employee bonus, etc. The Company strives to facilitate comprehensive and consistent communication with all employees in order to ensure satisfactory labor unions relations.

(2) The Company has established regular, trustworthy and effective communication channel in order to increase the frequency and depth of overall communication with labor unions.

A. The Company branches hold at least one meeting every 3 months in accordance to the labor union agreement.

B. In 2018, total 6 formal all-hands meeting with labor union were conducted, and 2 additional improvised meetings, of which many issues have been resolved.

C. If any significant labor related amendment changes are requested, negotiation and discussion meetings were conducted as additional meetings.

(3) The Company has signed collective bargaining agreement in accordance to the Collective Agreement Act. Currently, Chunghwa Telecom Workers' Union, Southern Taiwan Business Group Workers' Union, Data Communications Business Group Workers' Union, Kaohsiung Branch, Southern Taiwan Business Group Workers' Union, Changhua Branch, Southern Taiwan Business Group Workers' Union have all completed the agreement signing.

5.8 Labor Disputes related Losses for 2018 and up to the Publication Date of this Annual Report

None.

6. Major Contracts

Contract Types	Contract Party	Contract Period	Key Content	Restrictions
Procurement	APPLE ASIA LLC	May 8, 2018~ Current	Equipment for Resale	Confidentiality
Procurement	Ericsson Taiwan Ltd, Nokia Networks Taiwan Co., Ltd, Nokia Solutions and Networks Oy	Feb 12, 2018~ Feb 14, 2020	Mobile Telephone System	Confidentiality
Procurement	Hwacom Systems Inc., Stark Inforcom Inc.	Apr 2, 2018~ July 26, 2019	Transmission Equipment	Confidentiality
Procurement	Syscom Computer Engineering Co.	Mar 20, 2018~ Nov 27, 2019	Data Network Equipment	Confidentiality
Procurement	Shangren Technology Co., Ltd.	Feb 12, 2018~ Jan 20, 2020	Engineering Network Projects	Confidentiality
Related Entities				
Procurement	Senao International Co.	June 19, 2018~ Dec 31, 2019	Equipment for Resale	Confidentiality
Procurement	Taiwan International Standard Electronic	May 22, 2018~ May 22, 2019	Transmission Equipment	Confidentiality
Procurement	Chunghwa System Integration Co., Ltd.	July 26, 2018~ July 26, 2019	Information Systems	Confidentiality
Procurement	Donghwa Telecom Co., Ltd.	Apr 10, 2018~ Sept 5, 2020	International IP Forwarding Service	Confidentiality

6 Review and Analysis of Financial Position, Financial Performance and Risk Management

1. Financial Position
2. Financial Performance
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Review and Analysis of Financial Position, Financial Performance and Risk Management

1. Financial Position

Analysis of Consolidated Financial Position for the most recent 2 years

Unit: NT$'000

Item \ Year	Dec 31, 2018	Dec 31, 2017	Variance (+/-) Amount	Variance (+/-) %
Current Assets	91,688,336	79,334,002	12,354,334	16
Property, Plant and Equipment	288,914,228	288,707,910	206,318	0
Intangible Assets	50,943,682	54,883,268	(3,939,586)	(7)
Other Assets	35,722,458	28,197,942	7,524,516	27
Total Assets	**467,268,704**	**451,123,122**	**16,145,582**	**4**
Current Liabilities	61,387,021	59,990,359	1,396,662	2
Noncurrent Liabilities	19,309,363	17,553,183	1,756,180	10
Total Liabilities	**80,696,384**	**77,543,542**	**3,152,842**	**4**
Common Stocks	77,574,465	77,574,465	-	-
Additional Paid-in Capital	171,136,764	169,466,883	1,669,881	1
Retained Earnings	127,391,229	117,457,971	9,933,258	8
Other Adjustments	459,914	382,666	77,248	20
Noncontrolling Interests	10,009,948	8,697,595	1,312,353	15
Total Equity	**386,572,320**	**373,579,580**	**12,992,740**	**3**

Analysis for any variation plus and minus (+/-) 20%:

- Other assets increased 27%: primarily because under IFRS 15, the contract assets and the incremental costs of obtaining contracts were generated, and under IFRS 9, non-listed stocks are converted from cost valuation to fair valuation.
- Other adjustments increased 20%: primarily due to exchange differences arising from the translation of the foreign operations.

Analysis of Parent-only Financial Position for the most recent 2 years

Unit: NT$'000

Item / Year	Dec 31, 2018	Dec 31, 2017	Variance (+/-) Amount	Variance (+/-) %
Current Assets	67,338,984	60,762,443	6,576,541	11
Property, Plant and Equipment	281,056,057	281,413,852	(357,795)	0
Intangible Assets	50,404,295	54,283,253	(3,878,958)	(7)
Other Assets	50,017,325	37,470,635	12,546,690	33
Total Assets	**448,816,661**	**433,930,183**	**14,886,478**	**3**
Current Liabilities	57,334,954	55,929,805	1,405,149	3
Noncurrent Liabilities	14,919,335	13,118,393	1,800,942	14
Total Liabilities	**72,254,289**	**69,048,198**	**3,206,091**	**5**
Common Stocks	77,574,465	77,574,465	-	-
Additional Paid-in Capital	171,136,764	169,466,883	1,669,881	1
Retained Earnings	127,391,229	117,457,971	9,933,258	8
Other Adjustments	459,914	382,666	77,248	20
Total Equity	**376,562,372**	**364,881,985**	**11,680,387**	**3**

Analysis for any variation plus and minus (+/-) 20%:

- Other assets increased 33%: primarily because under IFRS 15, the contract assets and the incremental costs of obtaining contracts were generated, and under IFRS 9, non-listed stocks are converted from cost valuation to fair valuation.
- Other adjustments increased 20%: primarily due to exchange differences arising from the translation of the foreign operations.

2. Financial Performance

Analysis of Consolidated Financial Performance for the most recent 2 years

Unit: NT$'000

Item / Year	2018	2017	Variance (+/-) Amount	Variance (+/-) %
Revenues	215,483,158	227,514,183	(12,031,025)	(5)
Gross Profit	75,937,701	80,676,700	(4,738,999)	(6)
Income from Operations	43,643,659	46,702,977	(3,059,318)	(7)
Non-Operating Income and Expenses	1,335,045	1,294,085	40,960	3
Income Before Income Tax	44,978,704	47,997,062	(3,018,358)	(6)
Net Income	36,456,171	40,042,601	(3,586,430)	(9)
Other Comprehensive Income (Loss), Net of Income Tax	(1,014,453)	(1,305,526)	291,073	22
Total Comprehensive Income	35,441,718	38,737,075	(3,295,357)	(9)
Net Income Attributable to:				
Stockholders of the Parent	35,501,622	38,873,905	(3,372,283)	(9)
Noncontrolling interests	954,549	1,168,696	(214,147)	(18)
Comprehensive Income Attributable to:				
Stockholders of the Parent	34,496,742	37,590,365	(3,093,623)	(8)
Noncontrolling interests	944,976	1,146,710	(201,734)	(18)

Analysis for any variation plus and minus (+/-) 20%:

- Other comprehensive income increase 22%: primarily due to the increases of remeasurements of defined benefit pension plans and exchange differences arising from the translation of foreign operations, offset by the decrease arising from the application of IFRS 9.

Analysis of Consolidated Financial Performance for the most recent 2 years

Unit: NT$'000

Item / Year	2018	2017	Variance (+/-) Amount	Variance (+/-) %
Revenues	185,331,699	196,985,774	(11,654,075)	(6)
Gross Profit	66,501,764	75,473,632	(8,971,868)	(12)
Income from Operations	40,365,914	44,145,737	(3,779,823)	(9)
Non-Operating Income and Expenses	3,151,064	2,158,739	992,325	46
Income Before Income Tax	43,516,978	46,304,476	(2,787,498)	(6)
Net Income	35,501,622	38,873,905	(3,372,283)	(9)
Other Comprehensive Income (Loss), Net of Income Tax	(1,004,880)	(1,283,540)	278,660	22
Total Comprehensive Income	34,496,742	37,590,365	(3,093,623)	(8)

Analysis for any variation plus and minus (+/-) 20%:

- Non-operating income and expenses increased 46%: primarily due to share of profits of associates and joint ventures accounted for using equity method, mainly arising from the difference between the accounting treatment on standalone basis and consolidated basis as a result of IFRS 15.
- Other comprehensive income increase 22%: primarily due to the increases of remeasurements of defined benefit pension plans and exchange differences arising from the translation of foreign operations, offset by the decrease arising from the application of IFRS 9.

3. Cash Flow

Analysis of Consolidated Cash Flows for the most recent 2 years

Unit: NT$'000

Item / Year	2018	2017	Variance (+/-) Amount	Variance (+/-) %
Cash & Cash Equivalents, Beginning of the Year	28,824,935	31,100,342	(2,275,407)	(7)
Net Cash Provided by Operating Activities	66,366,350	70,931,864	(4,565,514)	(6)
Net Cash Used in Investing Activities	(32,613,754)	(36,720,526)	4,106,772	11
Net Cash Used in Financing Activities	(35,035,350)	(36,607,843)	1,572,493	4
Effect of Exchange Rate on Cash and Cash Equivalents	102,599	121,098	(18,499)	(15)
Cash & Cash Equivalents, End of the Year	27,644,780	28,824,935	(1,180,155)	(4)

Analysis for any variation plus and minus (+/-) 20%: None.

Analysis of Parent-only Cash Flows for the most recent 2 years

Unit: NT$'000

Item / Year	2018	2017	Variance (+/-) Amount	Variance (+/-) %
Cash & Cash Equivalents, Beginning of the Year	19,744,416	24,871,430	(5,127,014)	(21)
Net Cash Provided by Operating Activities	63,569,967	67,731,138	(4,161,171)	(6)
Net Cash Used in Investing Activities	(29,423,044)	(34,527,050)	5,104,006	15
Net Cash Used in Financing Activities	(36,968,488)	(38,331,102)	1,362,614	4
Cash & Cash Equivalents, End of the Year	16,922,851	19,744,416	(2,821,565)	(14)

Analysis for any variation plus and minus (+/-) 20%: None.

Projected Consolidated Cash Flow for 2019

Unit: NT$'000

Cash & Cash Equivalents, Beginning of the Year	Projected Net Cash Flow from Operating Activities (Note)	Projected Total Cash Outflow (Note)	Projected Cash & Cash Equivalents, End of the Year	Expected Remedy Plans for Negative Balance of Cash and Cash Equivalents	
				Investment Plans	Financing Plans
27,644,780	64,205,949	65,771,869	26,078,860	-	-

Note: The above table is based on consolidated financials.

4. Major Capital Expenditures and Impact for the most recent year

4.1 Major Capital Expenditures and Source of Funding

Unit: NT$ billion

Actual or Planned Source of Capital	Actual or Planned Source of Capital	Actual or Planned Date of Completion	Actual or Expected Capital Expenditure	
			2018 (Actual)	2019 (Expected)
Domestic Fixed Communications (2018)	Internal Funded	December 2018	12.69	
Mobile Communications (2018)	Internal Funded	December 2018	10.66	
Internet (2018)	Internal Funded	December 2018	2.73	
International Fixed Communications (2018)	Internal Funded	December 2018	1.35	
Others (2018)	Internal Funded	December 2018	1.12	
Domestic Fixed Communications (2019)	Internal Funded	December 2019		13.61
Mobile Communications (2019)	Internal Funded	December 2019		7.63
Internet (2019)	Internal Funded	December 2019		3.15
International Fixed Communications (2019)	Internal Funded	December 2019		1.51
Others (2019)	Internal Funded	December 2019		3.09

Note: The above table is based on consolidated financials.

4.2 Expected Benefits

(1) Drive business development, with a focus on strengthening mobile broadband and fixed network broadband.

(2) Enhance overall service quality, with a focus on strengthening network quality of service and customer services.

(3) Strengthen overall business back-end support capabilities, with a focus on enhancing research technology and business expansion.

(4) Increase operational efficiency, with a focus on enhancing network maintenance optimization, efficient account management, enterprise digitization, etc.

5. Investment Policies and Key Reasons for Profit / Loss for the most recent year; Improvement Plan and Future Investment Plan in the coming year

The Company's investment policies are consistent to its operational policies and development strategies, as well as complementary to its overall business and strategic goals, in order to enhance its core competencies, to accelerate new business initiatives and new market opportunities leveraging core strengths, thus achieving the Company's long term vision.

In 2018, the Company has not invested into any entities with investment amount exceeding 5% of the Company's paid-in capital. Also in 2018, total 27 investees of the Company have achieved stable business operation with positive profitability, total 10 investees have incurred losses, of which 8 of these investees are primarily either early stage investment with relatively unstable operations, or investees in the process of restructuring. The other 4 investees have either recognized full impairment loss or in the process of liquidation and dissolution. The Company integrates its overall business with investments, in order to maximize the overall targets and performances of the investments. In addition, the Company conducts regular evaluation of the investment strategy and financial performances, and may decide on exit and liquidation process of the investments if necessary. For more details, please also see page 82, Chapter III, Section 9, "Comprehensive Shareholding Information Relating to Company, Directors, Management, and Companies Affiliated through Direct and Indirect Investment" and page 143, Chapter VII, Section 1.1, "Consolidated Operation Report of the Company and Affiliates".

6. Analysis of Risk Management for the most recent year and up to the Publication Date of this Annual Report

6.1 Cybersercurity Risk Management Framework, Policies, Detailed Management Plan and Cybersecurity Risk Analysis

(1) The Company's Risk Management Organization and Responsibilities

The Company risk management organization chart is listed below. In order to increase risk awareness, enhance risk management, the Company has established "Risk Management Committee", consisting of senior managers who are responsible for supervising risk management and control throughout the organization. In addition, the Audit Department conducts independent reviews of risk management, with regular reporting to the Audit Committee of the Board:

Organization	Scope of Responsibilities
Board of Directors (including Audit Committee and Strategy Committee)	● Outline risk management policies, framework, and culture ● Ensure risk management effectiveness and appropriate resource allocation
Senior Management (CEO, President, EVPs)	● Implement Board of Directors risk management policies ● Coordinate inter-departmental risk management interactivity and communication
Senior Officers of various Department within Headquarter (Corporate Planning Office as the Executive Secretary)	● Analyze risk management event execution results ● Assist and supervise risk management events within all branch offices ● Identify risk factors and recommend risk measures depending on circumstance changes ● Conduct performance assessment and coordination after any risk adjustment
Branch Offices	● Implement regular risk management events ● Conduct self-assessment of all risk management events

(2) Cybersecurity and Privacy Protection Risk Management Mechanisms

In order to ensure full security of the Company's Critical Infrastructure, or CI, and Critical Information Infrastructure, or CII, the Company references NIST Cybersecurity Framework, or CSF, as well as domestic and international standards and regulations (including Legislative Yuan's Cyber Security Management Act, Legal Department's Personal Information Protection Act, General Data Protection Regulation, or GDPR, BS10012, ISO27001, ISO27011, etc.) The Company established "Cybersecurity and Privacy Protection Risk Management Framework" as shown on below:

The Company's senior executive vice president of business serves as the Chief Information Security Officer, or CISO, and Data Protection Officer, or DPO, with Cyber Security Department as the designated unit, in order to align regulations with technology advancement for new business development, coordinate the overall corporate cybersecurity policy, enact and amend required security specifications, utilize equipment for centralized security monitor and defense, mitigate enterprise security risks, accelerate new business development, provide all customers secure and reliable digital ecosystem.

The Company Risk Management Committee tracks and manages cybersecurity and privacy protection risk control issues on monthly basis. When the risk is greater than the risk appetite, or where there is a major crisis, the Risk Management Committee Convener to report to the Audit Committee, and if necessary, report to the Board of Directors accordingly. There is no major cybersecurity breach or privacy data leakage resulting in penalties are found by the competent authorities in 2018.

(3) Cybersecurity and Privacy Protection Management

The Company evaluates security governance based on risk management orientation, development, formulates annual Key Security Measures and KPIs based on external trends (such as regulations, security threats, international standards, technology development trend, etc.) and internal risk assessment results (including internal and external audits, the Company SOC threats detected, crisis resolution and review, etc.), incorporates into all employees' performance assessments.

The Company reviews and adjusts the security strategy, polices, procedures regularly, and complies to internal and external audits. The Company is required to pass government administrative security and privacy protection check and obtain third parties certifications (ISO 27001 / ISO 27011 / BS10012 / CSA STAR Certification, etc.), in order to ensure more comprehensive security and privacy protection for all consumers. All key security implement measures are described below:

Chunghwa Telecom Cybersecurity and Privacy Protection

Stages	Identify	Protect	Detect	Respond	Improve
Key Security Measures	• Regulatory Compliance • Cybersecurity Policy and Procedures • Cybersecurity Roles and Responsibilities • Asset Management • Risk Management Strategy and Assessment • Supply Chain Management	• Critical Infrastructure Security • Network & System Security • Software / Application Development Security • Access Control Security • End-point Security • Operation & Management Security • Data Security • Personal Information Security	• Vulnerability Analysis and Patch Management • Multi-layer Protection • Intelligent SOC and Multi-vector Detection	• Incident Report and Response • Anomaly Analysis, Forensics and Decision-making • Recovery and Improvement Plan • Cyber Security Intelligence Sharing and Joint Defense Boosting	• Awareness Training • Cybersecurity and Personal Data Incident Drills • Internal and External Audits • Third Party Certification • Performance Evaluation • Continual Improvement

(4) Cybersecurity Risk Assessment

Possible operational cybersecurity and privacy risks in 2018, and countermeasures are as follows. Over the past many years, the Company continued to invest into valuable resources and manpower to uncover potential risk and adopt coping measures in advance, Therefore, no major cybersecurity breach or privacy data leakage resulting in penalties are found by the competent authorities in recent years.

Possible Risk & Impact	Countermeasures
The "Cyber Security Management Act" is approved by the Legislative Yuan in 2018, and it has come into force since Jan 1, 2019. According to the Act, providers of critical infrastructure are required to establish, amend and implement the maintenance plan of Cyber Security, and report the result of the implementation, with required audit by government authority.	In compliance to the implementation of "Cyber Security Management Act" and its related sub-laws, the Company establishes an overall standardized maintenance plan of Cyber Security and Critical Infrastructure Protection Plan. These two plans must comply with both domestic and international regulations, international standards, as well as the Company's cybersecurity protection strategy, policy and specification.
The European Union promulgated the General Data Protection Regulation, or GDPR, in May 2018. If the Company incurs any delays, the international business development maybe affected.	For EU's GDPR implementation, the Company has completed the gap analysis between the Company regulation and GDPR, has utilized the latest international standards (BS10012:2017), and has continued to improve the Company's privacy protection management system (such as notification terms, personal data inventory, privacy impact analysis, individual rights SOP optimization, etc.) For any potential GDPR related business in the future, all cybersecurity and privacy protection can be implemented in accordance to the Company's policy and specification.
Emerging business growth, hacking attacks continue to be more sophisticated, any security incident or privacy leakage will damage customer rights, while challenge the Company to potential penalties and financial losses.	To prevent increasing cybersecurity risks and threats, the Company has established CHT SOC, which is responsible for internal security surveillance and analysis, threats smart detection and intelligence, vulnerability analysis and patch management, anomaly analysis and forensics, quick incidents response etc., as well as multi-faceted in-depth defense, with simultaneous collaboration of national ISAC and international CERT organization for joint incident notification and defense responses, including phishing website, intrusion attacks; 7x24 incident report processing for clients since 2013.

Because information security insurance is a new emerging product in Taiwan, based on risk management, cost and benefit analysis, the Company has incorporated appropriate "information protection liability insurance" or "information and network error or negligence liability insurance".

6.2 Impact of Interest Rates, Foreign Exchange Rates, Inflation, and Mitigating Measures

(1) Impact on Company Profit and Loss

Items	2018 (NT$'000, %)
Interest Income, Net	179,293
Foreign Exchange Gains/(Loss)	37,348
Revenues	215,483,158
Income Before Income Tax	44,978,704
Interest Income, Net as % of Revenues	0.08%
Interest Income, Net as % of Income Before Tax	0.40%
Foreign Exchange Gains/(Loss) as % of Revenues	0.02%
Foreign Exchange Gains/(Loss) as % of Income Before Tax	0.08%

Note: The above table is based on consolidated financials.

(2) As of December 31, 2018, the parent company has not issued or borrowed any debt, but the subsidiaries have borrowed a total bank debt of NT$1.7 billion, therefore, interest rate fluctuations have minimal impact on the Company.

(3) In 2018, the Company primarily leverages forward exchange contract to reduce its exposure to foreign currency risk.

(4) The Company continues to closely monitor inflation rates, although in the short term, the Company does not expect any major impact from the inflation rate.

6.3 Investment Policy for High-risk/High-leverage Financial Instruments, Loans, Debt Guarantees and Derivatives; Key Reasons for Related Gains / Losses, and Mitigating Measures

In 2018, the Company has not provided any loans of funding to others. For details of the Company and subsidiary endorsements or guarantees to others, please refer to page 167, Chapter VIII, Section 8, "Consolidated Financial Statements and Independent Auditors' Report": Endorsements / Guarantees Provided. The Company is conservative and disciplined in reviewing all derivative financial instruments, especially avoiding large risk instruments. The Company has governing financial policy, hedging policy, financial instrument trading authorization, key operating terms, standard operating procedures, etc.

6.4 Future Research & Development Plan and Projected Budget

The future development plan consists of 10 items as shown in the following table. In 2019, the research and development expenses are estimated to be NT$3.258 billion.

R&D Plan	Plan Description
1. Wireless Communications Technology	(1) The R&D of Mobile Access Network and Wireless Broadband Access Technologies (2) The R&D of 5G Mobile Core Network Technologies (3) The R&D of Mobile Network Operation and Management Technologies (4) The R&D of 5G Mobile Access Technologies (5) The R&D of National Time and Frequency Standard Technologies

R&D Plan	Plan Description
2. Broadband Networks Technology	(1) The R&D of NGN/IMS Communication and Convergence Technologies (2) The R&D of High-speed and Fiber-based Transmission and Access Network Technologies (3) The R&D of SDN/NFV-based Broadband Network and Service Technologies (4) The R&D of Network Traffic Monitoring and IPv6 Technologies (5) The R&D of Outside Plant and Optical Distribution Network Engineering Technologies (6) The R&D of Broadband Subscriber Loop Testing and Management Technologies
3. Network Management Technology	(1) The R&D of Service & Resource Fulfillment Operation System (2) The R&D of AI and Network Management Data Analysis Applications (3) The R&D of Broadband & Software-Defined Network Operation Support System (4) The R&D of Customer Centric Service Assurance Management System
4. Cloud Computing Technology	(1) The R&D of Cloud Infrastructure Technologies (2) The R&D of DevOps and Cloud Native Technologies (3) The R&D of Cloud Business and Operations Supporting Technologies
5. Intelligent Business Technology	(1) The Technology of Project Management (2) The R&D of Intelligent Order Management System (3) The R&D of Intelligent Billing Management System (4) The R&D of Intelligent Market Management System (5) The R&D of Enterprise Customer Business Support System (6) Software Development Technologies (7) Software Quality Assurance Technologies (8) System Structure Technologies
6. Information & Communication Security Technology	(1) The R&D of PKI Service and Network Security Technologies (2) The R&D of ICS Core Technologies and Devices (3) The R&D of System and Content Security Technologies (4) The R&D of Defense and Audit Technologies
7. Artificial Intelligence and Big Data Technology	(1) The R&D of Big Data Analytics & Business Intelligence Technologies (2) The R&D of Big Data Computing & Insight Technologies (3) The R&D of Perception & Cognition Technologies of Artificial Intelligence (4) The R&D of Artificial Intelligence Deep Learning Platform
8. IoT Technology	(1) The R&D of Intelligent Energy-saving Technologies (2) The R&D of Smart Home and Smart City Services Technology (3) The R&D of Fleet Management Service (4) The R&D of IoT Smart Platform and Traffic Analysis Technology (5) The R&D of Advanced Traffic Management Technology (6) The R&D of Vehicle Terminal Technology (7) The R&D of Health Service and Application Technologies
9. Convergence Service Technology	(1) Communication Value-added Technology and Application R&D (2) Convergent Content Service Technology and Application R&D (3) Convergence Video Technologies and Service R&D (4) E-commerce Technology and Application R&D (5) Mobile Payment Technology and Application R&D (6) AI-based Semantic Cloud Platform Technology and Application R&D
10. Business Customer Solutions Technology	(1) Enterprise Intelligent Security Application Technology R&D (2) Business ICT Solutions Research (North Region) (3) Business ICT Solutions Research (South Region) (4) Intelligent Video Surveillance Solution

6.5 Impact from Domestic and International Material Regulatory Changes and Development, Mitigating Measures

(1) Revision of Digital Convergence Regulations

On April 5, 2017, the NCC drafted the "Telecommunications Management Act" and the "Digital Communications Act" and submitted them to the Executive Yuan for review. On November 16, 2017, the Executive Yuan approved the drafts and submitted them to the Legislative Yuan. The Transportation Committee of the Legislative Yuan completed the review of the drafts of the "Digital Communications Act" and the "Telecommunications Management Act" on May 24, 2018 and March 14, 2019 respectively, but reserved four articles within the draft of the "Telecommunications Management Act" for further consultation among political parties. The two drafts might go through the entire Three Reading procedures in the 7th session of the 9th Legislative term. The two drafts cover the following key areas: (i) to reduce the entry barrier to the telecommunications markets by changing the original concession / approval system to the registration system; (ii) to make sure that the general market players shall have only ordinary obligations to the minimum necessary extent, provided that certain players possessing a dominant market position as published by the competent authority will be subject to asymmetrical and more stringent control measures; (iii) open up domestic roaming, bandwidth frequency transferring, leasing, lending or sharing mechanisms; (iv) to scale down the range of assistance for telecommunications construction under the existing Telecommunications Act; and (v) to introduce the internet governance principle whereby self-discipline and public-private partnership are to be the main governance mechanism for the internet.

Potential Impact: these new draft laws will reduce the entry barrier to the telecommunications market, which could increase the market competition. Also, it is likely that the Company will be regarded by the competent authority as possessing a dominant market position in specific telecommunication service markets and may therefore be subject to special obligations involving a higher level of control by the authority. In addition, potential unfair competition issues may arise from the opening of domestic roaming, and the flexible usage of the bandwidth frequency. Furthermore, in view of the scale-down range of assistance for telecommunications construction under the existing Telecommunications Act, the difficulty in developing telecommunications networks infrastructure maybe greatly increased.

Mitigating Measures: closely monitor the progress of the bills, when the drafts complete the whole legislative procedures, the Company will operate and comply with the laws.

(2) 3G Mobile Communication License Expiration

In accordance to Regulations for Administration of the Third Generation Mobile Communications Business Article 48-1, 3G license was only valid to December 31, 2018.

Potential Impact: the Company has successfully migrated 3G customers to 4G service, in collaborating with NCC's "Zero Impact, None Disputes" policy.

Mitigating Measures: ensure customer rights and benefits, actively conduct mobile broadband network construction, continue to enhance service quality in providing better mobile experiences for all 4G customers.

(3) NCC Tariff Control and Price Cap Regulation

On March 8, 2017, NCC announced a new plan for tariff reductions effective from April 1, 2017 to

March 31, 2020. The reduction plan applies to the monthly fees for fixed-line broadband access services (excluding FTTH, FTTB, ADSL, and the services with both downlink and uplink speeds over 100 Mbps), which was subject to a reduction by ∆CPI—3.19%; and to the wholesale tariffs for IP peering and domestic leased line services, which was subject to a reduction by ∆CPI—5.1749%. In addition, the set constant to be applied to the tariff adjustment for other Type 1 telecommunication services is the annual growth rate of the consumer price index (∆CPI) in Taiwan, so no increase in tariffs is allowed.

Potential Impact: reduced revenue generation from 3 consecutive years of tariff reduction.

Mitigating Measures: actively develop innovative value-added services and capture potential market opportunities to minimize revenue impact from tariff control.

(4) NCC Mobile Interconnection Fee Reduction

On November 1, 2017, NCC amended the articles 14 and 17 of the Regulations Governing Network Interconnection among Telecommunications Enterprises. Then on November 8, 2017, NCC announced "Upper Limit on Access Charge for the Third Generation Mobile Telecommunications Operators and Mobile Broadband Operators.", which stated that commencing November 1, 2017, excluding the telecommunication fees for international incoming calls connecting to mobile network (including interconnection fees), all other tariff for the mobile interconnection fees should be gradually reduced from NT$1.15 per minute to NT$0.571 per minute by year 2020. These reductions are effective starting January 1, 2017 until the next public announcement from the NCC.

Potential Impact: mobile interconnection fee reduction from 2017 to 2020 will reduce the Company interconnection revenue and cost, and may increase the pricing competition within the mobile business market.

Mitigating Measures: operate within the limit of the regulatory framework.

(5) NCC Fixed Interconnection Fee Reduction

On September 26, 2018, NCC approved our amended fixed network interconnection fees, which stated that from January 1, 2019 to December 31, 2022, local telephone and long-distance telephone interconnection fees are unchanged, but the interconnection fees from the mobile to local telephone should be reduced from NT$0.4851 per minute to NT$0.4383 per minute during peak hours; while reduced from NT$0.2531 per minute to NT$0.2148 per minute during off-peak hours.

Potential Impact: the Company has leading local telephone market share, any fixed network interconnection fee reduction would reduce the Company fixed network interconnection revenue stream.

Mitigating Measures: operate within the limit of the regulatory framework.

(6) NCC Approved MOD Platform to Package Channels

On January 23, 2019, NCC approved our amended MOD Service business rule, which stated that the Company shall maintain MOD open platform without any interferences to third party vendors in terms of channel content planning, content packaging, marketing, rate arrangement. Under such circumstances, the Company is allowed to "package channels" for fulfilling consumers' diverse demand. In addition, in order to protect the consumer rights, NCC stipulates that all channel operators must sign necessary contracts with consumers, and disclose any potential channel modification or removal with one-month advanced notice.

Potential Impact: the right to "package channels" shall drive further competitiveness, enable up-stream and down-stream fair competition and innovation.

Mitigating Measures: the Company will actively communicate with channel operators to promote reasonable revenue sharing mechanisms for diverse packaged channels, drive the proper entrance and exit of packaged channels, improve packaged channels composition, encourage more channels to join MOD platform in creating high quality media environment. As for the protection of consumer rights and benefits, the Company closely follows the requirements of the authority.

6.6 Impact from Technology Evolution and Industry Development, Mitigating Measures

Technology evolution and innovative applications are challenges and opportunities for the telecommunication industry. The Company will continue to focus on developing cutting-edge technology through continued input of R&D resources in order to expand its innovative offerings and revenue generation, as well as to maximize shareholder value.

(1) Fiber Access and Transmission Network Technology

Due to increasing demand from digital convergence and higher bandwidth services for audio and video, and in order to ensure long-term competitive advantage in the broadband market, the Company continued to invest into fiber access network construction in 2018, primarily focusing in residential and commercial regions with 500Mbps and 1Gbps demand. The Company intends to provide residential home users with up to 1Gbps, and enterprise users with over 1Gbps broadband access services with its fiber network coverage. In addition, the Company is actively deploying FTTx residential home Wi-Fi, integrated with multi-screen and a cloud convergence services (including MOD, Hami+, hichannel), KKBOX, KOD, e-Home, etc. as value-added services, in order to differentiate FTTx offerings and to increase broadband VAS revenue and profitability.

Due to 4G LTE base station expansion demand in 2018, and to attain market opportunities of enterprise client for 4G LTE backhaul circuit and ultra-high-speed data services, as well as to relieve metro area IDC bottle-neck, the Company established Packet Transport Network, or PTN, system advancement to 100Gbps, in order to maintain its competitive advantage for ultra-high-speed data services. In addition, the Company continues to expand international undersea cable bandwidth for domestic Taiwan, Asia Pacific, Taiwan-USA, Taiwan-Europe, as well as to invest and construct New Cross Pacific Cable, or NCP, and Southeast Japan Cable 2, or SJC2, in order to enhance its competitive advantage and growth potential in international communications for higher network service quality and increased revenue stream.

Commencing 2019, in fulfilling the market demand for video and smart homes, in responding to cable operators broadband competition for 500Mbps ~ 1Gbps, and in complying to government policy of "2020: 1Gbps coverage 90%; 2025: 2Gbps coverage 90%", the Company continued to expand its broadband speed, with advanced equipment upgrade, fiber coverage expansion, new technology introduction of G.fast, XGS-PON and NG-PON2, etc., in order to solidify its broadband competitive advantage, to increase its leading position compared to the cable operators, and to enhance broadband service revenue and profitability. In addition, in fulfilling the increasing traffic demands from home and enterprise users, the Company Optical Transport Network, or OTN, increased from 100Gbps per wavelength to 200Gbps per wavelength, with potential upgrade to 400Gbps per wavelength in the future.

(2) SDN/NFV Network Technology

Network technology is evolving toward open architecture, programmability, and virtualization, of which Software-Defined Networking, or SDN, and Network Function Virtualization, or NFV, are becoming the development focus for telecommunication service providers.

The Company has successfully completed the research and development of ICT Infra, with comprehensive SDN management and control, Software Defined Data Center, or SDDC, MANagement and Organization, or MANO, Orchestrator, and cloud network compatible technology. ICT Infra is fully applicable to any enterprise network, and has been first implemented throughout the Company headquarter campus in August 2018. Therefore, the Company became the first domestic telecommunication service provider capable of large-scale SDN network and SDDC, of which over 90% SDN equipment were supplied by domestic branded network and telecommunication providers. This is a strong testament that domestic SDN equipment technology is becoming more mature and advanced. In the future, the Company plans to implement SDN and cloud-network compatible architecture into 5G mobile network, fixed communication network, big data network, as well as AI-driven ICT services, enterprise network, academic campus network, IoT, etc. by collaborating with other domestic vendors.

(3) Next Generation Wireless Technology

The Company has continued advanced research program for wireless technology over the past years as the technology evolves dynamically, including active participation in 4G/5G standard formulation and research such as 3GPP, NGMN, and launching 4G LTE technology advancement with global introduction of LTE-WLAN Aggregation, or LWA, 4G+Wi-Fi services, Voice over LTE, or VoLTE, exclusive 5 Carrier Aggregation, or 5CA, self-developed IoT platform for NB-IoT and CatM1 services, etc.

In June 2019, 3GPP, the international standard organization plans to complete 5G Standard Phase I, and is expected to complete the full standard by end of 2020. In January 2018, the Company formed pilot team for "Taiwan 5G Industry Development Alliance", consisting of about 45 domestic and international enterprises, government entities, academia, etc., in building an end-to-end 5G industry chain for innovative applications. The Company aims to complete 5G commercialization in Taiwan by 2020 and maintain its leading position in the telecommunication sector.

(4) IPTV Technology

Due to the market acceptance of OTT and connected TV, next generation IPTV technology converges both open and closed development, and MOD platform is converging from closed architecture to semi-open architecture, which tend to enhance multi-screen and a cloud capability, improve partnership with branded equipment providers and TV manufacturers, with more user-friendly interfaces, customized film recommendation for users leveraging big data analysis, highly integrated multi-screen devices for the smart home hub usage, with ubiquitous viewing experiences and full-scale convergence services. In addition, in order to maximize the broadband value, MOD/OTT service platform will provide high-quality digital content, with high definition (4K) on-demand video, live video, interactive video services, as well as planned 8K super high definition viewing quality for broadcasting the upcoming 2020 Tokyo Olympic. Such innovative services are possible by leveraging the Company’s core competency while partnering with domestic film developers and software developers.

The Company also endeavors to improve its MOD business by facilitating the overall TV apps with existing Internet technical advantage, such as incorporating OTT network video, live concert, social network sharing, cloud gaming, video recommendation, advertising, multi-screen interaction, etc. The Company aims to develop open architecture with standardized platform for its IPTV system in the future. In addition, the Company plans to significantly enhance total user experiences by creating and integrating multi-screen interaction with other branded partners and for multiple devices such as table, smart phones, OTT box, etc. Commencing 2018, the Company has positioned itself as the smart home hub for high standard media entertainment, with security protocol (automation, security, energy management) and health management services, as well as integrated MOD and broadband services, to increase network speed and pricing for last-mile access and revenue generation.

(5) Cloud Computing Technology

Currently, there are over 3,000 enterprise and consumer clients using the Company cloud services. In 2018, the Company has also completed SSD, GPU computing, mixed cloud, SDDC, etc., in order to provide comprehensive public cloud, private cloud and SDDC for various entities such as government, academia, logistics, financial services, manufacturers, etc. The Company endeavors to continue innovation, develop ICT with cloud supply chain for other government entities, overseas markets, and other emerging market opportunities. The Company has participated in Cloud Service Selection sponsored by Industrial Development Bureau of MOEA in 2018, and has been reviewed extensively in terms of reliability, security, user-friendliness, etc. The Company was award #1 winner in the "Cloud Virtual Resource Category", which is the fourth year that the Company has retained its #1 title, and the primary preferred partner to the government. In addition, in 2018, the Company has obtained 4 international security certifications, including ISO 27001, ISO 27011, ISO 27017, ISO 27018, and plans to initiate GDPR data protection in 2019.

For enterprise and government cloud market development, the Company focused on mixed virtualization in 2018, with flexible virtual integration and professional team in order to enable government entities, academia, ICT industry and SME in building the relevant service platforms and in fulfilling their demand for cloud server computing and storage. In 2019, the Company plans to focus on AI, multi-cloud platform integration, applications from various partners in order to develop diverse cloud services, including public cloud, SDDC-enabled private cloud for data access via cloud. The Company has aggregated significant proven track records in ICT and cloud computing, with positive recognition and trust from customers in terms of its service and technology innovation. The Company will continue to integrate cloud computing, 5G, AI, IoT, OTT, security, big data, etc., in order to develop high-quality digital life for all users, and to gain the most reputable and trusted branding.

(6) Internet of Things, IoT Technology

The Company has focused on IoT development for over 10 years, with the deployment of IoT Smart Platform on December 20, 2017. This is a leading IoT ecosystem with capabilities in the areas of cloud, information security, big data, AI and AR, all of which are internally developed by the Company. In addition, the Company actively teamed up with cross-functional industry partners, in order to develop smart home/architecture, smart energy, smart transportation, smart city, and smart care, onto the IoT ecosystem for the digital generation.

Currently, the Company has been ready for providing full IoT services depending on customer demand and commercial application. The Company has also developed 4 different pricing plans in accordance to NB-IoT and Cat-M1 transmission requirements in order to fulfill different demands.

In addition, the Company proposed a smart city

IoT joint platform development plan in accordance to the government "Asia-Silicon Valley Development Agency, or ASVDA", and established IoT platform for sewage water management within the four primary industrial parks in Taoyuan. The Company has also participated in various smart city related development, including smart card, mobile payment, intelligent video surveillance service, smart energy-saving (including smart meter), smart home/architecture, smart transportation, smart care, etc., in order to further accelerate the IoT development within Taiwan. Furthermore, the Company has strategic development for 5G, IoT and smart architecture/community, with fixed broadband and MOD services. Commencing 2019, the Company plans to sponsor annual smart architecture/builder conference, with "CHT-inside" as joint product alliance for smart life application, in order to create win-win opportunities for all parties including real estate purchaser, architecture/builder, and the Company.

(7) Artificial Intelligence, AI Technology

AI is the simulation of human intelligence processes by machines, especially computer systems. The Company has focused on AI-related initiatives, including 5 key applications of smart channel, speech recognition, smart security, smart home, and smart transportation, as well as GPU deep-learning platform. In October 2017, the Company has completed the AI Laboratory platform, providing services such as voice recognition, semantic interpretation, image recognition, smart automated voice response system, chatbot, facial recognition, network traffic detection, smart transportation, etc., in order create differentiated value and to increase competitive advantages. In December 2018, the Company has deployed AI-enabled computing for hicloud public cloud, in order to continue innovative cloud applications and to enhance better services. In addition, on March 2019, the Company launched chatbot, AI semantic cloud service, combined with mobile signal, image big data on the cloud, and IoT technology, in providing travel time estimation, traffic flow analysis, smart city app, and in generating emerging business revenues.

(8) Industry Changes

Following the development of IoT, AI-enabled applications such as smart city, smart home, smart transportation are gaining more popularity in people's daily lives, which are also driving the innovative application and services for the overall telecommunication, including terminal devices, networking technology and integrated offerings.

In 2018, IoT, Blockchain, VR/AR, AI are gaining significant momentum, as well as 5G commercialization, robotics application, AI-driven smart homes, Internet of Vehicles, or IoV are becoming new focuses. In the future, smart technology, smart life, AI will drive the growth for next generation ICT. IoT and related services will drive diverse and cross-domain demand, and will thus drive the next generation ICT application toward cross-domain and intelligent business model for innovative development.

In reviewing the overall telecommunication sector development, mobile communication shifting toward IoT application, security AI, big data, 3D sensing, smart-phones, wearable devices, 5G commercialization, mobile payment, IoV and IoT application, are the ten key trends for the future. The Company will continue building the most powerful digital convergence platform for telecommunication, information and media, etc., in order to establish full-scale telecommunication ecosystem with the maximum value proposition.

As the leading operator in Taiwan telecommunication sector, Chunghwa Telecom has in-depth business operation and large customer base, and provides services closely related to customer's daily life. In order to deliver better digital life-style and financial services in fulfilling the dynamic consumption changes, Chunghwa Telecom is actively laying the foundation of internet banking, with brand new financial services platform for more diverse and innovative financial and digital life-style applications.

On October 3, 2018, Chunghwa Telecom announced that Mega International Commercial Bank Co., Ltd., Shin Kong Financial Holding, Pxmart Co Ltd. and Chunghwa Telecom have jointly established a preparatory office as 4 key strategic shareholders. The purpose is to integrate the Company big data, IT security, financial technology and talent resources in order to better enable big data-driven financial services and to expand the Company's overall business scope. In the future, the Company and the strategic partners plan to create an innovative financial services platform, with more diverse digital life applications, in order to capture the growing digital economy opportunities.

(9) Information Security Risk Assessment

For information security risk assessment, please refer to Section 6.1 "Information Security Risk Management Organization Chart, Policies, Detailed Management Plan and Risk Analysis" for disclosures of information security, risk management architecture, information security policy and management.

6.7 Impact of Corporate Image Changes on Crisis Management, Mitigating Measures

A. The Company's well-respected corporate image has not changed in the most recent year.

B. The Company has been a well-known, reliable and trusted household brand due to its nationwide infrastructure and value services, strict regulatory compliance, highest corporate governance standards, etc. In 2018, the Company efforts have been recognized and endorsed by many international and domestic awards, in terms of trust, services, innovation, CSR, etc.

6.8 Expected Benefits and Risks from Mergers, Mitigating Measures

(1) Expected Benefits

The Company plans to focus on strategic investments that are complementary to its business and strategic goals, in order to expand its business scope, increase sustainable growth and profitability.

(2) Potential Risks

The Company may not realize the benefits from its investments, due to lack of information or inaccurate information, thus adversely affect its business and financial performance.

(3) Mitigating Measures

A. Prevent lack of information or inaccurate information for investment evaluation

- Establish detailed evaluation SOP, with necessary reviews and revisions depending on the actual outcome.
- For investment due diligence and valuation, the Company may engage professional legal counsel, certified public accountant, and investment bankers in order to enhance the overall evaluation process.

B. Minimize investment related material under-performance

- Assist investment subsidiaries in establishing risk management system, conduct periodic analysis of the subsidiaries' operational performance and risk factors, in order to better manage the subsidiaries' achievements.
- Conduct periodic review of the investment subsidiaries' actual performances against the original projection in order to better supervise and formulate possible contingency plans.
- Establish acceptable business coordination practices between the Company and its affiliates, in order to maximize group synergies and improve the performances of investment subsidiaries.

6.9 Expected Benefits and Risks from Plant Facility Expansion, Mitigating Measures

Not applicable as the Company is not a manufacturer.

6.10 Concentration Risks from Supplying and Sourcing, Mitigating Measures

For consumers who purchase terminal devices such as mobile handsets, tablets, etc., if the pricing or other factors of these devices do not necessarily fulfill the consumer expectation, then the Company may incur inventory risks. The mitigating measures are as follows:

(1) The Company procures terminal devices according to the contracts and actual orders are placed in batches depending on pricing, sales status and inventory level. Any unpaid balance is considered as cancellation with automatic contract termination, thus effectively control mobile handset inventory.

(2) Inventory management: consistently track product sales and inventory turnover, with periodic reports of sourcing/sales/inventory status.

(3) Pricing adjustment: effective pricing control based on sales management policy, current market demand, supply situation, as well as competitive status.

(4) Form business alliance to increase effective sales channel and promotion: collaborate with vendors of other domains in order to increase revenue stream.

6.11 Impacts and Risks from Significant Changes in Shareholdings of Directors and Major Shareholders with greater than 10% Shareholding, Mitigating Measures

None.

6.12 Impacts and Risks from Changes in Management Control, Mitigating Measures

None.

6.13 Significant Lawsuits and Material Non-Litigious Matters

None.

6.14 Other Major Risks and Mitigating Measures

In 2018, Taiwan has experienced Hualien Earthquake on February 6, heavy rain on June 13 and September 9, Typhoon Maria and Typhoon Mangkhut, as well as tropical low-pressure flood on August 23. During these disaster periods, the Company formed emergency response teams with appropriate human and material resources, in order to conduct emergency repair and support, as well as to ensure speedy recovery of normal telecommunication services for all customers.

Potential impacts from and mitigating measures for natural disasters such as earthquake, typhoon, heavy rain, etc.:

(1) Potential Risks

Taiwan is susceptible to natural disasters, which could potentially damage or interrupt the Company telecommunication and network services, and thus have negative effect on its overall operations.

(2) Mitigating Measures

A. "Disaster Emergency Response and Management Plan"

The Company has completed "Disaster Emergency Response and Management Plan", in order to specify disaster prevention organization, responsibilities, resource preparation and dispatch, emergency tasks and SOPs, as the basis for action for all units within the Company, in order to restore basic telecommunication services, provide emergency connection, and minimize disruption time, as promptly as possible.

B. Fixed Communication

In order to limit the disaster damage, the Company has enhanced multi-routing repeater transmission for remote regions, wireless routing backup, power capacity backup, international submarine cable system backup, etc. In addition, the Company conducts annual drills of network and equipment dispatch and repair, in order to increase disaster preparedness and decrease potential losses caused by disasters.

C. Mobile Communication

If natural disasters cause mobile communication interruption, the Company has general and heavy-duty microwave and satellite (can be hand carried or carried by helicopters) systems serving as transmission base stations. Depending on the severity of the disasters, the Company can deploy these emergency mobile base stations to re-establish communication services within short period of time. In addition, the Company has significantly enhanced base station system with duplicate radio wave coverage, around key high-way infrastructures within Taiwan. Furthermore, the Company periodically conducts disaster prevention drills, in order to ensure mobile communication and network operation stability and reliability.

The Company has established "Emergency Response SMS System", which can distribute emergency alerts to designated areas, in order to prevent people entering and assist people evacuating out of the disaster areas. This system has been adopted by Directorate General of Highways (MOTC) for the Suhua Highway, and has received high commends from various government entities (such as City Government, Water Department, Taiwan Power, and Fire Department) and the public.

D. Wireless Communication (Microwave System)

Currently, there are multiple optical circuits among Taiwan main island, Jinmen county, and Matsu island, with microwave as backup system, in order to provide high quality telecommunication services.

For Taiwan main island and Jinmen county, there are 9-channels DS3 microwave backup systems, primarily serving as transmission backup, which can be automatically activated if the undersea cables malfunction, in order to ensure mobile communication quality. In addition, there are mini satellite stations in Jinmen county, which can be activated as emergency system for 2T1 voice circuits, if both the undersea cables and microwave systems malfunction.

For Taiwan main island and Matsu island, there is 5-channels STM-1 digital microwave system, primarily serving as transmission backup, of which 1-channel STM-1 is already employed for daily transmission use with real-time surveillance, in order to ensure system reliability. In addition, there are mini satellite stations in Matsu island, which can be activated as emergency system for 4T1 voice circuits, if both the submarine cables and microwave systems malfunction. Telecommunication service stability, reliability and quality are essential for Taiwan main island to connect to other islands of Taiwan. Aside from Jinmen county and Matsu island, the Company is also enhancing other islands with microwave routing and backup system, for example, the Company has installed external bandwidth of 5,900, 1,395, 1,395Mbps for Small Liuqiu, Lanyu, and Green islands respectively in order to fulfill the telecommunication demand.

E. Data Communication

The Company HiNet services employ multiple routers as highly reliable network backup mechanisms, with real-time surveillance and traffic flow optimization. For international routing, the Company employs multiple distributed submarine cables in order to avoid single-point failure. In addition, the Company collaborates closely with other international providers in order to significantly ensure the international network quality.

7. Others

None.

7 Special Disclosures

1. Affiliated Companies in 2018
2. Private Placement Securities in the most recent year and up to the Publication Date of this Annual Report
3. The Company's Shares Held or Disposed by Subsidiaries in the most recent year and up to the Publication Date of this Annual Report
4. Material Impact, pursuant to Article 36-3-2 of the Securities and Exchange Act, on Shareholders' Equity or Share Price in the most recent year and up to the Publication Date of this Annual Report
5. Other Supplementary Information

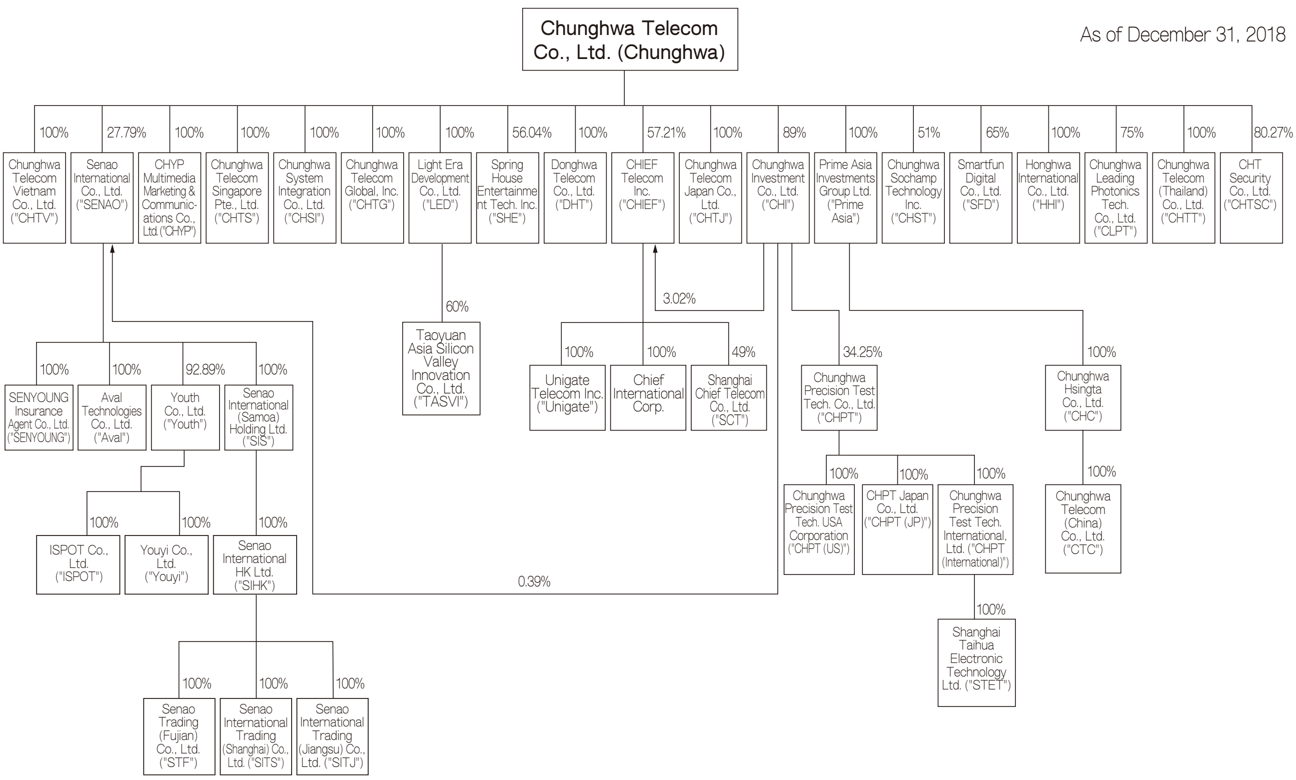
Special Disclosures

1. Affiliated Companies in 2018

1.1 Consolidated Operation Report of the Company and Affiliates

(1) Organization Structure

As of December 31, 2018



(2) Affiliates Profiles

As of December 31, 2018

Affiliate Name	Date of Incorporation	Address	Paid-in Capital	Primary Business Operation
Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia")	01/13/2006	Tortola, British Virgin Islands	USD12,996,000	Investment
Chunghwa Hsingta Co., Ltd. ("CHC")	12/08/2010	Room 2702-03, CC Wu Building, 302-8 Hennessy Road, Wanchai, Hong Kong	USD12,663,000	Investment
Chunghwa Telecom (China) Co., Ltd. ("CTC")	03/28/2011	Room B-2, 5F, Yinglong Mansion, No. 1358, Yan'an West Road, Changning, Shanghai, China	RMB39,376,000	Integrated information and communication solution services for enterprise clients, and intelligent energy network service
CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	01/18/2007	9F., No. 89-1, Sec. 4, Xinyi Rd., Da'an Dist., Taipei 106, Taiwan (R.O.C.)	NT$150,000,000	Digital information supply services and advertisement services
Donghwa Telecom Co., Ltd. ("DHT")	08/18/2004	Unit A, 7/F., Tower A, Billion Centre, No. 1 Wang Kwong Road, Kowloon Bay, Kowloon, Hong Kong	HKD402,590,000	International private leased circuit, IP VPN service, and IP transit services

Affiliate Name	Date of Incorporation	Address	Paid-in Capital	Primary Business Operation
Chunghwa Telecom Global, Inc. ("CHTG")	03/14/2002	2107 N. 1st St. Ste. 580, San Jose, CA 95131, USA	USD6,000,000	International private leased circuit, internet services, and transit services
Chunghwa System Integration Co., Ltd. ("CHSI")	05/15/2002	No. 2-1, Aly. 8, Ln. 85, Sec. 3, Muzha Rd., Wenshan Dist., Taipei City 116, Taiwan (R.O.C.)	NT$600,000,000	Providing system integration services and telecommunications equipment
Light Era Development Co., Ltd. ("LED")	02/12/2008	1F., No. 89-1, Sec. 4, Xinyi Rd., Da'an Dist., Taipei City 106, Taiwan (R.O.C.)	NT$3,000,000,000	Planning and development of real estate and intelligent buildings, and property management
Taoyuan Asia Silicon Valley Innovation Co., Ltd. ("TASVI")	03/28/2018	3F. - 8, No. 286, Sec. 1, Gaotiezhanqian W. Rd., Zhongli Dist., Taoyuan City 320, Taiwan (R.O.C.)	NT$12,500,000	Development of real estate
Chunghwa Telecom Singapore Pte., Ltd. ("CHTS")	07/09/2008	331 North Bridge Road, #03-05, Odeon Towers Singapore 188720	SGD26,382,000	International private leased circuit, IP VPN service, and IP transit services
Chunghwa Telecom Japan Co., Ltd. ("CHTJ")	09/22/2008	Level 5, Asagawa Building 2-1-17 Shiba Daimon, Minato-Ku, Tokyo 105-0012 Japan	JPY50,000,000	International private leased circuit, IP VPN service, and IP transit services
Chunghwa Telecom Vietnam Co., Ltd. ("CHTV")	05/31/2011	Room 703, 7th Floor, 3D VN, Duy Tan St., Dich Vong Hau Ward, Cau Giay Dist., Hanoi City, Vietnam	VND 104,137,000,000	Intelligent energy network saving solutions, international circuit, and ICT services
Honghwa International Co., Ltd. ("HHI")	01/28/2013	8F., No.88, Sec. 4, Xinyi Rd., Da'an Dist., Taipei City 106, Taiwan (R.O.C.)	NT$180,000,000	Telecommunications engineering, sales agent of mobile phone plan, application and other business services
Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT")	03/03/2017	65/131 16th Floor Chamnan Phenjati Business Centre, Rama 9 Rd., Huay Kwang Dist., Bangkok 10320 Thailand	THB 100,000,000	International private leased circuit, IP VPN service, ICT and cloud VAS services
Chunghwa Investment Co., Ltd. ("CHI")	05/03/2002	6F., No. 88, Sec. 4, Xinyi Rd., Da'an Dist., Taipei City 106, Taiwan (R.O.C.)	NT$765,000,000	Investment
Chunghwa Precision Test Tech. Co., Ltd. ("CHPT")	08/26/2005	No. 15, Gongye 3rd Rd., Pingzhen Dist., Taoyuan City 324, Taiwan (R.O.C.)	NT$327,890,000	Production and sale of semiconductor testing components and printed circuit board
Chunghwa Precision Test Tech. USA Corporation ("CHPT (US)")	07/27/2010	3120 De La Cruz Blvd., Suite 110, Santa Clara, CA, 95054, U.S.A	USD4,000	Design and after-sale services of semiconductor testing components and printed circuit board
CHPT Japan Co., Ltd. ("CHPT (JP)")	01/15/2013	Asakawa Building 5th Floor, 2-1-17 Shiba Daimon, Minato-Ku, Tokyo, Japan	JPY6,000,000	Related services of electronic parts, machinery processed products and printed circuit board
Chunghwa Precision Test Tech. International, Ltd. ("CHPT (International)")	07/31/2013	NovaSage Chambers, P.O. Box 3018, Level 2, CCCS Building, Beach Road, Apia SAMOA	USD1,700,000	Wholesale and retail of electronic materials, and investment
Shanghai Taihua Electronic Technology Ltd. ("STET")	11/25/2013	Room 302, Building 2 3F, No. 199, Le Yuan Road, Pudong New Area, Shanghai, China	USD1,600,000	Design of printed circuit board and related consultation service

Affiliate Name	Date of Incorporation	Address	Paid-in Capital	Primary Business Operation
CHT Security Co., Ltd. ("CHTSC")	12/14/2017	8F., No. 88, Sec. 4, Xinyi Rd., Da'an Dist.,Taipei 106, Taiwan (R.O.C.)	NT$299,000,000	Computing equipment installation, wholesale of computing and business machinery equipment and software, management consulting services, data processing services, digital information supply services and internet identify services
Chunghwa Leading Photonics Tech. Co., Ltd. ("CLPT")	07/28/2016	No. 6, Ziqiang 7th Rd., Zhongli Dist., Taoyuan City 320, Taiwan (R.O.C.)	NT$94,000,000	Production and sale of electronic components and finished products
CHIEF Telecom Inc. ("CHIEF")	01/19/1991	No. 250, Yangguang St., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)	NT$689,149,000	Network integration, internet data center (IDC), communications intergation and cloud application service
Chief International Corp. ("CIC")	05/27/2008	Offshore Chambers, P.O. Box 217. Apia, Samoa	USD200,000	Telecommunications and internet service
Unigate Telecom Inc. ("Unigate")	07/03/1999	No. 250, Yangguang St., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)	NT$2,000,000	Telecommunications and internet service
Shanghai Chief Telecom Co., Ltd. ("SCT")	08/14/2015	Room 1159,11F., No. 55, Jilong Road, Free Trade Pilot Area, Shanghai, China	RMB2,000,000	Telecommunications and internet service
Smartfun Digital Co., Ltd. ("SFD")	08/31/2011	8F., No. 88, Sec. 4, Xinyi Rd., Da'an Dist., Taipei City 106, Taiwan (R.O.C.)	NT$100,000,000	Providing diversified family education digital services
Spring House Entertainment Tech. Inc. ("SHE")	02/02/2000	10F., No. 106, Zhouzi St., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)	NT$183,403,000	Software design services, internet contents production and play, and motion picture production and distribution
Chunghwa Sochamp Technology Inc. ("CHST")	07/01/2011	Room 3B-38, 3F., No. 5, Sec. 5, Xinyi Rd., Xinyi Dist., Taipei City 110, Taiwan (R.O.C.)	NT$40,000,000	Design, development and production of Automatic License Plate Recognition software and hardware
Senao International Co., Ltd. ("SENAO")	05/18/1979	2F., No. 531, Zhongzheng Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)	NT$2,582,527,000	Handset and peripherals retailer; sales of CHT mobile phone plans as an agent
Senao International (Samoa) Holding Ltd. ("SIS")	12/15/2009	P.O.Box 217, Apia, Samoa	USD81,175,000	International investment
Senao International HK Ltd. ("SIHK")	12/28/2009	Units 3306-12 33/F, Shuion Centre 6-8 Harbour Road Wanchai HK	USD80,440,000	International investment
Senao Trading (Fujian) Co., Ltd. ("STF") (Note 1)	01/06/2011	Block C, Floor 6, International Building, Wusi Road, Gulou Dist., Fuzhou City, Fujian, China	USD36,000,000	Sale of information and communication technologies products
Senao International Trading (Jiangsu) Co., Ltd. ("SITJ") (Note 2)	01/27/2011	Room 2705, Building 2, No. 300, Shandong Road, Baixia Dist., Nanjing City, Jiangsu, China	USD9,000,000	Sale of information and communication technologies products
Senao International Trading (Shanghai) Co., Ltd. ("SITS")	01/12/2011	Room 401, Building 14, No. 470, Guiping Road, Xuhui Dist., Shanghai City, China	USD32,000,000	Sale of information and communication technologies products
Youth Co., Ltd. ("Youth")	10/04/1996	No.13, Sec. 1, Bade Rd., Zhongzheng Dist., Taipei City 100, Taiwan (R.O.C.)	NT$91,100,000	Sale of information and communication technologies products

Affiliate Name	Date of Incorporation	Address	Paid-in Capital	Primary Business Operation
ISPOT Co., Ltd. ("ISPOT")	09/05/2012	No. 13, Sec. 1, Bade Rd., Zhongzheng Dist., Taipei City 100, Taiwan (R.O.C.)	NT$10,727,000	Sale of information and communication technologies products
Youyi Co., Ltd. ("Youyi")	06/12/2012	2F., No. 13, Sec. 1, Bade Rd., Zhongzheng Dist., Taipei City 100, Taiwan (R.O.C.)	NT$21,354,000	Maintenance of information and communication technologies products
Aval Technologies Co., Ltd. ("Aval")	10/05/2015	6F., No. 533, Zhongzheng Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)	NT$65,100,000	Sale of information and communication technologies products
SENYOUNG Insurance Agent Co., Ltd. ("SENYOUNG")	11/22/2017	2F., No. 531, Zhongzheng Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)	NT$59,000,000	Property and liability insurance agency

Note 1: STF was approved to terminate and dissolve its business in September 2018. The liquidation of STF is still in progress.
Note 2: SITJ was approved to terminate and dissolve its business in April 2018. The liquidation of SITJ was completed in March 2019.

(3) Companies presumed to have a Relationship of Control and Subordination with Chunghwa Telecom

None.

(4) Industries covered by Affiliates' Business Operation

Industries covered by the Company's affiliates are primarily telecommunication related services, including advanced technology, production, marketing and enhanced services, in order to enable Chunghwa Telecom to continue creating synergies, to innovate and to provide the best offerings for its clients and consumers, as well as to ensure its leading market position.

(5) Affiliates' Directors, Supervisors and Executives Names and Shareholdings

As of December 31, 2018

Affiliate Name	Title	Name or Representative	Shareholding #	Shareholding %
Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia")	Director	Representative of Chunghwa Telecom Co., Ltd.: Shui-Yi Kuo	1,301	100%
Chunghwa Hsingta Co., Ltd. ("CHC")	Director	Representative of Prime Asia Investments Group Ltd.: Shui-Yi Kuo	1,266	100%
Chunghwa Telecom (China) Co., Ltd. ("CTC")	Chairman	Representative of Chunghwa Hsingta Co., Ltd.: Chuang-Liang Chiu	-	100%
	Director	Representative of Chunghwa Hsingta Co., Ltd.: Min-Gume Cheng	-	100%
	Director	Representative of Chunghwa Hsingta Co., Ltd.: Chih-Cheng Chien	-	100%
	Director	Representative of Chunghwa Hsingta Co., Ltd.: Kuan-Chun Hsieh	-	100%
	Director / General Manager	Representative of Chunghwa Hsingta Co., Ltd.: Jian Teng	-	100%
	Supervisor	Representative of Chunghwa Hsingta Co., Ltd.: Wei-Ting Chen	-	100%
CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Mei-Hua Hung	15,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Quen-Zong Wu	15,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Yih-Chyau Kuo	15,000,000	100%

Affiliate Name	Title	Name or Representative	Shareholding #	Shareholding %
CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	Director	Representative of Chunghwa Telecom Co., Ltd.: Shih-Chung Chang	15,000,000	100%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Chien-Chih Chen	15,000,000	100%
	Supervisor	Representative of Chunghwa Telecom Co., Ltd.: Yuan-Kai Chen	15,000,000	100%
Donghwa Telecom Co., Ltd. ("DHT")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Ming-Shih Chen	402,590,005	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Ying-Ming Wu	402,590,005	100%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Morris Su	402,590,005	100%
Chunghwa Telecom Global, Inc. ("CHTG")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Hsueh-Lan Wu	6,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Jung-Kuei Chen	6,000,000	100%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Phoebe Wang	6,000,000	100%
Chunghwa System Integration Co., Ltd. ("CHSI")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Hsu-Hui Ho	60,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Tian-Tsair Su	60,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Chih-Cheng Lo	60,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Yuan-Kai Chen	60,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Chi-Hsien Huang	60,000,000	100%
	Supervisor	Representative of Chunghwa Telecom Co., Ltd.: Mei-Ling Yeh	60,000,000	100%
	General Manager	Chung-Lin Yu	–	–
Light Era Development Co., Ltd. ("LED")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Adam Chen	300,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Kuo-Feng Lin	300,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Hung-Fen Tsai	300,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Edward Chou	300,000,000	100%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Chin-Hsun Su	300,000,000	100%
	Supervisor	Representative of Chunghwa Telecom Co., Ltd.: Kuo-Chiang Chung	300,000,000	100%
Taoyuan Asia Silicon Valley Innovation Co., Ltd. ("TASVI")	Chairman	Representative of Taoyuan Aerotropolis Co., Ltd.: Tze-Chun Wang	500,000	40%
	Director	Representative of Taoyuan Aerotropolis Co., Ltd.: Chih-Feng Huang	500,000	40%
	Director	Representative of Light Era Development Co., Ltd.: Tian-Tsair Su	750,000	60%
	Director	Representative of Light Era Development Co., Ltd.: Shih-Chung Chang	750,000	60%
	Director / General Manager	Representative of Light Era Development Co., Ltd.: Adam Chen	750,000	60%
	Supervisor	Shu-Ling Chen	–	–

Affiliate Name	Title	Name or Representative	Shareholding #	Shareholding %
Chunghwa Telecom Singapore Pte., Ltd. ("CHTS")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Chih-Cheng Chien	26,382,976	100%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Cheng Chiao	26,382,976	100%
Chunghwa Telecom Japan Co., Ltd. ("CHTJ")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Yuan-Kuang Tu	1,000	100%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Escudo Pai	1,000	100%
Chunghwa Telecom Vietnam Co., Ltd. ("CHTV")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Hsueh-Lan Wu	–	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Kuan-Hsiung Liang	–	100%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Wen-Jang Yang	–	100%
	Supervisor	Representative of Chunghwa Telecom Co., Ltd.: Kuo-Chiang Chung	–	100%
Honghwa International Co., Ltd. ("HHI")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Li-Show Wu	18,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Yao-Kun Chou	18,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Wen-Chiyh Lin	18,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Chau-Young Lin	18,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Shih-Chang Hung	18,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Yuan-Kuang Tu	18,000,000	100%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Ruey-Shu Chiu	18,000,000	100%
	Supervisor	Representative of Chunghwa Telecom Co., Ltd.: Chi-Hsien Huang	18,000,000	100%
	General Manager	Tai-Tsan Yeh	–	–
Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Hsueh-Lan Wu	1,000,000	100%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Wen-Jang Yang	1,000,000	100%
Chunghwa Investment Co., Ltd. ("CHI")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Ruey-Tsang Lee	68,085,000	89%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Kuo-Feng Lin	68,085,000	89%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Rong-Syh Lin	68,085,000	89%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Shui-Yi Kuo	68,085,000	89%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Yen-Chih Ting	68,085,000	89%
	Supervisor	Yuan-Kai Chen	–	–
Chunghwa Precision Test Tech. Co., Ltd. ("CHPT")	Chairman	Representative of Chunghwa Investment Co., Ltd.: Hsiu-Ku Huang	11,229,884	34%
	Director	Representative of Chunghwa Investment Co., Ltd.: Kuo-Feng Lin	11,229,884	34%
	Director	Representative of MediaTek Capital Corp.: David Ku	430,000	2%

Affiliate Name	Title	Name or Representative	Shareholding #	Shareholding %
Chunghwa Precision Test Tech. Co., Ltd. ("CHPT")	Director / General Manager	Scott Huang	861,594	3%
	Independent Director	Chung-Fern Wu	–	–
	Independent Director	Wen-Nan Tsan	–	–
	Independent Director	Kenneth H. C. Chiu	–	–
Chunghwa Precision Test Tech. USA Corporation ("CHPT (US)")	Chairman	Representative of Chunghwa Precision Test Tech. Co., Ltd.: Eric Chien	400,000	100%
	Director	Representative of Chunghwa Precision Test Tech. Co., Ltd.: Daphne Hsu	400,000	100%
	Director	Representative of Chunghwa Precision Test Tech. Co., Ltd.: Scott Huang	400,000	100%
	Director / General Manager	Brian Chang	–	–
CHPT Japan Co., Ltd. ("CHPT (JP)")	Director	Representative of Chunghwa Precision Test Tech. Co., Ltd.: Haku Cheng	600	100%
	Director	Representative of Chunghwa Precision Test Tech. Co., Ltd.: Scott Huang	600	100%
Chunghwa Precision Test Tech. International, Ltd. ("CHPT (International)")	Chairman	Representative of Chunghwa Precision Test Tech. Co., Ltd.: Scott Huang	1,700,000	100%
Shanghai Taihua Electronic Technology Ltd. ("STET")	Executive Director	Representative of Chunghwa Precision Test Tech. International, Ltd.: Scott Huang	–	100%
	Supervisor	Representative of Chunghwa Precision Test Tech. International, Ltd.: Daphne Hsu	–	100%
CHT Security Co., Ltd. ("CHTSC")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Jen-Nan Chen	24,000,000	80%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Hong-Chan Ma	24,000,000	80%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Rong-Syh Lin	24,000,000	80%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Chau-Young Lin	24,000,000	80%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Chin-Fu Hung	24,000,000	80%
	Supervisor	Shu-Ling Chen	–	–
Chunghwa Leading Photonics Tech. Co., Ltd. ("CLPT")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Yuan-Kuang Tu	7,050,000	75%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Jung-Kuei Chen	7,050,000	75%
	Director / General Manager	Chia-Chien Lin	870,000	9.26%
	Supervisor	Wei-Ting Chen	–	–
CHIEF Telecom Inc. ("CHIEF")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Yen-Hung Wu	39,425,803	57%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Chih-Cheng Lo	39,425,803	57%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Hong-Chan Ma	39,425,803	57%
	Director	Representative of InveStar Co., Ltd.: Chung-Hou Tai	109,000	0%

Affiliate Name	Title	Name or Representative	Shareholding #	Shareholding %
CHIEF Telecom Inc. ("CHIEF")	Independent Director	Han-Shing Liu	-	-
	Independent Director	Ling-Tai Chou	-	-
	Independent Director	Chih-Feng Lai	-	-
	General Manager	Yao-Yuan Liu	220,000	0%
Chief International Corp. ("CIC")	Chairman	Representative of CHIEF Telecom Inc.: Yao-Yuan Liu	200,000	100%
	Director	Representative of CHIEF Telecom Inc.: Chien-Chi Liao	200,000	100%
Unigate Telecom Inc. ("Unigate")	Chairman	Representative of CHIEF Telecom Inc.: Yen-Hung Wu	200,000	100%
	Director	Representative of CHIEF Telecom Inc.: Yao-Yuan Liu	200,000	100%
	Director	Representative of CHIEF Telecom Inc.: Chien-Chi Liao	200,000	100%
	Supervisor	Representative of CHIEF Telecom Inc.: Lin-Tung Chang	200,000	100%
Shanghai Chief Telecom Co., Ltd. ("SCT")	Chairman	Representative of CHIEF Telecom Inc.: Wen-Han Chiang	-	49%
	Director	Representative of CHIEF Telecom Inc.: Yao-Yuan Liu	-	49%
	Director / General Manager	Representative of Shenzhen Century Communication Co., Ltd.: Yuan-Wen Han	-	51%
	Supervisor	Representative of CHIEF Telecom Inc.: Chien-Chi Liao	-	49%
Smartfun Digital Co., Ltd. ("SFD")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Ming-Shih Chen	6,500,000	65%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Ying-Hsueh Wang	6,500,000	65%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Yen-Hsiang Hung	6,500,000	65%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Quen-Zong Wu	6,500,000	65%
	Director	Representative of United Daily News: Ming-Jey Ho	2,500,000	25%
	Supervisor	Miaw-Ling Chen	-	-
	Supervisor	Representative of UDN Digital Co., Ltd.: Yu-Chih Lin	1,000,000	10%
	General Manager	Shu-Chuan Shan	-	-
Spring House Entertainment Tech. Inc. ("SHE")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Chih-Jen Hsu	10,277,443	56%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Wen-Chiyh Lin	10,277,443	56%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Ruey-Shu Chiu	10,277,443	56%
	Director / General Manager	Representative of Chunghwa Telecom Co., Ltd.: Hsueh-Hai Hu	10,277,443	56%
	Director	Representative of Ku Shen Investment Inc.: Yao-Tung Kao	1,900,954	10%
	Director	Representative of Ku Shen Investment Inc.: Meng-Wei Ku	1,900,954	10%

Affiliate Name	Title	Name or Representative	Shareholding #	Shareholding %
Spring House Entertainment Tech. Inc. ("SHE")	Director	Jung-Kuei Chang	639,328	3%
	Supervisor	Wen-Chuan Chang	589,633	3%
	Supervisor	Wei-Ting Chen	-	-
Chunghwa Sochamp Technology Inc. ("CHST")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Hong-Chan Ma	2,040,000	51%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Ming-Shih Chen	2,040,000	51%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Rong-Syh Lin	2,040,000	51%
	Director	Representative of Socamp Technology Inc.: Shan-I Chen	1,960,000	49%
	Director / General Manager	Representative of Socamp Technology Inc.: Shang-Chih Chen	1,960,000	49%
	Supervisor	Wen-Chi Tseng	-	-
	Supervisor	Ta-Chieh Lin	-	-
Senao International Co., Ltd. ("SENAO")	Chairman	Representative of Chunghwa Telecom Co., Ltd.: Jin-Lin Lai	71,773,155	28%
	Vice chairman and President	Representative of Cheng Kang Investment Co., Ltd.: Pao-Yung Lin	14,820,975	6%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Ming-Shih Chen	71,773,155	28%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Yuan-Kuang Tu	71,773,155	28%
	Director	Representative of Chunghwa Telecom Co., Ltd.: Chien-Chieh Chen	71,773,155	28%
	Director	Representative of Cheng Kang Investment Co., Ltd.: Cheng-Kang, Lin	14,820,975	6%
	Director	Representative of Cheng Kang Investment Co., Ltd.: Cheng-Feng Lin	14,820,975	6%
	Independent Director	Kung-Liang Yeh	-	-
	Independent Director	Chung-Ming Su	-	-
	Supervisor	Sheng-Chen Li	-	-
	Supervisor	Representative of Cheng Feng Investment Co., Ltd.: Chun-Chien Chen	17,176,436	7%
	Supervisor	Representative of Cheng Feng Investment Co., Ltd.: Hsueh-Feng Chien	17,176,436	7%
Senao International (Samoa) Holding Ltd. ("SIS")	Director	Representative of Senao International Co., Ltd.: Pao-Yung Lin	-	100%
Senao International HK Ltd. ("SIHK")	Director	Representative of Senao International (Samoa) Holding Ltd.: Pao-Yung Lin	-	100%
Senao Trading (Fujian) Co., Ltd. ("STF") (Note 1)	Chairman	Representative of Senao International HK Ltd.: Pao-Yung Lin	-	100%
	Director	Representative of Senao International HK Ltd.: Chih-Chung Chiu	-	100%
	Director	Representative of Senao International HK Ltd.: Yu-Chiang Wu	-	100%
	Director / General Manager	Representative of Senao International HK Ltd.: Wu-Hsiung Huan	-	100%
	Supervisor	Representative of Senao International HK Ltd.: Shu-Ling Chen	-	100%

Affiliate Name	Title	Name or Representative	Shareholding #	Shareholding %
Senao International Trading (Jiangsu) Co., Ltd. ("SITJ") (Note 2)	Chairman	Representative of Senao International HK Ltd.: Pao-Yung Lin	-	100%
	Director	Representative of Senao International HK Ltd.: Chih-Chung Chiu	-	100%
	Director	Representative of Senao International HK Ltd.: Yu-Chiang Wu	-	100%
	Director / General Manager	Representative of Senao International HK Ltd.: Wu-Hsiung Huang	-	100%
	Supervisor	Representative of Senao International HK Ltd.: Shu-Ling Chen	-	100%
Senao International Trading (Shanghai) Co., Ltd. ("SITS")	Chairman	Representative of Senao International HK Ltd.: Pao-Yung Lin	-	100%
	Director	Representative of Senao International HK Ltd.: Yu-Chiang Wu	-	100%
	Director	Representative of Senao International HK Ltd.: Chih-Chung Chiu	-	100%
	Director / General Manager	Representative of Senao International HK Ltd.: Wu-Hsiung Huang	-	100%
	Supervisor	Representative of Senao International HK Ltd.: Shu-Ling Chen	-	100%
Youth Co., Ltd. ("Youth")	Chairman and President	Representative of Senao International Co., Ltd.: Yu-Chiang Wu	8,462,000	93%
	Director	Representative of Senao International Co., Ltd.: Chi-Hung Liao	8,462,000	93%
	Director	Representative of Senao International Co., Ltd.: Kuan-Heng Lai	8,462,000	93%
	Supervisor	Tsai-Hung Yu	-	-
ISPOT Co., Ltd. ("ISPOT")	Director	Representative of Youth Co., Ltd.: Yu-Chiang Wu	-	100%
Youyi Co., Ltd. ("Youyi")	Director	Representative of Youth Co., Ltd.: Yu-Chiang Wu	-	100%
Aval Technologies Co., Ltd. ("Aval")	Chairman	Representative of Senao International Co., Ltd.: Wen-He Tsai	6,510,000	100%
SENYOUNG Insurance Agent Co., Ltd. ("SENYOUNG")	Director	Representative of Senao International Co., Ltd.: Yan-Yan Jheng	2,950,000	100%
	Director	Representative of Senao International Co., Ltd.: Cing-Sheng Liou	2,950,000	100%
	Director	Representative of Senao International Co., Ltd.: Chi-Hung Liao	2,950,000	100%
	Supervisor	Representative of Senao International Co., Ltd.: Kuan-Heng Lai	2,950,000	100%

Note 1: STF was approved to terminate and dissolve its business in September 2018. The liquidation of STF is still in progress.
Note 2: SITJ was approved to terminate and dissolve its business in April 2018. The liquidation of SITJ was completed in March 2019.

(6) Affiliates' Operating Highlights

Unit: NT$'000

Affiliate Names	Paid-in Capital	Total Asset	Total Liability	Total Equity	Total Revenues	Operating Income	Net Income	Earnings per Share, NT$
Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia")	385,274	195,368	0	195,368	0	0	-1,911	NA
Chunghwa Hsingta Co., Ltd. ("CHC")	385,274	195,368	0	195,368	0	0	-1,911	NA
Chunghwa Telecom (China) Co., Ltd. ("CTC")	177,176	64,705	12,510	53,150	107,956	-1,479	-971	NA
CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	150,000	460,982	262,986	197,996	436,293	28,329	25,318	1.69
Donghwa Telecom Co., Ltd. ("DHT")	1,567,453	4,137,091	2,517,936	1,619,155	1,218,149	27,553	45,204	0.11
Chunghwa Telecom Global, Inc. ("CHTG")	194,994	679,945	392,803	287,142	598,386	82,077	58,899	9.82
Chunghwa System Integration Co., Ltd. ("CHSI")	600,000	1,443,822	806,729	637,093	2,002,824	-23,456	16,226	0.27
Light Era Development Co., Ltd. ("LED")	3,000,000	5,480,974	1,622,172	3,858,802	141,925	26,342	8,051	0.03
Taoyuan Asia Silicon Valley Innovation Co., Ltd. ("TASVI")	12,500	9,891	1,447	8,443	0	-5,115	-4,086	-3.27
Chunghwa Telecom Singapore Pte., Ltd. ("CHTS")	574,112	2,047,275	1,131,743	915,532	1,267,641	35,218	141,993	5.39
Chunghwa Telecom Japan Co., Ltd. ("CHTJ")	17,291	115,433	52,807	62,626	147,083	18,467	11,103	11,102.62
Chunghwa Telecom Vietnam Co., Ltd. ("CHTV")	148,275	303,237	197,147	106,091	28,446	-1,916	-1,471	NA
Honghwa International Co., Ltd. ("HHI")	180,000	1,539,746	1,062,745	477,002	5,652,079	278,629	221,203	12.29
Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT")	88,592	96,257	1,326	94,931	35,627	-2,259	-2,669	-2.67
Chunghwa Investment Co., Ltd. ("CHI")	765,000	3,691,416	64,079	3,627,337	289,649	261,594	201,712	2.64
Chunghwa Precision Test Tech. Co., Ltd. ("CHPT")	327,890	7,195,665	1,044,605	6,151,060	3,278,968	899,021	716,024	21.84
Chunghwa Precision Test Tech. USA Corporation ("CHPT (US)")	126	28,467	3,586	24,881	41,369	2,420	1,599	4.00
CHPT Japan Co., Ltd. ("CHPT (JP)")	2,008	2,417	56	2,361	4,930	235	123	205.68
Chunghwa Precision Test Tech. International, Ltd. ("CHPT (International)")	54,450	43,030	0	43,030	0	-40	-3,503	-2.06
Shanghai Taihua Electronic Technology Ltd. ("STET")	51,233	42,474	2,580	39,893	35,206	-3,583	-3,526	–
CHT Security Co., Ltd. ("CHTSC")	299,000	459,460	155,821	303,639	381,797	4,467	4,633	0.15
Chunghwa Leading Photonics Tech. Co., Ltd. ("CLPT")	94,000	202,462	54,153	148,309	109,526	27,950	24,908	2.65

Affiliate Names	Paid-in Capital	Total Asset	Total Liability	Total Equity	Total Revenues	Operating Income	Net Income	Earnings per Share, NT$
CHIEF Telecom Inc. ("CHIEF")	689,149	3,315,632	474,540	2,841,092	2,186,938	554,237	484,604	7.41
Chief International Corp. ("CIC")	6,068	65,116	772	64,344	24,575	10,327	11,409	57.04
Unigate Telecom Inc. ("Unigate")	2,000	1,386	499	887	0	-127	-116	-0.58
Shanghai Chief Telecom Co., Ltd. ("SCT")	10,150	16,657	449	16,208	60,849	4,544	4,211	-
Smartfun Digital Co., Ltd. ("SFD")	100,000	131,351	19,026	112,325	68,364	12,417	9,931	0.99
Spring House Entertainment Tech. Inc. ("SHE")	183,403	180,504	33,174	147,330	133,087	6,922	7,906	0.43
Chunghwa Sochamp Technology Inc. ("CHST")	40,000	125,401	111,309	14,092	72,013	7,013	5,169	1.29
Senao International Co., Ltd. ("SENAO")	2,582,527	9,554,330	3,746,251	5,808,079	29,621,736	226,022	403,281	1.59
Senao International (Samoa) Holding Ltd. ("SIS")	2,416,645	470,233	-	470,230	4	-89	-30,654	-
Senao International HK Ltd. ("SIHK")	2,393,646	431,596	46	431,552	-	-126	-30,705	-
Senao Trading (Fujian) Co., Ltd. ("STF") (Note 1)	1,073,170	194,045	24	194,021	-	-457	6,382	-
Senao International Trading (Jiangsu) Co., Ltd. ("SITJ") (Note 2)	263,736	87,285	67	87,218	-	-255	124	-
Senao International Trading (Shanghai) Co., Ltd. ("SITS")	955,838	107,005	27,568	79,437	117,019	-34,624	-34,866	-
Youth Co., Ltd. ("Youth")	91,100	137,189	53,914	83,275	236,938	-4,805	-17,744	-1.95
ISPOT Co., Ltd. ("ISPOT")	10,727	18,661	12,913	5,748	51,767	-1,543	-4,979	-
Youyi Co., Ltd. ("Youyi")	21,354	14,098	8,152	5,946	28,117	1,279	1,642	-
Aval Technologies Co., Ltd. ("Aval")	65,100	155,531	85,597	69,934	1,764,739	4,699	4,103	0.63
SENYOUNG Insurance Agent Co., Ltd. ("SENYOUNG")	59,000	100,807	50,123	50,684	76,051	-9,839	-7,832	-1.33

Note 1: STF was approved to terminate and dissolve its business in September 2018. The liquidation of STF is still in progress.
Note 2: SITJ was approved to terminate and dissolve its business in April 2018. The liquidation of SITJ is completed in March 2019.
Note 3: Exchange rates for the Consolidated Balance Sheet are as follows:
RMB1 = NT$4.4720, HKD1 = NT$3.9210, USD1 = NT$30.7150, JPY1 = NT$0.2782, VND1 = NT$0.001200
Exchange rates for the Consolidated Income Statement are as follows:
RMB1 = NT$4.5600, HKD1 = NT$3.8460, USD1 = NT$30.1490, JPY1 = NT$0.2730, VND1 = NT$0.001190

1.2 Consolidated Financial Report of the Company and Affiliates

For more details, please refer to page 167, Chapter VIII, Section 8, "Consolidated Financial Statements and Independent Auditors' Report".

2. Private Placement Securities in the most recent year and up to the Publication Date of this Annual Report

None.

3. The Company's Shares Held or Disposed by Subsidiaries in the most recent year and up to the Publication Date of this Annual Report

None.

4. Material Impact, pursuant to Article 36-3-2 of the Securities and Exchange Act, on Shareholders' Equity or Share Price in the most recent year and up to the Publication Date of this Annual Report

None.

5. Other Supplementary Information

None.

8 Financial Information

1. Five-Year Financial Summary
2. Occurrence of Financial Distress on the Company and Affiliates for the most recent year and up to the Publication Date of this Annual Report
3. Asset Impairment
4. Financial Asset & Liabilities Assessment and Provision
5. Financial Instruments Assessment
6. The Differences between 2018 Financial Statements under Taiwan-IFRSs and IFRSs
7. 2018 Audit Committee's Review Report
8. Consolidated Financial Statements and Independent Auditors' Report
9. Parent-only Financial Statements and Independent Auditors' Report

Financial Information

1. Five-Year Financial Summary

1.1 Condensed Balance Sheet and Statement of Comprehensive Income

(1) Condensed Balance Sheet

A. Consolidated Condensed Balance Sheet

Unit: NT$'000

Item \ Year		Financial Summary for Most Recent 5 Years				
		2018	2017	2016	2015	2014 (Note 1)
Current Assets		91,688,336	79,334,002	81,620,175	76,206,844	69,412,240
Property, Plant and Equipment		288,914,228	288,707,910	291,169,760	296,399,146	302,650,343
Intangible Assets		50,943,682	54,883,268	47,353,424	50,446,778	42,824,626
Other Assets		35,722,458	28,197,942	26,989,146	29,968,324	31,817,403
Total Assets		467,268,704	451,123,122	447,132,505	453,021,092	446,704,612
Current Liabilities	Before Distribution	61,387,021	59,990,359	60,105,595	58,526,087	58,899,740
	After Distribution	-	97,195,073	98,442,120	101,077,233	96,573,003
Noncurrent Liabilities		19,309,363	17,553,183	15,827,240	20,486,002	18,265,537
Total Liabilities	Before Distribution	80,696,384	77,543,542	75,932,835	79,012,089	77,165,277
	After Distribution	-	114,748,256	114,269,360	121,563,235	114,838,540
Equity Attributable to Stockholders of the Parent		376,562,372	364,881,985	364,703,748	368,739,928	364,454,150
Common Stocks		77,574,465	77,574,465	77,574,465	77,574,465	77,574,465
Additional Paid-in Capital		171,136,764	169,466,833	168,542,486	168,095,615	168,047,935
Retained Earnings	Before Distribution	127,391,229	117,457,971	118,592,201	122,801,129	117,945,603
	After Distribution	-	80,253,257	80,255,676	80,249,983	80,272,340
Other Adjustments		459,914	382,666	(5,404)	268,719	886,147
Noncontrolling Interests		10,009,948	8,697,595	6,495,922	5,269,075	5,085,185
Total Equity	Before Distribution	386,572,320	373,579,580	371,199,670	374,009,003	369,539,335
	After Distribution	-	336,374,866	332,863,145	331,457,857	331,866,072

Note 1: Retrospectively adjusted amount.

B. Parent-only Condensed Balance Sheet

Unit: NT$'000

Item		2018	2017	2016	2015	2014 (Note 1)
		Financial Summary for Most Recent 5 Years				
Current Assets		67,338,984	60,762,443	65,773,396	61,837,140	56,304,244
Property, Plant and Equipment		281,056,057	281,413,852	283,912,327	290,072,562	296,206,403
Intangible Assets		50,404,295	54,283,253	46,726,067	49,798,429	42,517,247
Other Assets		50,017,325	37,470,635	35,533,390	37,480,368	39,688,334
Total Assets		448,816,661	433,930,183	431,945,180	439,188,499	434,716,228
Current Liabilities	Before Distribution	57,334,954	55,929,805	55,347,993	53,993,104	55,015,151
	After Distribution	-	93,134,519	93,684,518	96,544,250	92,688,414
Noncurrent Liabilities		14,919,335	13,118,393	11,893,439	16,455,467	15,246,927
Total Liabilities	Before Distribution	72,254,289	69,048,198	67,241,432	70,448,571	70,262,078
	After Distribution	-	106,252,912	105,577,957	112,999,717	107,935,341
Common Stocks		77,574,465	77,574,465	77,574,465	77,574,465	77,574,465
Additional Paid-in Capital		171,136,764	169,466,883	168,542,486	168,095,615	168,047,935
Retained Earnings	Before Distribution	127,391,229	117,457,971	118,592,201	122,801,129	117,945,603
	After Distribution	-	80,253,257	80,255,676	80,249,983	80,272,340
Other Adjustments		459,914	382,666	(5,404)	268,719	886,147
Total Equity	Before Distribution	376,562,372	364,881,985	364,703,748	368,739,928	364,454,150
	After Distribution	-	327,677,271	326,367,223	326,188,782	326,780,887

Note 1: Retrospectively adjusted amount.

(2) Condensed Statement of Comprehensive Income

A. Consolidated Condensed Statement of Comprehensive Income

Unit: NT$'000

Item	2018	2017	2016	2015	2014 (Note 1)
	Financial Summary for Most Recent 5 Years				
Revenues	215,483,158	227,514,183	229,991,428	231,795,104	226,608,686
Gross Profit	75,937,701	80,676,700	82,439,634	83,668,891	78,229,126
Income from Operations	43,643,659	46,702,977	48,105,278	50,361,338	44,796,618
Non-operating Income and Expenses	1,335,045	1,294,085	1,277,269	1,606,875	1,757,330
Income Before Income Tax	44,978,704	47,997,062	49,382,547	51,968,213	46,553,948

Item \ Year	Financial Summary for Most Recent 5 Years				
	2018	2017	2016	2015	2014 (Note 1)
Net Income (Loss)	36,456,171	40,042,601	41,229,985	43,664,345	39,161,371
Other Comprehensive Income (Loss), Net of Income Tax	(1,014,453)	(1,305,526)	(2,056,206)	(833,770)	641,428
Total Comprehensive Income	35,441,718	38,737,075	39,173,779	42,830,575	39,802,799
Net Income Attributable to Stockholders of the Parent	35,501,622	38,873,905	40,067,010	42,805,728	38,612,056
Net Income Attributable to Noncontrolling Interests	954,549	1,168,696	1,162,975	858,617	549,315
Comprehensive Income Attributable to Stockholders of the Parent	34,496,742	37,590,365	38,068,095	41,973,659	39,235,975
Comprehensive Income Attributable to Noncontrolling Interests	944,976	1,146,710	1,105,684	856,916	566,824
Earnings per Share	4.58	5.01	5.16	5.52	4.98

Note 1: Retrospectively adjusted amount.

B. Parent-only Condensed Statement of Comprehensive Income

Unit: NT$'000

Item \ Year	Financial Summary for Most Recent 5 Years				
	2018	2017	2016	2015	2014 (Note 1)
Revenues	185,331,699	196,985,774	201,636,805	201,993,986	194,068,381
Gross Profit	66,501,764	75,473,632	77,661,707	78,865,616	73,613,496
Income from Operations	40,365,914	44,145,737	45,782,546	48,743,625	43,415,456
Non-operating Income and Expenses	3,151,064	2,158,739	1,987,813	2,050,808	2,365,745
Income before Income Tax	43,516,978	46,304,476	47,770,359	50,794,433	45,781,201
Net Income (Loss)	35,501,622	38,873,905	40,067,010	42,805,728	38,612,056
Other Comprehensive Income (Loss), Net of Income Tax	(1,004,880)	(1,283,540)	(1,998,915)	(832,069)	623,919
Total Comprehensive Income	34,496,742	37,590,365	38,068,095	41,973,659	39,235,975
Earnings per Share	4.58	5.01	5.16	5.52	4.98

Note 1: Retrospectively adjusted amount.

1.2 Independent Auditor's Names and Opinions for Recent Five Years

Year	Name of CPA	Audit Opinion
2014	Deloitte & Touche En-Ming Wu and Chao-Mei Chen	Unmodified Opinion
2015	Deloitte & Touche En-Ming Wu and Chao-Mei Chen	Unmodified Opinion
2016	Deloitte & Touche Ching-Pin Shih and Hung-Peng Lin	Unqualified Opinion
2017	Deloitte & Touche Ching-Pin Shih and Hung-Peng Lin	Unqualified Opinion
2018	Deloitte & Touche Ching-Pin Shih and Hung-Peng Lin	Unqualified Opinion

1.3 Five Years Financial Analysis & Discussion

(1) Consolidated Financial Analysis for Recent 5 Years

Item	Year	Financial Summary for Most Recent 5 Years				
		2018	2017	2016	2015	2014 (Note 1)
Financial Structure (%)	Debt to Asset Ratio	17.27	17.19	16.98	17.44	17.27
	Ratio of Long-term Capital to Property, Plants and Equipment	140.49	135.48	132.92	133.10	128.14
Liquidity Analysis (%)	Current Ratio	149.36	132.24	135.79	130.21	117.85
	Quick Ratio	121.68	113.86	118.49	110.65	101.65
	Interest Earned Ratio (Times)	2,557.19	2,191.35	2,494.06	1,568.95	1,009.80
Operating Performance	Accounts Receivable Turnover (Times)	6.45	6.80	7.53	8.33	8.84
	Average Collection Days	56.58	53.67	48.47	43.81	41.28
	Inventory Turnover (Times)	4.06	6.93	6.69	6.63	6.87
	Accounts Payable Turnover (Times)	N/A	N/A	N/A	N/A	N/A
	Average Days in Sales	89.90	52.66	54.55	55.05	53.12
	Property, Plants and Equipment Turnover (Times)	0.75	0.78	0.78	0.77	0.75
	Total Assets Turnover (Times)	0.47	0.51	0.51	0.52	0.51
Profitability	Return on Assets (%)	7.94	8.92	9.17	9.71	8.83
	Return on Equity (%)	9.59	10.75	11.07	11.74	10.66
	Pre-tax Income to Paid-in Capital (%)	57.98	61.87	63.66	66.99	60.01
	Net Income Ratio (%)	16.92	17.60	17.93	18.84	17.28
	Earnings per Share (NT$)	4.58	5.01	5.16	5.52	4.98

Item / Year		Financial Summary for Most Recent 5 Years				
		2018	2017	2016	2015	2014 (Note 1)
Cash Flow	Cash Flow Ratio (%)	108.11	118.24	108.06	130.41	121.19
	Cash Flow Adequacy Ratio (%)	109.03	111.59	106.17	107.90	110.45
	Cash Reinvestment Ratio (%)	2.71	3.28	2.28	3.97	5.52
Leverage	Operating Leverage	2.82	2.65	2.72	2.64	2.82
	Financial Leverage	1.00	1.00	1.00	1.00	1.00

Notes:
1. Retrospectively adjusted amount
2. The formulas for the above table:
   A. Financial Structure
      Debts to Assets Ratio = Total Liabilities / Total Assets
      Ratio of Long-term Capital to Property, Plants and Equipment = (Total Equity + Noncurrent Liabilities) / Net of Properties, Plants and Equipment
   B. Liquidity Analysis
      Current Ratio = Current Assets / Current Liabilities
      Quick Ratio = (Current Assets - Inventory - Prepaid Expense) / Current Liabilities
      Interest Earned Ratio = (Net Income before Income Tax and Interest Expenses) / Interest Expense
   C. Operating Performance
      Account Receivable Turnover = Net Sales / Average Accounts Receivable (including Accounts Receivable and Notes Receivable originated from operation)
      Average Collection Days = 365 / Accounts Receivable Turnover
      Inventory Turnover = Costs of Good Sold / Average Inventory
      Accounts Payable Turnover = Costs of Good Sold / Average Accounts Payable (including Accounts Payable and Notes Payable originated from operation)
      Average Days in Sales = 365 / Inventory Turnover
      Property, Plants and Equipment Turnover = Net Sales / Average of Net Properties, Plants and Equipment
      Total Assets Turnover = Net Sales / Average of Total Assets
   D. Profitability
      Return on Assets = (Net Income +Interest Expensex (1-Tax Rate)) / Average Total Assets
      Return on Equity =Net Income / Average Equity
      Net Income Ratio = Net Income / Net Sales
      Earnings per Share = (Net Income Attributable to Stockholders of the Parent - Preferred Stock Dividend) /Weighted Average Number of Outstanding Shares
   E. Cash Flow
      Cash Flow Ratio = Cash Flows from Operating Activities / Current Liabilities
      Cash Flow Adequacy Ratio = Net Cash Flow from Operating Activities for the most recent 5 years / (Capital Expenditure + Increase in Inventory + Cash Dividends) for the most recent 5 years
      Cash Reinvestment Ratio = (Net Cash Flow from Operating Activities - Cash Dividends) / (Gross Properties, Plants and Equipment + Long-term Investment + Gross Concession + Other Noncurrent Assets + Working Capital)
   F. Leverage
      Operating Leverage = (Net Sales - Variable Operating Costs and Expenses) / Operating Income
      Financial Leverage = Operating Income / (Operating Income - Interest Expenses)
3. Analysis and discussion for any financial ratio variation plus and minus (+/-) 20% in recent 2 years:
   A. Inventory turnover declined by 41.41%, and average days in sales increased by 70.72%, primarily due to increased inventory at the end of 2018.

(2) Parent-only Financial Analysis for Recent 5 Years

Item	Year	Financial Summary for Most Recent 5 Years				
		2018	2017	2016	2015	2014 (Note 1)
Financial Structure	Debt to Asset Ratio (%)	16.10	15.91	15.57	16.04	16.16
	Ratio of Long-term Capital to Property, Plants and Equipment (%)	139.29	134.32	132.65	132.79	128.19
Liquidity Analysis	Current Ratio (%)	117.45	108.64	118.84	114.53	102.34
	Quick Ratio (%)	96.67	98.62	111.12	104.30	96.36
	Interest Earned Ratio (Times)	162,985.94	9,260,896.20	(Note 2)	(Note 2)	7,304.96
Operating Performance	Accounts Receivable Turnover (Times)	5.80	6.14	6.91	7.62	7.86
	Average Collection Days	62.93	59.44	52.83	47.92	46.44
	Inventory Turnover (Times)	3.11	8.26	8.05	8.47	7.97
	Accounts Payable Turnover (Times)	N/A	N/A	N/A	N/A	N/A
	Average Days in Sales	117.36	44.21	45.32	43.07	45.80
	Property, Plant and Equipment Turnover (Times)	0.66	0.70	0.70	0.69	0.65
	Total Assets Turnover (Times)	0.42	0.45	0.46	0.46	0.45
Profitability	Return on Assets (%)	8.04	8.98	9.20	9.80	8.93
	Return on Equity (%)	9.58	10.66	10.93	11.68	10.65
	Pre-tax Income to Paid-in Capital (%)	56.10	59.69	61.58	65.48	59.02
	Net Income Ratio (%)	19.16	19.73	19.87	21.19	19.90
	Earnings per Share (NT$)	4.58	5.01	5.16	5.52	4.98
Cash Flow	Cash Flow Ratio (%)	110.87	121.10	112.72	134.51	127.13
	Cash Flow Adequacy Ratio (%)	105.93	109.49	105.03	106.57	110.14
	Cash Reinvestment Ratio (%)	2.49	3.01	2.04	3.64	5.43
Leverage	Operating Leverage	2.92	2.54	2.62	2.54	2.74
	Financial Leverage	1.00	1.00	1.00	1.00	1.00

Notes:
1. Retrospectively adjusted amount.
2. Interest earned ratio (times) is not calculated because there were no interest expenses in 2016 and 2015.
3. Analysis and discussion for any financial ratio variation plus and minus (+/-) 20% in recent 2 years:
   (1) Interest earned ratio (times) declined by 98.24%, primarily due to declined income before income taxes and increased interest expenses in 2018.
   (2) Inventory turnover declined by 62.35%, and average days in sales increased by 165.62%, primarily due to increased inventory at the end of 2018.

2. Occurrence of Financial Distress on the Company and Affiliates for the most recent year and up to the Publication Date of this Annual Report

None.

3. Asset Impairment

The Company recognizes asset impairment in accordance to the relevant IFRSs, for details, please refer to page 167, Section 8, "Consolidated Financial Statements and Independent Auditors' Report".

4. Financial Asset & Liabilities Assessment and Provision

	Item	Assessment Basis	Assessment Notes
1	Loss Allowance	Impairment Assessment on Balance Sheet date	The Company recognizes lifetime Expected Credit Loss (ECL) for accounts receivable and contract assets. For all other financial instruments, the Company recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECL. Expected credit loss reflects the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12 month ECL represents the portion of ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date. The Company recognizes an impairment loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.
2	Provision for Inventory and Obsolescence	Inventories are Stated at the Lower of Cost or Net Realizable Value	Inventories are stated at the lower of cost or net realizable value item by item, except for those that may be appropriate to group items of similar or related inventories. Net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. The calculation of the cost of inventory is derived using the weighted-average method.

5. Financial Instruments Assessment

The Company measures all financial instruments in accordance to IFRS 9 "Financial Instrument", see below financial categories:

(1) Financial assets at fair value through profit and loss, or FVTPL

Financial asset is classified as at FVTPL when the financial asset is mandatorily classified as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at fair value through other comprehensive income, or FVOCI.
Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividend earned on the financial asset.

(2) Financial assets at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

i. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii. The contractual terms of the financial asset give rise on specific dates to cash flows that are solely payments of principal and the interest on principal amount outstanding.

Subsequent to the initial recognition, financial assets at amortized cost are measured at amortized cost, which equals to gross carrying amount determined by the effective interest method less any impairment loss, except for short-term receivables as the effect of discounting is immaterial. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such financial assets.

(3) Investments in equity instruments at FVOCI

On initial recognition, the Company may make an irrevocable election to designate investments in equity instruments as at FVOCI. Designation at FVOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investment in equity instruments at FVOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments. Instead, it will be transferred to retained earnings.

Dividends on these investments in equity instrument are recognized in profit or loss when the Company’s right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

6. The Differences between 2018 Financial Statements under Taiwan-IFRSs and IFRSs

The Company has adopted Taiwan IFRSs endorsed and issued into effect by FSC for ROC reporting purposes. The differences between Taiwan IFRSs and IFRSs issued by International Accounting Standards Board, or IASB, are set forth below:

(1) Under Taiwan IFRSs endorsed and issued into effect by FSC (or "T-IFRSs"), the Company reported consolidated net income of NT$36,456,171 thousand, consolidated net income attributable to stockholders of the parent

of NT$35,501,622 thousand, and basic earnings per share of NT$4.58 for the year ended December 31, 2018, respectively. The Company also reported total assets of NT$467,268,704 thousand, total liabilities of NT$80,696,384 thousand, and total equity of NT$386,572,320 thousand as of December 31, 2018.

(2) Under IFRSs issued by IASB (or "IFRSs"), the Company reported consolidated net income of NT$38,581 million, consolidated net income attributable to stockholders of the parent of NT$37,557 million, and basic earnings per share of NT$4.84 for the year ended December 31, 2018, respectively. The Company also reported total assets of NT$467,056 million, total liabilities of NT$82,527 million, and total equity of NT$384,529 million as of December 31, 2018.

(3) The differences between consolidated net income under Taiwan-IFRSs and that under IFRSs followed by the Company mainly come from the timing of the recognition of income tax on unappropriated earnings. In addition, prior to incorporation, the Company was subject to the laws and regulations applicable to state-owned enterprises in Taiwan which differed from the generally accepted accounting principles as applicable to commercial companies. As such, revenue from providing fixed line connection service and selling prepaid phone cards was recognized at the time the service was performed or the card was sold by the Company. Upon incorporation, net assets greater than the capital stock was credited as additional paid-in-capital and part of the additional paid-in-capital was from the unearned revenues generated from connection fees and prepaid cards as of the date of incorporation. Under IFRSs, revenue from connection fees and prepaid phone cards was deferred at the time of the service performed or sale and recognized as revenue over time as the service is continuously performed or as consumed. This reclassification from additional paid-in capital to retained earnings did not affect total equity.

7. 2018 Audit Committee's Review Report

Audit Committee's Review Report

The Board of Directors has prepared the Company's 2018 business report, financial statements, and earnings distribution proposal. The CPA firm of Deloitte & Touche was retained to audit the Company's financial statements and has issued an audit report relating to the financial statements. The business report, financial statements, and earnings distribution proposal have been reviewed and determined to be accurate by the Audit Committee members of the Company. According to Article 14-4 of the Securities and Exchange Act and Article 219 of the Company Law, we hereby submit this report.

Chunghwa Telecom Co., Ltd.

Chairman of the Audit Committee

Charles L. Y. Yen

March 19, 2019

8. Consolidated Financial Statements and Independent Auditors' Report

Chunghwa Telecom Co., Ltd. and Subsidiaries

Consolidated Financial Statements for the Years Ended December 31, 2018 and 2017 and Independent Auditors' Report

REPRESENTATION LETTER

The entities that are required to be included in the consolidated financial statements of affiliates in accordance with the "Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises" for the year ended December 31, 2018 are all the same as those included in the consolidated financial statements of Chunghwa Telecom Co., Ltd. and its subsidiaries prepared in conformity with the International Financial Reporting Standard 10 "Consolidated Financial Statements". Relevant information that should be disclosed in the consolidated financial statements of affiliates is included in the consolidated financial statements of Chunghwa Telecom Co., Ltd. and its subsidiaries. Hence, we do not prepare a separate set of consolidated financial statements of affiliates.

Very truly yours,

CHUNGHWA TELECOM CO., LTD.

By

YU CHENG
Chairman

March 19, 2019

勤業眾信
勤業眾信聯合會計師事務所
11073 台北市信義區松仁路100號20樓

Deloitte & Touche
20F, Taipei Nan Shan Plaza
No. 100, Songren Rd.,
Xinyi Dist., Taipei 11073, Taiwan

Tel :+886 (2) 2725-9988
Fax:+886 (2) 4051-6888
www.deloitte.com.tw

INDEPENDENT AUDITORS'REPORT

The Board of Directors and Stockholders
Chunghwa Telecom Co., Ltd.

Opinion

We have audited the accompanying consolidated financial statements of Chunghwa Telecom Co., Ltd. and its subsidiaries (the Company), which comprise the consolidated balance sheets as of December 31, 2018 and 2017, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the related notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2018 and 2017, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors'Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Company in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2018. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

The descriptions of the key audit matters of the consolidated financial statements for the year ended December 31, 2018 are as follows:

Revenue Recognition on Mobile Services

Key audit matter:

As disclosed in Note 45 to the consolidated financial statements, mobile service revenue is the Company's one source of main revenues and is also an important indicator for the public to evaluate competitiveness and growth potential of telecommunications companies. The calculation of the Company's mobile services revenue highly relies on an automated computer environment in which the systems are complex due to combinations of the various mobile service price plans and process large volumes of data. Consequently, whether mobile services revenue is appropriately recognized is considered as one of the key audit matters.

Corresponding audit procedures:

We tested the effectiveness of the general information technology controls over the information systems used to process the mobile services revenue and relevant controls over the mobile service revenue process from call records, rate calculations, and billing procedures to accounting information system.

Moreover, we performed the following audit procedures on a sample basis: (1) inspected mobile service customers'contracts; (2) performed live call testing and re-calculated the call records on the basis of corresponding price plans; (3) checked that the calculations of call records agreed with customers'bills; and (4) checked that the amounts transferred from the mobile service system agreed with the accounting information system.

Revenue Recognition on Project Business

Key audit matter:

The project business mainly provides customers with combinations of one or more equipment and/or services. When the Company provides a project business, part of the obligations or service may likely be outsourced to third parties. Hence, the judgment on whether the Company is acting as a principal or an agent is required in order to determine if revenue should be reported gross as principal versus net as agent. Please refer to Notes 3 and 4 to the consolidated financial statements for the details. Due to highly customized nature of the project business, whether project revenue is recognized appropriately is considered as one of the key audit matters.

Corresponding audit procedures:

We tested the effectiveness of controls over the project revenue, including those over principal-versus-agent considerations and revenue recognition.

Moreover, we performed the following audit procedures on a sample basis: (1) inspected project contracts; (2) evaluated the reasonableness of the evaluation forms prepared by authorized personnel on whether the Company is acting as a principal or an agent; (3) re-calculated the project revenue and checked that they agreed with the accounting records; (4) obtained con 伍 mations; and (5) checked the source documents and tested the amounts received.

Emphasis of Matter

As discussed in Note 5 to the consolidated financial statements, the Company initia lly 唧 lied IFRS 9 "Financial instruments" and IFRS 15 "Revenue from contracts with customers" in 2018. Our audit opinion is not modified in respect of this matter.

Other Matter

We have also audited the parent company only financial statements of Chunghwa Telecom Co., Ltd. as of and for the years ended December 31, 2018 and 2017 on which we have issued an unmodified opinion.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and IFRS, IAS, IFRIC, and SIC endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China, and for such internal control as management determines is necessary to enable the preparation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the audit committee, are responsible for overseeing the Company's financial reporting process.

Auditors'Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors'report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors'report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors'report. However, future events or conditions may cause the Company to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2018 and are therefore the key audit matters. We describe these matters in our auditors'report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors'report are Mr. Hung Peng Lin and Mr. Ching Pin Shih.

Hung Peng Lin Ching Pin Shih

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 19, 2019

Notice to Readers

The accompanying consolidatedfinancial statements are intended only to present the consolidatedfinancial position, financial performance and cash flows in accordance with accounting principles and practices generally accepted in the Republic of China and not those 瓘 any other jurisdictions. The standards, procedures and practices to audit such consolidated financial statements are those generally applied in the Republic of China.

For the convenience 司 readers, the independent auditors'report and the accompanying consolidated financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation 司 the two versions, the Chinese-language independent auditors'report and consolidatedfinancial statements shall prevail.

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2018 and 2017
(In Thousands of New Taiwan Dollars)

	2018		2017	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 3 and 6)	$ 27,644,780	6	$ 28,824,935	7
Hedging financial assets (Notes 3, 5 and 21)	1,069	-	-	-
Contract assets (Notes 3, 5 and 30)	4,868,728	1	-	-
Trade notes and accounts receivable, net (Notes 3, 4, 5, 10 and 30)	30,075,503	7	31,941,094	7
Receivables from related parties (Note 39)	24,270	-	49,367	-
Inventories (Notes 3, 4, 5, 11 and 40)	15,120,715	3	8,839,615	2
Prepayments (Notes 5, 12 and 39)	1,872,984	-	2,188,173	-
Other current monetary assets (Notes 13 and 28)	9,504,203	2	5,308,060	1
Other current assets (Notes 5, 20, 32 and 40)	2,576,084	1	2,182,758	-
Total current assets	91,688,336	20	79,334,002	17
NONCURRENT ASSETS				
Financial assets at fair value through profit or loss (Notes 3, 4, 5 and 7)	517,362	-	-	-
Financial assets at fair value through other comprehensive income (Notes 3, 4, 5 and 8)	6,932,503	2	-	-
Available-for-sale financial assets (Notes 3, 5 and 9)	-	-	3,125,086	1
Financial assets carried at cost (Notes 3, 5 and 14)	-	-	2,625,785	1
Investments accounted for using equity method (Notes 3 and 16)	2,944,890	1	2,546,374	-
Contract assets (Notes 3, 5 and 30)	2,343,958	-	-	-
Property, plant and equipment (Notes 3, 4, 17, 39 and 40)	288,914,228	61	288,707,910	64
Investment properties (Notes 3, 4 and 18)	8,287,212	2	8,047,793	2
Intangible assets (Notes 3, 4 and 19)	50,943,682	11	54,883,268	12
Deferred income tax assets (Notes 3 and 32)	3,553,856	1	2,730,093	1
Incremental costs of obtaining contracts (Notes 3, 5 and 30)	1,335,030	-	-	-
Net defined benefit assets (Notes 3, 4 and 28)	1,164,088	-	12,979	-
Prepayments (Notes 12 and 39)	3,463,337	1	3,573,345	1
Other noncurrent assets (Notes 20 and 40)	5,180,222	1	5,536,487	1
Total noncurrent assets	375,580,368	80	371,789,120	83
TOTAL	$ 467,268,704	100	$ 451,123,122	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term loans (Note 22)	$ 100,000	-	$ 70,000	-
Financial liabilities at fair value through profit or loss (Notes 3, 5 and 7)	1,114	-	578	-
Hedging derivative financial liabilities (Notes 3, 5 and 21)	-	-	850	-
Contract liabilities (Notes 3, 5, 27 and 30)	10,687,772	2	-	-
Trade notes and accounts payable (Note 24)	20,464,792	5	19,395,889	4
Payables to related parties (Note 39)	917,951	-	684,185	-
Current tax liabilities (Notes 3, 5 and 32)	4,390,203	1	4,725,698	1
Other payables (Note 25)	23,315,383	5	25,001,401	6
Provisions (Notes 3,5 and 26)	128,200	-	188,744	-
Advance receipts (Note 3, 5 and 27)	-	-	8,841,858	2
Other current liabilities (Note 5)	1,381,606	-	1,081,156	-
Total current liabilities	61,387,021	13	59,990,359	13
NONCURRENT LIABILITIES				
Contract liabilities (Notes 3, 5, 27 and 30)	2,595,149	1	-	-
Long-term loans (Notes 23 and 40)	1,600,000	-	1,600,000	-
Deferred income tax liabilities (Notes 3, 5 and 32)	1,991,843	-	1,429,592	-
Provisions (Notes 3 and 26)	78,627	-	78,513	-
Customers' deposits (Note 39)	4,716,571	1	4,671,441	1
Net defined benefit liabilities (Notes 3, 4 and 28)	3,533,936	1	2,703,569	1
Deferred revenue (Note 3 and 5)	-	-	3,612,391	1
Other noncurrent liabilities (Note 5)	4,793,237	1	3,457,677	1
Total noncurrent liabilities	19,309,363	4	17,553,183	4
Total liabilities	80,696,384	17	77,543,542	17
EQUITY ATTRIBUTABLE TO STOCKHOLDERS OF THE PARENT (Notes 5, 15 and 29)				
Common stocks	77,574,465	17	77,574,465	17
Additional paid-in capital	171,136,764	36	169,466,883	38
Retained earnings				
Legal reserve	77,574,465	17	77,574,465	17
Special reserve	2,675,419	1	2,680,823	1
Unappropriated earnings	47,141,345	10	37,202,683	8
Total retained earnings	127,391,229	28	117,457,971	26
Other adjustments	459,914	-	382,666	-
Total equity attributable to stockholders of the parent	376,562,372	81	364,881,985	81
NONCONTROLLING INTERESTS (Notes 5, 15 and 29)	10,009,948	2	8,697,595	2
Total equity	386,572,320	83	373,579,580	83
TOTAL	$ 467,268,704	100	$ 451,123,122	100

The accompanying notes are an integral part of the consolidated financial statements.

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
YEARS ENDED DECEMBER 31, 2018 and 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
REVENUES (Notes 3, 5, 30, 39 and 45)	$ 215,483,158	100	$ 227,514,183	100
OPERATING COSTS (Notes 3, 5, 11, 28, 30, 31, 39 and 45)	139,545,457	65	146,837,483	65
GROSS PROFIT	75,937,701	35	80,676,700	35
OPERATING EXPENSES (Notes 3, 5, 28, 31, 39 and 45)				
Marketing	23,170,024	11	25,356,999	11
General and administrative	4,589,488	2	4,626,423	2
Research and development	3,725,249	2	3,885,920	2
Expected credit loss	919,732	-	-	-
Total operating expenses	32,404,493	15	33,869,342	15
OTHER INCOME AND EXPENSES (Notes 18, 19, 31 and 45)	110,451	-	(104,381)	-
INCOME FROM OPERATIONS	43,643,659	20	46,702,977	20
NON-OPERATING INCOME AND EXPENSES				
Interest income (Note 45)	196,889	-	205,448	-
Other income (Notes 8, 31 and 39)	699,823	-	835,465	-
Other gains and losses (Notes 31, 38 and 39)	(45,671)	-	(132,158)	-
Interest expenses (Note 45)	(17,596)	-	(21,913)	-
Share of profits of associates and joint ventures accounted for using equity method (Notes 16 and 45)	501,600	-	407,243	-
Total non-operating income and expenses	1,335,045	-	1,294,085	-
INCOME BEFORE INCOME TAX	44,978,704	20	47,997,062	20
INCOME TAX EXPENSE (Notes 3, 5 and 32)	8,522,533	4	7,954,461	2
NET INCOME	36,456,171	16	40,042,601	18

(Continued)

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
YEARS ENDED DECEMBER 31, 2018 and 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
TOTAL OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified to profit or loss:				
Remeasurements of defined benefit pension plans (Note 28)	$ (1,214,552)	-	$ (2,023,493)	(1)
Unrealized gain or loss on investments in equity instruments at fair value through other comprehensive income (Notes 3 and 38)	(346,330)	-	-	-
Gain or loss on hedging instruments subject to basis adjustment (Notes 3 and 21)	1,919	-	-	-
Share of remeasurements of defined benefit pension plans of associates and joint ventures (Note 16)	1,707	-	844	-
Income tax benefit relating to items that will not be reclassified to profit or loss (Note 32)	450,166	-	343,994	-
	(1,107,090)	-	(1,678,655)	(1)
Items that may be reclassified subsequently to profit or loss:				
Exchange differences arising from the translation of the foreign operations	89,319	-	(229,009)	-
Unrealized gain or loss on available-for-sale financial assets (Note 31)	-	-	605,274	-
Cash flow hedges (Notes 21 and 31)	-	-	(263)	-
Share of exchange differences arising from the translation of the foreign operations of associates and joint ventures (Note 16)	3,318	-	(5,293)	-
Income tax benefit relating to items that may be reclassified subsequently to profit or loss (Note 32)	-	-	2,420	-
	92,637	-	373,129	-
Total other comprehensive loss, net of income tax	(1,014,453)	-	(1,305,526)	(1)
TOTAL COMPREHENSIVE INCOME	$ 35,441,718	16	$ 38,737,075	17
NET INCOME ATTRIBUTABLE TO				
Stockholders of the parent	$ 35,501,622	16	$ 38,873,905	17
Noncontrolling interests	954,549	-	1,168,696	1
	$ 36,456,171	16	$ 40,042,601	18

(Continued)

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
YEARS ENDED DECEMBER 31, 2018 and 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
COMPREHENSIVE INCOME ATTRIBUTABLE TO				
Stockholders of the parent	$ 34,496,742	16	$ 37,590,365	17
Noncontrolling interests	944,976	-	1,146,710	-
	$ 35,441,718	16	$ 38,737,075	17
EARNINGS PER SHARE (Notes 5 and 33)				
Basic	$ 4.58		$ 5.01	
Diluted	$ 4.57		$ 5.00	

The accompanying notes are an integral part of the consolidated financial statements. (Concluded)

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
YEARS ENDED DECEMBER 31, 2018 and 2017
(In Thousands of New Taiwan Dollars)

	Equity Attributable to Stockholders of the Parent (Notes 15, 21 and 29)												
			Retained Earnings			Other Adjustments							
	Common Stocks	Additional Paid-in Capital	Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences Arising from the Translation of the Foreign Operations	Unrealized Gain or Loss on Available-for-sale Financial Assets	Unrealized Gain or Loss on Financial Assets at Fair Value Through Other Comprehensive Income	Cash Flow Hedges	Gain or Loss on Hedging Instruments	Total	Noncontrolling Interests (Notes 15 and 29)	Total Equity
BALANCE, JANUARY 1, 2017	$ 77,574,465	$ 168,542,486	$ 77,574,465	$ 2,675,419	$ 38,342,317	$ 46,068	$ (50,885)	$ -	$ (587)	$ -	$ 364,703,748	$ 6,495,922	$ 371,199,670
Appropriation of 2016 earnings													
Provision for special reserve	-	-	-	5,404	(5,404)	-	-	-	-	-	-	-	-
Cash dividends distributed by Chunghwa	-	-	-	-	(38,336,525)	-	-	-	-	-	(38,336,525)	-	(38,336,525)
Cash dividends distributed by subsidiaries	-	-	-	-	-	-	-	-	-	-	-	(942,482)	(942,482)
Unclaimed dividend	-	3,023	-	-	-	-	-	-	-	-	3,023	-	3,023
Change in additional paid-in capital from investments in associates and joint ventures accounted for using equity method	-	13,965	-	-	-	-	-	-	-	-	13,965	1,762	15,727
Partial disposal of interests in subsidiaries	-	76,714	-	-	-	-	-	-	-	-	76,714	29,217	105,931
Change in additional paid-in capital for not participating proportionately in the capital increase of subsidiaries	-	801,727	-	-	-	-	-	-	-	-	801,727	1,750,326	2,552,053
Other change in additional paid-in capital of subsidiaries	-	84	-	-	-	-	-	-	-	-	84	41	125
Net income for the year ended December 31, 2017	-	-	-	-	38,873,905	-	-	-	-	-	38,873,905	1,168,696	40,042,601
Other comprehensive income (loss) for the year ended December 31, 2017	-	-	-	-	(1,671,610)	(220,661)	608,994	-	(263)	-	(1,283,540)	(21,986)	(1,305,526)
Total comprehensive income (loss) for the year ended December 31, 2017	-	-	-	-	37,202,295	(220,661)	608,994	-	(263)	-	37,590,365	1,146,710	38,737,075
Share-based payment transactions of subsidiaries	-	1,984	-	-	-	-	-	-	-	-	1,984	19,799	21,783
Net increase in noncontrolling interests	-	26,900	-	-	-	-	-	-	-	-	26,900	196,300	223,200
BALANCE, DECEMBER 31, 2017	77,574,465	169,466,883	77,574,465	2,680,823	37,202,683	(174,593)	558,109	-	(850)	-	364,881,985	8,697,595	373,579,580
Effect of retrospective application (Note 5)	-	-	-	-	12,393,167	-	(558,109)	883,420	850	(850)	12,718,478	(3,945)	12,714,533
BALANCE, JANUARY 1, 2018 AS ADJUSTED	77,574,465	169,466,883	77,574,465	2,680,823	49,595,850	(174,593)	-	883,420	-	(850)	377,600,463	8,693,650	386,294,113
Appropriation of 2017 earnings													
Reversal of special reserve	-	-	-	(5,404)	5,404	-	-	-	-	-	-	-	-
Cash dividends distributed by Chunghwa	-	-	-	-	(37,204,714)	-	-	-	-	-	(37,204,714)	-	(37,204,714)
Cash dividends distributed by subsidiaries	-	-	-	-	-	-	-	-	-	-	-	(958,446)	(958,446)
Unclaimed dividend	-	2,455	-	-	-	-	-	-	-	-	2,455	-	2,455
Change in additional paid-in capital from investments in associates and joint ventures accounted for using equity method	-	(1,044)	-	-	-	-	-	-	-	-	(1,044)	191	(853)
Partial disposal of interests in subsidiaries	-	826,047	-	-	-	-	-	-	-	-	826,047	348,353	1,174,400
Change in additional paid-in capital for not participating proportionately in the capital increase of subsidiaries	-	776,713	-	-	-	-	-	-	-	-	776,713	699,967	1,476,680
Net income for the year ended December 31, 2018	-	-	-	-	35,501,622	-	-	-	-	-	35,501,622	954,549	36,456,171
Other comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	(756,817)	95,166	-	(345,148)	-	1,919	(1,004,880)	(9,573)	(1,014,453)
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	34,744,805	95,166	-	(345,148)	-	1,919	34,496,742	944,976	35,441,718
Share-based payment transactions of subsidiaries	-	10,776	-	-	-	-	-	-	-	-	10,776	41,863	52,639
Net increase in noncontrolling interests	-	54,934	-	-	-	-	-	-	-	-	54,934	239,394	294,328
BALANCE, DECEMBER 31, 2018	$ 77,574,465	$ 171,136,764	$ 77,574,465	$ 2,675,419	$ 47,141,345	$ (79,427)	$ -	$ 538,272	$ -	$ 1,069	$ 376,562,372	$ 10,009,948	$ 386,572,320

The accompanying notes are an integral part of the consolidated financial statements.

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2018 and 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	$ 44,978,704	$ 47,997,062
Adjustments to reconcile income before income tax to net cash provided by operating activities:		
Depreciation	27,481,956	28,163,584
Amortization	4,386,798	3,766,020
Amortization of incremental costs of obtaining contracts	1,941,124	-
Expected credit loss	919,732	-
Provision for doubtful accounts	-	643,010
Interest expenses	17,596	21,913
Interest income	(196,889)	(205,448)
Dividend income	(395,593)	(327,861)
Compensation cost of share-based payment transactions	17,302	21,783
Share of profits of associates and joint ventures accounted for using equity method	(501,600)	(407,243)
Loss (gain) on disposal of property, plant and equipment	(142,068)	106,692
Property, plant and equipment transferred to expenses	-	2,565
Loss on disposal of intangible assets	-	46
Gain on disposal of financial instruments	(5,763)	(2,748)
Loss on disposal of investments accounted for using equity method	125	223
Provision for inventory and obsolescence	365,123	52,487
Reversal of impairment loss on investment properties	(19,133)	(10,979)
Impairment loss on intangible assets	50,750	8,622
Valuation loss (gain) on financial assets and liabilities at fair value through profit or loss, net	20,763	(779)
Loss (gain) on foreign exchange, net	(17,223)	83,171
Changes in operating assets and liabilities:		
Decrease (increase) in:		
Financial assets held for trading	-	218
Financial assets mandatorily measured at fair value through profit or loss	63,117	-
Contract assets	2,750,594	-
Trade notes and accounts receivable	1,353,807	(1,191,428)
Receivables from related parties	25,097	(35,568)
Inventories	(6,778,309)	(1,469,328)
Prepayments	417,569	458,004
Other current monetary assets	(172,597)	(81,035)
Other current assets	(261,240)	(60,981)
Incremental cost of obtaining contracts	(802,011)	-
Increase (decrease) in:		
Contract liabilities	2,652,747	-
Trade notes and accounts payable	1,065,054	586,940
Payables to related parties	233,766	(77,888)
Other payables	(1,088,406)	(691,001)

(Continued)

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2018 and 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
Provisions	$ 27,142	$ 82,443
Advance receipts	-	(728,007)
Other operating liabilities	422,413	(76,063)
Deferred revenue	-	66,199
Net defined benefit plans	(1,535,294)	48,919
Cash generated from operations	77,275,153	76,743,544
Interest paid	(17,524)	(21,918)
Income tax paid	(10,891,279)	(5,789,762)
Net cash provided by operating activities	66,366,350	70,931,864
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets at fair value through other comprehensive income	(289,580)	-
Proceeds from return of financial assets at fair value through other comprehensive income	6,690	-
Proceeds from disposal of available-for-sale financial assets	-	1,258
Acquisition of time deposits and negotiable certificates of deposit with maturities of more than three months	(9,719,951)	(6,230,944)
Proceeds from disposal of time deposits and negotiable certificates of deposit with maturities of more than three months	5,654,941	5,649,868
Proceeds from disposal of held-to-maturity financial assets	-	2,140,000
Acquisition of financial assets carried at cost	-	(400,000)
Proceeds from disposal of financial assets carried at cost	-	7,292
Capital reduction of financial assets carried at cost	-	12,167
Acquisition of investments accounted for using equity method	(204,900)	-
Proceeds from disposal of investments accounted for using equity method	3,379	-
Proceeds from capital reduction of investments accounted for using equity method	19,184	-
Acquisition of property, plant and equipment	(28,549,929)	(26,875,336)
Proceeds from disposal of property, plant and equipment	264,446	159,636
Acquisition of intangible assets	(498,005)	(11,304,633)
Acquisition of investment properties	(5,627)	-
Increase in other noncurrent assets	(80,640)	(788,594)
Interest received	186,617	233,439
Cash dividends received	599,621	675,321
Net cash used in investing activities	(32,613,754)	(36,720,526)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from short-term loans	360,000	6,951,500
Repayment of short-term loans	(330,000)	(7,019,500)
Increase (decrease) in customers' deposits	30,997	(110,756)
Increase (decrease) in other noncurrent liabilities	83,613	(36,271)

(Continued)

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2018 and 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
Cash dividends	$ (37,204,714)	$ (38,336,525)
Partial disposal of interests in subsidiaries without losing control	1,174,400	105,931
Cash dividends distributed to noncontrolling interests	(958,446)	(942,482)
Change in other noncontrolling interests	1,806,345	2,777,237
Unclaimed dividend	2,455	3,023
Net cash used in financing activities	(35,035,350)	(36,607,843)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	102,599	121,098
NET DECREASE IN CASH AND CASH EQUIVALENTS	(1,180,155)	(2,275,407)
CASH AND CASH EQUIVALENTS, BEGINNING OF THE YEAR	28,824,935	31,100,342
CASH AND CASH EQUIVALENTS, END OF THE YEAR	$ 27,644,780	$ 28,824,935

The accompanying notes are an integral part of the consolidated financial statements. (Concluded)

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2018 and 2017
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL

Chunghwa Telecom Co., Ltd. (“Chunghwa”) was incorporated on July 1, 1996 in the Republic of China (“ROC”) pursuant to the Article 30 of the Telecommunications Act. Chunghwa is a company limited by shares and, prior to August 2000, was wholly owned by the Ministry of Transportation and Communications (“MOTC”). Prior to July 1, 1996, the current operations of Chunghwa were carried out under the Directorate General of Telecommunications (“DGT”). The DGT was established by the MOTC in June 1943 to take primary responsibility in the development of telecommunications infrastructure and to formulate policies related to telecommunications. On July 1, 1996, the telecom operations of the DGT were spun-off as Chunghwa which continues to carry out the business and the DGT continues to be the industry regulator.

Effective August 12, 2005, the MOTC completed the process of privatizing Chunghwa by reducing the government ownership to below 50% in various stages. In July 2000, Chunghwa received approval from the Securities and Futures Commission (the “SFC”) for a domestic initial public offering and its common stocks were listed and traded on the Taiwan Stock Exchange (the “TWSE”) on October 27, 2000. Certain of Chunghwa’s common stocks were sold, in connection with the foregoing privatization plan, in domestic public offerings at various dates from August 2000 to July 2003. Certain of Chunghwa’s common stocks were also sold in an international offering of securities in the form of American Depository Shares (“ADS”) on July 17, 2003 and were listed and traded on the New York Stock Exchange (the “NYSE”). The MOTC sold common stocks of Chunghwa by auction in the ROC on August 9, 2005 and completed the second international offering on August 10, 2005. Upon completion of the share transfers associated with these offerings on August 12, 2005, the MOTC owned less than 50% of the outstanding shares of Chunghwa and completed the privatization plan.

Chunghwa together with its subsidiaries are hereinafter referred to collectively as the “Company”.

The consolidated financial statements are presented in Chunghwa’s functional currency, New Taiwan dollars.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Board of Directors on March 19, 2019.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company initial applied IFRS 9 “Financial Instruments” and IFRS 15 “Revenue from Contracts with Customers” on January 1, 2018, and elected not to reflect the figures on a retrospective basis in comparative periods. Different accounting policies for each accounting period as a result of the application of new accounting standards are listed by year separately.

Statement of Compliance

The accompanying consolidated financial statements have been prepared in conformity with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), International

Financial Reporting Interpretations Committee (IFRIC) and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission (FSC) (the "Taiwan-IFRS").

Basis of Preparation

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values and net defined benefit liabilities (assets) which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

Current and Noncurrent Assets and Liabilities

Current assets include:

a. Assets held primarily for the purpose of trading;

b. Assets expected to be realized within twelve months after the reporting period; and

c. Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

Current liabilities include:

a. Liabilities held primarily for the purpose of trading;

b. Liabilities due to be settled within twelve months after the reporting period; and

c. Liabilities for which the Company does not have an unconditional right to defer settlement for at least twelve months after the reporting period.

Assets and liabilities that are not classified as current are classified as noncurrent.

Light Era Development Co., Ltd. (LED) engages mainly in development of property for rent and sale. The assets and liabilities of LED related to property development within its operating cycle, which is over one year, are classified as current items.

Basis of Consolidation

a. Principles for preparing consolidated financial statements

The consolidated financial statements incorporate the financial statements of Chunghwa and entities controlled by Chunghwa (its subsidiaries).

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with those used by the Company.

All inter-company transactions, balances, income and expenses are eliminated in full upon consolidation.

Attribution of total comprehensive income to noncontrolling interests

Total comprehensive income of subsidiaries is attributed to the stockholders of the parent and to the noncontrolling interests even if it results in the noncontrolling interests having a deficit balance.

Changes in the Company's ownership interests in subsidiaries

Changes in the Company's ownership interests in subsidiaries that do not result in the Company losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Company's interests and the noncontrolling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the noncontrolling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to stockholders of the parent.

b. The subsidiaries in the consolidated financial statements

The detail information of the subsidiaries at the end of reporting period was as follows:

			Percentage of Ownership December 31		
Name of Investor	Name of Investee	Main Businesses and Products	2018	2017	Note
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd. ("SENAO")	Handset and peripherals retailer; sales of CHT mobile phone plans as an agent	28	29	a)
	Light Era Development Co., Ltd. ("LED")	Planning and development of real estate and intelligent buildings, and property management	100	100	
	Donghwa Telecom Co., Ltd. ("DHT")	International private leased circuit, IP VPN service, and IP transit services	100	100	
	Chunghwa Telecom Singapore Pte., Ltd. ("CHTS")	International private leased circuit, IP VPN service, and IP transit services	100	100	
	Chunghwa System Integration Co., Ltd. ("CHSI")	Providing system integration services and telecommunications equipment	100	100	
	Chunghwa Investment Co., Ltd. ("CHI")	Investment	89	89	
	CHIEF Telecom Inc. ("CHIEF")	Network integration, internet data center ("IDC"), communications integration and cloud application services	57	67	b)
	CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	Digital information supply services and advertisement services	100	100	
	Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia")	Investment	100	100	
	Spring House Entertainment Tech. Inc. ("SHE")	Software design services, internet contents production and play, and motion picture production and distribution	56	56	
	Chunghwa Telecom Global, Inc. ("CHTG")	International private leased circuit, internet services, and transit services	100	100	
	Chunghwa Telecom Vietnam Co., Ltd. ("CHTV")	Intelligent energy saving solutions, international circuit, and information and communication technology ("ICT") services.	100	100	
	Smartfun Digital Co., Ltd. ("SFD")	Providing diversified family education digital services	65	65	
	Chunghwa Telecom Japan Co., Ltd. ("CHTJ")	International private leased circuit, IP VPN service, and IP transit services	100	100	
	Chunghwa Sochamp Technology Inc. ("CHST")	Design, development and production of Automatic License Plate Recognition software and hardware	51	51	
	Honghwa International Co., Ltd. ("HHI")	Telecommunications engineering, sales agent of mobile phone plan application and other business services	100	100	
	Chunghwa Leading Photonics Tech Co., Ltd. ("CLPT")	Production and sale of electronic components and finished products	75	75	
	Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT")	International private leased circuit, IP VPN service, ICT and cloud VAS services	100	100	c)

(Continued)

Name of Investor	Name of Investee	Main Businesses and Products	Percentage of Ownership December 31 2018	2017	Note
	CHT Security Co., Ltd. ("CHTSC")	Computing equipment installation, wholesale of computing and business machinery equipment and software, management consulting services, data processing services, digital information supply services and internet identify services	80	80	d)
	New Prospect Investments Holdings Ltd. (B.V.I.) ("New Prospect")	Investment	-	-	e)
Senao International Co., Ltd.	Senao International (Samoa) Holding Ltd. ("SIS")	International investment	100	100	
	Youth Co., Ltd. ("Youth")	Sale of information and communication technologies products	93	89	f)
	Aval Technologies Co., Ltd. ("Aval")	Sale of information and communication technologies products	100	100	
	SENYOUNG Insurance Agent Co., Ltd. ("SENYOUNG")	Property and liability insurance agency	100	100	g)
Youth Co., Ltd.	ISPOT Co., Ltd. ("ISPOT")	Sale of information and communication technologies products	100	100	
	Youyi Co., Ltd. ("Youyi")	Maintenance of information and communication technologies products	100	100	
Light Era Development Co., Ltd.	Taoyuan Asia Silicon Valley Innovation Co., Ltd. ("TASVI")	Development of real estate	60	-	h)
CHIEF Telecom Inc.	Unigate Telecom Inc. ("Unigate")	Telecommunications and internet service	100	100	
	Chief International Corp. ("CIC")	Telecommunications and internet service	100	100	
	Shanghai Chief Telecom Co., Ltd. ("SCT")	Telecommunications and internet service	49	49	
Chunghwa System Integration Co., Ltd.	Concord Technology Co., Ltd. ("Concord")	Investment	-	100	i)
Chunghwa Investment Co., Ltd.	Chunghwa Precision Test Tech. Co., Ltd. ("CHPT")	Production and sale of semiconductor testing components and printed circuit board	34	38	j)
Concord Technology Co., Ltd.	Glory Network System Service (Shanghai) Co., Ltd. ("GNSS (Shanghai)")	Design, development and production of computer and internet software, installment, maintenance and consulting services of information system integration, and sales of self-production products	-	-	k)
Chunghwa Precision Test Tech. Co., Ltd.	Chunghwa Precision Test Tech. USA Corporation ("CHPT (US)")	Design and after-sale services of semiconductor testing components and printed circuit board	100	100	
	CHPT Japan Co., Ltd. ("CHPT (JP)")	Related services of electronic parts, machinery processed products and printed circuit board	100	100	
	Chunghwa Precision Test Tech. International, Ltd. ("CHPT (International)")	Wholesale and retail of electronic materials, and investment	100	100	
Senao International (Samoa) Holding Ltd.	Senao International HK Limited ("SIHK")	International investment	100	100	
Senao International HK Limited	Senao Trading (Fujian) Co., Ltd. ("STF")	Sale of information and communication technologies products	100	100	l)
	Senao International Trading (Shanghai) Co., Ltd. ("SITS")	Sale of information and communication technologies products	100	100	

(Continued)

Name of Investor	Name of Investee	Main Businesses and Products	Percentage of Ownership December 31 2018	2017	Note
	Senao International Trading (Shanghai) Co., Ltd. ("SEITS")	Maintenance of information and communication technologies products	-	100	m)
	Senao International Trading (Jiangsu) Co., Ltd. ("SITJ")	Sale of information and communication technologies products	100	100	n)
Prime Asia Investments Group Ltd. (B.V.I.)	Chunghwa Hsingta Co., Ltd. ("CHC")	Investment	100	100	
Chunghwa Hsingta Co., Ltd. ("CHC")	Chunghwa Telecom (China) Co., Ltd. ("CTC")	Integrated information and communication solution services for enterprise clients, and intelligent energy network service	100	100	
	Jiangsu Zhenhua Information Technology Company, LLC. ("JZIT")	Providing intelligent energy saving solution and intelligent buildings services	-	75	o)
Chunghwa Precision Test Tech. International, Ltd.	Shanghai Taihua Electronic Technology Limited ("STET")	Design of printed circuit board and related consultation service	100	100	

(Concluded)

a) SENAO transferred its treasury stock to employees in June 2018 and the Company's ownership interest in SENAO decreased to 28.18% as of December 31, 2018. As Chunghwa controls five out of nine seats of the Board of Directors of SENAO through the support of large beneficial stockholders, the accounts of SENAO are included in the consolidated financial statements.

b) Chunghwa and CHI disposed some shares of CHIEF in June 2017 before CHIEF traded its shares on the emerging stock market according to the local requirements. The Company's equity ownership of CHIEF decreased to 70.43% as of December 31, 2017. CHIEF issued new shares in March and November 2018 as its employees exercised their options. In addition, Chunghwa and CHI disposed some shares of CHIEF in May 2018 before CHIEF traded its shares on the General Stock Market of the Taipei Exchange according to the local requirements. Furthermore, Chunghwa and CHI did not participate in the capital increase of CHIEF in June 2018. Therefore, the Company's equity ownership interest in CHIEF decreased to 60.23% as of December 31, 2018.

c) Chunghwa invested 100% equity shares of Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT") in March 2017.

d) Chunghwa invested 80.27% equity shares of CHT Security Co., Ltd. ("CHTSC") in December 2017.

e) New Prospect was approved to dissolve its business in April 2017. The liquidation of New Prospect was completed in May 2017.

f) SENAO subscribed for all the shares in the capital increase of Youth in December 2018. Therefore, the Company's equity ownership interest in Youth increased from 89% to 93%.

g) SENAO invested 100% equity shares of SENYOUNG Insurance Agent Co., Ltd. ("SENYOUNG") in November 2017.

h) LED invested 60% equity shares of Taoyuan Asia Silicon Valley Innovation Co., Ltd. ("TASVI") in March 2018.

i) Concord was approved to end and dissolve its business in August 2017. The liquidation of Concord was completed in January 2018.

j) CHI did not participate in the capital increase of CHPT in September 2017 and disposed some shares of CHPT from April to August 2018. Therefore, its ownership interest in CHPT decreased to 34.25% as of December 31, 2018. However, considering the absolute and relative size of ownership interest, and the dispersion of shares owned by the other stockholders, the management concluded that the Company has a sufficiently dominant voting interest to direct the relevant activities; hence, CHPT is deemed as a subsidiary of the Company.

k) GNSS (Shanghai) completed its liquidation in August 2017 and Concord received the proceeds from the liquidation.

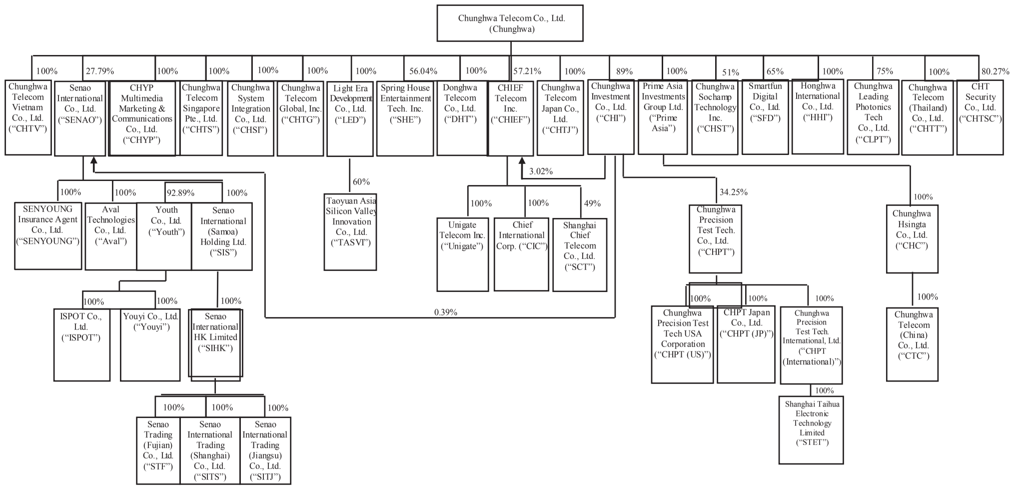
l) STF was approved to end and dissolve its business in September 2018. The liquidation of STF is still in process.

m) SEITS completed its liquidation in March 2018.

n) SITJ was approved to end and dissolve its business in April 2018. The liquidation of SITJ is still in process.

o) JZIT completed its liquidation in December 2018 and CHC received the proceeds from the liquidation.

The following diagram presents information regarding the relationship and ownership percentages between Chunghwa and its subsidiaries as of December 31, 2018:



Foreign Currencies

In preparing the financial statements of each individual entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period in which they arise.

Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined and related exchange differences are recognized in profit or loss. Conversely, when the fair value changes were recognized in other comprehensive income, related exchange difference shall be recognized in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are not retranslated.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Company's foreign operations (including of the subsidiaries and associates in other countries or currencies used different with Chunghwa) are translated into New Taiwan dollars using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income and attributed to stockholders of the parent and noncontrolling interests as appropriate.

Cash Equivalents

Cash equivalents include commercial paper, time deposits and negotiable certificates of deposit with original maturities within three months from the date of acquisition, highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

Inventories

Inventories are stated at the lower of cost or net realizable value item by item, except for those that may be appropriate to group items of similar or related inventories. Net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. The calculation of the cost of inventory is derived using the weighted-average method.

Buildings and Land Consigned to Construction Contractors

Inventories of LED are stated at the lower of cost or net realizable value item by item, except for those that may be appropriate to group as similar items or related inventories. Land acquired before construction is classified as land held for development, and then reclassified as land held under development after LED begins its construction project.

Upon the completion of the construction project, LED recognizes revenues in the amount of proceeds from customers for land and buildings and related costs when ownership is transferred to the customers. The unsold portion of the completed construction project is transferred to land and building held for sale.

Investments in Associates and Joint Ventures

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor an interest in a joint venture. A joint venture is a joint arrangement whereby the Company and other parties that have joint control of the arrangement have rights to the net assets of the arrangement.

Investments accounted for using the equity method include investments in associates and interests in joint ventures. Under the equity method, an investment in an associate or a joint venture is initially recognized at cost and adjusted thereafter to recognize the Company's share of profit or loss and other comprehensive income of the associate and joint venture as well as the distribution received. The Company also recognizes its share in changes in the associates and joint ventures.

When the Company subscribes for new shares of the associate and joint venture at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Company's proportionate interest in the associate and joint venture. The Company records such a difference as an adjustment to investments with the corresponding amount charged or credited to additional paid-in capital. When the adjustment should be debited to additional paid-in capital but the additional paid-in capital recognized from investments accounted for using equity method is insufficient, the shortage is debited to retained earnings.

Any excess of the cost of acquisition over the Company's share of the fair value of the identifiable net assets and liabilities of an associate or a joint venture at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and shall not be amortized. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition is recognized immediately in profit or loss.

When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

When the Company transacts with its associate and joint venture, profits and losses resulting from the transactions with the associate and joint venture are recognized in the Company's consolidated financial statements only to the extent of interests in the associate and joint venture that are not related to the Company.

Property, Plant and Equipment

Property, plant and equipment are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment loss.

Property, plant and equipment in the course of construction are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for their intended use.

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. Freehold land is not depreciated. The estimated useful lives, residual values and depreciation method are reviewed at the end of each year, with the effect of any changes in estimate accounted for on a prospective basis.

On derecognition of an item of property, plant and equipment, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss in the period in which the property is derecognized.

Investment Properties

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties also include land held for a currently undetermined future use.

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss. Depreciation is recognized using the straight-line method.

For a transfer from the investment properties to property, plant and equipment, the deemed cost of the property, plant and equipment for subsequent accounting is its carrying amount at the commencement of owner-occupation.

For a transfer from the property, plant and equipment to investment properties, the deemed cost of the investment properties for subsequent accounting is its carrying amount at the end of owner-occupation.

On derecognition of the investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss in the period in which the property is derecognized.

Goodwill

Goodwill arising from the acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment loss.

For the purpose of impairment testing, goodwill is allocated to each of the Company's cash-generating units or groups of cash-generating units (referred to as "cash-generating unit") that are expected to benefit from the synergies of the business combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the unit may be impaired, by comparing its carrying amount, including the attributable goodwill, with its recoverable amount. However, if the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit shall be tested for impairment before the end of the current annual period. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

Intangible Assets Other Than Goodwill

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful life, residual value, and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. The residual value of an intangible asset with a finite useful life shall be assumed to be zero unless the Company expects to dispose of the intangible asset before the end of its economic life. Intangible assets with indefinite useful lives that are acquired separately are measured at cost less accumulated impairment loss.

Intangible assets acquired in a business combination and recognized separately from goodwill are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss in the period in which the asset is derecognized.

Impairment of Tangible Assets, Intangible Assets (Other Than Goodwill) and Incremental Costs of Obtaining Contracts

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

Impairment loss from the assets related to incremental cost of obtaining contracts is recognized to the extent that the carrying amount of the assets exceeds the remaining amount of consideration that the Company expects to receive in exchange for related goods or services less the costs which relate directly to providing those goods or services.

When an impairment loss is subsequently reversed, the carrying amount of the asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

Financial Instruments

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

a. Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

1) Measurement category

2018

a) Financial assets at fair value through profit or loss (FVTPL)

Financial asset is classified as at FVTPL when the financial asset is mandatorily classified as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at fair value through other comprehensive income (FVOCI).

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividend earned on the financial asset. Fair value is determined in the manner described in Note 38.

b) Financial assets at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

i. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets at amortized cost are measured at amortized cost, which equals to gross carrying amount determined by the effective interest method less any impairment loss, except for short-term receivables as the effect of discounting is immaterial. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such financial assets.

c) Investments in equity instruments at FVOCI

On initial recognition, the Company may make an irrevocable election to designate investments in equity instruments as at FVOCI. Designation at FVOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments. Instead, it will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

2017

a) Financial assets at fair value through profit or loss (FVTPL)

Financial assets are classified as at FVTPL when the financial asset is held for trading.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividend or interest earned on the financial asset.

b) Held-to-maturity financial assets

The Company invests in bank debentures and corporate bonds with specific credit ratings and the Company has positive intent and ability to hold to maturity, are classified as held-to-maturity investments.

Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest method less any impairment loss.

c) Available-for-sale financial assets (AFS financial assets)

AFS financial assets are non-derivatives that are either designated as AFS or are not classified as loans and receivables, held-to-maturity financial assets or financial assets at fair value through profit or loss.

The Company invests in listed stocks, emerging market stocks and non-listed stocks. Among these investments, those that have a quoted market price in an active market are classified as AFS and measured at fair value at the end of each reporting period; the others that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost less any identified impairment losses at the end of each reporting period by presenting in a separate line item as financial assets carried at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between the carrying amount and the fair value is recognized in other comprehensive income. Any impairment losses are recognized in profit or loss.

Changes in the carrying amount of AFS monetary financial assets relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and dividends on AFS equity investments are recognized in profit or loss. Other changes in the carrying amount of AFS financial assets are recognized in other comprehensive income and will be reclassified to profit or loss when the investment is disposed of or is determined to be impaired.

Dividends on AFS equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established.

d) Loans and receivables

Loans and receivables (including cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other financial assets and refundable deposits) are measured at amortized cost using the effective interest method, less any impairment loss, except for short-term receivables as the effect of discounting is immaterial.

2) Impairment of financial assets and contract assets

2018

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including accounts receivable) and contract assets.

The Company recognizes lifetime Expected Credit Loss (ECL) for accounts receivable and contract assets. For all other financial instruments, the Company recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Company recognizes an impairment loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

2017

Financial assets, other than those at FVTPL, are assessed to determine whether there is objective evidence that an impairment loss has occurred at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

For financial assets carried at amortized cost, such as held-to-maturity financial assets and trade notes and accounts receivable, assets that are individually assessed and not impaired are, in addition, assessed for impairment on a collective basis.

For financial assets carried at amortized cost, the amount of the impairment loss recognized is mainly based on the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate. However, since the discounted effect of short-term receivables is immaterial, the impairment loss is recognized on the difference between carrying amount and estimated future cash flow.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

For AFS equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

When an AFS financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

In respect of AFS equity securities, impairment losses previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income.

For financial assets that are carried at cost, the amount of the impairment loss is mainly measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss is not reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade notes and accounts receivable and other receivables, where the carrying amount is reduced through the use of an allowance account. When trade notes and accounts receivable and other receivables are considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss except for uncollectible trade notes and accounts receivable and other receivables that are written off against the allowance account.

3) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

2018

On derecognition of a financial asset measured at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss.

On derecognition of investments in equity instruments at FVOCI in its entirety, the cumulative gain or loss is directly transferred to retained earnings, and it is not reclassified to profit or loss.

2017

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income is recognized in profit or loss.

b. Financial liabilities

1) Subsequent measurement

Except for financial liabilities at FVTPL, all the financial liabilities are subsequently measured at amortized cost using the effective interest method.

2) Derecognition of financial liabilities

The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

c. Derivative financial instruments

The Company enters into derivative financial instruments to manage its exposure to foreign exchange rate risks, including forward exchange contracts.

Derivatives are initially measured at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship. When the fair value of derivative financial instruments is positive, the derivative is recognized as a financial asset; when the fair value of derivative financial instruments is negative, the derivative is recognized as a financial liability.

Hedge Accounting

The Company designates some derivatives instruments as cash flow hedges. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

The associated gains or losses that were recognized in other comprehensive income are reclassified from equity to profit or loss as a reclassification adjustment in the line item relating to the hedged item in the same period when the hedged item affects profit or loss. If a hedge of a forecast transaction subsequently results in the recognition of a non-financial asset or a non-financial liability, the associated gains and losses that were recognized in other comprehensive income are removed from equity and are included in the initial cost of the non-financial asset or non-financial liability.

Before 2018, hedge accounting was discontinued prospectively when the Company revoked the designated hedging relationship, or when the hedging instrument expired or was sold, terminated, or exercised, or when the hedging instrument no longer met the criteria for hedge accounting. Starting from 2018, the Company discontinues hedge accounting only when the hedging relationship ceases to meet the qualifying criteria; for instance, when the hedging instrument expires or is sold, terminated or exercised. The cumulative gain or loss on the hedging instrument that has been previously recognized in other comprehensive income from the period when the hedge was effective remains separately in equity until the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss.

Provisions

Provisions are measured at the best estimate of the expenditure required to settle the Company's obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. The provisions for warranties claims and 2017 trade-in right are made by management according to the sales agreements which represent the management's best estimate of the future outflow of economic benefits. The provisions of warranties claims and trade-in right are recognized as operating cost and the reduction of revenue, respectively, in the period in which the goods are sold.

Revenue Recognition

2018

The Company identifies the performance obligations in the contract with the customers, allocates transaction price to each performance obligation and recognizes revenue when performance obligations are satisfied.

Sales of products are recognized as revenue when the Company delivers products and the customer accepts and controls the product. Except for the consumer electronic products such as mobile devices sold in channel stores which are usually in cash sale, the Company recognizes revenues for sale of other electronic devices and corresponding trade notes and accounts receivable.

Usage revenues from fixed-line services (including local, domestic long distance and international long distance telephone services), cellular services, internet and data services, and interconnection and call transfer fees from other telecommunications companies and carriers are billed in arrears and are recognized based upon seconds or minutes of traffic processed when the services are provided in accordance with contract terms. The usage revenues and corresponding trade notes and accounts receivable are recognized monthly.

Other revenues are recognized as follows: (a) one-time subscriber connection fees (on fixed-line services) are first recognized as contract liabilities and revenues are recognized subsequently over the average expected customer service periods, (b) monthly fees (on fixed-line services, mobile, internet and data services) and related receivables are accrued monthly, and (c) prepaid services (fixed-line, mobile, internet and data services) are recognized as contract liabilities upon collection considerations from customers and are recognized as revenues subsequently based upon actual usage by customers.

Where the Company enters into transactions which involve both the provision of telecommunications service bundled with products such as handsets, total consideration received from products and telecommunications service in these arrangements are allocated based on their relative stand-alone selling price. The amount of sales revenue recognized for products is not limited to the amount paid by the customer for the products. When the amount of sales revenue recognized for products exceeded the amount paid by the customer for the products, the difference is recognized as contract assets. Contract assets are reclassified to accounts receivable when the amounts become collectible from customers subsequently. When the amount of sales revenue recognized for products was less than the amount paid by the customer for the products, the difference is recognized as contract liabilities and revenues are recognized subsequently when the telecommunications service are provided.

For project business contracts, if a substantial part of the Company's promise to customers is to manage and coordinate the various tasks and assume the risks of those tasks to ensure the individual goods or services are incorporated into the combined output, they are treated as a single performance obligation since the Company provides a significant integration service. The Company recognizes revenues and corresponding accounts receivable when the project business contract is completed and accepted by customers.

For service contracts such as maintenance and warranties, customers simultaneously receive and consume the benefits provided by the Company; thus revenues and corresponding accounts receivable of service contracts are recognized over the related service period.

When another party is involved in providing goods or services to a customer, the Company is acting as a principal if it controls the specified good or service before that good or service is transferred to a customer; otherwise, the Company is acting as an agent. When the Company is acting as a principal, gross inflow of economic benefits arising from transactions is recognized as revenue. When the Company is acting as an agent, revenue is recognized in the amount of commission.

2017

Revenue from the sale of goods is recognized when all the following conditions are satisfied:

a. The Company has transferred to the buyer the significant risks and rewards of ownership of the goods;

b. The Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;

c. The amount of revenue can be measured reliably;

d. It is probable that the economic benefits associated with the transaction will flow to the Company; and

e. The costs incurred or to be incurred in respect of the transaction can be measured reliably.

Revenue is measured at the fair value of the consideration received or receivable and represents amounts for goods sold in the normal course of business, net of sales discounts and volume rebates. For trade notes and accounts receivable due within one year from the balance sheet date, as the nominal value of the consideration to be received approximates its fair value and transactions are frequent, fair value of the consideration is not determined by discounting all future receipts using an imputed rate of interest.

Usage revenues from fixed-line services (including local, domestic long distance and international long distance telephone services), cellular services, internet and data services, and interconnection and call transfer fees from other telecommunications companies and carriers are billed in arrears and are recognized based upon seconds or minutes of traffic processed when the services are provided in accordance with contract terms.

Other revenues are recognized as follows: (a) one-time subscriber connection fees (on fixed-line services) are deferred and recognized over the average expected customer service periods, (b) monthly fees (on fixed-line services, mobile, internet and data services) are accrued every month, and (c) prepaid services (fixed-line, mobile, internet and data services) are recognized as income based upon actual usage by customers.

Where the Company enters into transactions which involve both the provision of telecommunications service bundled with products such as handsets, total consideration received from products and telecommunications service in these arrangements are allocated and measured using units of accounting within the arrangement based on their relative fair values limited to the amount paid by the customer for the products.

Services revenue is recognized when service provided. Revenue from a contract to provide services is recognized by reference to the stage of completion of the contract.

Dividend income from investments is recognized when the stockholder's right to receive payment has been established under the premises when it is probable that the economic benefit related to the transactions will flow to the Company and that the revenue can be reasonably measured.

Interest income from a financial asset is recognized when it is probable that the economic benefits related to the transactions will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

When another party is involved in providing goods or services to a customer, the Company is acting as a principal when it has exposure to the significant risks and rewards associated with the sale of goods or the rendering of services; otherwise, the Company is acting as an agent. When the Company is acting as a principal, gross inflow of economic benefits arising from transactions is recognized as revenue. When the Company is acting as an agent, revenue is recognized in the amount of commission.

Incremental costs of obtaining contracts

Commissions and equipment subsidy related to telecommunications service as a result of obtaining contracts are recognized as an asset under the incremental costs of obtaining contracts to the extent the costs are expected to be recovered, and are amortized over the contract period. However, the Company elects not to capitalize the incremental costs of obtaining contracts if the amortization period of the assets that the Company otherwise would have recognized is expected to be one year or less.

Leasing

a. The Company as lessor

   Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease.

b. The Company as lessee

   Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

Borrowing Costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Other than stated above, all other borrowing costs are recognized in profit or loss in the period in which they are incurred.

Employee Benefits

a. Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

b. Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost and gains or losses on settlements) and net interest on the net defined benefit liability (asset) are recognized as employee benefits expense in the period they occur. Remeasurement, comprising (a) actuarial gains and losses; and (b) the return on plan assets, excluding amounts included in net interest on the net defined benefit liability (asset), is recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liability (asset) represents the actual deficit (surplus) in the Company's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

c. Other long-term employee benefits

Other long-term employee benefits are accounted for in the same way as the accounting required for defined benefit plan except that remeasurement is recognized in profit or loss.

Share-based Payment Arrangements - Employee Stock Options

The fair value determined at the grant date of the employee share options is expensed on a straight-line basis over the vesting period, based on the Company's estimate of employee share options that are expected to ultimately vest, with a corresponding increase in additional paid-in capital - employee stock options. If the equity instruments granted vest immediately at the grant date, expenses are recognized in full in profit or loss.

At the end of each reporting period, the Company revises its estimate of the number of employee share options expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to additional paid-in capital - employee stock options.

Income Tax

Income tax expense represents the sum of the tax currently payable and deferred tax.

a. Current tax

According to the Income Tax Act in the ROC, an additional tax of unappropriated earnings is provided for in the year the stockholders approve to retain the earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

b. Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. If the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit, the resulting deferred tax asset or liability is not recognized. In addition, a deferred tax liability is not recognized on taxable temporary difference arising from initial recognition of goodwill.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, unused loss carry forward and unused tax credits from purchases of machinery, equipment and technology and research and development expenditures to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax assets and liabilities reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

c. Current and deferred tax

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income, in which case, the current and deferred tax are also recognized in other comprehensive income.

Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY AND ASSUMPTION

In the application of the Company's accounting policies, the management is required to make judgments, estimates and assumptions which are based on historical experience and other factors that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed by the management on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period. Actual results may differ from these estimates.

a. Revenue recognition

The Company's project agreements are mainly to provide one or more equipment or services to customers. In order to fulfill the agreements, another party may be involved in some agreements. The Company considers the following factors to determine whether the Company is a principal of the transaction: whether the Company is the primary obligation provider of the agreements, its exposures to inventory risks and the discretion in establishing prices, etc. The determination of whether the Company is a principal or an agent will affect the amount of revenue recognized by the Company. Only when the Company is acting as a principal, gross inflows of economic benefits arising from transactions is recognized as revenue.

b. Impairment of trade notes and accounts receivable

2018

The provision for impairment of trade notes and accounts receivable is based on assumptions about risk of default and expected loss rates. The Company uses judgment in making these assumptions and in selecting the inputs to the impairment calculation, based on the Company's past experience, current market conditions as well as forward looking information at the end of each reporting period. For details of the key assumptions and inputs used, see Note 10. Where the actual future cash flows are less than expected, a material impairment loss may arise.

2017

When there is objective evidence showed indications of impairment, the Company considers the estimation of future cash flows. The amount of impairment will be measured at the difference between the carrying amount and the present value of estimated future cash flows discounted by the original effective interest rates of the financial assets. However, as the impact from discounting short-term receivables is not material, the impairment of short-term receivables is measured at the difference between the carrying amount and the estimated undiscounted future cash flows. Where the actual future cash flows are lower than expected, a material impairment loss may arise.

c. Fair value measurements and valuation processes

For the assets and liabilities measured at fair value without quoted prices in active markets, the Company's management determines the appropriate valuation techniques for the fair value measurements and whether to engage third party qualified appraisers based on the related regulations and professional judgments.

Information about the valuation techniques and inputs used in determining the fair value of various assets and liabilities was disclosed in Note 38. If the actual changes of inputs in the future differ

from expectation, the fair value may vary accordingly. The Company updates inputs periodically to monitor the appropriateness of the fair value measurement.

d. Provision for inventory valuation and obsolescence

Inventories are stated at the lower of cost or net realizable value. Net realizable value is calculated as the estimated selling price less the estimated selling costs. Comparison of net realizable value and cost is determined on an item by item basis, except for those similar items which could be categorized into the same groups. The Company uses the inventory holding period and turnover as the evaluation basis for inventory obsolescence losses.

e. Impairment of tangible and intangible assets

When an indication of impairment is assessed with objective evidence, the Company considers whether the recoverable amount of an asset is less than its carrying amount and recognizes the impairment loss based on difference between the recoverable amount and its carrying amount. The estimate of recoverable amount would impact on the timing and the amount of impairment loss recognition.

f. Useful lives of property, plant and equipment

As discussed in Note 3, "Summary of Significant Accounting Policies - Property, Plant and Equipment", the Company reviews estimated useful lives of property, plant and equipment at the end of each year.

g. Recognition and measurement of defined benefit plans

Net defined benefit liabilities and the resulting pension expense under defined benefit pension plans are calculated using the Projected Unit Credit Method. Actuarial assumptions comprise the discount rate, employee turnover rate, average future salary increase and etc. Changes in economic circumstances and market conditions will affect these assumptions and may have a material impact on the amount of the expense and the liability.

h. Control over subsidiaries

As discussed in Note 3, some entities are subsidiaries of the Company although the Company only owns less than 50% ownership interests in these entities. After considering the Company's absolute size of holding in the entity and the relative size of and the dispersion of shares owned by the other stockholders, and the contractual arrangements between the Company and other investors, potential voting interests and the written agreement between stockholders, the management concluded that the Company has a sufficiently dominant voting interest to direct the relevant activities of the entity and therefore the Company has control over these entities.

5. APPLICATION OF NEW AND REVISED STANDARDS AND INTERPRETATIONS

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), International Financial Reporting Interpretations Committee Interpretations (IFRIC) and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission (FSC).

Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRS, IAS, IFRIC and SIC issued by the International Accounting Standards Board and endorsed and issued into effect by the FSC (collectively, the "Taiwan-IFRSs") does not have material impacts on the Company's consolidated financial statements.

1) IFRS 9 "Financial Instruments" and related amendments

IFRS 9 supersedes IAS 39 "Financial Instruments: Recognition and Measurement", with consequential amendments to IFRS 7 "Financial Instruments: Disclosures" and other standards. IFRS 9 sets out the requirements for classification, measurement and impairment of financial assets and hedge accounting. Refer to Note 3 for information relating to the relevant accounting policies.

The requirements for classification, measurement and impairment of financial assets have been applied retrospectively on January 1, 2018, and the requirements for hedge accounting have been applied prospectively. IFRS 9 is not applicable to items that have already been derecognized on or before December 31, 2017.

Classification, measurement and impairment of financial assets and liabilities

On the basis of the facts and circumstances that existed on January 1, 2018, the Company performed an assessment of the classifications of financial assets and liabilities and elected not to restate the comparative figures.

The following table shows the original measurement categories and carrying amounts under IAS 39 and the new measurement categories and carrying amounts under IFRS 9 for each class of the Company's financial assets and financial liabilities as of January 1, 2018.

	Measurement Category		Carrying Amount		
	IAS 39	IFRS 9	IAS 39	IFRS 9	Note
Financial Assets					
Cash and cash equivalents	Loans and receivables	Amortized cost	$ 28,824,935	$ 28,824,935	a)
Equity securities	Available-for-sale	FVTPL	596,409	596,409	b)
	Available-for-sale	FVOCI- equity investments	5,154,462	6,996,327	b)
Trade notes and accounts receivable, receivables from related parties, other current monetary assets and refundable deposits	Loans and receivables	Amortized cost	40,158,885	40,158,885	a)
Financial Liabilities					
Short-term loans, trade notes and accounts payable, payables to related parties, partial other payables, customers' deposit and loan-term loans	Amortized cost	Amortized cost	39,725,662	39,725,662	
Derivatives	Held-for-trading	FVTPL	578	578	
	Hedging derivative financial liabilities	Hedging financial liabilities	850	850	c)

	IAS 39 Carrying Amount January 1, 2018	Reclassifi-cations	Remea-surements	IFRS 9 Carrying Amount January 1, 2018	Retained Earnings Effect on January 1, 2018	Other Adjustment Effect on January 1, 2018	Noncontrolling Interests Effect on January 1, 2018	Note
Financial assets measured at FVTPL	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Add: reclassification from available for sale (IAS 39) - mandatory reclassification	-	596,409	-	596,409	6,149	(6,149)	-	b)
	-	596,409	-	596,409	6,149	(6,149)	-	
Financial liabilities measured at FVTPL	(578)	-	-	(578)	-	-	-	
Financial assets measured at FVOCI- equity investments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Add: reclassification from available for sale (IAS 39) - designated at January 1, 2018	-	5,154,462	1,841,865	6,996,327	1,515,525	327,177	(837)	b)
	-	5,154,462	1,841,865	6,996,327	1,515,525	327,177	(837)	
Financial assets measured at Amortized cost	-	-	-	-	-	-	-	
Add: reclassification from loans and receivables (IAS 39)	-	68,983,820	-	68,983,820	-	-	-	a)
	-	68,983,820	-	68,983,820	-	-	-	
Financial liabilities measured at amortized cost	-	-	-	-	-	-	-	
Add: reclassification from amortized cost (IAS 39)	-	(39,725,662)	-	(39,725,662)	-	-	-	
	-	(39,725,662)	-	(39,725,662)	-	-	-	
Hedging financial liabilities	-	-	-	-	-	-	-	
Add: reclassification from Hedging derivative instrument (IAS 39)	-	(850)	-	(850)	-	-	-	c)
	-	(850)	-	(850)	-	-	-	
Total	$ (578)	$ 35,008,179	$ 1,841,865	$ 36,849,466	$ 1,521,674	$ 321,028	$ (837)	

(Continued) (Concluded)

a) Cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other current monetary assets and refundable deposit that were classified as loans and receivables under IAS 39 are now classified as financial assets measured at amortized cost with assessment of expected credit loss.

b) The Company elected to reclassify equity securities originally classified as available-for-sale under IAS 39 to FVTPL and designated at FVOCI in accordance with IFRS 9. As a result, the related other equity - unrealized gain or loss on available-for-sale financial assets of $6,149 thousand and$556,243 thousand were reclassified to retained earnings and to other equity - unrealized gain or loss on financial assets at FVOCI, respectively.

Equity investments in non-listed stocks previously carried at cost under IAS 39 are designated as FVOCI and remeasured at fair values. As a result, financial assets at FVOCI and other equity - unrealized gain or loss on financial assets at FVOCI were increased by $1,841,865 thousand and $1,842,702 thousand, respectively, and noncontrolling interests was decreased by $837 thousand. Some investments that previously classified as available-for-sale and measured at cost under IAS 39 were classified mandatorily as FVTPL under IFRS 9 as the contractual cash flows are not solely payments of principal and interest on the principal outstanding and such investments are not equity instruments.

The Company recognized impairment loss on certain investments in equity securities previously classified as available-for-sale and measured at cost and the loss was accumulated in retained earnings under IAS 39. Since those investments were designated as financial assets measured at FVOCI under IFRS 9 and no impairment assessment is required, an adjustment was made that resulted in a decrease of $1,515,525 thousand in other equity - unrealized gain or loss on financial assets at FVOCI and an increase of the $1,515,525 thousand in retained earnings on January 1, 2018.

c) Due to the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers, all derivative and non-derivative financial assets and financial liabilities which were designated as hedging instruments are presented as hedging financial assets and hedging financial liabilities for starting from January 1, 2018.

As the Company expects there is no tax obligation upon the disposal of the available-for-sale financial assets, the deferred income tax liabilities was decreased by $1,175 thousand, unrealized gain or loss on available-for-sale financial assets was increased by $4,283 thousand and noncontrolling interests was decreased by of $3,108 thousand, respectively.

2) IFRS 15 "Revenue from Contracts with Customers" and related amendments

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers, and supersedes IAS 18 "Revenue", IAS 11 "Construction Contracts" and a number of revenue-related interpretations. Please refer to Note 3 for related accounting policies.

When applying IFRS 15 and related amendments, the Company allocates the transaction price to each performance obligation identified in the contract on a relative stand-alone selling price basis.

Where the Company enters into transactions which involve both the provision of telecommunications service bundled with products such as handsets, total consideration received from products and telecommunications service in these arrangements is allocated based on each performance obligation's relative stand-alone selling price. The amount of sales revenue recognized for products is no longer limited to the amount paid by the customer for the products. This does not change the total revenue recognized, but changes the timing of revenue recognition. The Company may recognize more revenue at the beginning of the contract period (i.e., at the time of sale of products), and revenue recognized for telecommunications service in the subsequent contract periods will decrease.

Incremental cost of obtaining contracts is recognized as an asset to the extent the Company expects to recover those costs. Such asset is amortized on a basis that is consistent with the transfer to the customer of the goods or services to which the asset relates. Before the application of IFRS 15, the relevant expenditures were recognized as expenses.

IFRS 15 and its related amendments require that when another party is involved in providing goods or services to a customer, the Company is a principal if it controls the specified good or service before that good or service is transferred to a customer. Before the application of IFRS 15, the Company determined whether it is a principal or an agent based on its exposure to the significant risks and rewards associated with the sale of goods or the rendering of services.

Under IFRS 15, the net effect of revenue recognizes, consideration received and receivable is recognized as a contract asset or a contract liability. Before the application of IFRS 15, receivable was recognized or advance receipts and deferred revenue was reduced when revenue was recognized for the contract under IAS 18.

Under IFRS 15, the Company recognized a trade-in liability (other current liabilities) and a right to recover a product (other current assets) when recognizing revenue for the sale with a trade-in right. Before the application of IFRS 15, trade-in right provisions and inventories were recognized when recognizing revenue.

The Company elected to retrospectively apply IFRS 15 to contracts that were not completed on January 1, 2018 and recognized the cumulative effect of the change in the retained earnings on January 1, 2018.

Impact on items of assets, liabilities and equity

	Carrying Amounts before Retrospective Adjustments as of January 1, 2018	Adjustments Arising from Initial Application of IFRS 15	Carrying Amounts after Retrospective Adjustments as of January 1, 2018
Contract assets - current	$ -	$ 6,065,126	$ 6,065,126
Trade notes and accounts receivable, net	$ 31,941,094	(117,911)	$ 31,823,183
Inventories	$ 8,839,615	(132,086)	$ 8,707,529
Prepayments- current	$ 2,188,173	(7,628)	$ 2,180,545
Other current assets	$ 2,182,758	132,086	$ 2,314,844
Contract assets - noncurrent	$ -	3,916,924	$ 3,916,924
Incremental costs of obtaining contracts	$ -	2,474,143	$ 2,474,143
Total effect on assets		$ 12,330,654	
Contract liabilities - current	$ -	$ 8,003,855	$ 8,003,855
Current tax liabilities	$ 4,725,698	2,226,691	$ 6,952,389
Provisions - current	$ 188,744	(87,572)	$ 101,172
Advance receipts	$ 8,841,858	(8,841,858)	$ -
Other current liabilities	$ 1,081,156	71,690	$ 1,152,846
Contract liabilities - noncurrent	$ -	2,626,319	$ 2,626,319
Deferred revenue	$ 3,612,391	(3,612,391)	$ -
Other noncurrent liabilities	$ 3,457,677	1,072,427	$ 4,530,104
Total effect on liabilities		$ 1,459,161	
Total effect on equity (unappropriated earnings)	$ 37,202,683	$ 10,871,493	$ 48,074,176

The following table shows the increase (decrease) in assets, liabilities and equity resulting from the application of IFRS 15 on the balance sheet date.

	December 31, 2018
Contract assets - current	$ 4,868,728
Trade notes and accounts receivable, net	(108,582)
Inventories	(79,801)
Prepayments - current	(12,088)
Other current assets	79,801
Contract assets - noncurrent	2,343,958
Incremental costs of obtaining contracts	1,335,030
Assets	$ 8,427,046

(Continued)

	December 31, 2018
Contract liabilities - current	$ 10,687,772
Current tax liabilities	1,417,946
Provisions - current	(51,675)
Advance receipts	(11,276,942)
Other current liabilities	340,019
Contract liabilities - noncurrent	2,595,149
Deferred revenue	(3,748,043)
Other noncurrent liabilities	1,173,165
Liabilities	$ 1,137,391
Equity (unappropriated earnings)	$ 7,289,655

(Concluded)

Impact on items of statement of comprehensive income for current year

The following table shows the increase (decrease) in net income resulting from the application of IFRS 15.

	Year Ended December 31, 2018
Revenues	$ (3,228,240)
Operating costs	2,455,413
Operating expenses	(1,293,070)
Income from operations	(4,390,583)
Income tax expense	(808,745)
Net income	$ (3,581,838)
Decrease in net income attributable to:	$ (3,581,838)
Stockholders of the parent	-
Noncontrolling interests	
	$ (3,581,838)
Impact on earnings per share(NT$):	
Basic earnings per share	$ (0.46)
Diluted earnings per share	$ (0.46)

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers for application starting from 2019 and the IFRSs endorsed by the FSC

New, Revised or Amended Standards and Interpretations		Effective Date Announced by IASB (Note 1)
Amendments to IFRSs	Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9	Prepayment Features with Negative Compensation	January 1, 2019 (Note 2)
IFRS 16	Leases	January 1, 2019
Amendments to IAS 19	Plan Amendment, Curtailment or Settlement	January 1, 2019 (Note 3)
Amendments to IAS 28	Long-term Interests in Associates and Joint Ventures	January 1, 2019
IFRIC 23	Uncertainty over Income Tax Treatments	January 1, 2019

Note 1: Unless stated otherwise, the above new, amended or revised standards and interpretations are effective for annual periods beginning on or after their respective effective dates.

Note 2: The FSC permits the election for early adoption of the amendments starting from 2018.

Note 3: The Company shall apply these amendments to pension plan amendments, curtailments or settlements occurring on or after January 1, 2019.

Except for the following items, the application of the above new, revised or amended standards and interpretations will not have material impact on the Company's consolidated financial statements.

IFRS 16 "Leases"

IFRS 16 sets out the accounting standards for identifying leases and accounting treatments for lessors and lessees. It will supersede IAS 17, IFRIC 4 - Determining Whether an Arrangement Contains a Lease and a number of related interpretations.

Upon the initial application of IFRS 16, the Company anticipates reassessing whether a contract is, or contains, a lease in accordance with the definition of a lease under IFRS 16. Some contracts currently identified as containing a lease under IAS 17 and IFRIC 4 do not meet the definition of a lease under IFRS 16 and will be accounted for in accordance with other accounting standards because the Company does not have the right to direct the use of the identified assets. Contracts that are reassessed as leases or containing a lease will be accounted for in accordance with the transitional provisions under IFRS 16.

Upon the initial application of IFRS 16, if the Company is a lessee, it shall recognize right-of-use assets and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value will be recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Company will present the depreciation expense charged on the right-of-use asset separately from the interest expense accrued on lease liability using the effective interest method. On the consolidated statements of cash flows, cash payments for the principal portion of lease liability will be classified within financing activities; cash payments for interest portion will be classified within operating activities. Before the application of IFRS 16, payments under operating lease contracts are recognized as expenses on a straight-line basis. Prepaid lease payments for use rights of leased assets are recognized as prepaid rents. Cash flows for operating leases are classified within operating activities on the statements of cash flows.

The Company will not make any adjustments for leases in which the Company is a lessor and will account for those leases with the application of IFRS 16 starting from January 1, 2019.

The Company anticipates applying IFRS 16 retrospectively with the cumulative effect of the initial application of IFRS 16 recognized in retained earnings on January 1, 2019. Comparative financial information will not be restated.

Lease liabilities will be recognized on January 1, 2019 for leases currently classified as operating leases under IAS 17 and measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at the present value discounted using the aforementioned incremental borrowing rate as if IFRS 16 had been applied since the commencement date of leases. The Company will apply IAS 36 for assessing impairment of right-of-use assets.

Anticipated impacts on assets, liabilities and equity

	Carrying Amount as of December 31, 2018	Adjustments Arising from Initial Application of IFRS 16	Adjusted Carrying Amount as of January 1, 2019
Prepayments - current	$ 1,872,984	$ (245,215)	$ 1,627,769
Property, plant and equipment	$ 288,914,228	(1,308,990)	$ 287,605,238
Right-of-use assets	$ -	12,163,063	$ 12,163,063
Deferred income tax assets	$ 3,553,856	25,588	$ 3,579,444
Prepayments - noncurrent	$ 3,463,337	(413,521)	$ 3,049,816
Total effect on assets		$ 10,220,925	
Contract liabilities - current	$ 10,687,772	$ 214,174	$ 10,901,946
Lease liabilities - current	$ -	3,394,119	$ 3,394,119
Other payables	$ 23,315,383	(48,712)	$ 23,266,671
Other current liabilities	$ 1,381,606	(214,174)	$ 1,167,432
Contract liabilities - noncurrent	$ 2,595,149	3,482,907	$ 6,078,056
Deferred income tax liabilities	$ 1,991,843	6	$ 1,991,849
Lease liabilities - noncurrent	$ -	6,945,938	$ 6,945,938
Other noncurrent liabilities	$ 4,793,237	(3,482,907)	$ 1,310,330
Total effect on liabilities		$ 10,291,351	
Unappropriated earnings	$ 47,141,345	$ (50,823)	$ 47,090,522
Noncontrolling interests	$ 10,009,948	(19,603)	$ 9,990,345
Total effect on equity		$ (70,426)	

Except for the abovementioned impact, as of the date the consolidated financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of other standards and interpretations will have on the Company's financial position and operating result, and will disclose the relevant impact when the assessment is completed.

c. IFRSs issued by the IASB but not yet endorsed and issued into effect by the FSC

New, Revised or Amended Standards and Interpretations		Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3	Definition of a Business	January 1, 2020 (Note 2)
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between An Investor and Its Associate or Joint Venture	To be determined by IASB
Amendments to IAS 1 and IAS 8	Definition of Materiality	January 1, 2020 (Note 3)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The Company shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 3: The Company shall apply these amendments prospectively in annual periods beginning on or after January 1, 2020.

As of the date the consolidated financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of above standards and interpretations will have on the Company's financial position and operating result and will disclose the relevant impact when the assessment is completed.

6. CASH AND CASH EQUIVALENTS

	December 31 2018	December 31 2017
Cash		
Cash on hand	$ 462,719	$ 382,694
Bank deposits	10,574,697	7,877,605
	11,037,416	8,260,299
Cash equivalents (investments with maturities of less than three months)		
Commercial paper	6,143,672	10,178,512
Negotiable certificates of deposit	7,600,000	7,950,000
Time deposits	2,863,692	2,436,124
	16,607,364	20,564,636
	$ 27,644,780	$ 28,824,935

The annual yield rates of bank deposits, commercial paper, negotiable certificates of deposit and time deposits as of balance sheet dates were as follows:

	December 31 2018	December 31 2017
Bank deposits	0.00%-0.50%	0.00%-0.70%
Commercial paper	0.47%-0.57%	0.32%-0.40%
Negotiable certificates of deposit	0.55%-0.60%	0.40%-0.50%
Time deposits	0.09%-4.40%	0.52%-4.40%

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2018	2017
Financial assets-noncurrent		
Mandatorily measured at FVTPL		
Non-derivatives		
Non-listed stocks - domestic	$ 292,910	$ -
Non-listed stocks - foreign	224,452	-
	$ 517,362	$ -
Financial liabilities-current		
Held for trading		
Derivatives (not designated for hedge)		
Forward exchange contracts	$ 1,114	$ 578

Some investments previously carried at cost under IAS 39 were mandatorily reclassified as FVTPL when applying IFRS 9.

Outstanding forward exchange contracts not designated for hedge as of balance sheet dates were as follows:

	Currency	Maturity Period	Contract Amount (In Thousands)
December 31, 2018			
Forward exchange contracts - buy	EUR/NT$	2019.03-06	EUR5,452/NT$192,734
Forward exchange contracts - buy	US$/NT$	2019.01	US$2,020/NT$62,252
December 31, 2017			
Forward exchange contracts - buy	EUR/NT$	2018.03-06	EUR1,942/NT$69,061
Forward exchange contracts - buy	US$/NT$	2018.01	US$4,190/NT$125,481

The Company entered into the above forward exchange contracts to manage its exposure to foreign currency risk due to fluctuations in exchange rates. However, the aforementioned derivatives did not meet the criteria for hedge accounting.

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - NONCURRENT - 2018

	December 31, 2018
Domestic investments	
Listed stocks	$ 2,899,843
Non-listed stocks	3,901,053
Foreign investments	
Non-listed stocks	131,607
	$ 6,932,503

The Company holds the above foreign and domestic stocks for medium to long-term strategic purposes and expects to profit from long-term investment. Accordingly, the management elected to designate these investments in equity instruments at FVOCI as they believe that recognizing short-term fair value fluctuations of these investments in profit or loss is not consistent with the Company's strategy of holding these investments for long-term purposes. These investments in equity instruments were classified as available-for-sale financial assets under IAS 39. Refer to Notes 5, 9 and 14 for information relating to their reclassification and comparative information for 2017.

The Company recognized dividend income of $395,593 thousand for the year ended December 31, 2018 from those investments still held on December 31, 2018.

9. AVAILABLE-FOR-SALE FINANCIAL ASSETS – NONCURRENT-2017

	December 31, 2018	December 31, 2017
Equity securities		
Listed stocks	$ -	$ 3,125,086

The Company evaluated and concluded that there was no indication that available-for-sale financial assets were impaired; therefore, no impairment loss was recognized for the year ended December 31, 2017.

10. TRADE NOTES AND ACCOUNTS RECEIVABLE, NET

	December 31	
	2018	2017
Trade notes and accounts receivable	$ 32,677,558	$ 34,058,443
Less: Loss allowance	(2,602,055)	(2,117,349)
	$ 30,075,503	$ 31,941,094

Year ended December 31, 2018

The average credit terms range from 30 to 90 days.

The Company serves a large consumer base for telecommunications business; therefore, the concentration of credit risk is limited. When having transactions with customers, the Company considers the record of arrears in the past. In addition, the Company may also collect some telecommunication charges in advance to reduce the payment arrears in subsequent periods.

The Company adopted a policy of dealing with counterparties with certain credit ratings for project business and to obtain collateral where necessary to mitigate the risk of loss arising from default. Credit rating information is provided by independent rating agencies where available and, if such credit rating information is not available, the Company uses other publicly available financial information and its own historical transaction experience to rate its major customers. The Company continues to monitor the credit exposure and credit ratings of its counterparties and spread the credit risk amongst qualified counterparties.

In order to mitigate credit risk, the management of the Company has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure the recoverability of receivables. In addition, the Company reviews the recoverable amount of receivables at balance sheet dates to ensure that adequate allowance is provided for possible irrecoverable amounts. In this regard, the management believes the Company's credit risk could be reasonably reduced.

The Company applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for receivables. The expected credit losses on receivables are estimated using a provision matrix by reference to past default experience of the customers and an analysis of the customers' current financial positions, as well as the forward-looking indicators such as macroeconomic business indicator.

When there are evidences indicating that the counterparty is in evasion, bankruptcy, deregistration of its company or the accounts receivable are over two years past due and the recoverable amount cannot be reasonable estimated, the Company writes off the trade notes and accounts receivable. For accounts receivable that have been written off, the Company continues to engage in enforcement activity to attempt to recover the receivables due. Where recoveries are made, these are recognized in profit or loss.

Except for receivables arising from telecommunications business and project business, the Company's remaining accounts receivable are limited. Therefore, only Chunghwa's provision matrix arising from telecommunications business and project business is disclosed below.

December 31, 2018

	Not Past Due	Past Due Less than 30 Days	Pass Due 31 to 60 Days	Pass Due 61 to 90 Days	Pass Due 91 to 120 Days	Pass Due 121 to 180 Days	Pass Due over 181 Days	Total
Telecommunications business								
Expected credit loss rate (Note a)	0%-3%	3%-30%	7%-69%	19%-82%	32%-90%	61%-95%	100%	
Gross carrying amount	$ 23,307,276	$ 454,465	$ 94,715	$ 48,924	$ 37,640	$ 36,090	$ 418,101	$ 24,397,211
Loss allowance (lifetime ECL)	(79,857)	(26,872)	(24,023)	(28,432)	(28,196)	(25,618)	(418,101)	(631,099)
Amortized cost	$ 23,227,419	$ 427,593	$ 70,692	$ 20,492	$ 9,444	$ 10,472	$ -	$ 23,766,112
Project business								
Expected credit loss rate (Note b)	0%-5%	5%	10%	30%	50%	80%	100%	
Gross carrying amount	$ 4,066,271	$ 88,384	$ 92,343	$ 8,248	$ 12,132	$ 6,809	$ 1,725,168	$ 5,999,355
Loss allowance (lifetime ECL)	(152,624)	(8,609)	(10,142)	(2,910)	(8,492)	(5,643)	(1,725,168)	(1,913,588)
Amortized cost	$ 3,913,647	$ 79,775	$ 82,201	$ 5,338	$ 3,640	$ 1,166	$ -	$ 4,085,767

Note a: Please refer to Note 45 for the information of disaggregation of telecommunications service revenue. The expected credit loss rate applicable to different business revenue varies so as to reflect the risk level indicating by factors like historical experience.

Note b: The project business has different loss types according to the customer types. The expected credit loss rate listed above is for general customers. When customer is the government or its affiliates, it is expected that no credit loss will occur. For those who had bounced or exchanged checks as well as those accounts receivable were overdue more than six months that are classified as high risk customers, the expected credit loss of high risk customers is at least 50%, and the rate is increased when the overdue days increases.

Movements of the allowance for doubtful accounts were as follows:

	Year Ended December 31, 2018
Balance at January 1, 2018	$ 2,117,349
Add: Provision of credit loss	804,727
Less: Amounts written off	(320,021)
Balance at December 31, 2018	$ 2,602,055

Year ended December 31, 2017

The average credit terms range from 30 to 90 days. In determining the recoverability of trade notes and accounts receivable, the Company considers significant change in the credit quality of the trade notes and accounts receivable from the date credit was initially granted up to the end of the reporting period. In general, with few exceptional cases, it is unlikely for the notes and accounts receivable due longer than 180 days to be collected, therefore the Company recognized 100% allowance of notes and accounts receivable overdue longer than 180 days. For the notes and accounts receivable less than 180 days, the allowance for doubtful accounts was estimated based on the Company's historical recovery experience.

The Company serves a large consumer base; therefore, the concentration of credit risk is limited.

The aging analysis for trade notes and accounts receivable as of balance sheet dates was as follows:

	December 31, 2017
Non-overdue	$ 30,031,885
Less than 30 days	1,280,443
31-60 days	484,795
61-90 days	278,242
91-120 days	253,318
121-180 days	122,086
More than 181 days	1,607,674
	$ 34,058,443

The above aging analysis was based on days overdue.

At the balance sheet dates, the receivables that were past due but not impaired were considered recoverable by the management of the Company. The aging of these receivables as of balance sheet dates was as follows:

	December 31, 2017
Less than 30 days	$ 328,438
31-60 days	36,253
61-90 days	7,279
91-120 days	69,486

(Continued)

	December 31, 2017
121-180 days	$ 549
More than 181 days	6,572
	$ 448,577

(Concluded)

The above aging analysis was based on days overdue.

Movements of the allowance for doubtful accounts were as follows:

	Individually Assessed for Impairment	Collectively Assessed for Impairment	Total
Balance on January 1, 2017	$ 805,145	$ 967,880	$ 1,773,025
Add: Provision for doubtful accounts	534,836	42,811	577,647
Deduct: Amounts written off	(15,202)	(218,121)	(233,323)
Balance on December 31, 2017	$ 1,324,779	$ 792,570	$ 2,117,349

11. INVENTORIES

	December 31	
	2018	2017
Merchandise	$ 6,067,750	$ 5,133,528
Project in process	6,756,486	1,390,212
Work in process	109,191	151,804
Raw materials	111,566	88,726
	13,044,993	6,764,270
Land held under development	1,998,733	1,998,733
Construction in progress	76,989	76,612
	$ 15,120,715	$ 8,839,615

The operating costs related to inventories were $48,648,763 thousand (including the provision for inventory and obsolescence of $365,123 thousand) and $56,342,225 thousand (including the provision for inventory and obsolescence of $52,487 thousand) for the years ended December 31, 2018 and 2017, respectively.

As of December 31, 2018 and 2017, inventories of $2,075,722 thousand and $2,075,345 thousand, respectively, were expected to be recovered for a time period longer than twelve months. The aforementioned amount of inventories is related to property development owned by LED.

Land held under development and construction in progress on December 31, 2018 and 2017 was developed by LED for Qingshan Sec., Dayuan Dist., Taoyuan City project.

12. PREPAYMENTS

	December 31	
	2018	2017
Prepaid rents	$ 2,415,083	$ 2,687,513
Others	2,921,238	3,074,005
	$ 5,336,321	$ 5,761,518
Current		
Prepaid rents	$ 599,817	$ 812,148
Others	1,273,167	1,376,025
	$ 1,872,984	$ 2,188,173
Noncurrent		
Prepaid rents	$ 1,815,266	$ 1,875,365
Others	1,648,071	1,697,980
	$ 3,463,337	$ 3,573,345

13. OTHER CURRENT MONETARY ASSETS

	December 31	
	2018	2017
Time deposits and negotiable certificates of deposit with maturities of more than three months	$ 8,156,647	$ 4,053,637
Others	1,347,556	1,254,423
	$ 9,504,203	$ 5,308,060

The annual yield rates of time deposits and negotiable certificates of deposit with maturities of more than three months were as follows:

	December 31	
	2018	2017
Time deposits and negotiable certificates of deposit with maturities of more than three months	0.03%-3.05%	0.06%-4.15%

14. FINANCIAL ASSETS CARRIED AT COST- 2017

	December 31, 2017
Non-listed stocks	
Domestic	$ 2,331,798
Foreign	293,987
	$ 2,625,785

Since the fair values of the above non-listed stocks investments cannot be reliably measured due to the range of reasonable fair value estimates was so significant, the above non-listed stocks investments owned by the Company were measured at costs less any impairment losses at the balance sheet dates.

The Company invested $300,000 thousand of Taiwania Capital Buffalo Fund Co., Ltd. in December 2017 and owns 12.9% equity shares of Taiwania Capital Buffalo Fund Co., Ltd. Taiwania Capital Buffalo Fund Co., Ltd. engages mainly in investment business.

The Company disposed financial assets carried at cost with carrying amount $4,587 thousand and recognized the disposal gain of $2,705 thousand for the year ended December 31, 2017.

The Company evaluated and concluded that there was no indication that financial assets carried at cost were impaired; therefore, no impairment loss was recognized for the year ended December 31, 2017.

15. SUBSIDIARIES

a. Information on significant noncontrolling interest subsidiary

Subsidiaries	Principal Place of Business	Proportion of Ownership Interests and Voting Rights Held by Noncontrolling Interests December 31 2018	2017
SENAO	Taiwan	72%	71%
CHPT	Taiwan	66%	62%

	Profit Allocated to Noncontrolling Interests Year Ended December 31		Accumulated Noncontrolling Interests December 31	
	2018	2017	2018	2017
SENAO	$ 281,238	$ 578,618	$ 4,228,240	$ 4,257,408
CHPT	$ 456,599	$ 439,123	4,044,322	3,555,563
Individually immaterial subsidiaries with noncontrolling interests			1,737,386	884,624
			$10,009,948	$ 8,697,595

Summarized financial information in respect of SENAO and its subsidiaries that has material noncontrolling interests is set out below. The summarized financial information below represents amounts before intercompany eliminations.

	December 31 2018	2017
Current assets	$ 7,041,416	$ 7,584,225
Noncurrent assets	2,675,748	2,686,696
Current liabilities	(3,740,162)	(4,203,944)
Noncurrent liabilities	(164,056)	(160,366)
Equity	$ 5,812,946	$ 5,906,611

(Continued)

	December 31 2018	2017
Equity attributable to the parent	$ 1,584,706	$ 1,649,203
Equity attributable to noncontrolling interests	4,228,240	4,257,408
	$ 5,812,946	$ 5,906,611

(Concluded)

	Year Ended December 31 2018	2017
Revenues and income	$ 31,533,371	$ 36,034,572
Costs and expenses	31,137,428	35,215,871
Profit for the year	$ 395,943	$ 818,701
Profit attributable to the parent	$ 114,705	$ 240,083
Profit attributable to noncontrolling interests	281,238	578,618
Profit for the year	$ 395,943	$ 818,701
Other comprehensive income (loss) attributable to the parent	$ (1,818)	$ 2,656
Other comprehensive loss attributable to noncontrolling interests	(10,523)	(16,581)
	$ (12,341)	$ (13,925)
Total comprehensive income attributable to the parent	$ 112,887	$ 242,739
Total comprehensive income attributable to noncontrolling interests	270,715	562,037
	$ 383,602	$ 804,776
Net cash flow from operating activities	$ 696,142	$ 1,080,947
Net cash flow from investing activities	(12,596)	(56,640)
Net cash flow from financing activities	(490,757)	(896,889)
Effect of exchange rate changes on cash and cash equivalents	516	(2,488)
Net cash inflow	$ 193,305	$ 124,930
Dividends paid to noncontrolling interests	$ 587,264	$ 703,207

Summarized financial information in respect of CHPT and its subsidiaries that has material noncontrolling interests is set out below. The summarized financial information below represents amounts before intercompany eliminations.

	December 31	
	2018	2017
Current assets	$ 4,416,910	$ 4,495,601
Noncurrent assets	2,779,020	2,167,138
Current liabilities	(1,044,054)	(899,079)
Noncurrent liabilities	(816)	(997)
Equity	$ 6,151,060	$ 5,762,663
Equity attributable to CHI	$ 2,106,738	$ 2,207,100
Equity attributable to noncontrolling interests	4,044,322	3,555,563
	$ 6,151,060	$ 5,762,663

	Year Ended December 31	
	2018	2017
Revenues and income	$ 3,299,226	$ 3,126,669
Costs and expenses	2,583,202	2,390,299
Profit for the year	$ 716,024	$ 736,370
Profit attributable to CHI	$ 259,425	$ 297,247
Profit attributable to noncontrolling interests	456,599	439,123
Profit for the year	$ 716,024	$ 736,370
Other comprehensive loss attributable to CHI	$ 218	$ (1,179)
Other comprehensive loss attributable to noncontrolling interests	45	(1,904)
	$ 263	$ (3,083)
Total comprehensive income attributable to CHI	$ 259,643	$ 296,068
Total comprehensive income attributable to noncontrolling interests	456,644	437,219
	$ 716,287	$ 733,287
Net cash flow from operating activities	$ 861,558	$ 1,051,989
Net cash flow from investing activities	(733,108)	(639,158)
Net cash flow from financing activities	(327,890)	2,305,741
Effect of exchange rate changes on cash and cash equivalents	1,337	(3,640)
Net cash inflow (outflow)	$ (198,103)	$ 2,714,932
Dividends paid to noncontrolling interests	$ 209,711	$ 145,849

b. Equity transactions with noncontrolling interests

SENAO subscribed for all the shares in the capital increase of Youth in December 2018. Therefore, the Company's equity ownership interest in Youth increased from 89% to 93%.

SENAO transferred its treasury stock to employees in June and November 2017, and June 2018. The Company's ownership interest in SENAO decreased to 28.93% and 28.18% as of December 31, 2017 and 2018, respectively. See Note 34(b) for details.

CHI did not participate in the capital increase of CHPT in September 2017 and disposed some shares of CHPT from April to August 2018. Therefore, the Company's ownership interest in CHPT decreased to 34.25% as of December 31, 2018. See Note 34(e) for details.

CHIEF issued new shares in March and November 2018 as its employees exercised their options. In addition, Chunghwa and CHI disposed some shares of CHIEF in May 2018 before CHIEF traded its shares on the General Stock Market of the Taipei Exchange according to the local requirements. Furthermore, Chunghwa and CHI did not participate in the capital increase of CHIEF in June 2018. Therefore, the Company's equity ownership interest in CHIEF decreased to 60.23% as of December 31, 2018. See Note 34(c)(d) for details.

Chunghwa and CHI disposed some shares of CHIEF in June 2017 before CHIEF traded its shares on the emerging stock market according to the local requirements. The Company's ownership interest in CHIEF decreased to 70.43% as of December 31, 2017.

The above transactions were accounted for as equity transactions since the Company did not cease to have control over these subsidiaries.

Information of the Company's equity transactions with noncontrolling interests for the years ended December 31, 2018 and 2017 was as follows:

	Year Ended December 31, 2018					
	SENAO Not Proportionately Participating in the Capital Increase of Youth	SENAO Transferred its Treasury Stock	CHI Disposed Some Shares of CHPT	Chunghwa and CHI Did Not Participate in the Capital Increase of CHIEF	Chunghwa and CHI Disposed Some Shares of CHIEF	Share-based Payment of CHIEF
Cash consideration received from noncontrolling interests	$ -	$ 327,122	$ 1,041,689	$ 1,476,680	$ 132,711	$ 35,337
The proportionate share of the carrying amount of the net assets of the subsidiary transferred to noncontrolling interests	(68)	(272,188)	(330,100)	(699,899)	(18,253)	(24,561)
Differences arising from equity transactions	$ (68)	$ 54,934	$ 711,589	$ 776,781	$ 114,458	$ 10,776
Line items for equity transaction adjustments						
Additional paid-in capital-difference between consideration received or paid and the carrying amount of the subsidiaries' net assets upon actual disposal or acquisition	$ -	$ -	$ 711,589	$ -	$ 114,458	$ -
Additional paid-in capital - arising from changes in equities of subsidiaries	$ (68)	$ 54,934	$ -	$ 776,781	$ -	$ 10,776

	Year Ended December 31, 2017		
	CHI Did Not Participate in the Capital Increase of CHPT	Chunghwa and CHI Disposed Some Shares of CHIEF	SENAO Transferred its Treasury Stock
Cash consideration received from noncontrolling interests	$ 2,552,053	$ 105,931	$ 164,200
The proportionate share of the carrying amount of the net assets of the subsidiary transferred to noncontrolling interests	(1,750,326)	(29,217)	(137,300)
Differences arising from equity transactions	$ 801,727	$ 76,714	$ 26,900
Line items for equity transaction adjustments			
Additional paid-in capital - difference between consideration received or paid and the carrying amount of the subsidiaries' net assets upon actual disposal or acquisition	$ -	$ 76,393	$ -
Additional paid-in capital - arising from changes in equities of subsidiaries	$ 801,727	$ 321	$ 26,900

16. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

	December 31	
	2018	2017
Investments in associates	$ 2,944,890	$ 2,546,374

a. Investments in associates

Investments in associates were as follows:

	Carrying Amount	
	December 31	
	2018	2017
Listed		
Senao Networks, Inc. ("SNI")	$ 919,841	$ 862,116
Non-listed		
ST-2 Satellite Ventures Pte., Ltd. ("STS")	496,033	472,505
International Integrated System, Inc. ("IISI")	310,842	296,333
Viettel-CHT Co., Ltd. ("Viettel-CHT")	286,510	256,323
Taiwan International Standard Electronics Co., Ltd. ("TISE")	216,439	136,885

(Continued)

	Carrying Amount	
	December 31	
	2018	2017
Chunghwa PChome Fund I Co., Ltd. ("CPFI")	$ 198,974	$ -
KKBOX Taiwan Co., Ltd. ("KKBOXTW", previously known as Skysoft Co., Ltd.)	147,360	139,741
KingwayTek Technology Co., Ltd. ("KWT")	134,925	128,269
So-net Entertainment Taiwan Limited ("So-net")	119,956	104,171
Taiwan International Ports Logistics Corporation ("TIPL")	49,650	49,631
Click Force Co., Ltd. ("CF")	37,876	38,175
UUPON Inc. ("UUPON", previously known as Dian Zuan Integrating Marketing Co., Ltd.)	16,647	25,006
Alliance Digital Tech Co., Ltd. ("ADT")	5,080	14,488
Cornerstone Ventures Co., Ltd. ("CVC")	4,757	-
HopeTech Technologies Limited ("HopeTech")	-	22,731
MeWorks LIMITED (HK) ("MeWorks")	-	-
	$ 2,944,890	$ 2,546,374

(Concluded)

The percentages of ownership and voting rights in associates held by the Company as of balance sheet dates were as follows:

	% of Ownership and Voting Rights	
	December 31	
	2018	2017
Senao Networks, Inc. ("SNI")	34	34
ST-2 Satellite Ventures Pte., Ltd. ("STS")	38	38
International Integrated System, Inc. ("IISI")	32	32
Viettel-CHT Co., Ltd. ("Viettel-CHT")	30	30
Taiwan International Standard Electronics Co., Ltd. ("TISE")	40	40
Chunghwa PChome Fund I Co., Ltd. ("CPFI")	50	-
KKBOX Taiwan Co., Ltd. ("KKBOXTW")	30	30
KingwayTek Technology Co., Ltd. ("KWT")	26	26
So-net Entertainment Taiwan Limited ("So-net")	30	30
Taiwan International Ports Logistics Corporation ("TIPL")	27	27
Click Force Co., Ltd. ("CF")	49	49
UUpon Inc. ("UUPON")	22	22
Alliance Digital Tech Co., Ltd. ("ADT")	14	14
Cornerstone Ventures Co., Ltd. ("CVC")	49	-
HopeTech Technologies Limited ("HopeTech")	-	45
MeWorks LIMITED (HK) ("MeWorks")	20	20

None of the above associates is considered individually material to the Company. Summarized financial information of associates that are not individually material was as follows:

	Year Ended December 31 2018	2017
The Company's share of profits	$ 501,600	$ 408,022
The Company's share of other comprehensive income (loss)	5,025	(4,449)
The Company's share of total comprehensive income	$ 506,625	$ 403,573

The Level 1 fair values based on the closing market prices of SNI as of the balance sheet dates were as follows:

	December 31 2018	2017
SNI	$ 1,447,350	$ 2,130,406

The Company invested 50% equity shares of Chunghwa PChome Fund I Co., Ltd. ("CPFI") in October 2018. The Company has only two out of five seats of the Board of Directors of CPFI, and has no control but significant influence over CPFI. Therefore, the Company recognized CPFI as investment in associate. CPFI engages mainly in investment business.

The Company invested 49% equity shares of Cornerstone Ventures Co., Ltd. ("CVC") in October 2018. The Company has only two out of five seats of the Board of Directors of CVC, and has no control but significant influence over CVC. Therefore, the Company recognized CVC as investment in associate. CVC engages mainly in investment business.

HopeTech returned the proceeds of $19,184 thousand as a result of capital reduction in January 2018. The Company received $3,379 thousand by disposing all shares of HopeTech in June 2018 and recognized disposal loss of $125 thousand. HopeTech engages mainly in sale of information and communication technologies products.

The Company did not participate in the capital increase of UUPON in April 2017 and the ownership interest of UUPON decreased to 22%. UUPON engages mainly in information technology service and general advertisement service.

The Company owns 14% equity shares of ADT. As the Company remains the seat in the Board of Directors of ADT and considers the relative size of ownership interest and the dispersion of shares owned by the other stockholders, the Company remains significant influence over ADT. In June 2018, the stockholders of ADT approved to dissolve. ADT engages mainly in the development of mobile payments and information processing service.

The Company's share of profit and other comprehensive income (loss) of associates was recognized based on the audited financial statements.

b. Investments in joint ventures

In December 2016, the stockholders of CBO approved that CBO should start its dissolution from December 31, 2016. CBO completed its liquidation in December 2017.

In March 2016, the stockholders of HDD approved that HDD should start its dissolution from March 31, 2016. HDD completed its liquidation in March 2017.

None of the above joint ventures is considered individually material to the Company. Summarized financial information of joint ventures that was not material to the Company was as follows:

	Year Ended December 31 2018	2017
The Company's share of loss	$ -	$ (779)
The Company's share of other comprehensive income	-	-
The Company's share of total comprehensive loss	$ -	$ (779)

The Company's share of loss of joint ventures was recorded based on the audited financial statements.

17. PROPERTY, PLANT AND EQUIPMENT

	Land	Land Improvements	Buildings	Computer Equipment	Telecommunications Equipment	Transportation Equipment	Miscellaneous Equipment	Construction in Progress and Equipment to be Accepted	Total
Cost									
Balance on January 1, 2017	$ 103,872,069	$ 1,580,893	$ 67,737,813	$ 14,294,817	$ 715,692,476	$ 3,866,401	$ 8,942,936	$ 20,140,722	$ 936,128,127
Additions	-	-	29,582	77,643	193,286	1,048	193,238	25,574,267	26,069,064
Disposal	(157,928)	(4,701)	(108,349)	(974,218)	(13,739,288)	(61,988)	(401,624)	-	(15,448,096)
Effect of foreign exchange differences	-	-	-	(424)	(172,350)	(101)	(3,467)	35	(176,307)
Others	365,049	18,707	5,035,004	763,979	20,080,311	29,012	783,792	(27,188,210)	(112,356)
Balance on December 31, 2017	$ 104,079,190	$ 1,594,899	$ 72,694,050	$ 14,161,797	$ 722,054,435	$ 3,834,372	$ 9,514,875	$ 18,526,814	$ 946,460,432
Accumulated depreciation and impairment									
Balance on January 1, 2017	$ -	$ (1,248,614)	$ (25,591,288)	$ (11,581,679)	$ (596,497,180)	$ (3,237,064)	$ (6,802,542)	$ -	$ (644,958,367)
Depreciation expenses	-	(49,673)	(1,402,180)	(1,192,426)	(24,492,377)	(329,590)	(676,507)	-	(28,142,753)
Disposal	-	4,688	47,462	966,979	13,711,970	61,957	388,712	-	15,181,768
Effect of foreign exchange differences	-	-	-	218	45,272	84	1,354	-	46,928
Others	-	1,072	147,312	19,061	77,401	(8,916)	(116,028)	-	119,902
Balance on December 31, 2017	$ -	$ (1,292,527)	$ (26,798,694)	$ (11,787,847)	$ (607,154,914)	$ (3,513,529)	$ (7,205,011)	$ -	$ (657,752,522)
Balance on January 1, 2017, net	$ 103,872,069	$ 332,279	$ 42,146,525	$ 2,713,138	$ 119,195,296	$ 629,337	$ 2,140,394	$ 20,140,722	$ 291,169,760
Balance on December 31, 2017, net	$ 104,079,190	$ 302,372	$ 45,895,356	$ 2,373,950	$ 114,899,521	$ 320,843	$ 2,309,864	$ 18,526,814	$ 288,707,910
Cost									
Balance on January 1, 2018	$ 104,079,190	$ 1,594,899	$ 72,694,050	$ 14,161,797	$ 722,054,435	$ 3,834,372	$ 9,514,875	$ 18,526,814	$ 946,460,432
Additions	-	-	20,723	52,269	158,930	270	334,443	27,412,805	27,979,440
Disposal	(71,333)	(337)	(23)	(643,192)	(31,983,801)	(29,250)	(622,940)	-	(33,350,876)
Effect of foreign exchange differences	-	-	-	(119)	60,483	69	(343)	117	60,207
Others	(35,805)	5,761	196,260	687,730	25,458,071	77,073	647,554	(27,294,970)	(258,326)
Balance on December 31, 2018	$ 103,972,052	$ 1,600,323	$ 72,911,010	$ 14,258,485	$ 715,748,118	$ 3,882,534	$ 9,873,589	$ 18,644,766	$ 940,890,877
Accumulated depreciation and impairment									
Balance on January 1, 2018	$ -	$ (1,292,527)	$ (26,798,694)	$ (11,787,847)	$ (607,154,914)	$ (3,513,529)	$ (7,205,011)	$ -	$ (657,752,522)
Depreciation expenses	-	(45,731)	(1,356,765)	(982,728)	(24,235,603)	(161,660)	(678,692)	-	(27,461,179)
Disposal	-	337	23	632,457	31,951,706	29,186	614,789	-	33,228,498
Effect of foreign exchange differences	-	-	-	57	(20,354)	(40)	191	-	(20,146)
Others	-	217	28,453	(5,246)	33,391	(5,096)	(23,019)	-	28,700
Balance on December 31, 2018	$ -	$ (1,337,704)	$ (28,126,983)	$ (12,143,307)	$ (599,425,774)	$ (3,651,139)	$ (7,291,742)	$ -	$ (651,976,649)
Balance on January 1, 2018, net	$ 104,079,190	$ 302,372	$ 45,895,356	$ 2,373,950	$ 114,899,521	$ 320,843	$ 2,309,864	$ 18,526,814	$ 288,707,910
Balance on December 31, 2018, net	$ 103,972,052	$ 262,619	$ 44,784,027	$ 2,115,178	$ 116,322,344	$ 231,395	$ 2,581,847	$ 18,644,766	$ 288,914,228

There was no indication that property, plant and equipment was impaired so the Company did not recognize any impairment loss for the years ended December 31, 2018 and 2017.

Depreciation expense is computed using the straight-line method over the following estimated service lives:

Land improvements	8-30 years
Buildings	
Main buildings	35-60 years
Other building facilities	3-20 years
Computer equipment	2-8 years
Telecommunications equipment	
Telecommunication circuits	2-30 years
Telecommunication machinery and antennas equipment	2-30 years
Transportation equipment	3-10 years
Miscellaneous equipment	
Leasehold improvements	1-6 years
Mechanical and air conditioner equipment	3-16 years
Others	1-10 years

18. INVESTMENT PROPERTIES

Cost	
Balance on January 1, 2017	$ 9,194,652
Reclassification	(59,835)
Balance on December 31, 2017	$ 9,134,817
Accumulated depreciation and impairment	
Balance on January 1, 2017	$ (1,080,119)
Depreciation expense	(20,831)
Reclassification	2,947
Reversal of impairment loss	10,979
Balance on December 31, 2017	$ (1,087,024)
Balance on January 1, 2017, net	$ 8,114,533
Balance on December 31, 2017, net	$ 8,047,793
Cost	
Balance on January 1, 2018	$ 9,134,817
Addition	5,627
Reclassification	252,008
Balance on December 31, 2018	$ 9,392,452
Accumulated depreciation and impairment	
Balance on January 1, 2018	$ (1,087,024)
Depreciation expense	(20,777)
Reclassification	(16,572)
Reversal of impairment loss	19,133
Balance on December 31, 2018	$ (1,105,240)

(Continued)

Balance on January 1, 2018, net	$ 8,047,793
Balance on December 31, 2018, net	$ 8,287,212

(Concluded)

Depreciation expense is computed using the straight-line method over the following estimated service lives:

Land improvements	8-30 years
Buildings	
Main buildings	35-60 years
Other building facilities	4-10 years

After the evaluation of land and buildings, the Company concluded the recoverable amount which represented the fair value less costs to sell of some land and buildings was higher than the carrying amount. Therefore, the Company recognized reversal of impairment losses of $19,133 thousand and $10,979 thousand for the years ended December 31, 2018 and 2017, respectively, and the amounts were recognized only to the extent of impairment losses that had been recognized in prior years. The reversal of impairment loss was included in other income and expenses in the statements of comprehensive income.

The fair values of the Company's investment properties as of December 31, 2018 and 2017 were determined by Level 3 fair value measurements inputs based on the appraisal reports conducted by independent appraisers. Those appraisal reports are based on the comparison approach, income approach or cost approach. Key assumptions and the fair values were as follows:

	December 31	
	2018	2017
Fair value	$ 18,514,801	$ 17,728,012
Overall capital interest rate	1.02%-4.04%	1.46%-2.20%
Profit margin ratio	12%-20%	12%-20%
Discount rate	-	1.04%
Capitalization rate	0.79%-1.75%	0.47%-1.69%

All of the Company's investment properties are held under freehold interest.

19. INTANGIBLE ASSETS

	3G and 4G Concession	Computer Software	Goodwill	Others	Total
Cost					
Balance on January 1, 2017	$ 59,209,000	$ 3,408,092	$ 236,200	$ 414,231	$ 63,267,523
Additions-acquired separately	10,935,000	365,655	-	3,978	11,304,633
Disposal	-	(461,850)	-	(18)	(461,868)
Effect of foreign exchange difference	-	(287)	-	(41)	(328)
Balance on December 31, 2017	$ 70,144,000	$ 3,311,610	$ 236,200	$ 418,150	$ 74,109,960

(Continued)

	3G and 4G Concession	Computer Software	Goodwill	Others	Total
Accumulated amortization and impairment					
Balance on January 1, 2017	$(13,412,712)	$ (2,413,337)	$ (18,055)	$ (69,995)	$(15,914,099)
Amortization expenses	(3,261,853)	(480,496)	-	(23,671)	(3,766,020)
Disposal	-	461,804	-	18	461,822
Impairment losses	-	-	(8,622)	-	(8,622)
Effect of foreign exchange difference	-	232	-	(5)	227
Balance on December 31, 2017	$(16,674,565)	$ (2,431,797)	$ (26,677)	$ (93,653)	$(19,226,692)
Balance on January 1, 2017, net	$ 45,796,288	$ 994,755	$ 218,145	$ 344,236	$ 47,353,424
Balance on December 31, 2017, net	$ 53,469,435	$ 879,813	$ 209,523	$ 324,497	$ 54,883,268
Cost					
Balance on January 1, 2018	$ 70,144,000	$ 3,311,610	$ 236,200	$ 418,150	$ 74,109,960
Additions-acquired separately	-	484,864	-	13,141	498,005
Disposal	-	(370,657)	-	(58,008)	(428,665)
Effect of foreign exchange difference	-	152	-	(80)	72
Balance on December 31, 2018	$ 70,144,000	$ 3,425,969	$ 236,200	$ 373,203	$ 74,179,372
Accumulated amortization and impairment					
Balance on January 1, 2018	$(16,674,565)	$ (2,431,797)	$ (26,677)	$ (93,653)	$(19,226,692)
Amortization expenses	(3,957,909)	(405,898)	-	(22,991)	(4,386,798)
Disposal	-	370,657	-	58,008	428,665
Impairment losses	-	-	-	(50,750)	(50,750)
Effect of foreign exchange difference	-	(132)	-	17	(115)
Balance on December 31, 2018	$(20,632,474)	$ (2,467,170)	$ (26,677)	$ (109,369)	$(23,235,690)
Balance on January 1, 2018, net	$ 53,469,435	$ 879,813	$ 209,523	$ 324,497	$ 54,883,268
Balance on December 31, 2018, net	$ 49,511,526	$ 958,799	$ 209,523	$ 263,834	$ 50,943,682

(Concluded)

For long-term business development, Chunghwa submitted an application to NCC for 4G mobile broadband license in 1.8 and 2.1 GHz frequency bands and obtained certain spectrums. Chunghwa paid the 4G concession fee amounting to $10,935,000 thousand in November 2017.

The concessions are granted and issued by the NCC. The concession fees are amortized using the straight-line method from the date operations commence through the date the license expires. The carrying amount of 3G concession fee was fully amortized in December 2018, and 4G concession fees will be fully amortized by December 2030 and December 2033.

The computer software is amortized using the straight-line method over the estimated useful lives of 1 to 10 years. Other intangible assets are amortized using the straight-line method over the estimated useful lives of 3 to 20 years. Goodwill is not amortized.

SENAO evaluated and determined that the recoverable amount of certain licensed contract was nil and recognized the impairment loss of $50,750 thousand for the year ended December 31, 2018. The recoverable amount was based on the value in use.

SENAO evaluated the goodwill that arose in the acquisition of Youth and its subsidiaries at the end of each year. SENAO determined the smallest identifiable group of assets that generates cash inflows as single cash generating units by business type, and evaluated the recoverable amount of those cash generating units by their value in use. The management of SENAO estimated the cash flow projections based on the financial budgets for the following five years. Discount rates were 13.7% and 14.8% as of December 31 2018 and 2017, respectively and were used to calculate the recoverable amount of related cash generating units by discounting aforementioned cash flows.

There was no impairment loss recognized for the Company for the year ended December 31, 2018. SENAO concluded the recoverable amount of the goodwill was lower than the carrying value and recognized impairment loss of $8,622 thousand for the year ended December 31, 2017.

The aforementioned impairment loss was included in other income and expenses in the statements of comprehensive income.

20. OTHER ASSETS

	December 31 2018	December 31 2017
Spare parts	$ 2,422,060	$ 2,058,769
Refundable deposits	1,992,206	1,860,364
Other financial assets	1,000,000	1,000,000
Others	2,342,040	2,800,112
	$ 7,756,306	$ 7,719,245
Current		
Spare parts	$ 2,422,060	$ 2,058,769
Others	154,024	123,989
	$ 2,576,084	$ 2,182,758
Noncurrent		
Refundable deposits	$ 1,992,206	$ 1,860,364
Other financial assets	1,000,000	1,000,000
Others	2,188,016	2,676,123
	$ 5,180,222	$ 5,536,487

Other financial assets - noncurrent was Piping Fund. As part of the government's effort to upgrade the existing telecommunications infrastructure, Chunghwa and other public utility companies were required by the ROC government to contribute to a Piping Fund administered by the Taipei City Government. This fund was used to finance various telecommunications infrastructure projects. Net assets of this fund will be returned proportionately after the project is completed.

21. HEDGING DERIVATIVE FINANCIAL INSTRUMENTS

2018

Chunghwa's hedge strategy is to enter forward exchange contracts - buy to avoid its foreign currency exposure to certain foreign currency denominated equipment payments in the following six months. In addition, Chunghwa's management considers the market condition to determine the hedge ratio and enters into forward exchange contracts with the banks to avoid the foreign currency risk.

Chunghwa signed equipment purchase contracts with suppliers and entered into forward exchange contracts to avoid foreign currency risk exposure to Euro-denominated purchase commitments. Those forward exchange contracts were designated as cash flow hedges. When forecast purchases actually take place, basis adjustments are made to the initial carrying amounts of hedged items.

For the hedges of highly probable forecast sales and purchases, as the critical terms (i.e. the notional amount, life and underlying) of the forward foreign exchange contracts and their corresponding hedged items are the same, the Company performs a qualitative assessment of effectiveness and it is expected that the value of the forward contracts and the value of the corresponding hedged items will systematically change in opposite direction in response to movements in the underlying exchange rates.

The main source of hedge ineffectiveness in these hedging relationships is the effect of credit risks of the Company and the counterparty on the fair value of the forward exchange contracts. Such credit risks do not impact the fair value of the hedged item attributable to changes in foreign exchange rates. No other sources of ineffectiveness emerged from these hedging relationships.

The following tables summarized the information relating to the hedges for foreign currency risk.

December 31, 2018

Hedging Instruments	Currency	Notional Amount (In Thousands)	Maturity	Forward Rate	Line Item in Balance Sheet	Carrying Amount		Change in Fair Values of Hedging Instruments Used for Calculating Hedge Ineffectiveness
						Asset	Liability	
Cash flow hedge								
Forecast purchases - forward exchange contracts	EUR/NT$	EUR 4,911/ NT$ 171,797	2019.03	$ 34.98	Hedging financial assets (liabilities)	$ 1,069	$ -	$ 1,919

Hedged Items	Change in Value of Hedged Item Used for Calculating Hedge Ineffectiveness	Accumulated Gain or Loss on Hedging Instruments in Other Equity	
		Continuing Hedges	Hedge Accounting no Longer Applied
Cash flow hedge			
Forecast equipment purchases	$ (1,919)	$ 1,069	$ -

2018

Hedge Transaction	Comprehensive Income				
				Reclassification from Equity to Profit or Loss and the Adjusted Line Item	
	Hedging Gain or Loss Recognized in OCI	Amount of Hedge Ineffectiveness Recognized in Profit or Loss	Line Item in Which Hedge Ineffectiveness is Included	Amount Reclassified to P/L and the Adjusted Line Item	Due to Hedged Future Cash Flows no Longer Expected to Occur
Cash flow hedge					
Forecast equipment purchases	$ 1,919	$ -	-	$ (4,030) Construction in progress and equipment to be accepted	$ (297) Other gains and losses

2017

The hedging policy of 2017 for foreign currency risk was the same as that in 2018. The hedging instrument was showed as follows:

	December 31, 2017
Hedging derivative financial Assets	
Cash flow hedge - forward exchange contracts	$ -
Hedging derivative financial Liabilities	
Cash flow hedge - forward exchange contracts	$ 850

For the year ended December 31, 2017, losses arising from changes in fair value of the hedged items recognized in other comprehensive income were $263 thousand. Upon the completion of the purchase transaction, the amount deferred and recognized in equity initially will be reclassified into equipment as its carrying value.

As of December 31, 2017, Chunghwa expected part of the equipment purchase transactions would not occur and reclassified the related gain of $1,748 thousand from equity to profit or loss which arising from the forward exchange contracts of the aforementioned transactions for the year ended December 31, 2017.

The outstanding forward exchange contracts at the balance sheet dates were as follows:

	Currency	Maturity Period	Contract Amount (Thousands)
December 31, 2017			
Forward exchange contracts - buy	EUR/NT$	2018.03-06	EUR3,963/NT$141,605

Loss arising from the hedging derivative financial instruments that have been reclassified from equity to initial cost of the property, plant and equipment were as follows:

	Year Ended December 31, 2017
Construction in progress and equipment to be accepted	$ (2,411)

22. SHORT-TERM LOANS

	December 31	
	2018	2017
Unsecured loans	$ 100,000	$ 70,000

The annual interest rates of loans were as follows:

	December 31 2018	December 31 2017
Unsecured loans	1.35%-2.35%	2.15%-2.19%

23. LONG-TERM LOANS (INCLUDING LONG-TERM LOANS - CURRENT PORTION)

	December 31 2018	December 31 2017
Secured loans (Note 40)	$ 1,600,000	$ 1,600,000

The annual interest rates of loans were as follows:

	December 31 2018	December 31 2017
Secured loans	0.92%	0.91%

LED obtained a secured loan from Chang Hwa Bank in September 2010. Interest is paid monthly. $300,000 thousand and $1,350,000 thousand were originally due in December 2014 and September 2015, respectively. In October 2014, the bank borrowing mentioned above was extended to September 2018 for one time repayment. LED made an early repayment of $50,000 thousand in April 2015. LED entered into a contract with Chang Hwa Bank to renew the contract upon the maturity of the aforementioned contract in December 2017 and the due date of the renew contract is September 2021.

24. TRADE NOTES AND ACCOUNTS PAYABLE

	December 31 2018	December 31 2017
Trade notes and accounts payable	$ 20,464,792	$ 19,395,889

Trade notes and accounts payable were attributable to operating activities and the trading conditions were agreed separately.

25. OTHER PAYABLES

	December 31 2018	December 31 2017
Accrued salary and compensation	$ 9,040,692	$ 9,748,433
Accrued compensation to employees and remuneration to directors and supervisors	1,738,716	1,948,821
Payables to contractors	1,709,778	2,057,651
Payables to equipment suppliers	1,459,246	1,689,685
Amounts collected for others	1,226,031	1,202,933
Accrued franchise fees	1,151,084	1,248,010

(Continued)

	December 31 2018	December 31 2017
Accrued maintenance costs	$ 1,049,849	$ 1,081,473
Others	5,939,987	6,024,395
	$ 23,315,383	$ 25,001,401

(Concluded)

26. PROVISIONS

	December 31 2018	December 31 2017
Warranties	$ 131,664	$ 131,789
Employee benefits	51,393	43,429
Trade-in right	-	87,572
Others	23,770	4,467
	$ 206,827	$ 267,257
Current	$ 128,200	$ 188,744
Noncurrent	78,627	78,513
	$ 206,827	$ 267,257

	Warranties	Employee Benefits	Trade-in Right	Others	Total
Balance on January 1, 2017	$ 110,975	$ 38,014	$ 31,378	$ 4,447	$ 184,814
Additional provisions recognized	78,952	7,187	69,308	50	155,497
Used / forfeited during the year	(58,138)	(1,772)	(13,114)	(30)	(73,054)
Balance on December 31, 2017	$ 131,789	$ 43,429	$ 87,572	$ 4,467	$ 267,257
Balance on January 1, 2018	$ 131,789	$ 43,429	$ 87,572	$ 4,467	$ 267,257
Effect of retrospective application of IFRS 15	-	-	(87,572)	-	(87,572)
Balance on January 1, 2018 as adjusted	131,789	43,429	-	4,467	179,685
Additional provisions recognized	163,901	9,180	-	19,403	192,484
Used / forfeited during the year	(164,026)	(1,216)	-	(100)	(165,342)
Balance on December 31, 2018	$ 131,664	$ 51,393	$ -	$ 23,770	$ 206,827

a. The provision for warranties claims represents the present value of the management's best estimate of the future outflow of economic benefits that will be required under the Company's obligation for warranties in sales agreements. The estimate has been made based on the historical warranty experience.

b. The provision for employee benefits represents vested long-term service compensation accrued.

c. The provision for trade-in right in 2017 was based on the management's judgments to estimate the trade-in right of products exercised by customers in the future. The provision was recognized as a reduction of revenue in the period in which the goods are sold.

27. ADVANCE RECEIPTS

2017

Advance receipts are mainly from advance telecommunication charges. For the obligations to transfer goods or services to customers for which the Company has received consideration from, they were retrospectively reclassified as contract liabilities starting from 2018.

28. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The pension plan under the Labor Pension Act of ROC (the "LPA") is considered as a defined contribution plan. Based on the LPA, Chunghwa and its domestic subsidiaries make monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages. Its foreign subsidiaries would make monthly contributions based on the local pension requirements.

b. Defined benefit plans

Chunghwa completed its privatization plans on August 12, 2005. Chunghwa is required to pay all accrued pension obligations including service clearance payment, lump sum payment under civil service plan, additional separation payments, etc. upon the completion of the privatization in accordance with the Statute Governing Privatization of Stated-owned Enterprises. After paying all pension obligations for privatization, the plan assets of Chunghwa should be transferred to the Fund for Privatization of Government-owned Enterprises (the "Privatization Fund") under the Executive Yuan. On August 7, 2006, Chunghwa transferred the remaining balance of fund to the Privatization Fund. However, according to the instructions of MOTC, Chunghwa was requested to administer the distributions to employees for pension obligations including service clearance payment, lump sum payment under civil service plan, additional separation payments, etc. upon the completion of the privatization and recognized in other current monetary assets.

Chunghwa and its subsidiaries SENAO, CHIEF, CHSI, and SHE with the pension mechanism under the Labor Standards Law are considered as defined benefit plans. These pension plans provide benefits based on an employee's length of service and average six-month salary prior to retirement. Chunghwa and its subsidiaries contribute an amount no more than 15% of salaries paid each month to their respective pension funds (the Funds), which are administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the names of the Committees in the Bank of Taiwan. The plan assets are held in a commingled fund which is operated and managed by the government's designated authorities; as such, the Company does not have any right to intervene in the investments of the funds. According to the Article 56 of the Labor Standards Law in the ROC revised in February 2015, entities are required to contribute the difference in one appropriation to the Funds before the end of next March when the balance of the Funds is insufficient to pay employees who will meet the retirement eligibility criteria within next year.

The amounts included in the consolidated balance sheets arising from the Company's obligation in respect of its defined benefit plans were as follows:

	December 31 2018	December 31 2017
Present value of funded defined benefit obligation	$ 41,396,992	$ 37,662,966
Fair value of plan assets	(39,027,144)	(34,972,376)
Funded status - deficit	$ 2,369,848	$ 2,690,590
Net defined benefit liabilities	$ 3,533,936	$ 2,703,569
Net defined benefit assets	(1,164,088)	(12,979)
	$ 2,369,848	$ 2,690,590

Movements in the defined benefit obligation and the fair value of plan assets were as follows:

	Present Value of Funded Defined Benefit Obligation	Fair Value of Plan Assets	Net Defined Benefit Liabilities (Assets)
Balance on January 1, 2017	$ 34,572,194	$ 33,954,016	$ 618,178
Current service cost	2,918,166	-	2,918,166
Interest expense/interest income	506,261	519,049	(12,788)
Amounts recognized in profit or loss	3,424,427	519,049	2,905,378
Remeasurement on the net defined benefit liability			
Return on plan assets (excluding amounts included in net interest)	-	(192,650)	192,650
Actuarial losses recognized from changes in demographic assumptions	14,424	-	14,424
Actuarial losses recognized from experience adjustments	1,816,419	-	1,816,419
Amounts recognized in other comprehensive income	1,830,843	(192,650)	2,023,493
Contributions from employer	-	2,635,225	(2,635,225)
Benefits paid	(1,943,264)	(1,943,264)	-
Benefits paid directly by the Company	(221,234)	-	(221,234)
Balance on December 31, 2017	37,662,966	34,972,376	2,690,590
Current service cost	3,024,370	-	3,024,370
Interest expense/interest income	549,662	544,077	5,585
Amounts recognized in profit or loss	3,574,032	544,077	3,029,955
Remeasurement on the net defined benefit liability			
Return on plan assets (excluding amounts included in net interest)	-	875,203	(875,203)
Actuarial losses recognized from changes in demographic assumptions	3,446	-	3,446

(Continued)

	Present Value of Funded Defined Benefit Obligation	Fair Value of Plan Assets	Net Defined Benefit Liabilities (Assets)
Actuarial losses recognized from changes in financial assumptions	$ 1,273,122	$ -	$ 1,273,122
Actuarial losses recognized from experience adjustments	813,187	-	813,187
Amounts recognized in other comprehensive income	2,089,755	875,203	1,214,552
Contributions from employer	-	4,373,688	(4,373,688)
Benefits paid	(1,738,200)	(1,738,200)	-
Benefits paid directly by the Company	(191,561)	-	(191,561)
Balance on December 31, 2018	$ 41,396,992	$ 39,027,144	$ 2,369,848

(Concluded)

Relevant pension costs recognized in profit and loss for defined benefit plans were as follows:

	Year Ended December 31	
	2018	2017
Operating costs	$ 1,795,526	$ 1,733,951
Marketing expenses	885,684	847,318
General and administrative expenses	164,252	155,707
Research and development expenses	107,494	96,953
	$ 2,952,956	$ 2,833,929

The Company is exposed to following risks for the defined benefits plans under the Labor Standards Law:

a. Investment risk

Under the Labor Standards Law, the rate of return on assets shall not be lower than the average interest rate on a two-year time deposit published by the local banks and the government is responsible for any shortfall in the event that the rate of return is less than the required rate of return. The plan assets are held in a commingled fund mainly invested in foreign and domestic equity and debt securities and bank deposits which is operated and managed by the government's designated authorities; as such, the Company does not have any right to intervene in the investments of the funds.

b. Interest rate risk

The decline in government bond interest rate will increase the present value of the obligation on the defined benefit plan, while the return on plan assets will increase. The net effect on the present value of the obligation on defined benefit plan is partially offset by the return on plan assets.

c. Salary risk

The calculation of the present value of defined benefit obligation is referred to the plan participants' future salary. Hence, the increase in plan participants' salary will increase the present value of the defined benefit obligation.

The most recent actuarial valuation of plan assets and the present value of the defined benefit obligation were carried out by the independent actuary.

The principal assumptions used for the purpose of the actuarial valuations were as follows:

	Measurement Date	
	December 31	
	2018	2017
Discount rates	1.00%	1.50%
Expected rates of salary increase	1.20%-2.00%	1.20%-2.00%

If reasonably possible changes of the respective significant actuarial assumptions occur at the end of reporting periods, while holding all other assumptions constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	December 31	
	2018	2017
Discount rates		
0.5% increase	$ (1,258,429)	$ (1,231,822)
0.5% decrease	$ 1,338,402	$ 1,309,513
Expected rates of salary increase		
0.5% increase	$ 1,429,623	$ 1,397,699
0.5% decrease	$ (1,355,931)	$ (1,325,710)

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated. There is no change in the methods and assumptions used in preparing the sensitivity analysis from the previous period.

	December 31	
	2018	2017
The expected contributions to the plan for the next year	$ 2,236,871	$ 4,392,763
The average duration of the defined benefit obligation	6.5-12.1 years	6.8-12.5 years

As of December 31, 2018, the Company's maturity analysis of the undiscounted benefit payments was as follows:

Year	Amount
2019	$ 2,736,416
2020	6,088,812
2021	10,453,881
2022	12,566,099
2023 and thereafter	46,894,025
	$ 78,739,233

29. EQUITY

a. Share capital

1) Common stocks

	December 31 2018	December 31 2017
Number of authorized shares (thousand)	12,000,000	12,000,000
Authorized shares	$ 120,000,000	$ 120,000,000
Number of issued and paid shares (thousand)	7,757,447	7,757,447
Issued shares	$ 77,574,465	$ 77,574,465

The issued common stocks of a par value at $10 per share entitled the right to vote and receive dividends.

2) Global depositary receipts

The MOTC and some stockholders sold some common stocks of Chunghwa in an international offering of securities in the form of American Depositary Shares ("ADS") (one ADS represents 10 common stocks) in July 2003, August 2005, and September 2006. The ADSs were traded on the New York Stock Exchange since July 17, 2003. As of December 31, 2018, the outstanding ADSs were 234,273 thousand common stocks, which equaled 23,427 thousand units and represented 3.02% of Chunghwa's total outstanding common stocks.

The ADS holders generally have the same rights and obligations as other common stockholders, subject to the provision of relevant laws. The exercise of such rights and obligations shall comply with the related regulations and deposit agreement, which stipulate, among other things, that ADS holders are entitled to, through deposit agents:

a) Exercise their voting rights,

b) Sell their ADSs, and

c) Receive dividends declared and subscribe to the issuance of new shares.

b. Additional paid-in capital

The adjustments of additional paid-in capital for the years ended December 31, 2018 and 2017 were as follows:

	Share Premium	Movements of Additional Paid-in Capital for Associates and Joint Ventures Accounted for Using Equity Method	Movements of Additional Paid-in Capital Arising from Changes in Equities of Subsidiaries	Difference between Consideration Received and Carrying Amount of the Subsidiaries' Net Assets upon Disposal	Donated Capital	Stockholders' Contribution due to Privatization	Total
Balance on January 1, 2017	$ 147,329,386	$ 76,972	$ 390,030	$ 84,850	$ 13,170	$ 20,648,078	$ 168,542,486
Unclaimed dividend	-	-	-	-	3,023	-	3,023
Change in additional paid-in capital from investments in associates and joint ventures accounted for using equity method	-	13,965	-	-	-	-	13,965
Partial disposal of interests in subsidiaries	-	-	-	76,714	-	-	76,714
Change in additional paid-in capital for not proportionately participating in the capital increase of subsidiaries	-	-	801,727	-	-	-	801,727

(Continued)

	Share Premium	Movements of Additional Paid-in Capital for Associates and Joint Ventures Accounted for Using Equity Method	Movements of Additional Paid-in Capital Arising from Changes in Equities of Subsidiaries	Difference between Consideration Received and Carrying Amount of the Subsidiaries' Net Assets upon Disposal	Donated Capital	Stockholders' Contribution due to Privatization	Total
Other changes in additional paid-in capital of subsidiaries	$ -	$ -	$ 84	$ -	$ -	$ -	$ 84
Share-based payment transactions of subsidiaries	-	-	1,984	-	-	-	1,984
Treasury stock transfer of subsidiaries	-	-	26,900	-	-	-	26,900
Balance on December 31, 2017	147,329,386	90,937	1,220,725	161,564	16,193	20,648,078	169,466,883
Unclaimed dividend	-	-	-	-	2,455	-	2,455
Change in additional paid-in capital from investments in associates and joint ventures accounted for using equity method	-	(1,044)	-	-	-	-	(1,044)
Partial disposal of interests in subsidiaries	-	-	-	826,047	-	-	826,047
Change in additional paid-in capital for not proportionately participating in the capital increase of subsidiaries	-	-	776,713	-	-	-	776,713
Share-based payment transactions of subsidiaries	-	-	10,776	-	-	-	10,776
Treasury stock transfer of subsidiaries	-	-	54,934	-	-	-	54,934
Balance on December 31, 2018	$ 147,329,386	$ 89,893	$ 2,063,148	$ 987,611	$ 18,648	$ 20,648,078	$ 171,136,764

(Concluded)

Additional paid-in capital from share premium, donated capital and the difference between consideration received and the carrying amount of the subsidiaries' net assets upon disposal may be utilized to offset deficits. Furthermore, when Chunghwa has no deficit, it may be distributed in cash or capitalized, which however is limited to a certain percentage of Chunghwa's paid-in capital except the additional paid-in capital arising from unclaimed dividend can only be utilized to offset deficits.

The additional paid-in capital from movements of paid-in capital arising from changes in equities of subsidiaries may only be utilized to offset deficits.

Among additional paid-in capital from movements of investments in associates and joint ventures accounted for using equity method, the portion arising from the difference between consideration received and the carrying amount of the subsidiaries' net assets upon disposal may be utilized to offset deficits; furthermore, when the Company has no deficit, it may be distributed in cash or capitalized. However, other additional paid-in capital recognized in proportion of share ownership may only be utilized to offset deficits.

c. Retained earnings and dividends policy

In accordance with the Chunghwa's Articles of Incorporation, Chunghwa must pay all outstanding taxes, offset deficits in prior years and set aside a legal reserve equal to 10% of its net income before distributing a dividend or making any other distribution to stockholders, except when the accumulated amount of such legal reserve equals to Chunghwa's total issued capital, and depending on its business needs or requirements, may also set aside or reverse special reserves. No less than 50% of the remaining earnings comprising remaining balance of net income, if any, plus cumulative undistributed earnings shall be distributed as stockholders' dividends, of which cash dividends to be distributed shall not be less than 50% of the total amount of dividends to be distributed. If cash dividend to be distributed is less than $0.10 per share, such cash dividend shall be distributed in the form of common stocks.

Chunghwa should appropriate or reverse a special reserve in accordance with Rule No. 1010012865 and Rule No. 1010047490 issued by the FSC and the directive entitled "Questions and Answers on Special Reserves Appropriated Following the Adoption of Taiwan-IFRSs". Distributions can be made out of any subsequent reversal of the debit to other equity items.

The appropriation for legal reserve shall be made until the accumulated reserve equals the aggregate par value of the outstanding capital stock of Chunghwa. This reserve can only be used to offset a deficit, or when the legal reserve has exceeded 25% of Chunghwa's paid-in capital, the excess may be transferred to capital or distributed in cash.

The appropriations of the 2017 and 2016 earnings of Chunghwa approved by the stockholders in their meetings on June 15, 2018 and June 23, 2017 were as follows:

	Appropriation of Earnings		Dividends Per Share (NT$)	
	For Fiscal Year 2017	For Fiscal Year 2016	For Fiscal Year 2017	For Fiscal Year 2016
Provision for (reversal of) special reserve	$ (5,404)	$ 5,404		
Cash dividends	37,204,714	38,336,525	$ 4.796	$ 4.9419

The appropriations of earnings for 2018 had been proposed by Chunghwa's Board of Directors on March 19, 2019. The appropriations and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT$)
Cash dividends	$ 34,745,603	$ 4.479

The appropriations of earnings for 2018 are subject to the resolution of the stockholders' meeting planned to be held on June 21, 2019. Information of the appropriation of the Chunghwa's earnings proposed by the Board of Directors and approved by the stockholders is available on the Market Observation Post System website.

d. Other adjustments

1) Exchange differences arising from the translation of the foreign operations

The exchange differences arising from the translation of the foreign operations from their functional currency to New Taiwan dollars were recognized as exchange differences arising from the translation of the foreign operations in other comprehensive income.

2) Unrealized gain or loss on available-for-sale financial assets

Balance on January 1, 2017	$ (50,885)
Unrealized gain or loss on available-for-sale financial assets	606,878
Income tax relating to unrealized gain or loss on available- for-sale financial assets	2,154
Amount reclassified from equity to profit or loss on disposal of available-for-sale financial assets	(38)
Balance on December 31, 2017 under IAS 39	558,109
Effect of retrospective application of IFRS 9	(558,109)
Balance on January 1, 2018 under IFRS 9	$ -

3) Unrealized gain or loss on financial assets at FVOCI

	Year Ended December 31, 2018
Balance on January 1, 2018 under IAS 39	$ -
Effect of retrospective application of IFRS 9	883,420
Balance on January 1, 2018 under IFRS 9	883,420
Unrealized gain or loss for the year	
Equity instruments	(345,148)
Balance on December 31, 2018	$ 538,272

e. Noncontrolling interests

	Year Ended December 31	
	2018	2017
Beginning balance	$ 8,697,595	$ 6,495,922
Effect of retrospective application	(3,945)	-
Beginning balance as adjusted	8,693,650	6,495,922
Shares attributed to noncontrolling interests		
Net income for the year	954,549	1,168,696
Exchange differences arising from the translation of the net investment in foreign operations	(3,177)	(11,557)
Unrealized gain or loss on financial assets at FVOCI	(1,182)	-
Unrealized loss on available-for-sale financial assets	-	(1,566)
Income tax relating to unrealized gain and loss on available-for-sale financial assets	-	266
Remeasurements of defined benefit pension plans	(9,306)	(8,053)
Income tax relating to remeasurements of defined benefit pension plans	3,396	1,369
Share of other comprehensive loss of associates accounted for using equity method	696	(2,445)
Cash dividends distributed by subsidiaries	(958,446)	(942,482)
Changes in additional paid-in capital from investments in associates and joint ventures accounted for using equity method	191	1,762
Partial disposal of interests in subsidiaries	348,353	29,217
Change in additional paid-in capital for not proportionately participating in the capital increase of subsidiaries	699,967	1,750,326
Other changes in additional paid-in capital of subsidiaries	-	41
Share-based payment transactions of subsidiaries	41,863	19,799
Net increase in noncontrolling interests	239,394	196,300
Ending balance	$ 10,009,948	$ 8,697,595

30. REVENUES

2018

	Year Ended December 31, 2018
Revenue from contracts with customers	$ 214,460,894
Other revenues	
Rental income	640,312
Other	381,952
	1,022,264
	$ 215,483,158

The information of performance obligations in customer contracts, please refer to Note 3 Summary of Significant Accounting Policies for details.

a. Disaggregation of revenue

2018

	Domestic Fixed Communi-cations Business	Mobile Communi-cations Business	Internet Business	International Fixed Communi-cations Business	Others	Total
Main Products and Service Revenues						
Mobile services revenue	$ -	$ 63,905,960	$ -	$ -	$ -	$ 63,905,960
Sales of products	1,731,152	35,701,599	3,993	251,437	3,600,582	41,288,763
Local telephone and domestic long distance telephone services revenue	29,995,695	-	-	-	-	29,995,695
Broadband access and domestic leased line services revenue	22,453,133	-	-	-	-	22,453,133
Data Communications internet services revenue	-	-	21,137,189	-	-	21,137,189
International network and leased telephone services revenue	-	-	-	8,724,302	-	8,724,302
Others	11,922,601	1,269,587	8,509,272	4,448,211	806,181	26,955,852
	$ 66,102,581	$100,877,146	$ 29,650,454	$ 13,423,950	$ 4,406,763	$214,460,894

b. Contract balances

	December 31, 2018
Trade notes and accounts receivable (Note 10)	$ 30,075,503
Contract assets	
Products and service bundling	$ 7,122,875
Other	108,581
Less: Loss allowance	(18,770)
	$ 7,212,686

(Continued)

	December 31, 2018
Current	$ 4,868,728
Noncurrent	2,343,958
	$ 7,212,686
Contract liabilities	
Telecommunications business	$ 8,193,215
Project business	4,508,200
Products and service bundling	105,559
Other	475,947
	$ 13,282,921
Current	$ 10,687,772
Noncurrent	2,595,149
	$ 13,282,921

(Concluded)

The changes in the contract asset and the contract liability balances primarily result from the timing difference between the satisfaction of performance obligations and the payments collected from customers. Significant changes of contract assets and liabilities recognized resulting from product and service bundling were as follows:

	Year Ended December 31, 2018
Contract assets	
Net increase of customer contracts	$ 4,125,505
Reclassified to trade receivables	(7,531,886)
	$ (3,406,381)
Contract liabilities	
Net increase of customer contracts	$ 16,243
Recognized as revenues	(194,384)
	$ (178,141)

The Company applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for receivables. Contract assets will be reclassified to trade receivables when the corresponding invoice is billed to the client. Contract assets have substantially the same risk characteristics as the trade receivables of the same types of contracts. Therefore, the Company concluded that the expected loss rates for trade receivables can be applied to the contract assets.

Revenue recognized for the period that was included in the contract liability at the beginning of the period was as follows:

	Year Ended December 31, 2018
Telecommunications business	$ 7,156,712
Project business	626,860
Others	324,892
	$ 8,108,464

c. Incremental costs of obtaining contracts

	December 31, 2018
Noncurrent	
Incremental costs of obtaining contracts	$ 1,335,030

The Company considered the past experience and the default clauses in the telecommunications service contract and believes the commissions and equipment subsidy paid for obtaining contracts are expected to be recoverable; therefore, incremental costs of obtaining contracts are recognized as an asset. Amortization expense of incremental costs of obtaining contracts for the year ended December 31, 2018 was $1,941,124 thousand.

d. Remaining Performance Obligations

As of December 31, 2018, the aggregate amount of transaction price allocated to performance obligations for non-cancellable telecommunications service contracts that are unsatisfied is $38,909,171 thousand. The Company expects to recognize revenue when service is provided over contract terms in the next 36 months, $24,388,492 thousand, $11,581,144 thousand and $2,939,535 thousand for 2019, 2020 and 2021, respectively. The variable consideration collected from customers on nonrecurring basis resulting from exceeded usage from monthly fee and revenue recognized for contracts that the Company has a right to consideration from customers in the amount corresponding directly with the value to the customers of the Company's performance completed to date have been excluded from the disclosure of remaining performance obligations.

As of December 31, 2018, the aggregate amount of transaction price allocated to performance obligations for non-cancellable project business contracts that are unsatisfied is $20,989,579 thousand. The Company recognizes revenues when the project business contract is completed and accepted by customers. The Company expects to recognize such revenue for $3,656,313 thousand, $12,892,600 thousand and $4,440,666 thousand in 2019, 2020 and 2021, respectively. Project business contracts whose expected duration are less than a year have been excluded from the aforementioned disclosure.

2017

The main source of revenue of the Company includes various telecommunications services in different streams. The information of disaggregation of revenue please refer to Note 45.

31. NET INCOME AND OTHER COMPREHENSIVE INCOME (LOSS)

a. Net income

1) Other income and expenses

	Year Ended December 31	
	2018	2017
Gain or loss on disposal of property, plant and equipment	$ 142,068	$ (106,692)
Reversal of impairment loss on investment properties	19,133	10,979
Loss on disposal of intangible assets	-	(46)
Impairment loss on intangible assets	(50,750)	(8,622)
	$ 110,451	$ (104,381)

2) Other income

	Year Ended December 31	
	2018	2017
Dividend income	$ 395,593	$ 327,861
Rental income	70,142	60,516
Others	234,088	447,088
	$ 699,823	$ 835,465

3) Other gains and losses

	Year Ended December 31	
	2018	2017
Net foreign currency exchange gain (loss)	$ 37,348	$ (87,330)
Gain on disposal of financial instruments	5,763	2,748
Loss on disposal of investments accounted for using equity method	(125)	(223)
Valuation gain (loss) on financial assets and liabilities at fair value through profit or loss, net	(20,763)	779
Others	(67,894)	(48,132)
	$ (45,671)	$ (132,158)

4) Impairment loss (reversal of impairment loss)

	Year Ended December 31	
	2018	2017
Contract Assets	$ 18,770	$ -
Trade notes and accounts receivable	$ 804,727	$ 577,647
Other receivables	$ 96,235	$ 65,363
Inventories	$ 365,123	$ 52,487
Investment properties	$ (19,133)	$ (10,979)
Intangible assets	$ 50,750	$ 8,622

5) Depreciation and amortization expenses

	Year Ended December 31 2018	2017
Property, plant and equipment	$ 27,461,179	$ 28,142,753
Investment properties	20,777	20,831
Intangible assets	4,386,798	3,766,020
Incremental costs of obtaining contracts	1,941,124	-
Total depreciation and amortization expenses	$ 33,809,878	$ 31,929,604
Depreciation expenses summarized by functions		
Operating costs	$ 25,996,087	$ 26,401,822
Operating expenses	1,485,869	1,761,762
	$ 27,481,956	$ 28,163,584
Amortization expenses summarized by functions		
Operating costs	$ 6,085,039	$ 3,473,233
Marketing expenses	113,253	153,458
General and administrative expenses	93,239	104,205
Research and development expenses	36,391	35,124
	$ 6,327,922	$ 3,766,020

6) Employee benefit expenses

	Year Ended December 31 2018	2017
Post-employment benefit		
Defined contribution plans	$ 639,670	$ 593,714
Defined benefit plans	2,952,956	2,833,929
	3,592,626	3,427,643
Share-based payment		
Equity-settled share-based payment	17,302	21,783
Other employee benefit		
Salaries	26,203,747	25,759,742
Insurance	2,739,782	2,748,020
Others	14,470,194	15,449,368
	43,413,723	43,957,130
Total employee benefit expenses	$ 47,023,651	$ 47,406,556
Summary by functions		
Operating costs	$ 24,366,935	$ 24,725,143
Operating expenses	22,656,716	22,681,413
	$ 47,023,651	$ 47,406,556

Chunghwa distributes employees' compensation at the rates from 1.7% to 4.3% and remuneration to directors not higher than 0.17%, respectively, of pre-tax income. As of December 31, 2018, the payables of the employees' compensation and the remuneration to directors were $1,404,264 thousand and $38,216 thousand, respectively. Such amounts have

been approved by the Chunghwa's Board of Directors on March 19, 2019 and will be reported to the stockholders in their meeting planned to be held on June 21, 2019.

If there is a change in the proposed amounts after the annual financial statements are authorized for issue, the differences are recorded as a change in accounting estimate.

The compensation to the employees and remuneration to the directors of 2017 and 2016 approved by the Board of Directors on March 13, 2018 and March 7, 2017, respectively, were as follows:

	2017 Cash	2016 Cash
Compensation distributed to the employees	$ 1,596,012	$ 1,702,164
Remuneration paid to the directors	40,750	42,087

There was no difference between the initial accrual amounts and the amounts proposed in the Board of Directors in 2018 and 2017 of the aforementioned compensation to employees and the remuneration to directors.

Information of the appropriation of Chunghwa's employees compensation and remuneration to directors and those approved by the Board of Directors is available on the Market Observation Post System website.

b. Reclassification adjustments of other comprehensive income (loss)

	Year Ended December 31, 2017
Unrealized gain (loss) on available-for-sale financial assets	
Arising during the year	$ 605,317
Reclassification adjustments	
Upon disposal	(43)
	$ 605,274
Cash flow hedges	
Gain arising during the year	$ 3,896
Reclassification adjustments included in profit or loss	(1,748)
Adjusted against the carrying amount of hedged items	(2,411)
	$ (263)

32. INCOME TAX

a. Income tax recognized in profit or loss

The major components of income tax expense were as follows:

	Year Ended December 31 2018	Year Ended December 31 2017
Current tax		
Current tax expenses recognized for the year	$ 8,271,026	$ 7,993,159
Income tax on unappropriated earnings	47,528	48,170
Income tax adjustments on prior years	6,782	(1,997)
Others	7,368	11,210
	8,332,704	8,050,542
Deferred tax		
Deferred tax expenses recognized for the year	208,252	(101,663)
Income tax adjustments on prior years	19,229	5,582
Change in tax rate	(37,652)	-
	189,829	(96,081)
Income tax expense recognized in profit or loss	$ 8,522,533	$ 7,954,461

Reconciliation of accounting profit and income tax expense was as follows:

	Year Ended December 31 2018	Year Ended December 31 2017
Income before income tax	$ 44,978,704	$ 47,997,062
Income tax expense calculated at the statutory rate (20% and 17% in 2018 and 2017, respectively)	$ 8,995,741	$ 8,159,501
Nondeductible income and expenses in determining taxable income	226,727	34,300
Unrecognized deductible temporary differences	755	(856)
Unrecognized loss carryforwards	21,240	9,859
Tax-exempt income	(578,412)	(87,476)
Additional income tax under Alternative Minimum Tax Act	45,827	-
Income tax on unappropriated earnings	47,528	48,170
Investment credits	(204,223)	(211,740)
Change in tax rate	(37,652)	-
Effect of different tax rates of group entities operating in other jurisdictions	(14,967)	(2,110)
Income tax adjustments on prior years	26,011	3,585
Others	(6,042)	1,228
Income tax expense recognized in profit or loss	$ 8,522,533	$ 7,954,461

In 2017, the applicable corporate income tax rate used by the Company is 17%.

Income Tax Act in the ROC was amended in February 2018 and the corporate income tax rate is adjusted from 17% to 20%. Such amendment is effective from 2018. In addition, the rate of the corporate surtax applicable to 2018 unappropriated earnings is reduced from 10% to 5%. The applicable tax rate used by subsidiaries in China is 25%, and tax rates used by other entities in the Company operating in other jurisdictions are based on the tax laws in those jurisdictions.

b. Income tax benefit recognized in other comprehensive income

	Year Ended December 31 2018	Year Ended December 31 2017
Deferred tax		
Remeasurement on defined benefit plan	$ (242,911)	$ (343,994)
Change in tax rate	(207,255)	-
Unrealized gain or loss on available-for-sale financial assets	-	(2,420)
Total income tax benefit recognized in other comprehensive income	$ (450,166)	$ (346,414)

c. Current tax assets and liabilities

	December 31 2018	December 31 2017
Current tax assets		
Tax refund receivable (included in other current assets - other)	$ 466	$ 1,670
Current tax liabilities		
Income tax payable	$ 4,390,203	$ 4,725,698

d. Deferred income tax assets and liabilities

The movements of deferred income tax assets and liabilities were as follows:

For the year ended December 31, 2018

	January 1, 2018	Effect of Retrospective Application (Note 5)	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2018
Deferred income tax assets					
Temporary differences					
Defined benefit obligation	$ 1,723,130	$ -	$ 133,748	$ 450,179	$ 2,307,057
Allowance for doubtful receivables over quota	289,043	-	146,402	-	435,445
Share of profit or loss of associates and joint ventures accounted for using equity method	330,705	-	58,674	-	389,379
Deferred revenue	105,742	-	5,187	-	110,929
Impairment loss on property, plant and equipment	112,323	-	(18,867)	-	93,456
Valuation loss on inventory	22,905	-	64,569	-	87,474
Estimated warranty liabilities	22,389	-	3,600	-	25,989
Accrued award credits liabilities	15,387	-	(1,475)	-	13,912
Trade-in right	14,887	-	(4,552)	-	10,335
Property, plant and equipment	1,762	-	236	-	1,998
Unrealized foreign exchange loss, net	16,663	-	(16,233)	-	430
Others	29,547	-	6,963	-	36,510
	2,684,483	-	378,252	450,179	3,512,914
Loss carryforwards	45,610	-	(4,668)	-	40,942
	$ 2,730,093	$ -	$ 373,584	$ 450,179	$ 3,553,856

(Continued)

	January 1, 2018	Effect of Retrospective Application (Note 5)	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2018
Deferred income tax liabilities					
Temporary differences					
Defined benefit obligation	$ 1,265,380	$ -	$ 567,276	$ 13	$ 1,832,669
Land value incremental tax	94,986	-	-	-	94,986
Intangible assets	38,111	-	(6,083)	-	32,028
Deferred revenue for award credits	28,810	-	1,880	-	30,690
Unrealized foreign exchange gain, net	134	-	465	-	599
Valuation gain or loss on financial instruments, net	1,175	(1,175)	53	-	53
Others	996	-	(178)	-	818
	$ 1,429,592	$ (1,175)	$ 563,413	$ 13	$ 1,991,843

(Concluded)

For the year ended December 31, 2017

	January 1, 2017	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2017
Deferred income tax assets				
Temporary differences				
Defined benefit obligation	$ 1,373,755	$ 5,397	$ 343,978	$ 1,723,130
Allowance for doubtful receivables over quota	230,017	59,026	-	289,043
Share of profits of associates and joint ventures accounted for using equity method	329,775	930	-	330,705
Deferred revenue	117,193	(11,451)	-	105,742
Impairment loss on property, plant and equipment	122,805	(10,482)	-	112,323
Valuation loss on inventory	20,616	2,289	-	22,905
Estimated warranty liabilities	18,544	3,845	-	22,389
Accrued award credits liabilities	19,926	(4,539)	-	15,387
Trade-in right	-	14,887	-	14,887
Property, plant and equipment	1,850	(88)	-	1,762
Unrealized foreign exchange loss, net	120	16,543	-	16,663
Others	33,775	(4,228)	-	29,547
	2,268,376	72,129	343,978	2,684,483
Loss carryforwards	53,850	(8,240)	-	45,610
	$ 2,322,226	$ 63,889	$ 343,978	$ 2,730,093
Deferred income tax liabilities				
Temporary differences				
Defined benefit obligation	$ 1,268,319	$ (2,923)	$ (16)	$ 1,265,380
Land value incremental tax	94,986	-	-	94,986
Intangible assets	40,742	(2,631)	-	38,111

(Continued)

	January 1, 2017	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2017
Deferred revenue for award credits	$ 45,690	$ (16,880)	$ -	$ 28,810
Unrealized foreign exchange gain, net	9,545	(9,411)	-	134
Valuation gain or loss on financial instruments, net	3,632	(37)	(2,420)	1,175
Others	1,306	(310)	-	996
	$ 1,464,220	$ (32,192)	$ (2,436)	$ 1,429,592

(Concluded)

e. Deductible temporary differences and unused loss carryforwards for which no deferred tax assets have been recognized in the consolidated balance sheets

	December 31 2018	December 31 2017
Loss carryforwards		
Expire in 2019	$ 135,872	$ 137,604
Expire in 2020	41,390	41,758
Expire in 2021	11,836	9,347
Expire in 2022	10,264	10,957
Expire in 2023	8,459	21
Expire in 2024	1,631	20
Expire in 2025	15,438	13,122
Expire in 2026	8,423	23
Expire in 2027	2,585	2,575
Expire in 2028	614	-
	$ 236,512	$ 215,427
Deductible temporary differences	$ 1,369	$ 2,543

f. Information about unused loss carryforwards

As of December 31, 2018, information about loss carryforwards was as follows:

Remaining Creditable Amount	Expiry Year
$ 135,872	2019
41,390	2020
21,543	2021
11,460	2022
9,131	2023
1,814	2024
32,695	2025
11,636	2026
3,621	2027
8,292	2028
$ 277,454	

g. Income tax examinations

Income tax returns of Chunghwa have been examined by the tax authorities through 2015. Income tax returns of SENAO, Aval, CHSI, CHI, CHPT, HHI, SHE, LED, CHIEF, Unigate, CLPT and CHST have been examined by the tax authorities through 2016. Income tax returns of SFD, CHYP, ISPOT, Youth and Youyi have been examined by the tax authorities through 2017.

33. EARNINGS PER SHARE ("EPS")

Net income and weighted average number of common stocks used in the calculation of earnings per share were as follows:

Net Income

	Year Ended December 31	
	2018	**2017**
Net income used to compute the basic earnings per share		
Net income attributable to the parent	$ 35,501,622	$ 38,873,905
Assumed conversion of all dilutive potential common stocks		
Employee stock options and employee compensation of subsidiaries	(6,333)	(459)
Net income used to compute the diluted earnings per share	$ 35,495,289	$ 38,873,446

Weighted Average Number of Common Stocks

(Thousand Shares)

	Year Ended December 31	
	2018	**2017**
Weighted average number of common stocks used to compute the basic earnings per share	7,757,447	7,757,447
Assumed conversion of all dilutive potential common stocks		
Employee compensation	9,062	10,486
Weighted average number of common stocks used to compute the diluted earnings per share	7,766,509	7,767,933

Because Chunghwa may settle the employee compensation in shares or cash, Chunghwa shall presume that it will be settled in shares and takes those shares into consideration when calculating the weighted average number of outstanding shares used in the calculation of diluted EPS if the shares have a dilutive effect. The dilutive effect of the shares needs to be considered until the approval of the number of shares to be distributed to employees as compensation in the following year.

34. SHARE-BASED PAYMENT ARRANGEMENT

a. SENAO share-based compensation plan ("SENAO Plan") described as follows:

Effective Date for Plan Registration	Resolution Date by SENAO's Board of Directors	Stock Options Units (Thousand)	Exercise Price (NT$)
2012.05.28	2013.04.29	10,000	$66.20 (Original price $93.00)

Each option is eligible to subscribe for one common share when exercisable. Under the terms of the SENAO Plan, the options are granted at an exercise price equal to the closing price of the SENAO's common stocks listed on the TSE on the higher of closing price or par value. The SENAO Plan have exercise price adjustment formula upon the changes in common stocks equity (including cash capital increase, new share issue through capitalization of earnings and additional paid-in capital, merger, spin off and new share issue for Global Depositary Shares, and so on) or distribution of cash dividends. The options of SENAO Plan are valid for six years and the graded vesting schedule for which 50% of option granted will vest two years after the grant date and another two tranches of 25%, each will vest three and four years after the grant date respectively.

The compensation cost of stock options granted on May 7, 2013 was $3,991 thousand for the year ended December 31, 2017. No compensation cost was recognized for the year ended December 31, 2018.

SENAO modified the plan terms of the outstanding stock options in July 2018 and the exercise price changed from $70.70 to $66.20 per share. The modification did not cause any incremental fair value granted.

SENAO modified the plan terms of the outstanding stock options in July 2017 and the exercise price changed from $76.10 to $70.70 per share. The modification did not cause any incremental fair value granted.

Information about SENAO's outstanding stock options for the years ended December 31, 2018 and 2017 was as follows:

	Year Ended December 31			
	2018		2017	
	Granted on May 7, 2013		Granted on May 7, 2013	
	Number of Options (Thousand)	Weighted Average Exercise Price (NT$)	Number of Options (Thousand)	Weighted Average Exercise Price (NT$)
Employee stock options				
Options outstanding at beginning of the year	5,926	$ 70.70	6,587	$ 76.10
Options forfeited	(608)	-	(661)	-
Options outstanding at end of the year	5,318	66.20	5,926	70.70
Options exercisable at end of the year	5,318	66.20	5,926	70.70

As of December 31, 2018, information about employee stock options outstanding was as follows:

Options Outstanding				Options Exercisable	
Range of Exercise Price (NT$)	Number of Options (Thousand)	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT$)	Number of Options (Thousand)	Weighted Average Exercise Price (NT$)
$ 66.20	5,318	0.35	$ 66.20	5,318	$ 66.20

As of December 31, 2017, information about employee stock options outstanding was as follows:

Options Outstanding				Options Exercisable	
Range of Exercise Price (NT$)	Number of Options (Thousand)	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT$)	Number of Options (Thousand)	Weighted Average Exercise Price (NT$)
$ 70.70	5,926	1.35	$ 70.70	5,926	$ 70.70

SENAO used the fair value method to evaluate the options using the Black-Scholes model and the related assumptions and the fair value of the options were as follows:

	Stock Options Granted on May 7, 2013
Grant-date share price (NT$)	$93.00
Exercise price (NT$)	$93.00
Dividends yield	-
Risk-free interest rate	0.91%
Expected life	4.375 years
Expected volatility	36.22%
Weighted average fair value of grants (NT$)	$28.72

Expected volatility was based on the historical share price volatility of SENAO over the period equal to the expected life of SENAO Plan.

b. SENAO transferred the treasury stock

The Board of Directors of SENAO resolved to transfer treasury stock 6,658 thousand shares to specific employees in April 2018. The aforementioned treasury stock transferred to employees were measured at the fair value on the grant date. The compensation cost of $15,564 thousand was recognized for the year ended December 31, 2018.

The Board of Directors of SENAO resolved to transfer treasury stock to specific employees in May and November 2017. The aforementioned treasury stock transferred to employees were measured at the fair value of the grant date. SENAO totally transferred 3,342 thousand shares of treasury stock and the compensation cost of $8,698 thousand was recognized for the year ended December 31, 2017.

SENAO used the fair value method to evaluate share-based payment transaction using the Black-Scholes model and the related assumptions and the fair value of the option were as follows:

	Stock Options Granted on May 7, 2018	Stock Options Granted on November 17, 2017	Stock Options Granted on May 23, 2017
Grant-date share price (NT$)	$51.60	$51.00	$53.60
Exercise price (NT$)	$49.28	$49.28	$49.28
Dividends yield	-	-	-
Risk-free interest rate	0.59%	0.59%	0.59%
Expected life	18 days	14 days	9 days
Expected volatility	8.78%	9.94%	12.35%
Weighted average fair value of grants (NT$)	$2.34	$1.75	$4.33

Expected volatility was based on the historical share price volatility of SENAO over three months before the grant date.

c. CHIEF share-based compensation plan ("CHIEF Plan") described as follows:

Effective Date for Plan Registration	Resolution Date by CHIEF's Board of Directors	Stock Options Units	Exercise Price (NT$)
2017.12.18	2017.12.19	950.00	$ 140.60 (Original price $ 147.00)
	2018.10.31	50.00	$ 147.00
2015.11.17	2015.10.22	2,000.00	$ 34.40 (Original price $ 43.00)

Each option is eligible to subscribe for one thousand common stocks when exercisable. The options are granted to specific employees that meet the vesting conditions. The CHIEF Plan has exercise price adjustment formula upon the changes in common stocks or distribution of cash dividends. The options of CHIEF Plan are valid for five years and the graded vesting schedule will vest two years after the grant date.

The compensation cost for stock options granted on October 31, 2018 was $92 thousand for the year ended December 31, 2018.

The compensation costs for stock options granted on December 19, 2017 were $596 thousand and $96 thousand for the years ended December 31, 2018 and 2017, respectively.

The compensation costs for stock options granted on October 22, 2015 were $1,050 thousand and $3,177 thousand for the years ended December 31, 2018 and 2017, respectively.

CHIEF modified the plan terms of stock options granted on December 19, 2017 in June and August 2018 and the exercise price changed from $147.00 to $144.10 and $144.10 to $140.60 per share, respectively. The modification did not cause any incremental fair value granted.

Information about CHIEF's outstanding stock options for the years ended December 31, 2018 and 2017 was as follows:

	Year Ended December 31, 2018					
	Granted on October 31, 2018		Granted on December 19, 2017		Granted on October 22, 2015	
	Number of Options	Weighted Average Exercise Price (NT$)	Number of Options	Weighted Average Exercise Price (NT$)	Number of Options	Weighted Average Exercise Price (NT$)
Employee stock options						
Options outstanding at beginning of the year	-	$ -	950.00	$ 147.00	1,936.00	$ 34.40
Options granted	50.00	147.00	-	-	-	-
Options exercised	-	-	-	-	(1,027.25)	34.40
Options forfeited	-	-	25.00	-	(26.00)	-
Options outstanding at end of the year	50.00	147.00	925.00	140.60	882.75	34.40
Options exercisable at end of the year	-	-	-	-	416.50	34.40

	Year Ended December 31, 2017			
	Granted on December 19, 2017		Granted on October 22, 2015	
	Number of Options (Thousand)	Weighted Average Exercise Price (NT$)	Number of Options (Thousand)	Weighted Average Exercise Price (NT$)
Employee stock options				
Options outstanding at beginning of the year	-	$ -	1,948.00	$ 34.40
Options granted	950.00	147.00	-	-
Options forfeited	-	-	(12.00)	-
Options outstanding at end of the year	950.00	147.00	1,936.00	34.40
Options exercisable at end of the year	-	-	968.00	34.40

As of December 31, 2018, information about employee stock options outstanding was as follows:

Granted on October 31, 2018

	Options Outstanding			Options Exercisable	
Range of Exercise Price (NT$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT$)	Number of Options	Weighted Average Exercise Price (NT$)
$147.00	50.00	4.83	$147.00	-	$ -

Granted on December 19, 2017

	Options Outstanding			Options Exercisable	
Range of Exercise Price (NT$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT$)	Number of Options	Weighted Average Exercise Price (NT$)
$140.60	925.00	3.96	$140.60	-	$ -

Granted on October 22, 2015

	Options Outstanding			Options Exercisable	
Range of Exercise Price (NT$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT$)	Number of Options	Weighted Average Exercise Price (NT$)
$ 34.40	882.75	1.81	$ 34.40	416.50	$ 34.40

As of December 31, 2017, information about employee stock options outstanding was as follows:

Granted on December 19, 2017

	Options Outstanding			Options Exercisable	
Range of Exercise Price (NT$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT$)	Number of Options	Weighted Average Exercise Price (NT$)
$147.00	950.00	4.96	$147.00	-	$ -

Granted on October 22, 2015

	Options Outstanding			Options Exercisable	
Range of Exercise Price (NT$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT$)	Number of Options	Weighted Average Exercise Price (NT$)
$ 34.40	1,936.00	2.81	$ 34.40	968.00	$ 34.40

CHIEF used the fair value method to evaluate the options using the Black-Scholes model and binomial option pricing model and the related assumptions and the fair value of the options were as follows:

	Stock Options Granted on October 31, 2018	Stock Options Granted on December 19, 2017	Stock Options Granted on October 22, 2015
Grant-date share price (NT$)	$166.00	$95.92	$39.55
Exercise price (NT$)	$147.00	$147.00	$43.00
Dividends yield	-	-	-

(Continued)

	Stock Options Granted on October 31, 2018	Stock Options Granted on December 19, 2017	Stock Options Granted on October 22, 2015
Risk-free interest rate	0.72%	0.62%	0.86%
Expected life	5 years	5 years	5 years
Expected volatility	16.60%	17.35%	21.02%
Weighted average fair value of grants (NT$)	$33,540	$2,318	$4,863

(Concluded)

Expected volatility was based on the average annualized historical share price volatility of CHIEF's comparable companies before the grant date.

d. New shares reserved for subscription by employees under cash injection of CHIEF

In March 2018, the Board of Directors of CHIEF approved the cash injection to issue 7,842 thousand shares and simultaneously reserved 1,176 thousand shares for subscription by employees according to the Company Act of the ROC. Furthermore, when the employees subscribed some shares or discarded their rights to subscribe shares, the Board of Directors of CHIEF authorized the chairman of the Board of Directors to contact specific people or group to subscribe.

The aforementioned options granted to employees are accounted for and measured at fair value of the grant date. No compensation cost was recognized for the year ended December 31, 2018.

CHIEF used the fair value method to evaluate the options granted to employees on May 22, 2018 using the Black-Scholes model and the related assumptions and the fair value of the options were as follows:

	Stock Options Granted on May 22, 2018
Grant-date share price (NT$)	$156.41
Exercise price (NT$)	$170.00
Dividends yield	-
Risk-free interest rate	0.34%
Expected life	7 days
Expected volatility	14.33%
Weighted average fair value of grants (NT$)	$ -

Expected volatility was based on the average annualized historical share price volatility of CHIEF's comparable companies before the grant date.

e. New shares reserved for subscription by employees under cash injection of CHPT

On February 8, 2017, the Board of Directors of CHPT approved the cash injection to issue 2,000 thousand shares and simultaneously reserved 300 thousand shares for subscription by employees according to the Company Act of the ROC. Furthermore, when the employees subscribed some shares or discarded their rights to subscribe shares, the Board of Directors of CHPT authorized the chairman of the Board of Directors to contact specific people or group to subscribe.

The aforementioned options granted to employees are accounted for and measured at fair value. The recognized compensation cost was $5,821 thousand for the year ended December 31, 2017.

CHPT used the fair value method to evaluate the options granted to employees on September 18, 2017 using the Black-Scholes model and the related assumptions and the fair value of the options were as follows:

	Stock Options Granted on September 18, 2017
Grant-date share price (NT$)	$1,295.00
Exercise price (NT$)	$1,267.33
Dividends yield	-
Risk-free interest rate	0.35%
Expected life	4 days
Expected volatility	28.30%
Weighted average fair value of grants (NT$)	$31.60

Expected volatility was based on the historical share price volatility of CHPT over the period equal to the expected life.

35. NON-CASH TRANSACTIONS

For the years ended December 31, 2018 and 2017, the Company entered into the following non-cash investing activities:

	Year Ended December 31 2018	2017
Increase in property, plant and equipment	$ 27,979,440	$ 26,069,064
Changes in other payables	570,489	806,272
	$ 28,549,929	$ 26,875,336

36. OPERATING LEASE ARRANGEMENTS

a. The Company as lessee

Except for the ST-2 satellite referred in Note 39 to the consolidated financial statements, the Company entered into several lease agreements for base stations located all over in Taiwan. The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	December 31 2018	2017
Within one year	$ 3,439,259	$ 2,918,651
Longer than one year but within five years	6,375,101	5,796,026
Longer than five years	743,494	778,808
	$ 10,557,854	$ 9,493,485

b. The Company as lessor

The Company leases out some land and buildings. The future aggregate minimum lease collection under non-cancellable operating leases are as follows:

	December 31	
	2018	2017
Within one year	$ 343,981	$ 353,023
Longer than one year but within five years	580,451	658,768
Longer than five years	205,747	242,799
	$ 1,130,179	$ 1,254,590

37. CAPITAL MANAGEMENT

The Company manages its capital to ensure that entities in the Company will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of the debt and equity balance.

The capital structure of the Company consists of debt of the Company and the equity attributable to the parent.

Some consolidated entities are required to maintain minimum paid-in capital amount as prescribed by the applicable laws.

The management reviews the capital structure of the Company as needed. As part of this review, the management considers the cost of capital and the risks associated with each class of capital.

According to the management's suggestion, the Company maintains a balanced capital structure through paying cash dividends, increasing its share capital, purchasing outstanding shares, and proceeds from new debt or repayment of debt.

38. FINANCIAL INSTRUMENTS

Fair Value Information

The fair value measurement guidance establishes a framework for measuring fair value and expands disclosure about fair value measurements. The standard describes a fair value hierarchy based on three levels of inputs that may be used to measure fair value. These levels are:

Level 1 fair value measurements: These measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 fair value measurements: These measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3 fair value measurements: These measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

a. Financial instruments that are not measured at fair value but for which fair value is disclosed

The Company considers that the carrying amounts of financial assets and liabilities not measured at fair value approximate their fair values or the fair values cannot be reliable estimated, no financial instruments need to be disclosed on balance sheet date.

b. Financial instruments that are measured at fair value on a recurring basis.

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL Non-listed stocks	$ -	$ -	$ 517,362	$ 517,362
Hedging financial assets	$ -	$ 1,069	$ -	$ 1,069
Financial assets at FVOCI Equity investment	$ 2,899,843	$ -	$ 4,032,660	$ 6,932,503
Financial liabilities at FVTPL Derivatives	$ -	$ 1,114	$ -	$ 1,114

December 31, 2017

	Level 1	Level 2	Level 3	Total
Available-for-sale financial assets Equity investments	$ 3,125,086	$ -	$ -	$ 3,125,086
Financial liabilities at FVTPL Derivatives	$ -	$ 578	$ -	$ 578
Hedging derivative financial liabilities	$ -	$ 850	$ -	$ 850

There were no transfers between Levels 1 and 2 for the years ended December 31, 2018 and 2017.

The reconciliations for financial assets measured at Level 3 are listed below:

Financial Assets	Measured at Fair Value through Profit or Loss	Measured at Fair Value through Other Comprehensive Income	Total
Balance at January 1, 2018 (IAS 39)	$ -	$ -	$ -
The effect on retrospective adjustment of applying IFRS 9	542,521	3,925,129	-
4,467,650 Balance at January 1, 2018 (IFRS 9)	542,521	3,925,129	4,467,650
Acquisition	-	289,580	289,580

(Continued)

Financial Assets	Measured at Fair Value through Profit or Loss	Measured at Fair Value through Other Comprehensive Income	Total
Recognized in profit or loss under "Other gains and losses"	$ (25,159)	$ -	$ (25,159)
Recognized in other comprehensive income under "Unrealized gain or loss on investments in equity instruments at fair value through other comprehensive income"	-	(175,359)	(175,359)
Proceed from return of investees	-	(6,690)	(6,690)
Balance at December 31, 2018	$ 517,362	$ 4,032,660	$ 4,550,022
Unrealized loss in 2018	$ (25,159)		

(Concluded)

The fair values of financial assets and financial liabilities of Level 2 are determined as follows:

1) The fair values of financial assets and financial liabilities with standard terms and conditions and traded in active markets are determined with reference to quoted market prices.

2) For derivatives, fair values are estimated using discounted cash flow model. Future cash flows are estimated based on observable inputs including forward exchange rates at the end of the reporting periods and the forward and spot exchange rates stated in the contracts, discounted at a rate that reflects the credit risk of various counterparties.

The fair values of non-listed domestic and foreign equity investments were Level 3 financial assets, and determined using the market approach by reference the Price-to-Book ratios (P/B ratios) of peer companies that traded in active market or using assets approach. The significant unobservable inputs used were listed in the table below. A decrease in discount for the lack of marketability or noncontrolling interests discount would result in increases in the fair values.

	December 31, 2018
Discount for lack of marketability	12.73%-20.00%
Noncontrolling interests discount	24.41%-25.00%

If the inputs to the valuation model were changed to reflect reasonably possible alternative assumptions while all the other variables were held constant, the fair values of equity investments would increase as below table. When related discounts increase, the fair value of equity investments would be the negative amount of the same amount.

	December 31, 2018
Discount for lack of marketability	
5% decrease	$ 268,085
Noncontrolling interests discount	
5% decrease	$ 36,527

Categories of Financial Instruments

	December 31 2018	December 31 2017
Financial assets		
Measured at FVTPL		
Mandatorily measured at FVTPL	$ 517,362	$ -
Hedging financial assets	1,069	-
Loans and receivables (Note a)	-	68,983,820
Available-for-sale financial assets (Note b)	-	5,750,871
Financial assets at amortized cost (Note a)	70,240,962	-
Financial assets at FVOCI	6,932,503	-
Financial liabilities		
Measured at FVTPL		
Held for trading	1,114	578
Hedging financial liabilities	-	850
Measured at amortized cost (Note c)	40,335,289	39,725,662

Note a: The balances included cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other current monetary assets and refundable deposits (classified as other noncurrent assets) which were loans and receivables. Such amounts are reclassified as financial assets at amortized cost upon the application of IFRS 9 starting from 2018.

Note b: The balances included financial assets carried at cost which were classified as available-for-sale financial assets.

Note c: The balances included short-term loans, trade notes and accounts payable, payables to related parties, partial other payables, customers' deposits and long-term loans which were financial liabilities carried at amortized cost.

Financial Risk Management Objectives

The main financial instruments of the Company include equity investments, trade notes and accounts receivable, trade notes and accounts payable as well as loans. The Company's Finance Department provides services to its business units, co-ordinates access to domestic and international capital markets, monitors and manages the financial risks relating to the operations of the Company through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk, and liquidity risk.

The Company seeks to minimize the effects of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives is governed by the Company's policies approved by the Board of Directors. Those derivatives are used to hedge the risks of exchange rate fluctuation arising from operating or investment activities. Compliance with policies and risk exposure limits is reviewed by the Company's Finance Department on a continuous basis. The Company does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

Chunghwa reports the significant risk exposures and related action plans timely and actively to the audit committee and if needed to the Board of Directors.

a. Market risk

The Company is exposed to market risks of changes in foreign currency exchange rates and interest rates. The Company uses forward exchange contracts to hedge the exchange rate risk arising from assets and liabilities denominated in foreign currencies.

There were no changes to the Company's exposure to market risks or the manner in which these risks are managed and measured.

1) Foreign currency risk

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities at the balance sheet dates were as follows:

	December 31	
	2018	2017
Assets		
USD	$ 5,903,025	$ 5,584,064
EUR	34,059	28,492
SGD	123,916	62,909
JPY	16,689	36,248
RMB	2,082	2,986
Liabilities		
USD	6,998,564	4,963,953
EUR	1,216,812	1,322,803
SGD	50,921	96,442
JPY	13,968	11,934
RMB	-	25

The carrying amounts of the Company's derivatives with exchange rate risk exposures at the balance sheet dates were as follows:

	December 31	
	2018	2017
Assets		
USD	$ -	$ -
EUR	1,069	-
Liabilities		
USD	217	484
EUR	897	944

Foreign currency sensitivity analysis

The Company is mainly exposed to the fluctuations of the currencies USD, EUR, SGD, JPY and RMB listed above.

The following table details the Company's sensitivity to a 5% increase and decrease in the functional currency against the relevant foreign currencies. 5% is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible changes in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and forward exchange contracts. A positive number below indicates an increase in pre-tax profit or equity where the functional currency weakens 5% against the relevant currency.

	Year Ended December 31	
	2018	2017
Profit or loss		
Monetary assets and liabilities (a)		
USD	$ (54,777)	$ 31,006
EUR	(59,138)	(64,716)
SGD	3,650	(1,677)
JPY	136	1,216
RMB	104	148
Derivatives (b)		
USD	3,102	6,235
EUR	9,595	3,454
Equity		
Derivatives (c)		
EUR	8,644	7,048

a) This is mainly attributable to the exposure to foreign currency denominated receivables and payables of the Company outstanding at the balance sheet dates.

b) This is mainly attributable to the forward exchange contracts.

c) This is mainly attributable to the changes in the fair value of derivatives that are designated as cash flow hedges.

For a 5% strengthening of the functional currency against the relevant currencies, it would have equal but opposite effect on the pre-tax profit or equity for the amounts shown above.

2) Interest rate risk

The carrying amounts of the Company's exposures to interest rates on financial assets and financial liabilities at the balance sheet dates were as follows:

	Year Ended December 31	
	2018	2017
Fair value interest rate risk		
Financial assets	$ 25,821,638	$ 25,911,422
Cash flow interest rate risk		
Financial assets	9,160,863	6,714,639
Financial liabilities	1,700,000	1,670,000

Interest rate sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to interest rates for non-derivative instruments at the end of the reporting period. A 25 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 25 basis points higher/lower and all other variables were held constant, the Company's pre-tax income would increase/decrease by $18,652 thousand and $12,612 thousand for the years ended December 31, 2018 and 2017, respectively. This is mainly attributable to the Company's exposure to floating interest rates on its financial assets and short-term and long-term loan.

3) Other price risk

The Company is exposed to equity price risks arising from holding other company's equity. Equity investments are held for strategic rather than trading purposes. The management managed the risk through holding various risk portfolios. Further, the Company assigned finance and investment departments to monitor the price risk.

Equity price sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to equity price risks at the end of the reporting period.

If equity prices had been 5% higher/lower, pre-tax profit and pre-tax other comprehensive income for the year ended December 31, 2018 would have increased/decreased by $25,868 thousand and $346,625 thousand as a result of the changes in fair value of financial assets at FVTPL and financial assets at FVTOCI, respectively. If equity prices had been 5% higher/lower, other comprehensive income would have increased/decreased by $156,254 thousand as a result of the changes in fair value of available-for-sale financial assets for the year ended December 31, 2017.

b. Credit risk

Credit risk refers to the risk that a counterparty would default on its contractual obligations resulting in financial loss to the Company. The maximum credit exposure of the aforementioned financial instruments is equal to their carrying amounts recognized in consolidated balance sheet as of the balance sheet date.

The Company has large trade receivables outstanding with its customers. A substantial majority of the Company's outstanding trade receivables are not covered by collateral or credit insurance. The Company has implemented ongoing measures including enhancing credit assessments and strengthening overall risk management to reduce its credit risk. While the Company has procedures to monitor and limit exposure to credit risk on trade receivables, there can be no assurance such procedures will effectively limit its credit risk and avoid losses. This risk is heightened during periods when economic conditions worsen.

As the Company serves a large number of unrelated consumers, the concentration of credit risk was limited.

c. Liquidity risk

The Company manages and maintains sufficient cash and cash equivalent position to support the operations and reduce the impact on fluctuation of cash flow.

1) Liquidity and interest risk tables

The following tables detailed the Company's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables had been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Company is required to pay.

	Weighted Average Effective Interest Rate (%)	Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	Add More than 5 Years	Total
December 31, 2018							
Non-derivative financial liabilities							
Non-interest bearing	-	$ 41,808,326	$ -	$ 2,889,800	$ 4,716,571	$ -	$ 49,414,697
Floating interest rate instruments	0.98	-	-	100,000	1,600,000	-	1,700,000
		$ 41,808,326	$ -	$ 2,989,800	$ 6,316,571	$ -	$ 51,114,697
December 31, 2017							
Non-derivative financial liabilities							
Non-interest bearing	-	$ 41,884,644	$ -	$ 3,196,831	$ 4,671,441	$ -	$ 49,752,916
Floating interest rate instruments	0.97	50,000	-	20,000	1,600,000	-	1,670,000
		$ 41,934,644	$ -	$ 3,216,831	$ 6,271,441	$ -	$ 51,422,916

The following table detailed the Company's liquidity analysis for its derivative financial instruments. The table had been drawn up based on the undiscounted gross inflows and outflows on those derivatives that require gross settlement.

	Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	Total
December 31, 2018					
Gross settled					
Forward exchange contracts					
Inflow	$ 62,035	$ 238,302	$ 126,401	$ -	$ 426,738
Outflow	62,252	238,459	126,072	-	426,783
	$ (217)	$ (157)	$ 329	$ -	$ (45)
December 31, 2017					
Gross settled					
Forward exchange contracts					
Inflows	$ 124,997	$ 173,068	$ 36,654	$ -	$ 334,719
Outflows	125,481	174,021	36,645	-	336,147
	$ (484)	$ (953)	$ 9	$ -	$ (1,428)

2) Financing facilities

	December 31	
	2018	2017
Unsecured bank loan facility		
Amount used	$ 132,445	$ 90,000
Amount unused	46,328,280	45,748,967
	$ 46,460,725	$ 45,838,967
Secured bank loan facility		
Amount used	$ 1,600,000	$ 1,600,000
Amount unused	1,340,000	1,910,000
	$ 2,940,000	$ 3,510,000

39. RELATED PARTIES TRANSACTIONS

The ROC Government, one of Chunghwa's customers, has significant equity interest in Chunghwa. Chunghwa provides fixed-line services, wireless services, internet and data and other services to the various departments and institutions of the ROC Government in the normal course of business and at arm's-length prices. The transactions with the ROC government bodies have not been disclosed because the transactions are not individually or collectively significant. However, the related revenues and operating costs have been appropriately recorded.

a. The Company engages in business transactions with the following related parties:

Company	Relationship
Taiwan International Standard Electronics Co., Ltd.	Associate
So-net Entertainment Taiwan Limited	Associate
KKBOX Taiwan Co., Ltd.	Associate
KingwayTek Technology Co., Ltd.	Associate
UUPON Inc.	Associate
Taiwan International Ports Logistics Corporation	Associate
Huada Digital Corporation	Joint venture
Chunghwa Benefit One Co., Ltd.	Joint venture
International Integrated System, Inc.	Associate
Senao Networks, Inc.	Associate
EnGenius Tech. Co., Ltd.	Subsidiary of the Company's associate, Senao Networks, Inc.
HopeTech Technologies Limited	Associate
ST-2 Satellite Ventures Pte., Ltd.	Associate
Viettel-CHT Co., Ltd.	Associate
Click Force Co., Ltd.	Associate
Alliance Digital Tech Co., Ltd.	Associate
MeWorks LIMITED（HK）	Associate
Chunghwa PChome Fund I Co., Ltd. ("CPFI")	Associate
Cornerstone Ventures Co., Ltd. ("CVC")	Associate
Other related parties	
Chunghwa Telecom Foundation	A nonprofit organization of which the funds donated by Chunghwa exceeds one third of its total funds
Senao Technical and Cultural Foundation	A nonprofit organization of which the funds donated by SENAO exceeds one third of its total funds
Sochamp Technology Co., Ltd.	Investor of significant influence over CHST
E-Life Mall Co., Ltd.	One of the directors of E-Life Mall and a director of SENAO are members of an immediate family
Engenius Technologies Co., Ltd.	Chairman of Engenius Technologies Co., Ltd. is a member of SENAO's management
United Daily News Co., Ltd.	Investor of significant influence over SFD
Shenzhen Century Communication Co., Ltd.	Investor of significant influence over SCT
Taoyuan Aerotropolis Co., Ltd.	Investor of significant influence over TASUI

b. Balances and transactions between Chunghwa and its subsidiaries, which are related parties of Chunghwa, have been eliminated on consolidation and are not disclosed in this note. Terms of the foregoing transactions with related parties were not significantly different from transactions with non-related parties. When no similar transactions with non-related parties can be referenced, terms were determined in accordance with mutual agreements. Details of transactions between the Company and other related parties are disclosed below:

1) Operating transactions

	Revenues	
	Year Ended December 31	
	2018	2017
Associates	$ 344,043	$ 344,305
Joint ventures	-	563
Others	94,227	64,951
	$ 438,270	$ 409,819

	Operating Costs and Expenses	
	Year Ended December 31	
	2018	2017
Associates	$ 1,304,008	$ 1,196,636
Joint ventures	-	2,247
Others	75,345	71,596
	$ 1,379,353	$ 1,270,479

2) Non-operating transactions

	Non-operating Income and Expenses	
	Year Ended December 31	
	2018	2017
Associates	$ 31,255	$ 31,554
Others	32	32
	$ 31,287	$ 31,586

3) Receivables

	December 31	
	2018	2017
Associates	$ 10,785	$ 43,302
Others	13,485	6,065
	$ 24,270	$ 49,367

4) Payables

	December 31	
	2018	2017
Associates	$ 914,177	$ 679,845
Others	3,774	4,340
	$ 917,951	$ 684,185

5) Customers' deposits

	December 31	
	2018	2017
Associates	$ 5,925	$ 5,700

6) Acquisition of property, plant and equipment

	Year Ended December 31	
	2018	2017
Associates	$ 311,519	$ 389,924
Joint ventures	-	46
	$ 311,519	$ 389,970

7) Prepayments

Chunghwa entered into a contract with ST-2 Satellite Ventures Pte., Ltd. on March 12, 2010 to lease capacity on the ST-2 satellite. This lease term is for 15 years which should start from the official operation of ST-2 satellite and the total contract value is approximately $6,000,000 thousand (SG$260,723 thousand), including a prepayment of $3,067,711 thousand, and the rest of amount should be paid annually when ST-2 satellite starts its official operation. ST-2 satellite was launched in May 2011, and began its official operation in August 2011. The total rental expense for the year ended December 31, 2018 was $394,289 thousand, which consisted of an offsetting credit of the prepayment of $204,398 thousand and an additional accrual of $189,891 thousand. The total rental expense for the year ended December 31, 2017 was $391,691 thousand, which consisted of an offsetting credit of the prepayment of $204,398 thousand and an additional accrual of $187,293 thousand. The prepaid rents (classified as prepayments) as of December 31, 2018 and 2017, were as follows:

	December 31	
	2018	2017
Prepaid rents - current	$ 204,398	$ 204,398
Prepaid rents - noncurrent	1,345,623	1,550,021
	$ 1,550,021	$ 1,754,419

c. Compensation of key management personnel

The compensation of directors and key management personnel was as follows:

	Year Ended December 31	
	2018	2017
Short-term employee benefits	$ 281,981	$ 253,254
Post-employment benefits	9,971	9,171
Share-based payment	9,484	2,162
	$ 301,436	$ 264,587

The compensation of directors and key management personnel was mainly determined by the compensation committee having regard to the performance of individual and market trends.

40. PLEDGED ASSETS

The following assets are pledged as collaterals for bank loans and custom duties of the imported materials.

	December 31	
	2018	2017
Property, plant and equipment	$ 2,520,838	$ 2,550,352
Land held under development (included in inventories)	1,998,733	1,998,733
Restricted assets (included in other assets - others)	2,500	2,500
	$ 4,522,071	$ 4,551,585

41. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

The Company's significant contingent liabilities and recognized commitments, excluding those disclosed in other notes, were as follows:

a. As of December 31, 2018, acquisitions of land and buildings of $173,701 thousand.

b. As of December 31, 2018, acquisitions of telecommunications equipment of $15,760,185 thousand.

c. As of December 31, 2018, unused letters of credit amounting to $50,000 thousand.

d. A commitment to contribute $2,000,000 thousand to a Piping Fund administered by the Taipei City Government, of which $1,000,000 thousand was contributed by Chunghwa on August 15, 1996 (classified as other monetary assets - noncurrent). If the fund is not sufficient, Chunghwa will contribute the remaining $1,000,000 thousand upon notification from the Taipei City Government.

e. CHPT signed the contract for its headquarters construction amounted to $1,613,800 thousand in July, 2017. The payment of $399,794 thousand has been made as of December 31, 2018.

42. SIGNIFICANT SUBSEQUENT EVENTS

The participation of establishing Next Commercial Bank Co., Ltd. ("NCB") was approved by Chunghwa's Board of Directors in January 2019. The Company expects to invest $4,500,000 thousand at most in NCB's common stock and the Company's equity ownership interest in NCB will be no more than 45%. The establishment of NCB is subject to the approval of FSC.

43. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The following information summarizes the disclosure of the currency which is other than functional currency of Chunghwa and its subsidiaries. The following exchange rates are the exchange rates used to translate to the presentation currency in the consolidated financial statements, which is NTD:

	December 31, 2018		
	Foreign Currencies (Thousands)	**Exchange Rate**	**New Taiwan Dollars (Thousands)**
Assets denominated in foreign currencies			
Monetary items			
Cash			
USD	$ 27,035	30.72	$ 830,385
EUR	957	35.20	33,676
SGD	5,461	22.48	122,762
JPY	58,563	0.278	16,280
RMB	466	4.472	2,082
Accounts receivable			
USD	165,152	30.72	5,072,640
EUR	11	35.20	383
SGD	51	22.48	1,154
JPY	1,471	0.278	409
Non-monetary items			
Investments accounted for using equity method			
SGD	22,066	22.48	496,033
VND	238,757,968	0.0012	286,510
Liabilities denominated in foreign currencies			
Monetary items			
Accounts payable			
USD	227,855	30.72	6,998,564
EUR	34,569	35.20	1,216,812
SGD	2,265	22.48	50,921
JPY	50,243	0.278	13,968

	December 31, 2017		
	Foreign Currencies (Thousands)	**Exchange Rate**	**New Taiwan Dollars (Thousands)**
Assets denominated in foreign currencies			
Monetary items			
Cash			
USD	$ 20,224	29.76	$ 601,877
EUR	757	35.57	26,941
SGD	2,752	22.26	61,270
JPY	97,684	0.264	25,789
RMB	197	4.565	898
Accounts receivable			
USD	167,412	29.76	4,982,187
EUR	44	35.57	1,551
SGD	74	22.26	1,639
JPY	39,616	0.264	10,459
RMB	457	4.565	2,088
Non-monetary items			
Investments accounted for using equity method			
USD	762	29.76	22,731
SGD	21,227	22.26	472,505
VND	215,397,479	0.00119	256,323
Liabilities denominated in foreign currencies			
Monetary items			
Accounts payable			
USD	166,800	29.76	4,963,953
EUR	37,189	35.57	1,322,803
SGD	4,333	22.26	96,442
JPY	45,203	0.264	11,934
RMB	5	4.565	25

The unrealized foreign exchange losses were $7,872 thousand and $67,954 thousand for the years ended December 31, 2018 and 2017, respectively. Due to the various foreign currency transactions and the functional currency of each individual entity of the Company, foreign exchange gains and losses cannot be disclosed by the respective significant foreign currency.

44. ADDITIONAL DISCLOSURES

Following are the additional disclosures required by the FSC for the Company:

a. Financing provided: None.

b. Endorsement/guarantee provided: Please see Table 1.

c. Marketable securities held (excluding investments in subsidiaries, associates and joint ventures): Please see Table 2.

d. Marketable securities acquired and disposed of at costs or prices at least $300 million or 20% of the paid-in capital: Please see Table 3.

e. Acquisition of individual real estate at costs of at least $300 million or 20% of the paid-in capital: Please see Table 4.

f. Disposal of individual real estate at prices of at least $300 million or 20% of the paid-in capital: None.

g. Total purchases from or sales to related parties amounting to at least $100 million or 20% of the paid-in capital: Please see Table 5.

h. Receivables from related parties amounting to $100 million or 20% of the paid-in capital: Please see Table 6.

i. Names, locations, and other information of investees on which the Company exercises significant influence (excluding investment in Mainland China): Please see Table 7.

j. Derivative instruments transactions: Please see Notes 7, 21 and 38.

k. Investment in Mainland China: Please see Table 8.

l. Intercompany relationships and significant intercompany transaction: Please see Table 9.

45. SEGMENT INFORMATION

The Company has the following reportable segments that provide different products or services. The reportable segments are managed separately because each segment represents a strategic business unit that serves different markets. Segment information is provided to CEO who allocates resources and assesses segment performance. The Company's measure of segment performance is mainly based on revenues and income before income tax. The Company's reportable segments are as follows:

a. Domestic fixed communications business - the provision of local telephone services, domestic long distance telephone services, broadband access, and related services;

b. Mobile communications business - the provision of mobile services, sales of mobile handsets and data cards, and related services;

c. Internet business - the provision of HiNet services and related services;

d. International fixed communications business - the provision of international long distance telephone services and related services;

e. Others - the provision of non-telecom services and the corporate related items not allocated to reportable segments.

Some operating segments have been aggregated into a single operating segment taking into account the following factors: (a) similar economic characteristics such as long-term gross profit margins; (b) the nature of the telecommunications products and services are similar; (c) the nature of production processes of the telecommunications products and services are similar; (d) the type or class of customer for the telecommunications products and services are similar; and (e) the methods used to provide the services to the customers are similar.

There was no material differences between the accounting policies of the operating segments and the accounting policies described in Note 3.

Segment Revenues and Operating Results

Analysis by reportable segment of revenues and operating results of continuing operations was as follows:

	Domestic Fixed Communi-cations Business	Mobile Communi-cations Business	Internet Business	International Fixed Communi-cations Business	Others	Total
Year ended December 31, 2018						
Revenues						
From external customers	$ 66,753,094	$ 100,937,021	$ 29,813,239	$ 13,434,422	$ 4,545,382	$ 215,483,158
Intersegment revenues	17,125,311	1,701,768	4,038,032	2,234,202	5,007,565	30,106,878
Segment revenues	$ 83,878,405	$ 102,638,789	$ 33,851,271	$ 15,668,624	$ 9,552,947	245,590,036
Intersegment elimination						(30,106,878)
Consolidated revenues						$ 215,483,158
Segments operating costs and expenses	$ 59,430,120	$ 73,901,350	$ 13,765,723	$ 13,279,413	$ 11,573,344	$ 171,949,950
Segment income (loss) before income tax	$ 18,243,503	$ 15,327,824	$ 11,943,594	$ 1,023,831	$ (1,560,048)	$ 44,978,704
Year ended December 31, 2017						
Revenues						
From external customers	$ 71,136,604	$ 109,376,248	$ 28,917,514	$ 13,552,343	$ 4,531,474	$ 227,514,183
Intersegment revenues	22,514,866	2,030,565	4,208,685	2,375,280	4,600,296	35,729,692
Segment revenues	$ 93,651,470	$ 111,406,813	$ 33,126,199	$ 15,927,623	$ 9,131,770	263,243,875
Intersegment elimination						(35,729,692)
Consolidated revenues						$ 227,514,183
Segments operating costs and expenses	$ 62,795,150	$ 80,274,903	$ 13,288,122	$ 13,385,017	$ 10,963,633	$ 180,706,825
Segment income (loss) before income tax	$ 24,888,058	$ 12,433,249	$ 11,118,327	$ 1,028,983	$ (1,471,555)	$ 47,997,062

Other Segment Information

Other information reviewed by the chief operating decision maker or regularly provided to the chief operating decision maker was as follows:

	Domestic Fixed Communi-cations Business	Mobile Communi-cations Business	Internet Business	International Fixed Communi-cations Business	Others	Total
Year ended December 31, 2018						
Share of profits of associates and joint ventures accounted for using equity method	$ -	$ -	$ -	$ -	$ 501,600	$ 501,600
Interest revenue	$ 17,535	$ 12,159	$ 19,123	$ 27,903	$ 120,169	$ 196,889
Interest expenses	$ -	$ 181	$ 191	$ -	$ 17,224	$ 17,596
Depreciation and amortization	$ 15,027,196	$ 13,788,352	$ 3,120,942	$ 1,424,530	$ 448,858	$ 33,809,878
Capital expenditure	$ 12,692,526	$ 10,663,759	$ 2,729,512	$ 1,347,874	$ 1,116,258	$ 28,549,929
Reversal of impairment loss on investment properties	$ 19,133	$ -	$ -	$ -	$ -	$ 19,133
Year ended December 31, 2017						
Share of profits of associates and joint ventures accounted for using equity method	$ -	$ -	$ -	$ -	$ 407,243	$ 407,243
Interest revenue	$ 21,282	$ 14,791	$ 8,619	$ 15,510	$ 145,246	$ 205,448
Interest expenses	$ -	$ 5,406	$ 195	$ -	$ 16,312	$ 21,913
Depreciation and amortization	$ 15,614,052	$ 11,000,948	$ 3,385,312	$ 1,476,658	$ 452,634	$ 31,929,604
Capital expenditure	$ 11,647,266	$ 9,742,113	$ 2,778,821	$ 1,580,156	$ 1,126,980	$ 26,875,336
Reversal of impairment loss on investment properties	$ 10,979	$ -	$ -	$ -	$ -	$ 10,979

Main Products and Service Revenues

	Year Ended December 31	
	2018	2017
Mobile services revenue	$ 63,905,960	$ 75,822,863
Sales of products	41,288,763	37,649,313
Local telephone and domestic long distance telephone services revenue	29,995,695	32,247,482
Broadband access and domestic leased line services revenue	22,453,133	22,949,982
Data Communications internet services revenue	21,137,189	21,142,705
International network and leased telephone services revenue	8,724,302	9,328,298
Others	27,978,116	28,373,540
	$ 215,483,158	$ 227,514,183

Geographic Information

The users of the Company's services are mainly from Taiwan, ROC. The revenues it derived outside Taiwan are mainly revenues from international long distance telephone and leased line services. The geographic information for revenues was as follows:

	Year Ended December 31	
	2018	2017
Taiwan, ROC	$ 205,695,525	$ 217,567,991
Overseas	9,787,633	9,946,192
	$ 215,483,158	$ 227,514,183

The Company has long-lived assets in U.S., Singapore, Hong Kong, China, Vietnam, Japan and Thailand and except for $4,324,172 thousand and $4,444,991 thousand at December 31, 2018 and 2017, respectively, in the aforementioned areas, the other long-lived assets are located in Taiwan, ROC.

Major Customers

For the years ended December 31, 2018 and 2017, the Company did not have any single customer whose revenue exceeded 10% of the total revenues.

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

ENDORSEMENTS/GUARANTEES PROVIDED
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

No. (Note 1)	Endorsement/ Guarantee Provider	Guaranteed Party		Limits on Endorsement/ Guarantee Amount Provided to Each Guaranteed Party	Maximum Balance for the Period	Ending Balance	Actual Borrowing Amount	Amount of Endorsement/ Guarantee Collateralized by Properties	Ratio of Accumulated Endorsement/ Guarantee to Net Equity Per Latest Financial Statements	Maximum Endorsement/ Guarantee Amount Allowable	Endorsement/ Guarantee Given by Parent on Behalf of Subsidiaries	Endorsement/ Guarantee Given by Subsidiaries on Behalf of Parent	Endorsement/ Guarantee Given on Behalf of Companies in Mainland China	Note
		Name	Nature of Relationship (Note 2)											
1	Senao International Co., Ltd.	Youth Co., Ltd.	b	$ 580,807	$ 200,000	$ -	$ -	$ -	-	$ 2,904,039	Yes	No	No	Notes 3, 4 and 5
		ISPOT Co., Ltd.	b	580,807	150,000	-	-	-	-	2,904,039	Yes	No	No	Notes 3, 4 and 6
		Aval Technologies Co., Ltd.	b	580,807	300,000	300,000	300,000	-	5.17	2,904,039	Yes	No	No	Notes 3 and 4

Note 1: Significant transactions between the Company and its subsidiaries or among subsidiaries are numbered as follows:

a. “0” for the Company.
b. Subsidiaries are numbered from “1”.

Note 2: Relationships between the endorsement/guarantee provider and the guaranteed party:

a. A company with which it does business.
b. A company in which the Company directly and indirectly holds more than 50 percent of the voting shares.
c. A company that directly and indirectly holds more than 50 percent of the voting shares in the Company.
d. Companies in which the Company holds, directly or indirectly, 90% or more of the voting shares.
e. The Company fulfills its contractual obligations by providing mutual endorsements/guarantees for another company in the same industry or for joint builders for purposes of undertaking a construction project.
f. All capital contributing shareholders make endorsements/ guarantees for their jointly invested company in proportion to their shareholding percentages.
g. Companies in the same industry provide among themselves joint and several security for a performance guarantee of a sales contract for pre-construction homes pursuant to the Consumer Protection Act for each other.

Note 3: The limits on endorsement or guarantee amount provided to each guaranteed party is up to 10% of the net assets value of the latest financial statements of Senao International Co., Ltd.

Note 4: The total amount of endorsement or guarantee that the Company is allowed to provide is up to 50% of the net assets va lue of the latest financial statements of Senao International Co., Ltd.

Note 5: Senao International Co., Ltd. dissolved the endorsement or guarantee to Youth Co., Ltd. in August 2018.

Note 6: Senao International Co., Ltd. retrieved the guarantee letter and dissolved the endorsement or guarantee to ISPOT Co., Ltd. in August 2018.

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

MARKETABLE SECURITIES HELD
DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	December 31, 2018				Note
				Shares (Thousands/ Thousand Units)	Carrying Value (Note 1)	Percentage of Ownership	Fair Value	
Chunghwa Telecom Co., Ltd.	Stocks							
	Taipei Financial Center Corp.	-	Financial assets at FVOCI	172,927	$ 3,485,638	12	$ 3,485,638	-
	Innovation Works Development Fund, L.P.	-	Financial assets at FVTPL	-	224,452	4	224,452	-
	Industrial Bank of Taiwan II Venture Capital Co., Ltd. (IBT II)	-	Financial assets at FVOCI	5,252	21,930	17	21,930	-
	Global Mobile Corp.	-	Financial assets at FVOCI	7,617	-	3	-	-
	Innovation Works Limited	-	Financial assets at FVOCI	1,000	2,850	2	2,850	-
	RPTI Intergroup International Ltd.	-	Financial assets at FVOCI	4,765	-	10	-	-
	Taiwan mobile payment Co., Ltd.	-	Financial assets at FVOCI	1,200	4,837	2	4,837	-
	Taiwania Capital Buffalo Fund Co., Ltd.	-	Financial assets at FVTPL	300,000	292,910	13	292,910	-
	China Airlines Ltd.	-	Financial assets at FVOCI	263,622	2,899,843	5	2,899,843	Note 2
	4 Gamers Entertainment Inc.	-	Financial assets at FVOCI	136	117,955	19.9	117,955	-
Senao International Co., Ltd.	Stocks							
	N.T.U. Innovation Incubation Corporation	-	Financial assets at FVOCI	1,200	9,768	9	9,768	-
CHIEF Telecom Inc.	Stocks							
	3 Link Information Service Co., Ltd.	-	Financial assets at FVOCI	374	930	10	930	-
Chunghwa Investment Co., Ltd.	Stocks							
	Tatung Technology Inc.	-	Financial assets at FVOCI	4,571	117,360	11	117,360	-
	iSing99 Inc.	-	Financial assets at FVOCI	10,000	52,574	7	52,574	-
	Powertec Energy Corp.	-	Financial assets at FVOCI	20,000	208,016	2	208,016	-
Chunghwa Hsingta Co., Ltd.	Stocks							
	Cotech Engineering Fuzhou Corp.	-	Financial assets at FVOCI	-	10,802	5	10,802	-

Note 1: Showed at carrying amounts with fair value adjustments.

Note 2: Fair value was based on the closing price on December 28, 2018.

TABLE 3

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Company Name	Marketable Securities Type and Name	Financial Statement Account	Counter-party	Nature of Relationship	Beginning Balance		Acquisition		Disposal				Ending Balance	
					Shares (Thousands/ Thousand Units)	Amount	Shares (Thousands/ Thousand Units)	Amount	Shares (Thousands/ Thousand Units)	Amount	Carrying Value	Gain on Disposal	Shares (Thousands/ Thousand Units)	Amount
Chunghwa Investment Co., Ltd.	Stocks Chunghwa Precision Test Tech. Co., Ltd.	Investments accounted for using equity method	-	Subsidiary	12,558	$ 2,207,100 (Note 1)	-	$ -	1,328	$ 1,041,689	$ 240,953 (Note 1)	$ 800,736 (Note 2)	11,230	$ 2,106,738 (Note 1)

Note 1: Including share of profit and other comprehensive income of associates accounted for using equity method.

Note 2: Differences arising from equity transactions are included in additional paid-in capital.

TABLE 4

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

ACQUISITION OF INDIVIDUAL REAL ESTATE AT COSTS OF AT LEAST $300 MILLION OR 20% OF THE PAID-IN CAPITAL
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Buyer	Property	Event Date	Transaction Amount	Payment Status	Counterparty	Relationship	Information on Previous Title Transfer If Counterparty is a Related Party				Pricing Reference	Purpose of Acquisition	Other Terms
							Property Owner	Relationship	Transaction Date	Amount			
Chunghwa Precision Test Tech. Co., Ltd.	Headquarters	2017.7.29-2018.12.22	$ 539,695	Monthly settlement based on the construction progress and acceptance	Fu Tsu Construction Co., Ltd.	-	Not applicable	Not applicable	Not applicable	Not applicable	Bidding, price comparison and price negotiation	Manufacturing purpose	None

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Company Name	Related Party	Nature of Relationship	Transaction Details				Abnormal Transaction		Notes / Accounts Payable or Receivable	
			Purchase/Sales (Note 1)	Amount (Notes 2 and 5)	% to Total	Payment Terms	Units Price	Payment Terms	Ending Balance (Notes 3 and 5)	% to Total
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	Subsidiary	Sales	$ 2,090,888	1	30 days	$ -	-	$ 249,014	1
			Purchase	1,440,824	1	30-90 days	-	-	(916,854)	(5)
	CHIEF Telecom Inc.	Subsidiary	Sales	332,872	-	30 days	-	-	38,387	-
			Purchase	286,267	-	60 days	-	-	(37,417)	-
	Chunghwa System Integration Co., Ltd.	Subsidiary	Purchase	1,008,233	1	30 days	-	-	(629,455)	(3)
	CHYP Multimedia Marketing & Communications Co., Ltd	Subsidiary	Purchase	136,855	-	30 days	-	-	(25,116)	-
	Honghwa International Co., Ltd.	Subsidiary	Purchase	5,422,154	5	30-60 days	-	-	(1,059,239)	(6)
	Donghwa Telecom Co., Ltd.	Subsidiary	Sales	211,604	-	30 days	-	-	118,861	-
			Purchase	531,116	-	90 days	-	-	(189,148)	(1)
	Chunghwa Telecom Global, Inc.	Subsidiary	Purchase	337,300	-	90 days	-	-	(43,990)	-
	Chunghwa Telecom Singapore Pte., Ltd.	Subsidiary	Sales	150,673	-	30 days	-	-	102,253	-
			Purchase	189,339	-	90 days	-	-	(76,002)	-
	CHT Security Co., Ltd.	Subsidiary	Purchase	323,704	-	30 days	-	-	(97,675)	(1)
	ST-2 Satellite Ventures Pte. Ltd.	Associate	Purchase	394,289	-	30 days	-	-	(47,729)	-
	Taiwan International Standard Electronics Co., Ltd.	Associate	Purchase	677,295	1	30-90 days	-	-	(595,028)	(3)
	So-net Entertainment Taiwan Limited	Associate	Sales	158,158	-	60 days	-	-	7	-
	International Integrated System, Inc.	Associate	Purchase	160,307	-	30 days	-	-	(105,834)	(1)
Senao International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	6,570,414	21	30-90 days	-	-	924,130	51
			Purchase	1,904,795	7	30 days	-	-	(214,199)	(8)
	Senao Networks, Inc.	Associate	Sales	114,267	-	30 days	-	-	5,407	-
	Youth Co., Ltd.	Subsidiary	Sales	125,862	-	90 days	-	-	41,157	2
	Aval Technologies Co., Ltd.	Subsidiary	Purchase	297,248	1	30 days	-	-	(533)	-
CHIEF Telecom Inc.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	286,267	13	60 days	-	-	37,417	18
			Purchase	332,191	25	30 days	-	-	(38,387)	(31)
Chunghwa System Integration Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	1,733,260	87	30 days	-	-	628,180	85
CHYP Multimedia Marketing & Communications Co., Ltd	Chunghwa Telecom Co., Ltd.	Parent company	Sales	136,855	31	30 days	-	-	22,871	33
Honghwa International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	5,422,154	96	30-60 days	-	-	1,059,239	99
Donghwa Telecom Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	531,116	44	90 days	-	-	189,148	98
			Purchase	211,604	18	30 days	-	-	(118,861)	(83)
Chunghwa Telecom Global, Inc.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	337,300	56	90 days	-	-	43,990	70
Chunghwa Telecom Singapore Pte., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	189,339	15	90 days	-	-	76,002	21
			Purchase	150,673	13	30 days	-	-	(102,253)	(37)
CHT Security Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	345,563	91	30 days	-	-	97,677	70

Note 1: Purchase included acquisition of services costs.

Note 2: The differences were because Chunghwa Telecom Co., Ltd. and subsidiaries classified the amount as incremental costs of obtaining contracts inventories, property, plant and equipment, intangible assets, and operating expenses.

Note 3: Notes and accounts receivable did not include the amounts collected for others and other receivables.

Note 4: Transaction terms with the related parties were determined in accordance with mutual agreements when there were no similar transactions with third parties. Other transactions with related parties were not significantly different from those with third parties.

Note 5: All inter-company transactions, balances, income and expenses are eliminated upon consolidation.

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Company Name	Related Party	Nature of Relationship	Ending Balance	Turnover Rate (Note 1)	Overdue		Amounts Received in Subsequent Period	Allowance for Bad Debts
					Amounts	Action Taken		
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	Subsidiary	$ 446,718 (Note 2)	11.28	$ -	-	$ 431,727	$ -
	Donghwa Telecom Co., Ltd.	Subsidiary	118,861 (Note 2)	2.14	-	-	45,483	-
	Chunghwa Telecom Singapore Pte., Ltd.	Subsidiary	102,253 (Note 2)	1.40	-	-	102,253	-
Senao International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	1,210,922 (Note 2)	6.15	-	-	545,921	-
Chunghwa System Integration Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	628,180 (Note 2)	2.94	-	-	478,332	-
Honghwa International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	1,059,239 (Note 2)	5.23	-	-	634,207	-
Donghwa Telecom Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	189,148 (Note 2)	5.37	-	-	68,792	-

Note 1: Payments and receipts collected in trust for others are excluded from the accounts receivable for calculating the turnover rate.

Note 2: The amount was eliminated upon consolidation.

TABLE 7

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

NAMES, LOCATIONS, AND OTHER INFORMATION OF INVESTEES IN WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INVESTMENT IN MAINLAND CHINA)
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2018			Net Income (Loss) of the Investee	Recognized Gain (Loss) (Notes 1, 2 and 3)	Note
				December 31, 2018	December 31, 2017	Shares (Thousands)	Percentage of Ownership (%)	Carrying Value (Note 3)			
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	Taiwan	Handset and peripherals retailer; sales of CHT mobile phone plans as an agent	$ 1,065,813	$ 1,065,813	71,773	28	$ 1,607,436	$ 403,281	$ 107,306	Subsidiary (Note 7)
	Light Era Development Co., Ltd.	Taiwan	Planning and development of real estate and intelligent buildings, and property management	3,000,000	3,000,000	300,000	100	3,853,824	8,051	8,051	Subsidiary (Note 7)
	Donghwa Telecom Co., Ltd.	Hong Kong	International private leased circuit, IP VPN service, and IP transit services	1,567,453	1,567,453	402,590	100	1,619,155	45,204	45,204	Subsidiary (Note 7)
	Chunghwa Telecom Singapore Pte., Ltd.	Singapore	International private leased circuit, IP VPN service, and IP transit services	574,112	574,112	26,383	100	915,532	141,993	141,993	Subsidiary (Note 7)
	Chunghwa System Integration Co., Ltd.	Taiwan	Providing system integration services and telecommunications equipment	838,506	838,506	60,000	100	738,139	16,226	21,487	Subsidiary (Note 7)
	CHIEF Telecom Inc.	Taiwan	Network integration, internet data center (“IDC”), communications integration and cloud application services	459,652	468,326	39,426	57	1,694,950	484,604	298,169	Subsidiary (Note 7)
	Chunghwa Investment Co., Ltd.	Taiwan	Investment	639,559	639,559	68,085	89	3,152,229	201,712	176,542	Subsidiary (Note 7)
	Prime Asia Investments Group Ltd. (B.V.I.)	British Virgin Islands	Investment	385,274	385,274	1	100	192,841	(1,911)	(1,911)	Subsidiary (Note 7)
	Honghwa International Co., Ltd.	Taiwan	Telecommunication engineering, sales agent of mobile phone plan application and other business services	180,000	180,000	18,000	100	465,889	221,203	211,985	Subsidiary (Note 7)
	CHYP Multimedia Marketing & Communications Co., Ltd.	Taiwan	Digital information supply services and advertisement services	150,000	150,000	15,000	100	197,996	25,318	25,318	Subsidiary (Note 7)
	Chunghwa Telecom Vietnam Co., Ltd.	Vietnam	Intelligent energy saving solutions, international circuit, and information and communication technology (“ICT”) services.	148,275	148,275	-	100	106,091	(1,471)	(1,471)	Subsidiary (Note 7)
	Chunghwa Telecom Global, Inc.	United States	International private leased circuit, internet services, and transit services	70,429	70,429	6,000	100	288,207	58,899	61,154	Subsidiary (Note 7)
	CHT Security Co., Ltd.	Taiwan	Computing equipment installation, wholesale of computing and business machinery equipment and software, management consulting services, data processing services, digital information supply services and internet identify services	240,000	240,000	24,000	80	237,927	4,633	(2,078)	Subsidiary (Note 7)
	Chunghwa Telecom (Thailand) Co., Ltd.	Thailand	International private leased circuit, IP VPN service, ICT and cloud VAS services	100,000	100,000	1,000	100	94,931	(2,669)	(2,669)	Subsidiary (Note 7)
	Spring House Entertainment Tech. Inc.	Taiwan	Software design services, internet contents production and play, and motion picture production and distribution	62,209	62,209	10,277	56	98,298	7,906	4,431	Subsidiary (Note 7)
	Chunghwa leading Photonics Tech Co., Ltd.	Taiwan	Production and sale of electronic components and finished products	70,500	70,500	7,050	75	98,763	24,908	24,514	Subsidiary (Note 7)
	Smartfun Digital Co., Ltd.	Taiwan	Providing diversified family education digital services	65,000	65,000	6,500	65	72,031	9,931	8,215	Subsidiary (Note 7)
	Chunghwa Telecom Japan Co., Ltd.	Japan	International private leased circuit, IP VPN service, and IP transit services	17,291	17,291	1	100	62,626	11,103	11,103	Subsidiary (Note 7)
	Chunghwa Sochamp Technology Inc.	Taiwan	Design, development and production of Automatic License Plate Recognition software and hardware	20,400	20,400	2,040	51	(6,233)	5,169	3,964	Subsidiary (Note 7)
	International Integrated System, Inc.	Taiwan	IT solution provider, IT application consultation, system integration and package solution	283,500	283,500	22,498	32	310,842	76,335	23,307	Associate
	Viettel-CHT Co., Ltd.	Vietnam	IDC services	288,327	288,327	-	30	286,510	215,549	64,681	Associate

(Continued)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2018			Net Income (Loss) of the Investee	Recognized Gain (Loss) (Notes 1, 2 and 3)	Note
				December 31, 2018	December 31, 2017	Shares (Thousands)	Percentage of Ownership (%)	Carrying Value (Note 3)			
	Taiwan International Standard Electronics Co., Ltd.	Taiwan	Manufacturing, selling, designing, and maintaining of telecommunications systems and equipment	$ 164,000	$ 164,000	1,760	40	$ 216,439	$ 195,155	$ 133,299	Associate
	KKBOX Taiwan Co., Ltd.	Taiwan	Providing of music on-line, software, electronic information, and advertisement services	67,025	67,025	4,438	30	147,360	22,268	7,269	Associate
	So-net Entertainment Taiwan Limited	Taiwan	Online service and sale of computer hardware	120,008	120,008	9,429	30	119,956	51,233	15,717	Associate
	KingwayTek Technology Co., Ltd.	Taiwan	Publishing books, data processing and software services	69,013	69,013	6,993	26	134,925	38,427	7,427	Associate
	Taiwan International Ports Logistics Corporation	Taiwan	Import and export storage, logistic warehouse, and ocean shipping service	80,000	80,000	8,000	27	49,650	10	19	Associate
	UUPON Inc.	Taiwan	Information technology service and general advertisement service	97,598	97,598	5,400	15	11,432	(38,469)	(5,786)	Associate
	Alliance Digital Tech Co., Ltd.	Taiwan	Development of mobile payments and information processing service	60,000	60,000	6,000	14	5,080	(65,337)	(9,408)	Associate
	Chunghwa PChome Fund I Co., Ltd.	Taiwan	Investment, venture capital, investment advisor, management consultant and other consultancy service	200,000	-	20,000	50	198,974	(2,052)	(1,026)	Associate
	Cornerstone Ventures Co., Ltd.	Taiwan	Investment, venture capital, investment advisor, management consultant and other consultancy service	4,900	-	490	49	4,757	(291)	(143)	Associate
Senao International Co., Ltd.	Senao Networks, Inc.	Taiwan	Telecommunication facilities manufactures and sales	202,758	202,758	16,579	34	919,841	465,415	156,130	Associate
	Senao International (Samoa) Holding Ltd.	Samoa Islands	International investment	2,416,645	2,416,645	81,175	100	470,230	(30,654)	(30,654)	Subsidiary (Note 7)
	UUPON Inc.	Taiwan	Information technology service and general advertisement service	24,000	24,000	2,400	7	5,215	(38,469)	(2,574)	Associate
	Youth Co., Ltd.	Taiwan	Sale of information and communication technologies products	364,950	335,450	8,462	93	206,539	(17,744)	(62,586)	Subsidiary (Note 7)
	Aval Technologies Co., Ltd.	Taiwan	Sale of information and communication technologies products	60,000	60,000	6,510	100	69,934	4,103	4,103	Subsidiary (Note 7)
	SENYOUNG Insurance Agent Co., Ltd.	Taiwan	Property and liability insurance agency	59,000	10,000	5,900	100	50,684	(7,832)	(7,832)	Subsidiary (Note 7)
Light Era Development Co., Ltd.	Taoyuan Asia Silicon Valley Innovation Co., Ltd.	Taiwan	Development of real estate	7,500	-	750	60	5,048	(4,086)	(2,452)	Subsidiary (Note 7)
CHIEF Telecom Inc.	Unigate Telecom Inc.	Taiwan	Telecommunications and internet service	2,000	2,000	200	100	887	(116)	(116)	Subsidiary (Note 7)
	Chief International Corp.	Samoa Islands	Telecommunications and internet service	6,068	6,068	200	100	64,344	11,409	11,409	Subsidiary (Note 7)
Chunghwa System Integrated Co., Ltd.	Concord Technology Co., Ltd.	Brunei	Investment	-	47,321	-	-	-	-	-	Subsidiary (Notes 4 and 7)
Chunghwa Telecom Singapore Pte., Ltd.	ST-2 Satellite Ventures Pte., Ltd.	Singapore	Operation of ST-2 telecommunications satellite	409,061	409,061	18,102	38	496,033	292,852	111,077	Associate
Chunghwa Investment Co., Ltd.	Chunghwa Precision Test Tech. Co., Ltd.	Taiwan	Production and sale of semiconductor testing components and printed circuit board	178,608	199,736	11,230	34	2,106,738	716,024	259,425	Subsidiary (Note 7)
	CHIEF Telecom Inc.	Taiwan	Network integration, internet data center (“IDC”), communications integration and cloud application services	19,064	19,422	2,078	3	86,051	484,604	15,873	Associate (Note 7)
	Senao International Co., Ltd.	Taiwan	Selling and maintaining mobile phones and its peripheral products	49,731	49,731	1,001	-	43,275	403,281	1,503	Associate (Note 7)
Chunghwa Precision Test Tech. Co., Ltd.	Chunghwa Precision Test Tech USA Corporation	United States	Design and after-sale services of semiconductor testing components and printed circuit board	12,636	12,636	400	100	24,881	1,599	1,599	Subsidiary (Note 7)
	CHPT Japan Co., Ltd.	Japan	Related services of electronic parts, machinery processed products and printed circuit board	2,008	2,008	1	100	2,361	123	123	Subsidiary (Note 7)

(Continued)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2018			Net Income (Loss) of the Investee	Recognized Gain (Loss) (Notes 1, 2 and 3)	Note
				December 31, 2018	December 31, 2017	Shares (Thousands)	Percentage of Ownership (%)	Carrying Value (Note 3)			
	Chunghwa Precision Test Tech. International, Ltd.	Samoa Islands	Wholesale and retail of electronic materials, and investment	$ 54,450	$ 54,450	1,700	100	$ 43,030	$ (3,503)	$ (3,503)	Subsidiary (Note 7)
Prime Asia Investments Group, Ltd. (B.V.I.)	Chunghwa Hsingta Co., Ltd.	Hong Kong	Investment	375,274	375,274	1	100	195,368	(1,911)	(1,911)	Subsidiary (Note 7)
	MeWorks Limited (HK)	Hong Kong	Investment	10,000	10,000	-	20	-	-	-	Associate
Senao International (Samoa) Holding Ltd.	Senao International HK Limited	Hong Kong	International investment	2,393,646	2,393,646	80,440	100	431,552	(30,705)	(30,705)	Subsidiary (Note 7)
	HopeTech Technologies Limited	Hong Kong	Information technology and telecommunications products sales	-	21,177	-	-	-	(330)	(149)	Associate (Note 5)
Youth Co., Ltd.	ISPOT Co., Ltd.	Taiwan	Sale of information and communication technologies products	53,021	53,021	-	100	9,384	(4,979)	(9,830)	Subsidiary (Note 7)
	Youyi Co., Ltd.	Taiwan	Maintenance of information and communication technologies products	21,354	21,354	-	100	17,065	1,642	1,321	Subsidiary (Note 7)
CHYP Multimedia Marketing & Communications Co., Ltd	Click Force Marketing Company	Taiwan	Advertisement services	44,607	44,607	1,078	49	37,876	7,929	1,760	Associate

Note 1: The amounts were based on audited financial statements.

Note 2: Recognized gain (loss) of investees includes amortization of differences between the investment cost and net value and elimination of unrealized transactions.

Note 3: Recognized gain (loss) and carrying value of the investees did not include the adjustment of the difference between the accounting treatment on standalone basis and consolidated basis as a result of the application of IFRS 15.

Note 4: Concord Technology Co., Ltd. was approved to end and dissolve its business in August 2017. The liquidation of Concord was completed in January 2018.

Note 5: Senao International (Samoa) Holding Ltd disposed all shares of HopeTech Technologies Limited in June 2018.

Note 6: Investment in mainland China is included in Table 8.

Note 7: The amount was eliminated upon consolidation.

(Concluded)

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

INVESTMENT IN MAINLAND CHINA
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Investee	Main Businesses and Products	Total Amount of Paid-in Capital	Investment Type (Note 1)	Accumulated Outflow of Investment from Taiwan as of January 1, 2018	Investment Flows		Accumulated Outflow of Investment from Taiwan as of December 31, 2018	Net Income (Loss) of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Loss) (Note 2)	Carrying Value as of December 31, 2018	Accumulated Inward Remittance of Earnings as of December 31, 2018	Note
					Outflow	Inflow							
Senao Trading (Fujian) Co., Ltd.	Sale of information and communication technologies products	$ 1,073,170	2	$ 1,073,170	$ -	$ -	$ 1,073,170	$ 6,382	100	$ 6,382	$ 194,021	$ -	Notes 7 and 11
Senao International Trading (Shanghai) Co., Ltd.	Sale of information and communication technologies products	955,838	2	955,838	-	-	955,838	(34,866)	100	(34,866)	79,437	-	Note 11
Senao International Trading (Shanghai) Co., Ltd. (Note 12)	Maintenance of information and communication technologies products	87,540	2	87,540	-	-	87,540	(968)	100	(968)	-	-	Notes 8 and 11
Senao International Trading (Jiangsu) Co., Ltd.	Sale of information and communication technologies products	263,736	2	263,736	-	-	263,736	124	100	124	87,218	-	Notes 9 and 11
Chunghwa Telecom (China) Co., Ltd.	Integrated information and communication solution services for enterprise clients, and intelligent energy network service	177,176	2	177,176	-	-	177,176	(971)	100	(971)	53,150	-	Note 11
Jiangsu Zhenghua Information Technology Company, LLC	Providing intelligent energy saving solution and intelligent buildings services	189,410	2	142,057	-	-	142,057	(465)	75	(349)	-	-	Notes 10 and 11
Shanghai Taihua Electronic Technology Limited	Design of printed circuit board and related consultation service	51,233	2	51,233	-	-	51,233	(3,526)	100	(3,526)	39,893	-	Note 11
Shanghai Chief Telecom Co., Ltd.	Telecommunications and internet service	10,150	1	4,973	-	-	4,973	4,211	49	2,063	7,942	-	Note 11

(Continued)

Investee	Accumulated Investment in Mainland China as of December 31, 2018	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on Investment Stipulated by Investment Commission, MOEA
SENAO and its subsidiaries (Note 3)	$ 2,380,284	$ 2,380,284	$ 3,494,200
Chunghwa Telecom (China) Co., Ltd. (Note 4)	177,176	177,176	231,943,392
Jiangsu Zhenghua Information Technology Company, LLC (Note 4)	142,057	142,057	231,943,392
Shanghai Taihua Electronic Technology Limited (Note 5)	51,233	97,965	3,690,636
Shanghai Chief Telecom Co., Ltd. (Note 6)	4,973	4,973	1,709,614

Note 1: Investments are divided into three categories as follows:

a. Direct investment.
b. Investments through a holding company registered in a third region.
c. Others.

Note 2: The amounts were calculated based on the investee's audited financial statements.

Note 3: Senao International Co., Ltd. and its subsidiaries were calculated based on the consolidated net assets value of Senao International Co., Ltd.

Note 4: Chunghwa Telecom (China) Co., Ltd. and Jiangsu Zhenghua Information Technology Company, LLC were calculated based on the consolidated net assets value of Chunghwa Telecom Co., Ltd.

Note 5: Shanghai Taihua Electronic Technology Limited was calculated based on the consolidated net assets value of Chunghwa Precision Test Tech. Co., Ltd.

Note 6: Shanghai Chief Telecom Co., Ltd. was calculated based on the consolidated net assets value of CHIEF Telecom Inc.

Note 7: Senao Trading (Fujian) Co., Ltd. was approved to end its business and dissolve in September 2018. The liquidation of Senao Trading (Fujian) Co., Ltd. is still in process.

Note 8: The liquidation of Senao International Trading (Shanghai) Co., Ltd. was completed in March 2018.

Note 9: Senao International Trading (Jiangsu) Co., Ltd. was approved to end its business and dissolve in April 2018. The liquidation of Senao International Trading (Jiangsu) Co., Ltd. is still in process.

Note 10: The liquidation of Jiangsu Zhenhua Information Technology Company, LLC. was completed in December 2018.

Note 11: The amount was eliminated upon consolidation.

Note 12: The English name is the same as the above entity; however the Chinese name included in the respective Articles of Incorporations is different from the above entity.

(Concluded)

TABLE 9

CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT TRANSACTIONS
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Year	No. (Note 1)	Company Name	Related Party	Nature of Relationship (Note 2)	Transaction Details			
					Financial Statement Account	Amount (Note 5)	Payment Terms (Note 3)	% to Total Sales or Assets (Note 4)
2018	0	Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	a	Accounts receivable	$ 249,014	-	-
					Accrued custodial receipts	197,704	-	-
					Inventories	40,424	-	-
					Accounts payable	916,854	-	-
					Amounts collected for others	294,299	-	-
					Revenues	2,090,888	-	1
					Operating costs and expenses	1,400,400	-	1
			CHIEF Telecom Inc.	a	Accounts receivable	38,387	-	-
					Accounts payable	37,417	-	-
					Revenues	332,872	-	-
					Operating costs and expenses	286,267	-	-
			CHYP Multimedia Marketing & Communications Co., Ltd.	a	Accounts payable	25,116	-	-
					Amounts collected for others	53,308	-	-
					Revenues	30,883	-	-
					Operating costs and expenses	136,855	-	-
			Chunghwa System Integration Co., Ltd.	a	Accounts receivable	38,684	-	-
					Accounts payable	629,455	-	-
					Revenues	18,179	-	-
					Operating costs and expenses	782,061	-	-
					Inventories	226,172	-	-
					Prepayments	115,066	-	-
					Property, plant and equipment	508,653	-	-
					Intangible assets	143,192	-	-
			Chunghwa Telecom Global Inc.	a	Accounts receivable	16,581	-	-
					Accounts payable	43,990	-	-
					Revenues	63,123	-	-
					Operating costs and expenses	337,300	-	-
			Donghwa Telecom Co., Ltd.	a	Accounts receivable	118,861	-	-
					Accounts payable	189,148	-	-
					Revenues	211,604	-	-
					Operating costs and expenses	531,116	-	-
			Spring House Entertainment Tech. Inc.	a	Amounts collected for others	10,060	-	-
			Chunghwa Telecom Japan Co., Ltd.	a	Accounts receivable	17,461	-	-
					Accounts payable	15,881	-	-
					Revenues	15,763	-	-
					Operating costs and expenses	92,099	-	-
			Light Era Development Co., Ltd.	a	Operating costs and expenses	45,120	-	-

(Continued)

Year	No. (Note 1)	Company Name	Related Party	Nature of Relationship (Note 2)	Transaction Details			
					Financial Statement Account	Amount (Note 5)	Payment Terms (Note 3)	% to Total Sales or Assets (Note 4)
			Chunghwa Telecom Singapore Pte., Ltd.	a	Accounts receivable	$ 102,253	-	-
					Accounts payable	76,002	-	-
					Revenues	150,673	-	-
					Operating costs and expenses	189,339	-	-
			Chunghwa Sochamp Technology Inc.	a	Accounts payable	59,582	-	-
					Operating costs and expenses	42,329	-	-
					Inventories	10,816	-	-
			Honghwa International Co., Ltd.	a	Accounts receivable	10,305	-	-
					Accounts payable	1,059,239	-	-
					Revenues	40,590	-	-
					Operating costs and expenses	5,422,154	-	3
					Inventories	30,749	-	-
					Property, plant and equipment	100,483	-	-
			Smartfun Digital Co., Ltd.	a	Accounts payable	10,613	-	-
					Operating costs and expenses	17,640	-	-
			Chunghwa Telecom (Thailand) Co., Ltd.	a	Operating costs and expenses	25,253	-	-
			CHT Security Co., Ltd.	a	Accounts payable	97,675	-	-
					Revenues	29,174	-	-
					Operating costs and expenses	323,704	-	-
					Property, plant and equipment	13,143	-	-
			Aval Technologies Co., Ltd.	a	Operating costs and expenses	47,025	-	-
					Customers' deposits	10,999	-	-
	1	Light Era Development Co., Ltd.	CHIEF Telecom Inc.	c	Revenues	95,190	-	-
	2	Chunghwa Telecom Singapore Pte., Ltd.	Donghwa Telecom Co., Ltd.	c	Prepayments	18,231	-	-

Note 1: Significant transactions between the Company and its subsidiaries or among subsidiaries are numbered as follows:

a. "0" for the Company.
b. Subsidiaries are numbered from "1".

Note 2: Related party transactions are divided into three categories as follows:

a. The Company to subsidiaries.
b. Subsidiaries to the Company.
c. Subsidiaries to subsidiaries.

Note 3: Transaction terms with the related parties were determined in accordance with mutual agreements when there were no similar transactions with third parties. Other transactions with related parties were not significantly different from those with third parties.

Note 4: For assets and liabilities, amount is shown as a percentage to consolidated total assets as of December 31, 2018, while revenues, costs and expenses are shown as a percentage to consolidated revenues for the year ended December 31, 2018.

Note 5: The amount was eliminated upon consolidation.

(Concluded)

9. Parent-only Financial Statements and Independent Auditors' Report

Chunghwa Telecom Co., Ltd.

Financial Statements for the
Years Ended December 31, 2018 and 2017 and
Independent Auditors' Report

勤業眾信
勤業眾信聯合會計師事務所
11073 台北市信義區松仁路100號20樓

Deloitte & Touche
20F, Taipei Nan Shan Plaza
No. 100, Songren Rd.,
Xinyi Dist., Taipei 11073, Taiwan

Tel :+886 (2) 2725-9988
Fax:+886 (2) 4051-6888
www.deloitte.com.tw

INDEPENDENT AUDITORS'REPORT

The Board of Directors and Stockholders
Chunghwa Telecom Co., Ltd.

Opinion

We have audited the accompanying financial statements of Chunghwa Telecom Co., Ltd. (the Company), which comprise the balance sheets as of December 31, 2018 and 2017, and the statements of comprehensive income, changes in equity and cash flows for the years then ended, and the related notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and its financial performance and its cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors'Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the year ended December 31, 2018. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

The descriptions of the key audit matters of the financial statements for the year ended December 31, 2018 are as follows:

Revenue Recognition on Mobile Services

Key audit matter:

As disclosed in Note 40 to the financial statements, mobile service revenue is the Company's one source of main revenues and is also an important indicator for the public to evaluate competitiveness and growth potential of telecommunications companies. The calculation of the Company's mobile services revenue highly relies on an automated computer environment in which the systems are complex due to combinations of the various mobile service price plans and process large volumes of data. Consequently, whether mobile services revenue is appropriately recognized is considered as one of the key audit matters.

Corresponding audit procedures:

We tested the effectiveness of the general information technology controls over the information systems used to process the mobile services revenue and relevant controls over the mobile service revenue process from call records, rate calculations, and billing procedures to accounting information system.

Moreover, we performed the following audit procedures on a sample basis: (1) inspected mobile service customers'contracts; (2) performed live call testing and re-calculated the call records on the basis of corresponding price plans; (3) checked that the calculations of call records agreed with customers'bills; and (4) checked that the amounts transferred from the mobile service system agreed with the accounting information system.

Revenue Recognition on Project Business

Key audit matter:

The project business mainly provides customers with combinations of one or more equipment and/or services. When the Company provides a project business, part of the obligations or service may likely be outsourced to third parties. Hence, the judgment on whether the Company is acting as a principal or an agent is required in order to determine if revenue should be reported gross as principal versus net as agent. Please refer to Notes 3 and 4 to the financial statements for the details. Due to highly customized nature of the project business, whether project revenue is recognized 瞓 ropriately is considered as one of the key audit matters.

Corresponding audit procedures:

We tested the effectiveness of controls over the project revenue, including those over principal-versus-agent considerations and revenue recognition.

Moreover, we performed the following audit procedures on a sample basis: (1) inspected project contracts; (2) evaluated the reasonableness of the evaluation forms prepared by authorized personnel on whether the Company is acting as a principal or an agent; (3) re-calculated the project revenue and checked that they agreed with the accounting records; (4) obtained confirmations; and (5) checked the source documents and tested the amounts received.

Emphasis of Matter

As discussed in Note 5 to the financial statements, the Company initially applied IFRS 9 "Financial instruments" and IFRS 15 "Revenue from contracts with customers" in 2018. Our audit opinion is not modified in respect of this matter.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the audit committee, are responsible for overseeing the Company's financial reporting process.

Auditors'Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors'report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the auditing standards generally accepted in the Republic of China, we exercise professional 亅 udgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or en .or, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors'report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors'report. However, future events or conditions may cause the Company to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the financial statements. We are responsible for the direction, supervision, and performance of the audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements for the year ended December 31, 2018 and are therefore the key audit matters. We describe these matters in our auditors'report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we deter 而 ne that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication .

The engagement partners on the audit resulting in this independent auditors'report are Mr. Hung Peng Lin and Mr. Ching Pin Shih.

Hung Peng Lin   Ching Pin Shih

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 19, 2019

<u>Notice to Readers</u>

The accompanying financial statements are intended only to present the financial position, financial performance and cash flows in accordance with accounting principles and practices generally accepted in the Republic of China and not those of any other Jur isdictions. The standards, procedures and practices to audit suchfinancial statements are those generally applied in the Republic of China.

For the convenience of readers, the independent auditors'report and the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors'report andfinancial statements shall prevail.

CHUNGHWA TELECOM CO., LTD.

BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018		2017	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 3 and 6)	$ 16,922,851	4	$ 19,744,416	5
Hedging financial assets (Notes 3 and 20)	1,069	-	-	-
Contract assets - current (Notes 3, 5 and 27)	1,653,886	-	-	-
Trade notes and accounts receivable, net (Notes 3, 4, 5, 10 and 27)	27,851,879	6	29,627,307	7
Receivables from related parties (Note 35)	817,874	-	1,006,442	-
Inventories (Notes 3, 4, 5 and 11)	10,471,759	2	3,834,008	1
Prepayments (Notes 12 and 35)	1,438,962	-	1,771,460	-
Other current monetary assets (Notes 13 and 25)	5,671,132	1	2,671,540	1
Other current assets (Notes 5 and 19)	2,509,572	1	2,107,270	-
Total current assets	67,338,984	14	60,762,443	14
NONCURRENT ASSETS				
Financial assets at fair value through profit or loss (Notes 3, 4, 5 and 7)	517,362	-	-	-
Financial assets at fair value through other comprehensive income (Notes 3, 4, 5 and 8)	6,533,053	1	-	-
Available-for-sale financial assets (Notes 3, 5 and 9)	-	-	3,071,198	1
Financial assets carried at cost (Notes 3, 5 and 14)	-	-	2,411,738	1
Investments accounted for using equity method (Notes 3, 5 and 15)	15,696,310	4	14,771,770	3
Contract assets - noncurrent (Notes 3, 5 and 27)	667,259	-	-	-
Property, plant and equipment (Notes 3, 4, 16 and 35)	281,056,057	64	281,413,852	64
Investment properties (Notes 3, 4 and 17)	8,212,437	2	7,973,018	2
Intangible assets (Notes 3, 4 and 18)	50,404,295	11	54,283,253	13
Deferred income tax assets (Notes 3 and 29)	3,041,999	1	2,279,124	1
Incremental costs of obtaining contracts (Notes 3, 5 and 27)	7,620,704	2	-	-
Net defined benefit assets (Notes 3, 4 and 25)	1,149,402	-	-	-
Prepayments (Notes 12 and 35)	1,852,675	-	1,870,604	-
Other noncurrent assets (Note 19)	4,726,124	1	5,093,183	1
Total noncurrent assets	381,477,677	86	373,167,740	86
TOTAL	$ 448,816,661	100	$ 433,930,183	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Financial liabilities at fair value through profit or loss (Notes 3, 5 and 7)	$ 897	-	$ 94	-
Hedging derivative financial liabilities (Notes 3, 5 and 20)	-	-	850	-
Contract liabilities - current (Notes 3, 5, 24 and 27)	10,686,892	2	-	-
Trade notes and accounts payable (Note 21)	16,773,477	4	15,645,102	4
Payables to related parties (Note 35)	4,443,212	1	4,223,065	1
Current tax liabilities (Notes 3, 5 and 29)	4,070,910	1	4,438,738	1
Other payables (Note 22)	20,148,990	4	22,024,733	5
Provisions (Notes 3, 5 and 23)	50,844	-	115,305	-
Advance receipts (Notes 3, 5 and 24)	-	-	8,390,325	2
Other current liabilities (Note 5)	1,159,732	-	1,091,593	-
Total current liabilities	57,334,954	12	55,929,805	13
NONCURRENT LIABILITIES				
Contract liabilities - noncurrent (Notes 3, 5, 24 and 27)	2,456,191	1	-	-
Deferred income tax liabilities (Notes 3 and 29)	1,957,503	-	1,388,350	-
Provisions (Notes 3 and 23)	78,627	-	78,513	-
Customers' deposits (Note 35)	4,635,193	1	4,582,587	1
Net defined benefit liabilities (Notes 3, 4 and 25)	3,419,867	1	2,599,396	1
Deferred revenue (Notes 3 and 5)	-	-	3,611,623	1
Other noncurrent liabilities (Notes 5 and 35)	2,371,954	1	857,924	-
Total noncurrent liabilities	14,919,335	4	13,118,393	3
Total liabilities	72,254,289	16	69,048,198	16
EQUITY (Notes 5 and 26)				
Common stocks	77,574,465	18	77,574,465	18
Additional paid-in capital	171,136,764	39	169,466,883	39
Retained earnings				
Legal reserve	77,574,465	17	77,574,465	18
Special reserve	2,675,419	-	2,680,823	-
Unappropriated earnings	47,141,345	10	37,202,683	9
Total retained earnings	127,391,229	27	117,457,971	27
Other adjustments	459,914	-	382,666	-
Total equity	376,562,372	84	364,881,985	84
TOTAL	$ 448,816,661	100	$ 433,930,183	100

The accompanying notes are an integral part of the financial statements.

CHUNGHWA TELECOM CO., LTD.

STATEMENTS OF COMPREHENSIVE INCOME
YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018 Amount	2018 %	2017 Amount	2017 %
REVENUES (Notes 3, 5, 27, 35 and 40)	$ 185,331,699	100	$ 196,985,774	100
OPERATING COSTS (Notes 3, 5, 11, 25, 27, 28, 35 and 40)	118,829,935	64	121,512,142	62
GROSS PROFIT	66,501,764	36	75,473,632	38
OPERATING EXPENSES (Notes 3, 5, 25, 28, 35 and 40)				
Marketing	18,807,803	10	24,328,558	12
General and administrative	3,427,037	2	3,522,518	2
Research and development	3,182,608	2	3,386,000	2
Expected credit loss	888,844	-	-	-
Total operating expenses	26,306,292	14	31,237,076	16
OTHER INCOME AND EXPENSES (Notes 16, 17, 28 and 40)	170,442	-	(90,819)	-
INCOME FROM OPERATIONS	40,365,914	22	44,145,737	22
NON-OPERATING INCOME AND EXPENSES				
Interest income (Note 40)	114,887	-	153,205	-
Other income (Notes 8, 28 and 35)	521,177	-	662,050	-
Other gains and losses (Notes 28 and 35)	(64,694)	-	(73,924)	-
Interest expenses (Note 40)	(267)	-	(5)	-
Share of profits of subsidiaries, associates and joint ventures accounted for using equity method (Notes 5, 15 and 40)	2,579,961	1	1,417,413	2
Total non-operating income and expenses	3,151,064	1	2,158,739	2
INCOME BEFORE INCOME TAX	43,516,978	23	46,304,476	24
INCOME TAX EXPENSE (Notes 3, 5 and 29)	8,015,356	4	7,430,571	4
NET INCOME	35,501,622	19	38,873,905	20
TOTAL OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified to profit or loss:				
Remeasurements of defined benefit pension plans (Note 25)	(1,201,469)	(1)	(2,011,048)	(1)

(Continued)

CHUNGHWA TELECOM CO., LTD.

STATEMENTS OF COMPREHENSIVE INCOME
YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018 Amount	2018 %	2017 Amount	2017 %
Unrealized gain or loss on investments in equity instruments at fair value through other comprehensive income (Notes 3 and 26)	$ (346,223)	-	$ -	-
Gain or loss on hedging instruments subject to basis adjustment (Notes 3 and 20)	1,919	-	-	-
Share of unrealized gain or loss on investments in equity instruments at fair value through other comprehensive income of subsidiaries, associates and joint ventures (Notes 3 and 26)	1,075	-	-	-
Share of remeasurements of defined benefit pension plans of subsidiaries, associates and joint ventures (Note 15)	(659)	-	(2,440)	-
Income tax benefit relating to items that will not be reclassified to profit or loss (Note 29)	445,311	-	341,878	-
	(1,100,046)	(1)	(1,671,610)	(1)
Items that may be reclassified subsequently to profit or loss:				
Exchange differences arising from the translation of the foreign operations	91,956	-	(208,928)	-
Unrealized gain or loss on available-for-sale financial assets (Note 26)	-	-	619,512	-
Cash flow hedges (Notes 20 and 28)	-	-	(263)	-
Share of exchange differences arising from the translation of the foreign operations of subsidiaries, associates and joint ventures (Note 15)	3,210	-	(11,733)	-
Share of unrealized loss on available-for-sale financial assets of subsidiaries, associates and joint ventures (Notes 15 and 26)	-	-	(10,518)	
	95,166	-	388,070	-
Total other comprehensive loss, net of income tax	(1,004,880)	(1)	(1,283,540)	(1)
TOTAL COMPREHENSIVE INCOME	$ 34,496,742	18	$ 37,590,365	19
EARNINGS PER SHARE (Notes 5 and 30)				
Basic	$ 4.58		$ 5.01	
Diluted	$ 4.57		$ 5.00	

The accompanying notes are an integral part of the financial statements.

(Concluded)

CHUNGHWA TELECOM CO., LTD.

STATEMENTS OF CHANGES IN EQUITY
YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

			Retained Earnings (Note 26)			Other Adjustments (Notes 20 and 26)					
	Common Stocks (Note 26)	Additional Paid-in Capital (Note 26)	Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences Arising from the Translation of the Foreign Operations	Unrealized Gain or Loss on Available-for-sale Financial Assets	Unrealized Gain or Loss on Financial Assets at Fair Value through Other Comprehensive Income	Cash Flow Hedges	Gain or Loss on Hedging Instruments	Total Equity
BALANCE, JANUARY 1, 2017	$ 77,574,465	$ 168,542,486	$ 77,574,465	$ 2,675,419	$ 38,342,317	$ 46,068	$ (50,885)	$ -	$ (587)	$ -	$ 364,703,748
Appropriation of 2016 earnings											
Special Reserve	-	-	-	5,404	(5,404)	-	-	-	-	-	-
Cash dividends	-	-	-	-	(38,336,525)	-	-	-	-	-	(38,336,525)
Unclaimed dividend	-	3,023	-	-	-	-	-	-	-	-	3,023
Change in additional paid-in capital from investments in subsidiaries, associates and joint ventures accounted for using equity method	-	844,981	-	-	-	-	-	-	-	-	844,981
Partial disposal of interests in subsidiaries	-	76,393	-	-	-	-	-	-	-	-	76,393
Net income for the year ended December 31, 2017	-	-	-	-	38,873,905	-	-	-	-	-	38,873,905
Other comprehensive loss for the year ended December 31, 2017	-	-	-	-	(1,671,610)	(220,661)	608,994	-	(263)	-	(1,283,540)
Total comprehensive income for the year ended December 31, 2017	-	-	-	-	37,202,295	(220,661)	608,994	-	(263)	-	37,590,365
BALANCE, DECEMBER 31, 2017	77,574,465	169,466,883	77,574,465	2,680,823	37,202,683	(174,593)	558,109	-	(850)	-	364,881,985
Effect of retrospective application (Note 5)	-	-	-	-	12,393,167	-	(558,109)	883,420	850	(850)	12,718,478
BALANCE, JANUARY 1, 2018 AS ADJUSTED	77,574,465	169,466,883	77,574,465	2,680,823	49,595,850	(174,593)	-	883,420	-	(850)	377,600,463
Appropriation of 2017 earnings											
Reversal of special reserve	-	-	-	(5,404)	5,404	-	-	-	-	-	-
Cash dividends	-	-	-	-	(37,204,714)	-	-	-	-	-	(37,204,714)
Unclaimed dividend	-	2,455	-	-	-	-	-	-	-	-	2,455
Change in additional paid-in capital from investments in subsidiaries, associates and joint ventures accounted for using equity method	-	950,689	-	-	-	-	-	-	-	-	950,689
Partial disposal of interests in subsidiaries	-	716,737	-	-	-	-	-	-	-	-	716,737
Net income for the year ended December 31, 2018	-	-	-	-	35,501,622	-	-	-	-	-	35,501,622
Other comprehensive loss for the year ended December 31, 2018	-	-	-	-	(756,817)	95,166	-	(345,148)	-	1,919	(1,004,880)
Total comprehensive income for the year ended December 31, 2018	-	-	-	-	34,744,805	95,166	-	(345,148)	-	1,919	34,496,742
BALANCE, DECEMBER 31, 2018	$ 77,574,465	$ 171,136,764	$ 77,574,465	$ 2,675,419	$ 47,141,345	$ (79,427)	$ -	$ 538,272	$ -	$ 1,069	$ 376,562,372

The accompanying notes are an integral part of the financial statements.

CHUNGHWA TELECOM CO., LTD.

STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	$ 43,516,978	$ 46,304,476
Adjustments to reconcile income before income tax to net cash provided by operating activities:		
Depreciation	26,867,479	27,587,424
Amortization	4,312,043	3,693,706
Amortization of incremental costs of obtaining contracts	9,958,119	-
Expected credit loss	888,844	-
Provision for doubtful accounts	-	637,799
Interest expenses	267	5
Interest income	(114,887)	(153,205)
Dividend income	(389,651)	(322,158)
Share of profits of subsidiaries, associates and joint ventures accounted for using equity method	(2,579,961)	(1,417,413)
Loss (gain) on disposal of property, plant and equipment	(151,309)	101,798
Property, plant and equipment transferred to expenses	-	2,565
Loss on disposal of investments accounted for using equity method	-	223
Provision for inventory and obsolescence	352,833	45,285
Reversal of impairment loss on investment properties	(19,133)	(10,979)
Valuation loss (gain) on financial assets and liabilities at fair value through profit or loss, net	25,961	(1,262)
Loss (gain) on foreign exchange, net	(3,105)	72,078
Changes in operating assets and liabilities:		
Decrease (increase) in:		
Contract assets	359,155	-
Trade notes and accounts receivable	1,201,810	(864,894)
Receivables from related parties	188,568	(250,329)
Inventories	(7,122,670)	(1,492,081)
Other current monetary assets	(100,041)	(44,583)
Prepayments	350,427	278,109
Other current assets	(270,216)	(88,876)
Incremental cost of obtaining contracts	(5,575,998)	-
Increase (decrease) in:		
Contract liabilities	3,196,632	-
Trade notes and accounts payable	1,124,526	924,625
Payables to related parties	220,147	(507,330)
Other payables	(1,195,293)	(1,045,896)
Provisions	23,225	72,486
Advance receipts	-	(556,178)
Other operating liabilities	394,170	(78,148)
Deferred revenue	-	66,342
Net defined benefit plans	(1,530,400)	53,689
Cash generated from operations	73,928,520	73,007,278

(Continued)

CHUNGHWA TELECOM CO., LTD.

STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
Interest paid	$ (267)	$ (5)
Income tax paid	(10,358,286)	(5,276,135)
Net cash provided by operating activities	63,569,967	67,731,138
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets at fair value through other comprehensive income	(89,580)	-
Proceeds from return of financial assets at fair value through other comprehensive income	6,690	-
Acquisition of negotiable certificates of deposit with maturities of more than three months	(6,502,000)	(4,200,000)
Proceeds from disposal of negotiable certificates of deposit with maturities of more than three months	3,700,000	4,200,000
Proceeds from disposal of held-to-maturity financial assets	-	2,140,000
Acquisition of financial assets carried at cost	-	(300,000)
Capital reduction of financial assets carried at cost	-	12,042
Acquisition of investments accounted for using equity method	(204,900)	(340,000)
Acquisition of property, plant and equipment	(27,490,579)	(25,709,388)
Acquisition of investment properties	(5,627)	-
Proceeds from disposal of property, plant and equipment	264,290	157,740
Acquisition of intangible assets	(433,085)	(11,250,892)
Increase in other noncurrent assets	(64,036)	(713,078)
Interest received	108,389	178,928
Cash dividends received from others	389,651	322,158
Cash dividends received from subsidiaries and associates accounted for using equity method	897,743	975,440
Net cash used in investing activities	(29,423,044)	(34,527,050)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase (decrease) in customers' deposits	12,597	(111,104)
Increase in other noncurrent liabilities	95,074	12,910
Cash dividends paid	(37,204,714)	(38,336,525)
Partial disposal of interests in subsidiaries without losing control	126,100	100,594
Unclaimed dividend	2,455	3,023
Net cash used in financing activities	(36,968,488)	(38,331,102)
NET DECREASE IN CASH AND CASH EQUIVALENTS	(2,821,565)	(5,127,014)
CASH AND CASH EQUIVALENTS, BEGINNING OF THE YEAR	19,744,416	24,871,430
CASH AND CASH EQUIVALENTS, END OF THE YEAR	$ 16,922,851	$ 19,744,416

The accompanying notes are an integral part of the financial statements. (Concluded)

CHUNGHWA TELECOM CO., LTD.

NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL

Chunghwa Telecom Co., Ltd. (“the Company”) was incorporated on July 1, 1996 in the Republic of China (“ROC”) pursuant to the Article 30 of the Telecommunications Act. The Company is a company limited by shares and, prior to August 2000, was wholly owned by the Ministry of Transportation and Communications (“MOTC”). Prior to July 1, 1996, the current operations of the Company were carried out under the Directorate General of Telecommunications (“DGT”). The DGT was established by the MOTC in June 1943 to take primary responsibility in the development of telecommunications infrastructure and to formulate policies related to telecommunications. On July 1, 1996, the telecom operations of the DGT were spun-off as the Company which continues to carry out the business and the DGT continues to be the industry regulator.

Effective August 12, 2005, the MOTC completed the process of privatizing the Company by reducing the government ownership to below 50% in various stages. In July 2000, the Company received approval from the Securities and Futures Commission (the “SFC”) for a domestic initial public offering and its common stocks were listed and traded on the Taiwan Stock Exchange (the “TWSE”) on October 27, 2000. Certain of the Company’s common stocks were sold, in connection with the foregoing privatization plan, in domestic public offerings at various dates from August 2000 to July 2003. Certain of the Company’s common stocks were also sold in an international offering of securities in the form of American Depository Shares (“ADS”) on July 17, 2003 and were listed and traded on the New York Stock Exchange (the “NYSE”). The MOTC sold common stocks of the Company by auction in the ROC on August 9, 2005 and completed the second international offering on August 10, 2005. Upon completion of the share transfers associated with these offerings on August 12, 2005, the MOTC owned less than 50% of the outstanding shares of the Company and completed the privatization plan.

The financial statements are presented in the Company’s functional currency, New Taiwan dollars.

2. APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved and authorized for issue by the Board of Directors on March 19, 2019.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company initial applied IFRS 9 “Financial Instruments” and IFRS 15 “Revenue from Contracts with Customers” on January 1, 2018, and elected not to reflect the figures on a retrospective basis in comparative periods. Different accounting policies for each accounting period as a result of the application of new accounting standards are listed by year separately.

Statement of Compliance

The accompanying financial statements have been prepared in conformity with the Regulations Governing the Preparation of Financial Reports by Securities Issuers (the “Regulations”).

Basis of Preparation

The financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values and net defined benefit liabilities (assets) which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

When preparing the accompanying financial statements, the Company used equity method to account for its investment in subsidiaries, associates and joint ventures. In order for the amounts of the net profit, other comprehensive income and total equity in the parent company only financial statements to be the same with those amounts attributable to the owner of the Company in its consolidated financial statements, adjustments arising from the differences in accounting treatment between parent company only basis and consolidated basis were made to the captions of “investments accounted for using equity method”, “share of profit (loss) of subsidiaries, associates and joint ventures accounted for using equity method”, “share of other comprehensive income of subsidiaries, associates and joint ventures accounted for using equity method” and related equity items, as appropriate, in the parent company only financial statements.

Current and Noncurrent Assets and Liabilities

Current assets include:

a. Assets held primarily for the purpose of trading;

b. Assets expected to be realized within twelve months after the reporting period; and

c. Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

Current liabilities include:

a. Liabilities held primarily for the purpose of trading;

b. Liabilities due to be settled within twelve months after the reporting period; and

c. Liabilities for which the Company does not have an unconditional right to defer settlement for at least twelve months after the reporting period.

Assets and liabilities that are not classified as current are classified as noncurrent.

Foreign Currencies

In preparing the Company’s financial statements, transactions in currencies other than the Company’s functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period in which they arise.

Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined and related exchange differences are recognized in profit or loss. Conversely, when the fair value changes were recognized in other comprehensive income, related exchange difference shall be recognized in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are not retranslated.

For the purposes of presenting financial statements, the assets and liabilities of the Company's foreign operations (including of the subsidiaries and associates in other countries or currencies used different with the Company) are translated into New Taiwan dollars using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income.

Cash Equivalents

Cash equivalents include commercial paper, time deposits and negotiable certificates of deposit with original maturities within three months from the date of acquisition, highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

Inventories

Inventories are stated at the lower of cost or net realizable value item by item, except for those that may be appropriate to group items of similar or related inventories. Net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. The calculation of the cost of inventory is derived using the weighted-average method.

Investments Accounted for Using Equity Method

Investments in subsidiaries, associates and joint ventures are accounted for using equity method.

a. Investment in subsidiaries

Subsidiaries are the entities controlled by the Company.

Under the equity method, the investment in subsidiaries is initially recognized at cost and the increase or decrease of carrying amount reflects the recognition of the Company's share of profit or loss and other comprehensive income of the subsidiaries after the date of acquisition. Besides, the Company also recognizes the Company's share of the change in other equity of the subsidiaries.

Changes in the Company's ownership interests in subsidiaries that do not result in the Company's loss of control over the subsidiaries are accounted for as equity transactions. Any difference between the carrying amounts of the investment of the subsidiaries and the fair value of the consideration paid or received is recognized directly in equity.

The acquisition cost in excess of the acquisition-date fair value of the identifiable net assets acquired is recognized as goodwill, which is included within the carrying amount of the investment and shall not be amortized. The acquisition-date fair value of the net identifiable assets acquired in excess of the acquisition cost is recognized immediately in profit or loss.

Unrealized profits and losses from downstream transactions with a subsidiary are eliminated in full. Profits and losses from upstream transactions with a subsidiary and sidestream transactions between subsidiaries are recognized in the Company's financial statements only to the extent of interests in the subsidiary that are not related to the Company.

b. Investments in associates and joint ventures

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor an interest in a joint venture. A joint venture is a joint arrangement whereby the Company and other parties that have joint control of the arrangement have rights to the net assets of the arrangement.

Investments accounted for using the equity method include investments in associates and interests in joint ventures. Under the equity method, an investment in an associate or a joint venture is initially recognized at cost and adjusted thereafter to recognize the Company's share of profit or loss and other comprehensive income of the associate and joint venture as well as the distribution received. The Company also recognizes its share in changes in the associates and joint ventures.

When the Company subscribes for new shares of the associate and joint venture at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Company's proportionate interest in the associate and joint venture. The Company records such a difference as an adjustment to investments with the corresponding amount charged or credited to additional paid-in capital. When the adjustment should be debited to additional paid-in capital but the additional paid-in capital recognized from investments accounted for using equity method is insufficient, the shortage is debited to retained earnings.

Any excess of the cost of acquisition over the Company's share of the fair value of the identifiable net assets and liabilities of an associate or a joint venture at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and shall not be amortized. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition is recognized immediately in profit or loss.

When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

When the Company transacts with its associate and joint venture, profits and losses resulting from the transactions with the associate and joint venture are recognized in the Company's financial statements only to the extent of interests in the associate and joint venture that are not related to the Company.

Property, Plant and Equipment

Property, plant and equipment are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment loss.

Property, plant and equipment in the course of construction are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for their intended use.

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. Freehold land is not depreciated. The estimated useful lives, residual values and depreciation method are reviewed at the end of each year, with the effect of any changes in estimate accounted for on a prospective basis.

On derecognition of an item of property, plant and equipment, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss in the period in which the property is derecognized.

Investment Properties

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties also include land held for a currently undetermined future use.

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss. Depreciation is recognized using the straight-line method.

For a transfer from the investment properties to property, plant and equipment, the deemed cost of the property, plant and equipment for subsequent accounting is its carrying amount at the commencement of owner-occupation.

For a transfer from the property, plant and equipment to investment properties, the deemed cost of the investment properties for subsequent accounting is its carrying amount at the end of owner-occupation.

On derecognition of the investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss in the period in which the property is derecognized.

Intangible Assets

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful life, residual value, and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. The residual value of an intangible asset with a finite useful life shall be assumed to be zero unless the Company expects to dispose of the intangible asset before the end of its economic life.

Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss in the period in which the asset is derecognized.

Impairment of Tangible Assets, Intangible Assets and Incremental Costs of Obtaining Contracts

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

Impairment loss from the assets related to incremental cost of obtaining contracts is recognized to the extent that the carrying amount of the assets exceeds the remaining amount of consideration that the Company expects to receive in exchange for related goods or services less the costs which relate directly to providing those goods or services.

When an impairment loss is subsequently reversed, the carrying amount of the asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

Financial Instruments

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

a. Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

1) Measurement category

<u>2018</u>

a) Financial assets at fair value through profit or loss (FVTPL)

Financial asset is classified as at FVTPL when the financial asset is mandatorily classified as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at fair value through other comprehensive income (FVOCI).

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividend earned on the financial asset. Fair value is determined in the manner described in Note 34.

b) Financial assets at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

i. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets at amortized cost are measured at amortized cost, which equals to gross carrying amount determined by the effective interest method less any impairment loss, except for short-term receivables as the effect of discounting is immaterial. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such financial assets.

c) Investments in equity instruments at FVOCI

On initial recognition, the Company may make an irrevocable election to designate investments in equity instruments as at FVOCI. Designation at FVOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments. Instead, it will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

2017

a) Financial assets at fair value through profit or loss (FVTPL)

Financial assets are classified as at FVTPL when the financial asset is held for trading.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividend or interest earned on the financial asset.

b) Held-to-maturity financial assets

The Company invests in bank debentures and corporate bonds with specific credit ratings and the Company has positive intent and ability to hold to maturity, are classified as held-to-maturity investments.

Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest method less any impairment loss.

c) Available-for-sale financial assets (AFS financial assets)

AFS financial assets are non-derivatives that are either designated as AFS or are not classified as loans and receivables, held-to-maturity financial assets or financial assets at fair value through profit or loss.

The Company invests in listed stocks and non-listed stocks. Among these investments, those that have a quoted market price in an active market are classified as AFS and measured at fair value at the end of each reporting period; the others that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost less any identified impairment losses at the end of each reporting period by presenting in a separate line item as financial assets carried at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between the carrying amount and the fair value is recognized in other comprehensive income. Any impairment losses are recognized in profit or loss.

Changes in the carrying amount of AFS monetary financial assets relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and dividends on AFS equity investments are recognized in profit or loss. Other changes in the carrying amount of AFS financial assets are recognized in other

comprehensive income and will be reclassified to profit or loss when the investment is disposed of or is determined to be impaired.

Dividends on AFS equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established.

d) Loans and receivables

Loans and receivables (including cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other financial assets and refundable deposits) are measured at amortized cost using the effective interest method, less any impairment loss, except for short-term receivables as the effect of discounting is immaterial.

2) Impairment of financial assets and contract assets

2018

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including accounts receivable) and contract assets.

The Company recognizes lifetime Expected Credit Loss (ECL) for accounts receivable and contract assets. For all other financial instruments, the Company recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Company recognizes an impairment loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

2017

Financial assets, other than those at FVTPL, are assessed to determine whether there is objective evidence that an impairment loss has occurred at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

For financial assets carried at amortized cost, such as held-to-maturity financial assets and trade notes and accounts receivable, assets that are individually assessed and not impaired are, in addition, assessed for impairment on a collective basis.

For financial assets carried at amortized cost, the amount of the impairment loss recognized is mainly based on the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate. However, since the discounted effect of short-term receivables is immaterial, the impairment loss is recognized on the difference between carrying amount and estimated future cash flow.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

For AFS equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

When an AFS financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

In respect of AFS equity securities, impairment losses previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income.

For financial assets that are carried at cost, the amount of the impairment loss is mainly measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss is not reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade notes and accounts receivable and other receivables, where the carrying amount is reduced through the use of an allowance account. When trade notes and accounts receivable and other receivables are considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss except for uncollectible trade notes and accounts receivable and other receivables that are written off against the allowance account.

3) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

2018

On derecognition of a financial asset measured at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss.

On derecognition of investments in equity instruments at FVOCI in its entirety, the cumulative gain or loss is directly transferred to retained earnings, and it is not reclassified to profit or loss.

2017

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income is recognized in profit or loss.

b. Financial liabilities

1) Subsequent measurement

Except for financial liabilities at FVTPL, all the financial liabilities are subsequently measured at amortized cost using the effective interest method.

2) Derecognition of financial liabilities

The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

c. Derivative financial instruments

The Company enters into derivative financial instruments to manage its exposure to foreign exchange rate risks, including forward exchange contracts.

Derivatives are initially measured at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship. When the fair value of derivative financial instruments is positive, the derivative is recognized as a financial asset; when the fair value of derivative financial instruments is negative, the derivative is recognized as a financial liability.

For derivatives embedded in non-derivative host contracts that are financial assets within the scope of IFRS 9, the whole hybrid contracts shall be measured as one and the classification is determined by the entire hybrid contract. For derivatives embedded in non-derivative host contracts that are not financial assets within the scope of IFRS 9 (e.g. financial liabilities), the embedded derivatives are separated from the host contract when (1) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; (2) the risks and economic characteristics of the embedded derivatives are not closely related to those of the host contracts; and (3) the hybrid contracts are not measured at FVTPL.

Hedge Accounting

The Company designates some derivatives instruments as cash flow hedges. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

The associated gains or losses that were recognized in other comprehensive income are reclassified from equity to profit or loss as a reclassification adjustment in the line item relating to the hedged item in the same period when the hedged item affects profit or loss. If a hedge of a forecast transaction subsequently results in the recognition of a non-financial asset or a non-financial liability, the associated gains and losses that were recognized in other comprehensive income are removed from equity and are included in the initial cost of the non-financial asset or non-financial liability.

Before 2018, hedge accounting was discontinued prospectively when the Company revoked the designated hedging relationship; when the hedging instrument expired or was sold, terminated, or exercised; or when the hedging instrument no longer met the criteria for hedge accounting. Starting from 2018, the Company discontinues hedge accounting only when the hedging relationship ceases to meet the qualifying criteria; for instance, when the hedging instrument expires or is sold, terminated or exercised. The cumulative gain or loss on the hedging instrument that has been previously recognized in other comprehensive income from the period when the hedge was effective remains separately in equity until the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss.

Provisions

Provisions are measured at the best estimate of the expenditure required to settle the Company's obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. The provisions for warranties claims and 2017 trade-in right are made by management according to the sales agreements which represent the management's best estimate of the future outflow of economic benefits. The provisions of warranties claims and trade-in right are recognized as operating cost and the reduction of revenue, respectively, in the period in which the goods are sold.

Revenue recognition

2018

The Company identifies the performance obligations in the contract with the customers, allocates transaction price to each performance obligation and recognizes revenue when performance obligations are satisfied.

Sales of products are recognized as revenue when the Company delivers products and the customer accepts and controls the product. Except for the consumer electronic products such as mobile devices sold in channel stores which are usually in cash sale, the Company recognizes revenues for sale of other electronic devices and corresponding trade notes and accounts receivable.

Usage revenues from fixed-line services (including local, domestic long distance and international long distance telephone services), cellular services, internet and data services, and interconnection and call transfer fees from other telecommunications companies and carriers are billed in arrears and are recognized based upon seconds or minutes of traffic processed when the services are provided in accordance with contract terms. The usage revenues and corresponding trade notes and accounts receivable are recognized monthly.

Other revenues are recognized as follows: (a) one-time subscriber connection fees (on fixed-line services) are first recognized as contract liabilities and revenues are recognized subsequently over the average expected customer service periods, (b) monthly fees (on fixed-line services, mobile, internet and data services) and related receivables are accrued monthly, and (c) prepaid services (fixed-line, mobile, internet and data services) are recognized as contract liabilities upon collection considerations from customers and are recognized as revenues subsequently based upon actual usage by customers.

Where the Company enters into transactions which involve both the provision of telecommunications service bundled with products such as handsets, total consideration received from products and telecommunications service in these arrangements are allocated based on their relative stand-alone selling price. The amount of sales revenue recognized for products is not limited to the amount paid by the customer for the products. When the amount of sales revenue recognized for products exceeded the amount paid by the customer for the products, the difference is recognized as contract assets. Contract assets are reclassified to accounts receivable when the amounts become collectible from customers subsequently. When the amount of sales revenue recognized for products was less than the amount paid by the customer for the products, the difference is recognized as contract liabilities and revenues are recognized subsequently when the telecommunications service are provided.

For project business contracts, if a substantial part of the Company's promise to customers is to manage and coordinate the various tasks and assume the risks of those tasks to ensure the individual goods or services are incorporated into the combined output, they are treated as a single performance obligation since the Company provides a significant integration service. The Company recognizes revenues and

corresponding accounts receivable when the project business contract is completed and accepted by customers.

For service contracts such as maintenance and warranties, customers simultaneously receive and consume the benefits provided by the Company; thus revenues and corresponding accounts receivable of service contracts are recognized over the related service period.

When another party is involved in providing goods or services to a customer, the Company is acting as a principal if it controls the specified good or service before that good or service is transferred to a customer; otherwise, the Company is acting as an agent. When the Company is acting as a principal, gross inflow of economic benefits arising from transactions is recognized as revenue. When the Company is acting as an agent, revenue is recognized in the amount of commission.

2017

Revenue from the sale of goods is recognized when all the following conditions are satisfied:

a. The Company has transferred to the buyer the significant risks and rewards of ownership of the goods;

b. The Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;

c. The amount of revenue can be measured reliably;

d. It is probable that the economic benefits associated with the transaction will flow to the Company; and

e. The costs incurred or to be incurred in respect of the transaction can be measured reliably.

Revenue is measured at the fair value of the consideration received or receivable and represents amounts for goods sold in the normal course of business, net of sales discounts and volume rebates. For trade notes and accounts receivable due within one year from the balance sheet date, as the nominal value of the consideration to be received approximates its fair value and transactions are frequent, fair value of the consideration is not determined by discounting all future receipts using an imputed rate of interest.

Usage revenues from fixed-line services (including local, domestic long distance and international long distance telephone services), cellular services, internet and data services, and interconnection and call transfer fees from other telecommunications companies and carriers are billed in arrears and are recognized based upon seconds or minutes of traffic processed when the services are provided in accordance with contract terms.

Other revenues are recognized as follows: (a) one-time subscriber connection fees (on fixed-line services) are deferred and recognized over the average expected customer service periods, (b) monthly fees (on fixed-line services, mobile, internet and data services) are accrued every month, and (c) prepaid services (fixed-line, mobile, internet and data services) are recognized as income based upon actual usage by customers.

Where the Company enters into transactions which involve both the provision of telecommunications service bundled with products such as handsets, total consideration received from products and telecommunications service in these arrangements are allocated and measured using units of accounting within the arrangement based on their relative fair values limited to the amount paid by the customer for the products.

Services revenue is recognized when service provided. Revenue from a contract to provide services is recognized by reference to the stage of completion of the contract.

Dividend income from investments is recognized when the stockholder's right to receive payment has been established under the premises when it is probable that the economic benefit related to the transactions will flow to the Company and that the revenue can be reasonably measured.

Interest income from a financial asset is recognized when it is probable that the economic benefits related to the transactions will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

When another party is involved in providing goods or services to a customer, the Company is acting as a principal when it has exposure to the significant risks and rewards associated with the sale of goods or the rendering of services; otherwise, the Company is acting as an agent. When the Company is acting as a principal, gross inflow of economic benefits arising from transactions is recognized as revenue. When the Company is acting as an agent, revenue is recognized in the amount of commission.

Incremental costs of obtaining contracts

Commissions and equipment subsidy related to telecommunications service as a result of obtaining contracts are recognized as an asset under the incremental costs of obtaining contracts to the extent the costs are expected to be recovered, and are amortized over the contract period. However, the Company elects not to capitalize the incremental costs of obtaining contracts if the amortization period of the assets that the Company otherwise would have recognized is expected to be one year or less.

Leasing

a. The Company as lessor

   Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease.

b. The Company as lessee

   Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

Employee Benefits

a. Short-term employee benefits

   Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

b. Retirement benefits

   Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

   Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost and gains or losses on settlements) and net interest on the net defined benefit liability (asset) are recognized as employee benefits expense in the period they occur. Remeasurement, comprising (a) actuarial gains and losses; and (b) the return on plan assets, excluding amounts included in net interest on the net defined benefit liability (asset), is recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

   Net defined benefit liability (asset) represents the actual deficit (surplus) in the Company's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

c. Other long-term employee benefits

   Other long-term employee benefits are accounted for in the same way as the accounting required for defined benefit plan except that remeasurement is recognized in profit or loss.

Income Tax

Income tax expense represents the sum of the tax currently payable and deferred tax.

a. Current tax

   According to the Income Tax Act in the ROC, an additional tax of unappropriated earnings is provided for in the year the stockholders approve to retain the earnings.

   Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

b. Deferred tax

   Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the Company's financial statements and the corresponding tax bases used in the computation of taxable profit.

   Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused tax credits from purchases of machinery, equipment and technology and research and development expenditures to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

   Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

   The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

   Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax assets and liabilities reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

c. Current and deferred tax

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income, in which case, the current and deferred tax are also recognized in other comprehensive income.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY AND ASSUMPTION

In the application of the Company's accounting policies, the management is required to make judgments, estimates and assumptions which are based on historical experience and other factors that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed by the management on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period. Actual results may differ from these estimates.

a. Revenue recognition

The Company's project agreements are mainly to provide one or more equipment or services to customers. In order to fulfill the agreements, another party may be involved in some agreements. The Company considers the following factors to determine whether the Company is a principal of the transaction: whether the Company is the primary obligation provider of the agreements, its exposures to inventory risks and the discretion in establishing prices, etc. The determination of whether the Company is a principal or an agent will affect the amount of revenue recognized by the Company. Only when the Company is acting as a principal, gross inflows of economic benefits arising from transactions is recognized as revenue.

b. Impairment of trade notes and accounts receivable

2018

The provision for impairment of trade notes and accounts receivable is based on assumptions about risk of default and expected loss rates. The Company uses judgment in making these assumptions and in selecting the inputs to the impairment calculation, based on the Company's past experience, current market conditions as well as forward looking information at the end of each reporting period. For details of the key assumptions and inputs used, see Note 10. Where the actual future cash flows are less than expected, a material impairment loss may arise.

2017

When there is objective evidence showed indications of impairment, the Company considers the estimation of future cash flows. The amount of impairment will be measured at the difference between the carrying amount and the present value of estimated future cash flows discounted by the original effective interest rates of the financial assets. However, as the impact from discounting short-term receivables is not material, the impairment of short-term receivables is measured at the difference between the carrying amount and the estimated undiscounted future cash flows. Where the actual future cash flows are lower than expected, a material impairment loss may arise.

c. Fair value measurements and valuation processes

2018

For the assets and liabilities measured at fair value without quoted prices in active markets, the Company's management determines the appropriate valuation techniques for the fair value measurements and whether to engage third party qualified appraisers based on the related regulations and professional judgments.

Information about the valuation techniques and inputs used in determining the fair value of various assets and liabilities was disclosed in Note 34. If the actual changes of inputs in the future differ from expectation, the fair value may vary accordingly. The Company updates inputs periodically to monitor the appropriateness of the fair value measurement.

d. Provision for inventory valuation and obsolescence

Inventories are stated at the lower of cost or net realizable value. Net realizable value is calculated as the estimated selling price less the estimated selling costs. Comparison of net realizable value and cost is determined on an item by item basis, except for those similar items which could be categorized into the same groups. The Company uses the inventory holding period and turnover as the evaluation basis for inventory obsolescence losses.

e. Impairment of tangible and intangible assets

When an indication of impairment is assessed with objective evidence, the Company considers whether the recoverable amount of an asset is less than its carrying amount and recognizes the impairment loss based on difference between the recoverable amount and its carrying amount. The estimate of recoverable amount would impact on the timing and the amount of impairment loss recognition.

f. Useful lives of property, plant and equipment

As discussed in Note 3, "Summary of Significant Accounting Policies - Property, Plant and Equipment", the Company reviews estimated useful lives of property, plant and equipment at the end of each year.

g. Recognition and measurement of defined benefit plans

Net defined benefit liabilities and the resulting pension expense under defined benefit pension plans are calculated using the Projected Unit Credit Method. Actuarial assumptions comprise the discount rate, employee turnover rate, average future salary increase and etc. Changes in economic circumstances and market conditions will affect these assumptions and may have a material impact on the amount of the expense and the liability.

5. APPLICATION OF NEW AND REVISED STANDARDS AND INTERPRETATIONS

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), International Financial Reporting Interpretations Committee Interpretations (IFRIC) and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission (FSC).

Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRS, IAS, IFRIC and SIC issued by the International Accounting Standards Board and endorsed and issued into effect by the FSC (collectively, the "Taiwan-IFRSs") does not have material impacts on the Company's financial statements.

1) IFRS 9 "Financial Instruments" and related amendments

IFRS 9 supersedes IAS 39 "Financial Instruments: Recognition and Measurement", with consequential amendments to IFRS 7 "Financial Instruments: Disclosures" and other standards. IFRS 9 sets out the requirements for classification, measurement and impairment of financial assets and hedge accounting. Refer to Note 3 for information relating to the relevant accounting policies.

The requirements for classification, measurement and impairment of financial assets have been applied retrospectively on January 1, 2018, and the requirements for hedge accounting have been applied prospectively. IFRS 9 is not applicable to items that have already been derecognized on or before December 31, 2017.

Classification, measurement and impairment of financial assets and liabilities

On the basis of the facts and circumstances that existed on January 1, 2018, the Company performed an assessment of the classifications of financial assets and liabilities and elected not to restate the comparative figures.

The following table shows the original measurement categories and carrying amounts under IAS 39 and the new measurement categories and carrying amounts under IFRS 9 for each class of the Company's financial assets and financial liabilities as of January 1, 2018.

	Measurement Category		Carrying Amount		
	IAS 39	IFRS 9	IAS 39	IFRS 9	Note
Financial assets					
Cash and cash equivalents	Loans and receivables	Amortized cost	$ 19,744,416	$ 19,744,416	a)
Equity securities	Available-for-sale	FVTPL	542,521	542,521	b).c)
		FVOCI- equity investments	4,940,415	6,796,385	b)
Trade notes and accounts receivable, receivables from related parties, other current monetary assets and refundable deposits	Loans and receivables	Amortized cost	35,857,242	35,857,242	a)
Financial liabilities					
Trade notes and accounts payable, payables to related parties, partial other payables and customers' deposit	Amortized cost	Amortized cost	36,464,843	36,464,843	
Derivatives	FVTPL	FVTPL	94	94	
	Hedging derivative financial liabilities	Hedging financial liabilities	850	850	d)

	IAS 39 Carrying Amount January 1, 2018	Reclassifications	Remea-surements	IFRS 9 Carrying Amount January 1, 2018	Retained Earnings Effect on January 1, 2018	Other Adjustment Effect on January 1, 2018	Note
Financial assets measured at FVTPL	$ -	$ -	$ -	$ -	$ -	$ -	
Add: reclassification from available for sale (IAS 39) - mandatory reclassification	-	542,521	-	542,521	-	-	(b)
	-	542,521	-	542,521	-	-	
Financial liabilities measured at FVTPL	(94)	-	-	(94)	-	-	
Financial assets measured at FVOCI- equity investments	-	-	-	-	-	-	
Add: reclassification from available for sale (IAS 39) - designated at January 1, 2018	-	4,940,415	1,855,970	6,796,385	1,515,525	340,445	(b)
	-	4,940,415	1,855,970	6,796,385	1,515,525	340,445	
Financial assets measured at Amortized cost	-	-	-	-	-	-	
Add: reclassification from loans and receivables (IAS 39)	-	55,601,658	-	55,601,658	-	-	(a)
	-	55,601,658	-	55,601,658	-	-	
Financial liabilities measured at amortized cost	-	-	-	-	-	-	
Add: reclassification from amortized cost (IAS 39)	-	(36,464,843)	-	(36,464,843)	-	-	
	-	(36,464,843)	-	(36,464,843)	-	-	
Hedging financial liabilities	-	-	-	-	-	-	
Add: reclassification from Hedging derivative instrument (IAS 39)	-	(850)	-	(850)	-	-	(d)
	-	(850)	-	(850)	-	-	
Total	$ (94)	$ 24,618,901	$ 1,855,970	$ 26,474,777	$ 1,515,525	$ 340,445	

a) Cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other current monetary assets and refundable deposit that were classified as loans and receivables under IAS 39 are now classified as financial assets measured at amortized cost with assessment of expected credit loss.

b) The Company elected to reclassify equity securities originally classified as available-for-sale under IAS 39 to designated at FVOCI in accordance with IFRS 9. As a result, the related other equity - unrealized gain or loss on available-for-sale financial assets was reclassified $556,243 thousand to other equity - unrealized gain or loss on financial assets at FVOCI. Some investments that previously classified as available-for-sale and measured at cost under IAS 39 were classified mandatorily as FVTPL under IFRS 9 as the contractual cash flows are not solely payments of principal and interest on the principal outstanding and such investments are not equity instruments.

Equity investments in non-listed stocks previously carried at cost under IAS 39 are designated as FVOCI and remeasured at fair values. As a result, financial assets at FVOCI and other equity - unrealized gain or loss on financial assets at FVOCI were both increased by $1,855,970 thousand.

The Company recognized impairment loss on certain investments in equity securities previously classified as available-for-sale and measured at cost and the loss was accumulated in retained earnings under IAS 39. Since those investments were designated as financial assets measured at FVOCI under IFRS 9 and no impairment assessment is required, an adjustment was made that resulted in a decrease of $1,515,525 thousand in other equity - unrealized gain or loss on financial assets at FVOCI and an increase of the $1,515,525 thousand in retained earnings on January 1, 2018.

c) As Chunghwa Investment Co., Ltd. ("CHI"), CHIEF Telecom Inc. ("CHIEF") and Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia") retrospectively applied IFRS 9, an adjustment was made that resulted in a decrease of $8,985 thousand in investments accounted for using equity method, a decrease of $1,866 thousand in other equity -

unrealized gain or loss on available-for-sale financial assets, a decrease of $13,268 thousand in other equity - unrealized gain or loss on financial assets at FVOCI, and an increase of $6,149 thousand in retained earnings on January 1, 2018.

d) Due to the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers, all derivative and non-derivative financial assets and financial liabilities which were designated as hedging instruments are presented as hedging financial assets and hedging financial liabilities for starting from January 1, 2018.

2) IFRS 15 “Revenue from Contracts with Customers” and related amendments

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers, and supersedes IAS 18 “Revenue”, IAS 11 “Construction Contracts” and a number of revenue-related interpretations. Please refer to Note 3 for related accounting policies.

When applying IFRS 15 and related amendments, the Company allocates the transaction price to each performance obligation identified in the contract on a relative stand-alone selling price basis.

Where the Company enters into transactions which involve both the provision of telecommunications service bundled with products such as handsets, total consideration received from products and telecommunications service in these arrangements is allocated based on each performance obligation’s relative stand-alone selling price. The amount of sales revenue recognized for products is no longer limited to the amount paid by the customer for the products. This does not change the total revenue recognized, but changes the timing of revenue recognition. The Company may recognize more revenue at the beginning of the contract period (i.e., at the time of sale of products), and revenue recognized for telecommunications service in the subsequent contract periods will decrease.

Incremental cost of obtaining contracts is recognized as an asset to the extent the Company expects to recover those costs. Such asset is amortized on a basis that is consistent with the transfer to the customer of the goods or services to which the asset relates. Before the application of IFRS 15, the relevant expenditures were recognized as expenses.

IFRS 15 and its related amendments require that when another party is involved in providing goods or services to a customer, the Company is a principal if it controls the specified good or service before that good or service is transferred to a customer. Before the application of IFRS 15, the Company determined whether it is a principal or an agent based on its exposure to the significant risks and rewards associated with the sale of goods or the rendering of services.

Under IFRS 15, the net effect of revenue recognizes, consideration received and receivable is recognized as a contract asset or a contract liability. Before the application of IFRS 15, receivable was recognized or advance receipts and deferred revenue was reduced when revenue was recognized for the contract under IAS 18.

Under IFRS 15, the Company recognized a trade-in liability (other current liabilities) and a right to recover a product (other current assets) when recognizing revenue for the sale with a trade-in right. Before the application of IFRS 15, trade-in right provisions and inventories were recognized when recognizing revenue.

The Company elected to retrospectively apply IFRS 15 to contracts that were not completed on January 1, 2018 and recognized the cumulative effect of the change in the retained earnings on January 1, 2018.

Impact on items of assets, liabilities and equity

	Carrying Amounts before Retrospective Adjustments as of January 1, 2018	Adjustments Arising from Initial Application of IFRS 15	Carrying Amounts after Retrospective Adjustments as of January 1, 2018
Contract assets - current	$ -	$ 1,380,055	$ 1,380,055
Trade notes and accounts receivable, net	$ 29,627,307	(117,911)	$ 29,509,396
Inventories	$ 3,834,008	(132,086)	$ 3,701,922
Other current assets	$ 2,107,270	132,086	$ 2,239,356
Contract assets - noncurrent	$ -	1,306,626	$ 1,306,626
Incremental costs of obtaining contracts	$ -	12,002,825	$ 12,002,825
Investments accounted for using equity method	$ 14,771,770	(2,483,547)	$ 12,288,223
Total effect on assets		$ 12,088,048	
Contract liabilities - current	$ -	$ 7,395,323	$ 7,395,323
Current tax liabilities	$ 4,438,738	2,226,691	$ 6,665,429
Provisions - current	$ 115,305	(87,572)	$ 27,733
Advance receipts	$ 8,390,325	(8,390,325)	$ -
Other current liabilities	$ 1,091,593	61,274	$ 1,152,867
Contract liabilities - noncurrent	$ -	2,551,128	$ 2,551,128
Deferred revenue	$ 3,611,623	(3,611,623)	$ -
Other noncurrent liabilities	$ 857,924	1,071,659	$ 1,929,583
Total effect on liabilities		$ 1,216,555	
Total effect on equity (unappropriated earnings)	$ 37,202,683	$ 10,871,493	$ 48,074,176

The following table shows the increase (decrease) in assets, liabilities and equity resulting from the application of IFRS 15 on the balance sheet date.

	December 31, 2018
Contract assets - current	$ 1,653,886
Trade notes and accounts receivable, net	(101,890)
Inventories	(79,801)
Other current assets	79,801
Contract assets - noncurrent	667,259
Incremental costs of obtaining contracts	7,620,704
Investments accounted for using equity method	(1,280,249)
Assets	$ 8,559,710

(Continued)

	December 31, 2018
Contract liabilities - current	$ 10,686,892
Current tax liabilities	1,417,946
Provisions - current	(51,675)
Advance receipts	(10,896,375)
Other current liabilities	103,475
Contract liabilities - noncurrent	2,456,191
Deferred revenue	(3,619,564)
Other noncurrent liabilities	1,173,165
Liabilities	$ 1,270,055
Equity (unappropriated earnings)	$ 7,289,655

(Concluded)

Impact on items of statement of comprehensive income for current year

The following table shows the increase (decrease) in net income resulting from the application of IFRS 15.

	Year Ended December 31, 2018
Revenues	$ (1,205,379)
Operating costs	7,715,738
Operating expenses	(3,327,236)
Income from operations	(5,593,881)
Share of profits or losses of associates and joint ventures accounted for using equity method	1,203,298
Income tax expense	(808,745)
Net income	$ (3,581,838)
Impact on earnings per share(NT$):	
Basic earnings per share	$ (0.46)
Diluted earnings per share	$ (0.46)

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers for application starting from 2019 and the IFRSs endorsed by the FSC

New, Revised or Amended Standards and Interpretations		Effective Date Announced by IASB (Note 1)
Amendments to IFRSs	Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9	Prepayment Features with Negative Compensation	January 1, 2019 (Note 2)
IFRS 16	Leases	January 1, 2019
Amendments to IAS 19	Plan Amendment, Curtailment or Settlement	January 1, 2019 (Note 3)

(Continued)

New, Revised or Amended Standards and Interpretations		Effective Date Announced by IASB (Note 1)
Amendments to IAS 28	Long-term Interests in Associates and Joint Ventures	January 1, 2019
IFRIC 23	Uncertainty over Income Tax Treatments	January 1, 2019

(Concluded)

Note 1: Unless stated otherwise, the above new, amended or revised standards and interpretations are effective for annual periods beginning on or after their respective effective dates.

Note 2: The FSC permits the election for early adoption of the amendments starting from 2018.

Note 3: The Company shall apply these amendments to pension plan amendments, curtailments or settlements occurring on or after January 1, 2019.

Except for the following items, the application of the above new, revised or amended standards and interpretations will not have material impact on the Company's financial statements.

IFRS 16 "Leases"

IFRS 16 sets out the accounting standards for identifying leases and accounting treatments for lessors and lessees. It will supersede IAS 17, IFRIC 4 - Determining Whether an Arrangement Contains a Lease and a number of related interpretations.

Upon the initial application of IFRS 16, the Company anticipates reassessing whether a contract is, or contains, a lease in accordance with the definition of a lease under IFRS 16. Some contracts currently identified as containing a lease under IAS 17 and IFRIC 4 do not meet the definition of a lease under IFRS 16 and will be accounted for in accordance with other accounting standards because the Company does not have the right to direct the use of the identified assets. Contracts that are reassessed as leases or containing a lease will be accounted for in accordance with the transitional provisions under IFRS 16.

Upon the initial application of IFRS 16, if the Company is a lessee, it shall recognize right-of-use assets and lease liabilities for all leases on the balance sheets except for those whose payments under low-value will be recognized as expenses on a straight-line basis. On the statements of comprehensive income, the Company will present the depreciation expense charged on the right-of-use asset separately from the interest expense accrued on lease liability using the effective interest method. On the statements of cash flows, cash payments for the principal portion of lease liability will be classified within financing activities; cash payments for interest portion will be classified within operating activities. Before the application of IFRS 16, payments under operating lease contracts are recognized as expenses on a straight-line basis. Prepaid lease payments for use rights of leased assets are recognized as prepaid rents. Cash flows for operating leases are classified within operating activities on the statements of cash flows.

The Company will not make any adjustments for leases in which the Company is a lessor and will account for those leases with the application of IFRS 16 starting from January 1, 2019.

The Company anticipates applying IFRS 16 retrospectively with the cumulative effect of the initial application of IFRS 16 recognized in retained earnings on January 1, 2019. Comparative financial information will not be restated.

Lease liabilities will be recognized on January 1, 2019 for leases currently classified as operating leases under IAS 17 and measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at the present value discounted using the aforementioned incremental borrowing rate as if IFRS 16 had been applied since the commencement date of leases. The Company will apply IAS 36 for assessing impairment of right-of-use assets.

Anticipated impacts on assets, liabilities and equity

	Carrying Amount as of December 31, 2018	Adjustments Arising from Initial Application of IFRS 16	Adjusted Carrying Amount as of January 1, 2019
Prepayments - current	$ 1,438,962	$ (281,266)	$ 1,157,696
Investments accounted for using equity method	$ 15,696,310	3,234	$ 15,699,544
Property, plant and equipment	$ 281,056,057	(1,401,581)	$ 279,654,476
Right-of-use assets	$ -	11,000,544	$ 11,000,544
Deferred income tax assets	$ 3,041,999	13,514	$ 3,055,513
Prepayments - noncurrent	$ 1,852,675	(252,416)	$ 1,600,259
Total effect on assets		$ 9,082,029	
Contract liabilities - current	$ 10,686,892	$ 160,561	$ 10,847,453
Lease liabilities - current	$ -	3,043,530	$ 3,043,530
Other payables	$ 20,148,990	(48,712)	$ 20,100,278
Other current liabilities	$ 1,159,732	(160,561)	$ 999,171
Contract liabilities - noncurrent	$ 2,456,191	1,010,583	$ 3,466,774
Lease liabilities - noncurrent	$ -	6,138,034	$ 6,138,034
Other noncurrent liabilities	$ 2,371,954	(1,010,583)	$ 1,361,371
Total effect on liabilities		$ 9,132,852	
Total effect on equity (unappropriated earnings)	$ 47,141,345	$ (50,823)	$ 47,090,522

Except for the abovementioned impact, as of the date the financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of other standards and interpretations will have on the Company's financial position and operating result, and will disclose the relevant impact when the assessment is completed.

c. IFRSs issued by the IASB but not yet endorsed and issued into effect by the FSC

New, Revised or Amended Standards and Interpretations		Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3	Definition of a Business	January 1, 2020 (Note 2)
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between An Investor and Its Associate or Joint Venture	To be determined by IASB
Amendments to IAS 1 and IAS 8	Definition of Materiality	January 1, 2020 (Note 3)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The Company shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 3: The Company shall apply these amendments prospectively in annual periods beginning on or after January 1, 2020.

As of the date the financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of above standards and interpretations will have on the Company's financial position and operating result and will disclose the relevant impact when the assessment is completed.

6. CASH AND CASH EQUIVALENTS

	December 31 2018	December 31 2017
Cash		
Cash on hand	$ 210,125	$ 191,528
Bank deposits	4,016,515	2,462,609
	4,226,640	2,654,137
Cash equivalents (investments with maturities of less than three months)		
Commercial paper	5,095,053	9,140,279
Time deposits	1,158	-
Negotiable certificates of deposit	7,600,000	7,950,000
	12,696,211	17,090,279
	$ 16,922,851	$ 19,744,416

The annual yield rates of bank deposits, commercial paper, time deposits and negotiable certificates of deposit were as follows:

	December 31	
	2018	2017
Bank deposits	0.00%-0.48%	0.00%-0.28%
Commercial paper	0.52%-0.57%	0.35%-0.38%
Time deposits	0.62%	-
Negotiable certificates of deposit	0.55%-0.60%	0.40%-0.50%

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2018	2017
Financial assets - noncurrent		
Mandatorily measured at FVTPL		
Non-derivative financial assets		
Non-listed stocks - domestic	$ 292,910	$ -
Non-listed stocks - foreign	224,452	-
	$ 517,362	$ -
Financial liabilities - current		
Held for trading		
Derivatives (not designated for hedge)		
Forward exchange contracts	$ 897	$ 94

Some investments previously carried at cost under IAS 39 were mandatorily reclassified as FVTPL when applying IFRS 9.

Outstanding forward exchange contracts not designated for hedge as of balance sheet dates were as follows:

	Currency	Maturity Period	Contract Amount (In Thousands)
December 31, 2018			
Forward exchange contracts - buy	EUR/NT$	2019.03-06	EUR5,452/NT$192,734
December 31, 2017			
Forward exchange contracts - buy	EUR/NT$	2018.03-06	EUR1,942/NT$69,061

The Company entered into the above forward exchange contracts to manage its exposure to foreign currency risk due to fluctuations in exchange rates. However, the aforementioned derivatives did not meet the criteria for hedge accounting.

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - NONCURRENT - 2018

	December 31, 2018
Domestic investments	
Listed stocks	$ 2,899,843
Non-listed stocks	3,512,405
Foreign investments	
Non-listed stocks	120,805
	$ 6,533,053

The Company holds the above foreign and domestic stocks for medium to long-term strategic purposes and expects to profit from long-term investment. Accordingly, the management elected to designate these investments in equity instruments at FVOCI as they believe that recognizing short-term fair value fluctuations of these investments in profit or loss is not consistent with the Company's strategy of holding these investments for long-term purposes. These investments in equity instruments were classified as available-for-sale financial assets under IAS 39. Refer to Notes 5, 9 and 14 for information relating to their reclassification and comparative information for 2017.

The Company recognized dividend income of $389,651 thousand for the year ended December 31, 2018 from those investments still held on December 31, 2018.

9. AVAILABLE-FOR-SALE FINANCIAL ASSETS - NONCURRENT - 2017

	December 31, 2018	December 31, 2017
Equity securities		
Listed stocks	$ -	$ 3,071,198

The Company evaluated and concluded that there was no indication that available-for-sale financial assets were impaired; therefore, no impairment loss was recognized for the year ended December 31, 2017.

10. TRADE NOTES AND ACCOUNTS RECEIVABLE, NET

	December 31	
	2018	2017
Trade notes and accounts receivable	$ 30,396,566	$ 31,691,444
Less: Loss allowance	(2,544,687)	(2,064,137)
	$ 27,851,879	$ 29,627,307

Year ended December 31, 2018

The average credit terms range from 30 to 90 days.

The Company serves a large consumer base for telecommunications business; therefore, the concentration of credit risk is limited. When having transactions with customers, the Company considers the record of arrears in the past. In addition, the Company may also collect some telecommunication charges in advance to reduce the payment arrears in subsequent periods.

The Company adopted a policy of dealing with counterparties with certain credit ratings for project business and to obtain collateral where necessary to mitigate the risk of loss arising from default. Credit rating information is provided by independent rating agencies where available and, if such credit rating information is not available, the Company uses other publicly available financial information and its own historical transaction experience to rate its major customers. The Company continues to monitor the credit exposure and credit ratings of its counterparties and spread the credit risk amongst qualified counterparties.

In order to mitigate credit risk, the management of the Company has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure the recoverability of receivables. In addition, the Company reviews the recoverable amount of receivables at balance sheet dates to ensure that adequate allowance is provided for possible irrecoverable amounts. In this regard, the management believes the Company's credit risk could be reasonably reduced.

The Company applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for receivables. The expected credit losses on receivables are estimated using a provision matrix by reference to past default experience of the customers and an analysis of the customers' current financial positions, as well as the forward-looking indicators such as macroeconomic business indicator.

When there are evidences indicating that the counterparty is in evasion, bankruptcy, deregistration of its company or the accounts receivable are over two years past due and the recoverable amount cannot be reasonable estimated, the Company writes off the trade notes and accounts receivable. For accounts receivable that have been written off, the Company continues to engage in enforcement activity to attempt to recover the receivables due. Where recoveries are made, these are recognized in profit or loss.

The Company's provision matrix arising from telecommunications business and project business is disclosed below.

December 31, 2018

	Not Past Due	Past Due Less than 30 Days	Pass Due 31 to 60 Days	Pass Due 61 to 90 Days	Pass Due 91 to 120 Days	Pass Due 121 to 180 Days	Pass Due over 181 Days	Total
Telecommunications business								
Expected credit loss rate (Note a)	0%-3%	3%-30%	7%-69%	19%-82%	32%-90%	61%-95%	100%	
Gross carrying amount	$ 23,307,276	$ 454,465	$ 94,715	$ 48,924	$ 37,640	$ 36,090	$ 418,101	$ 24,397,211
Loss allowance (lifetime ECL)	(79,857)	(26,872)	(24,023)	(28,432)	(28,196)	(25,618)	(418,101)	(631,099)
Amortized cost	$ 23,227,419	$ 427,593	$ 70,692	$ 20,492	$ 9,444	$ 10,472	$ -	$ 23,766,112
Project business								
Expected credit loss rate (Note b)	0%-5%	5%	10%	30%	50%	80%	100%	
Gross carrying amount	$ 4,066,271	$ 88,384	$ 92,343	$ 8,248	$ 12,132	$ 6,809	$ 1,725,168	$ 5,999,355
Loss allowance (lifetime ECL)	(152,624)	(8,609)	(10,142)	(2,910)	(8,492)	(5,643)	(1,725,168)	(1,913,588)
Amortized cost	$ 3,913,647	$ 79,775	$ 82,201	$ 5,338	$ 3,640	$ 1,166	$ -	$ 4,085,767

Note a: Please refer to Note 40 for the information of disaggregation of telecommunications service revenue. The expected credit loss rate applicable to different business revenue varies so as to reflect the risk level indicating by factors like historical experience.

Note b: The project business has different loss types according to the customer types. The expected credit loss rate listed above is for general customers. When customer is the government or its affiliates, it is expected that no credit loss will occur. For those who had bounced or exchanged checks as well as those accounts receivable were overdue more than six months

that are classified as high risk customers, the expected credit loss of high risk customers is at least 50%, and the rate is increased when the overdue days increases.

Movements of the allowance for doubtful accounts were as follows:

	Year Ended December 31, 2018
Balance at January 1, 2018	$ 2,064,137
Add: Provision of credit loss	786,250
Less: Amounts written off	(305,700)
Balance at December 31, 2018	$ 2,544,687

Year ended December 31, 2017

The average credit terms range from 30 to 90 days. In determining the recoverability of trade notes and accounts receivable, the Company considers significant change in the credit quality of the trade notes and accounts receivable from the date credit was initially granted up to the end of the reporting period. In general, with few exceptional cases, it is unlikely for the notes and accounts receivable due longer than 180 days to be collected, therefore the Company recognized 100% allowance of notes and accounts receivable overdue longer than 180 days. For the notes and accounts receivable less than 180 days, the allowance for doubtful accounts was estimated based on the Company's historical recovery experience.

The Company serves a large consumer base; therefore, the concentration of credit risk is limited.

The aging analysis for trade notes and accounts receivable as of balance sheet dates was as follows:

	December 31, 2017
Non-overdue	$ 28,179,768
Less than 30 days	949,839
31-60 days	444,028
61-90 days	258,658
91-120 days	182,428
121-180 days	119,911
More than 181 days	1,556,812
	$ 31,691,444

The above aging analysis was based on days overdue.

There was no trade notes and accounts receivable that was past due but not impaired as of December 31, 2017.

Movements of the allowance for doubtful accounts were as follows:

	Individually Assessed for Impairment	Collectively Assessed for Impairment	Total
Balance on January 1, 2017	$ 766,178	$ 956,153	$ 1,722,331
Add: Provision for doubtful accounts	521,747	50,662	572,409
Deduct: Amounts written off	(13,541)	(217,062)	(230,603)
Balance on December 31, 2017	$ 1,274,384	$ 789,753	$ 2,064,137

11. INVENTORIES

	December 31	
	2018	2017
Merchandise	$ 3,645,462	$ 2,346,618
Project in process	6,826,297	1,487,390
	$ 10,471,759	$ 3,834,008

The operating costs related to inventories were $22,230,534 thousand (including the valuation loss on inventories of $352,833 thousand) and $25,679,204 thousand (including the valuation loss on inventories of $45,285 thousand) for the years ended December 31, 2018 and 2017, respectively.

12. PREPAYMENTS

	December 31	
	2018	2017
Prepaid rents	$ 2,358,439	$ 2,623,401
Others	933,198	1,018,663
	$ 3,291,637	$ 3,642,064
Current		
Prepaid rents	$ 505,764	$ 752,797
Others	933,198	1,018,663
	$ 1,438,962	$ 1,771,460
Noncurrent		
Prepaid rents	$ 1,852,675	$ 1,870,604

13. OTHER CURRENT MONETARY ASSETS

	December 31	
	2018	2017
Negotiable certificates of deposit with maturities of more than three months	$ 4,402,000	$ 1,600,000
Others	1,269,132	1,071,540
	$ 5,671,132	$ 2,671,540

The annual yield rates of negotiable certificates of deposit with maturities of more than three months at the balance sheet dates were as follows:

	December 31	
	2018	2017
Negotiable certificates of deposit with maturities of more than three months	0.58%-1.04%	0.63%

14. FINANCIAL ASSETS CARRIED AT COST - 2017

	December 31, 2017
Non-listed stocks	
Domestic	$ 2,142,383
Foreign	269,355
	$ 2,411,738

Since the fair values of the above non-listed stocks investments cannot be reliably measured due to the range of reasonable fair value estimates was so significant, the above non-listed stocks investments owned by the Company were measured at costs less any impairment losses at the balance sheet dates.

The Company invested $300,000 thousand of Taiwania Capital Buffalo Fund Co., Ltd. in December 2017 and owns 12.9% equity shares of Taiwania Capital Buffalo Fund Co., Ltd. Taiwania Capital Buffalo Fund Co., Ltd. engages mainly in investment business.

There was no disposal of financial assets carried at cost in 2017.

The Company evaluated and concluded that there was no indication that financial assets carried at cost were impaired; therefore, no impairment loss was recognized for the year ended December 31, 2017.

15. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

	December 31	
	2018	2017
Investments in subsidiaries	$ 14,210,385	$ 13,628,711
Investments in associates	1,485,925	1,143,059
	$ 15,696,310	$ 14,771,770

a. Investments in subsidiaries

Investments in subsidiaries were as follows:

	Carrying Amount December 31	
	2018	2017
Listed		
Senao International Co., Ltd. ("SENAO")	$ 335,629	$ 1,678,240
CHIEF Telecom Inc. ("CHIEF")	1,694,950	-
Non-listed		
Light Era Development Co., Ltd. ("LED")	3,853,824	3,855,359
Chunghwa Investment Co., Ltd. ("CHI")	3,152,229	2,316,100
Donghwa Telecom Co., Ltd. ("DHT")	1,619,155	1,527,333
CHIEF Telecom Inc. ("CHIEF")	-	858,313
Chunghwa Telecom Singapore Pte., Ltd. ("CHTS")	915,532	848,442
Chunghwa System Integration Co., Ltd. ("CHSI")	738,139	715,610
Honghwa International Co., Ltd. ("HHI")	457,449	459,096
Chunghwa Telecom Global, Inc. ("CHTG")	288,207	218,982
CHT Security Co., Ltd. ("CHTSC")	237,927	240,007
CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	197,996	194,808
Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia")	192,841	212,251
Chunghwa Telecom Vietnam Co., Ltd. ("CHTV")	106,091	106,676
Chunghwa Leading Photonics Tech. Co., Ltd. ("CLPT")	98,763	98,007
Spring House Entertainment Tech. Inc. ("SHE")	98,298	93,907
Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT")	94,931	93,998
Smartfun Digital Co., Ltd. ("SFD")	72,031	73,049
Chunghwa Telecom Japan Co., Ltd. ("CHTJ")	62,626	48,730
Chunghwa Sochamp Technology Inc. ("CHST")	(6,233)	(10,197)
New Prospect Investments Holdings Ltd. (B.V.I.) ("New Prospect")	-	-
	$ 14,210,385	$ 13,628,711

The percentages of ownership and voting rights in subsidiaries held by the Company as of balance sheet dates were as follows:

	% of Ownership and Voting Right December 31	
	2018	2017
Senao International Co., Ltd. ("SENAO")	28	29
CHIEF Telecom Inc. ("CHIEF")	57	67
Light Era Development Co., Ltd. ("LED")	100	100
Chunghwa Investment Co., Ltd. ("CHI")	89	89
Donghwa Telecom Co., Ltd. ("DHT")	100	100
Chunghwa Telecom Singapore Pte., Ltd. ("CHTS")	100	100
Chunghwa System Integration Co., Ltd. ("CHSI")	100	100

(Continued)

	% of Ownership and Voting Right December 31	
	2018	2017
Honghwa International Co., Ltd. ("HHI")	100	100
Chunghwa Telecom Global, Inc. ("CHTG")	100	100
CHT Security Co., Ltd. ("CHTSC")	80	80
CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	100	100
Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia")	100	100
Chunghwa Telecom Vietnam Co., Ltd. ("CHTV")	100	100
Chunghwa Leading Photonics Tech. Co., Ltd. ("CLPT")	75	75
Spring House Entertainment Tech. Inc. ("SHE")	56	56
Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT")	100	100
Smartfun Digital Co., Ltd. ("SFD")	65	65
Chunghwa Telecom Japan Co., Ltd. ("CHTJ")	100	100
Chunghwa Sochamp Technology Inc. ("CHST")	51	51
New Prospect Investments Holdings Ltd. (B.V.I.) ("New Prospect")	-	-

(Concluded)

SENAO transferred its treasury stock to employees in June 2018 and the Company's ownership interest in SENAO decreased to 27.79% as of December 31, 2018. As the Company controls five out of nine seats of the Board of Directors of SENAO through the support of large beneficial stockholders, the accounts of SENAO are included in the consolidated financial statements.

The Company disposed some shares of CHIEF in June 2017 before CHIEF traded its shares on the emerging stock market according to the local requirements. The Company's equity ownership of CHIEF decreased to 66.9% as of December 31, 2017. CHIEF issued new shares in March and November 2018 as its employees exercised their options. In addition, the Company disposed some shares of CHIEF in May 2018 before CHIEF traded its shares on the General Stock Market of the Taipei Exchange according to the local requirements. Furthermore, the Company did not participate in the capital increase of CHIEF in June 2018. Therefore, the Company's equity ownership interest in CHIEF decreased to 57.21% as of December 31, 2018.

The Company invested 80% equity shares of CHT Security Co., Ltd. ("CHTSC") in December 2017.

The Company invested 100% equity shares of Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT") in March 2017.

New Prospect was approved to dissolve its business in April 2017. The liquidation of New Prospect was completed in May 2017.

For the details of the subsidiaries indirectly held by the Company, please refer to Note 39.

The Company's share of profit (loss) and other comprehensive income (loss) of the subsidiaries was recognized based on the audited financial statements.

b. Investments in associates

Investments in associates were as follows:

	Carrying Amount December 31	
	2018	2017
Non-listed		
International Integrated System, Inc. (“IISI”)	$ 310,842	$ 296,333
Viettel-CHT Co., Ltd. (“Viettel-CHT”)	286,510	256,323
Taiwan International Standard Electronics Co., Ltd. (“TISE”)	216,439	136,885
Chunghwa PChome Fund I Co., Ltd. (“CPFI”)	198,974	-
KKBOX Taiwan Co., Ltd. (“KKBOXTW”, previously known as Skysoft Co., Ltd.)	147,360	139,741
KingwayTek Technology Co., Ltd. (“KWT”)	134,925	128,269
So-net Entertainment Taiwan Limited (“So-net”)	119,956	104,171
Taiwan International Ports Logistics Corporation (“TIPL”)	49,650	49,631
UUPON Inc. (“UUPON”, previously known as Dian Zuan Integrating Marketing Co., Ltd.)	11,432	17,218
Alliance Digital Tech Co., Ltd. (“ADT”)	5,080	14,488
Cornerstone Ventures Co., Ltd. (“CVC”)	4,757	-
	$ 1,485,925	$ 1,143,059

The percentages of ownership and voting rights in associates held by the Company as of balance sheet dates were as follows:

	% of Ownership and Voting Right December 31	
	2018	2017
International Integrated System, Inc. (“IISI”)	32	32
Viettel-CHT Co., Ltd. (“Viettel-CHT”)	30	30
Taiwan International Standard Electronics Co., Ltd. (“TISE”)	40	40
Chunghwa PChome Fund I Co., Ltd. (“CPFI”)	50	-
KKBOX Taiwan Co., Ltd. (“KKBOXTW”)	30	30
KingwayTek Technology Co., Ltd. (“KWT”)	26	26
So-net Entertainment Taiwan Limited (“So-net”)	30	30
Taiwan International Ports Logistics Corporation (“TIPL”)	27	27
UUPON Inc. (“UUPON”)	15	15
Alliance Digital Tech Co., Ltd. (“ADT”)	14	14
Cornerstone Ventures Co., Ltd. (“CVC”)	49	-

None of the above associates is considered individually material to the Company. Summarized financial information of associates that are not individually material was as follows:

	Year Ended December 31	
	2018	2017
The Company’s share of profits	$ 235,356	$ 143,197
The Company’s share of other comprehensive income (loss)	4,060	(1,028)
The Company’s share of total comprehensive income	$ 239,416	$ 142,169

The Company invested 50% equity shares of Chunghwa PChome Fund I Co., Ltd. (“CPFI”) in October 2018. The Company has only two out of five seats of the Board of Directors of CPFI, and has no control but significant influence over CPFI. Therefore, the Company recognized CPFI as investment in associate. CPFI engages mainly in investment business.

The Company invested 49% equity shares of Cornerstone Ventures Co., Ltd. (“CVC”) in October 2018. The Company has only two out of five seats of the Board of Directors of CVC, and has no control but significant influence over CVC. Therefore, the Company recognized CVC as investment in associate. CVC engages mainly in investment business.

The Company did not participate in the capital increase of UUPON in April 2017 and the ownership interest of UUPON decreased to 15%. UUPON engages mainly in information technology service and general advertisement service.

The Company owns 14% equity shares of ADT. As the Company remains the seat in the Board of Directors of ADT and considers the relative size of ownership interest and the dispersion of shares owned by the other stockholders, the Company remains significant influence over ADT. In June 2018, the stockholders of ADT approved to dissolve. ADT engages mainly in the development of mobile payments and information processing service.

The Company’s share of profit and other comprehensive income (loss) of associates was recognized based on the audited financial statements.

c. Investments in joint ventures

In December 2016, the stockholders of CBO approved that CBO should start its dissolution from December 31, 2016. CBO completed its liquidation in December 2017.

In March 2016, the stockholders of HDD approved that HDD should start its dissolution from March 31, 2016. HDD completed its liquidation in March 2017.

None of the above joint ventures is considered individually material to the Company. Summarized financial information of joint ventures that was not material to the Company was as follows:

	Year Ended December 31	
	2018	2017
The Company’s share of loss	$ -	$ (779)
The Company’s share of other comprehensive income	-	-
The Company’s share of total comprehensive loss	$ -	$ (779)

The Company’s share of losses of the joint ventures was recognized based on the audited financial statements.

16. PROPERTY, PLANT AND EQUIPMENT

	Land	Land Improvements	Buildings	Computer Equipment	Telecommunications Equipment	Transportation Equipment	Miscellaneous Equipment	Construction in Progress and Equipment to be Accepted	Total
Cost									
Balance on January 1, 2017	$ 100,877,222	$ 1,580,893	$ 65,415,472	$ 13,852,367	$ 712,160,794	$ 3,861,941	$ 7,495,894	$ 19,986,617	$ 925,231,200
Additions	-	-	-	4	9,124	60	-	25,264,145	25,273,333
Disposal	(157,928)	(4,701)	(108,349)	(938,945)	(13,646,913)	(61,470)	(326,606)	-	(15,244,912)
Other	365,049	18,707	5,024,273	759,539	20,034,386	29,012	670,318	(26,973,633)	(72,349)
Balance on December 31, 2017	$ 101,084,343	$ 1,594,899	$ 70,331,396	$ 13,672,965	$ 718,557,391	$ 3,829,543	$ 7,839,606	$ 18,277,129	$ 935,187,272
Accumulated depreciation and impairment									
Balance on January 1, 2017	$ -	$ (1,248,614)	$ (25,001,672)	$ (11,210,188)	$ (594,719,411)	$ (3,233,727)	$ (5,905,261)	$ -	$ (641,318,873)
Depreciation expenses	-	(49,673)	(1,328,809)	(1,164,331)	(24,216,471)	(328,998)	(478,311)	-	(27,566,593)
Disposal	-	4,688	47,462	932,416	13,620,399	61,443	318,966	-	14,985,374
Other	-	1,072	147,222	25,508	78,266	(8,916)	(116,480)	-	126,672
Balance on December 31, 2017	$ -	$ (1,292,527)	$ (26,135,797)	$ (11,416,595)	$ (605,237,217)	$ (3,510,198)	$ (6,181,086)	$ -	$ (653,773,420)
Balance on January 1, 2017, net	$ 100,877,222	$ 332,279	$ 40,413,800	$ 2,642,179	$ 117,441,383	$ 628,214	$ 1,590,633	$ 19,986,617	$ 283,912,327
Balance on December 31, 2017, net	$ 101,084,343	$ 302,372	$ 44,195,599	$ 2,256,370	$ 113,320,174	$ 319,345	$ 1,658,520	$ 18,277,129	$ 281,413,852
Cost									
Balance on January 1, 2018	$ 101,084,343	$ 1,594,899	$ 70,331,396	$ 13,672,965	$ 718,557,391	$ 3,829,543	$ 7,839,606	$ 18,277,129	$ 935,187,272
Additions	-	-	-	50	6,944	-	2	26,830,327	26,837,323
Disposal	(71,333)	(337)	-	(589,922)	(31,949,302)	(29,250)	(535,897)	-	(33,176,041)
Other	(35,805)	5,761	193,605	692,570	25,465,666	77,073	520,643	(27,161,582)	(242,069)
Balance on December 31, 2018	$ 100,977,205	$ 1,600,323	$ 70,525,001	$ 13,775,663	$ 712,080,699	$ 3,877,366	$ 7,824,354	$ 17,945,874	$ 928,606,485
Accumulated depreciation and impairment									
Balance on January 1, 2018	$ -	$ (1,292,527)	$ (26,135,797)	$ (11,416,595)	$ (605,237,217)	$ (3,510,198)	$ (6,181,086)	$ -	$ (653,773,420)
Depreciation expenses	-	(45,731)	(1,281,264)	(945,621)	(23,970,020)	(161,226)	(442,840)	-	(26,846,702)
Disposal	-	337	-	584,047	31,918,865	29,186	530,625	-	33,063,060
Other	-	217	28,453	(5,193)	11,274	(5,096)	(23,021)	-	6,634
Balance on December 31, 2018	$ -	$ (1,337,704)	$ (27,388,608)	$ (11,783,362)	$ (597,277,098)	$ (3,647,334)	$ (6,116,322)	$ -	$ (647,550,428)
Balance on January 1, 2018, net	$ 101,084,343	$ 302,372	$ 44,195,599	$ 2,256,370	$ 113,320,174	$ 319,345	$ 1,658,520	$ 18,277,129	$ 281,413,852
Balance on December 31, 2018, net	$ 100,977,205	$ 262,619	$ 43,136,393	$ 1,992,301	$ 114,803,601	$ 230,032	$ 1,708,032	$ 17,945,874	$ 281,056,057

There was no indication that property, plant and equipment was impaired so the Company did not recognize any impairment loss for the years ended December 31, 2018 and 2017.

Depreciation expense is computed using the straight-line method over the following estimated service lives:

Land improvements	8-30 years
Buildings	
Main buildings	35-60 years
Other building facilities	4-10 years
Computer equipment	5-6 years
Telecommunications equipment	
Telecommunication circuits	9-15 years
Telecommunication machinery and antennas equipment	5-10 years
Transportation equipment	3-10 years
Miscellaneous equipment	
Leasehold improvements	2-6 years
Mechanical and air conditioner equipment	8-16 years
Others	3-10 years

17. INVESTMENT PROPERTIES

	Investment Properties
Cost	
Balance on January 1, 2017	$ 9,119,876
Reclassification	(59,834)
Balance on December 31, 2017	$ 9,060,042
Accumulated depreciation and impairment	
Balance on January 1, 2017	$ (1,080,118)
Depreciation expense	(20,831)
Reclassification	2,946
Reversal of impairment loss	10,979
Balance on December 31, 2017	$ (1,087,024)
Balance on January 1, 2017, net	$ 8,039,758
Balance on December 31, 2017, net	$ 7,973,018
Cost	
Balance on January 1, 2018	$ 9,060,042
Additions	5,627
Reclassification	252,008
Balance on December 31, 2018	$ 9,317,677
Accumulated depreciation and impairment	
Balance on January 1, 2018	$ (1,087,024)
Depreciation expense	(20,777)
Reclassification	(16,572)
Reversal of impairment loss	19,133
Balance on December 31, 2018	$ (1,105,240)
Balance on January 1, 2018, net	$ 7,973,018
Balance on December 31, 2018, net	$ 8,212,437

After the evaluation of land and buildings, the Company concluded the recoverable amount which represented the fair value less costs to sell of some land and buildings was higher than the carrying amount. Therefore, the Company recognized reversal of impairment losses of $19,133 thousand and $10,979 thousand for the years ended December 31, 2018 and 2017, respectively, and the amounts were recognized only to the extent of impairment losses that had been recognized in prior years. The reversal of impairment loss was included in other income and expenses in the statements of comprehensive income.

Depreciation expense is computed using the straight-line method over the following estimated service lives:

Land improvements	8-30 years
Buildings	
Main buildings	35-60 years
Other building facilities	4-10 years

The fair values of the Company's investment properties as of December 31, 2018 and 2017 were determined by Level 3 fair value measurements inputs based on the appraisal reports conducted by independent appraisers. Those appraisal reports are based on the comparison approach, income approach or cost approach. Key assumptions and the fair values were as follows:

	December 31	
	2018	2017
Fair value	$ 18,282,068	$ 17,490,094
Overall capital interest rate	1.02%-4.04%	1.46%-2.20%
Profit margin ratio	12%-20%	12%-20%
Discount rate	-	-
Capitalization rate	0.79%-1.75%	0.47%-1.69%

All of the Company's investment properties are held under freehold interest.

18. INTANGIBLE ASSETS

	3G and 4G Concession	Computer Software	Others	Total
Cost				
Balance on January 1, 2017	$ 59,209,000	$ 3,095,616	$ 7,467	$ 62,312,083
Additions - acquired separately	10,935,000	314,110	1,782	11,250,892
Disposal	-	(445,964)	(18)	(445,982)
Balance on December 31, 2017	$ 70,144,000	$ 2,963,762	$ 9,231	$ 73,116,993
Accumulated amortization and impairment				
Balance on January 1, 2017	$ (13,412,712)	$ (2,169,902)	$ (3,402)	$ (15,586,016)
Amortization expenses	(3,261,853)	(430,827)	(1,026)	(3,693,706)
Disposal	-	445,964	18	445,982
Balance on December 31, 2017	$ (16,674,565)	$ (2,154,765)	$ (4,410)	$ (18,833,740)
Balance on January 1, 2017, net	$ 45,796,288	$ 925,714	$ 4,065	$ 46,726,067
Balance on December 31, 2017, net	$ 53,469,435	$ 808,997	$ 4,821	$ 54,283,253

(Continued)

	3G and 4G Concession	Computer Software	Others	Total
Cost				
Balance on January 1, 2018	$ 70,144,000	$ 2,963,762	$ 9,231	$ 73,116,993
Additions - acquired separately	-	424,397	8,688	433,085
Disposal	-	(363,953)	(9)	(363,962)
Balance on December 31, 2018	$ 70,144,000	$ 3,024,206	$ 17,910	$ 73,186,116
Accumulated amortization and impairment				
Balance on January 1, 2018	$ (16,674,565)	$ (2,154,765)	$ (4,410)	$ (18,833,740)
Amortization expenses	(3,957,909)	(352,634)	(1,500)	(4,312,043)
Disposal	-	363,953	9	363,962
Balance on December 31, 2018	$ (20,632,474)	$ (2,143,446)	$ (5,901)	$ (22,781,821)
Balance on January 1, 2018, net	$ 53,469,435	$ 808,997	$ 4,821	$ 54,283,253
Balance on December 31, 2018, net	$ 49,511,526	$ 880,760	$ 12,009	$ 50,404,295

(Concluded)

For long-term business development, the Company submitted an application to NCC for 4G mobile broadband license in 1.8 and 2.1 GHz frequency bands and obtained certain spectrums. The Company paid the 4G concession fee amounting to $10,935,000 thousand in November 2017.

The concessions are granted and issued by the NCC. The concession fees are amortized using the straight-line method from the date operations commence through the date the license expires. The carrying amount of 3G concession fee was fully amortized in December 2018, and 4G concession fees will be fully amortized by December 2030 and December 2033.

The computer software is amortized using the straight-line method over the estimated useful lives of 1 to 10 years. Other intangible assets are amortized using the straight-line method over the estimated useful lives of 1 to 11 years.

19. OTHER ASSETS

	December 31	
	2018	2017
Spare parts	$ 2,423,391	$ 2,059,905
Refundable deposits	1,659,261	1,551,953
Other financial assets	1,000,000	1,000,000
Others	2,153,044	2,588,595
	$ 7,235,696	$ 7,200,453

(Continued)

	December 31 2018	December 31 2017
Current		
Spare parts	$ 2,423,391	$ 2,059,905
Others	86,181	47,365
	$ 2,509,572	$ 2,107,270
Noncurrent		
Refundable deposits	$ 1,659,261	$ 1,551,953
Other financial assets	1,000,000	1,000,000
Others	2,066,863	2,541,230
	$ 4,726,124	$ 5,093,183

(Concluded)

Other financial assets - noncurrent was Piping Fund. As part of the government's effort to upgrade the existing telecommunications infrastructure, the Company and other public utility companies were required by the ROC government to contribute to a Piping Fund administered by the Taipei City Government. This fund was used to finance various telecommunications infrastructure projects. Net assets of this fund will be returned proportionately after the project is completed.

20. HEDGING DERIVATIVE FINANCIAL INSTRUMENTS

2018

The Company's hedge strategy is to enter forward exchange contracts - buy to avoid its foreign currency exposure to certain foreign currency denominated equipment payments in the following six months. In addition, the Company's management considers the market condition to determine the hedge ratio and enters into forward exchange contracts with the banks to avoid the foreign currency risk.

The Company signed equipment purchase contracts with suppliers and entered into forward exchange contracts to avoid foreign currency risk exposure to Euro-denominated purchase commitments. Those forward exchange contracts were designated as cash flow hedges. When forecast purchases actually take place, basis adjustments are made to the initial carrying amounts of hedged items.

For the hedges of highly probable forecast sales and purchases, as the critical terms (i.e. the notional amount, life and underlying) of the forward foreign exchange contracts and their corresponding hedged items are the same, the Company performs a qualitative assessment of effectiveness and it is expected that the value of the forward contracts and the value of the corresponding hedged items will systematically change in opposite direction in response to movements in the underlying exchange rates.

The main source of hedge ineffectiveness in these hedging relationships is the effect of credit risks of the Company and the counterparty on the fair value of the forward exchange contracts. Such credit risks do not impact the fair value of the hedged item attributable to changes in foreign exchange rates. No other sources of ineffectiveness emerged from these hedging relationships.

The following tables summarized the information relating to the hedges for foreign currency risk.

December 31, 2018

Hedging Instruments	Currency	Notional Amount (In Thousands)	Maturity	Forward Rate	Line Item in Balance Sheet	Carrying Amount Asset	Carrying Amount Liability	Change in Fair Values of Hedging Instruments Used for Calculating Hedge Ineffectiveness
Cash flow hedge								
Forecast purchases - forward exchange contracts	EUR/NT$	EUR4,911/ NT$171,797	2019.03	$ 34.98	Hedging financial assets (liabilities)	$ 1,069	$ -	$ 1,919

Hedged Items	Change in Value of Hedged Item Used for Calculating Hedge Ineffectiveness	Accumulated Gain or Loss on Hedging Instruments in Other Equity: Continuing Hedges	Accumulated Gain or Loss on Hedging Instruments in Other Equity: Hedge Accounting No Longer Applied
Cash flow hedge			
Forecast equipment purchases	$ (1,919)	$ 1,069	$ -

Year ended December 31, 2018

	Comprehensive Income				
				Reclassification from Equity to Profit or Loss and the Adjusted Line Item	
Hedge Transaction	Hedging Gain or Loss Recognized in OCI	Amount of Hedge Ineffectiveness Recognized in Profit or Loss	Line Item in Which Hedge Ineffectiveness is Included	Amount Reclassified to P/L and the Adjusted Line Item	Due to Hedged Future Cash Flows No Longer Expected to Occur
Cash flow hedge					
Forecast equipment purchases	$ 1,919	$ -	-	$ (4,030) Construction in progress and equipment to be accepted	$ (297) Other gains and losses

2017

The hedging policy of 2017 for foreign currency risk was the same as that in 2018. The hedging instrument was showed as follows:

	December 31, 2017
Hedging derivative financial Liabilities	
Cash flow hedge - forward exchange contracts	$ 850

For the year ended December 31, 2017, change in fair value of the hedged items recognized in other comprehensive income was loss of $263 thousand. Upon the completion of the purchase transaction, the amount deferred and recognized in equity initially will be reclassified into equipment as its carrying value.

As of December 31, 2017, the Company expected part of the equipment purchase transactions would not occur and reclassified the related gain of $1,748 thousand from equity to profit or loss which arising from the forward exchange contracts of the aforementioned transactions for the year ended December 31, 2017.

The outstanding forward exchange contracts at the balance sheet date was as follows:

	Currency	Maturity Period	Contract Amount (Thousands)
December 31, 2017			
Forward exchange contracts - buy	EUR/NT$	2018.03-06	EUR3,963/NT$141,605

Loss arising from the hedging derivative financial instruments that has been reclassified from equity to initial cost of the property, plant and equipment was as follows:

	Year Ended December 31, 2017
Construction in progress and equipment to be accepted	$ (2,411)

21. TRADE NOTES AND ACCOUNTS PAYABLE

	December 31	
	2018	2017
Trade notes and accounts payable	$ 16,773,477	$ 15,645,102

Trade notes and accounts payable were attributable to operating activities and the trading conditions were agreed separately.

22. OTHER PAYABLES

	December 31	
	2018	2017
Accrued salary and compensation	$ 7,628,124	$ 8,373,882
Payables to contractors	1,530,713	2,057,651
Accrued compensation to employees and remuneration to directors	1,442,480	1,636,762
Payables to equipment suppliers	1,399,296	1,537,536
Accrued franchise fees	1,148,241	1,244,800
Amounts collected for others	1,100,599	1,073,115
Accrued maintenance costs	1,046,412	1,080,410
Others	4,853,125	5,020,577
	$ 20,148,990	$ 22,024,733

23. PROVISIONS

	December 31	
	2018	2017
Warranties	$ 54,308	$ 58,350
Employee benefits	51,393	43,429
Trade-in right	-	87,572
Others	23,770	4,467
	$ 129,471	$ 193,818
Current	$ 50,844	$ 115,305
Noncurrent	78,627	78,513
	$ 129,471	$ 193,818

	Warranties	Employee Benefits	Trade-in Right	Others	Total
Balance on January 1, 2017	$ 47,493	$ 38,014	$ 31,378	$ 4,447	$ 121,332
Additional provisions recognized	32,776	7,187	69,308	50	109,321
Used /forfeited during the year	(21,919)	(1,772)	(13,114)	(30)	(36,835)
Balance on December 31, 2017	$ 58,350	$ 43,429	$ 87,572	$ 4,467	$ 193,818
Balance on January 1, 2018	$ 58,350	$ 43,429	$ 87,572	$ 4,467	$ 193,818
Effect of retrospective application of IFRS 15	-	-	(87,572)	-	(87,572)
Balance on January 1, 2018 as adjusted	58,350	43,429	-	4,467	106,246
Additional provisions recognized	24,370	9,180	-	19,403	52,953
Used /forfeited during the year	(28,412)	(1,216)	-	(100)	(29,728)
Balance on December 31, 2018	$ 54,308	$ 51,393	$ -	$ 23,770	$ 129,471

a. The provision for warranties claims represents the present value of the management's best estimate of the future outflow of economic benefits that will be required under the Company's obligation for warranties in sales agreements. The estimate has been made based on the historical warranty experience.

b. The provision for employee benefits represents vested long-term service compensation accrued.

c. The provision for trade-in right in 2017 was based on the management's judgments to estimate the trade-in right of products exercised by customers in the future. The provision was recognized as a reduction of revenue in the period in which the goods are sold.

24. ADVANCE RECEIPTS - 2017

Advance receipts are mainly from advance telecommunication charges. For the obligations to transfer goods or services to customers for which the Company has received consideration from, they were retrospectively reclassified as contract liabilities starting from 2018.

25. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The pension plan under the Labor Pension Act of ROC (the "LPA") is considered as a defined contribution plan. Based on the LPA, the Company makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

b. Defined benefit plans

The Company completed its privatization plans on August 12, 2005. The Company is required to pay all accrued pension obligations including service clearance payment, lump sum payment under civil service plan, additional separation payments, etc. upon the completion of the privatization in accordance with the Statute Governing Privatization of Stated-owned Enterprises. After paying all pension obligations for privatization, the plan assets of the Company should be transferred to the Fund for Privatization of Government-owned Enterprises (the "Privatization Fund") under the Executive Yuan. On August 7, 2006, the Company transferred the remaining balance of fund to the Privatization Fund. However, according to the instructions of MOTC, the Company was requested to administer the distributions to employees for pension obligations including service clearance payment, lump sum payment under civil service plan, additional separation payments, etc. upon the completion of the privatization and recognized in other current monetary assets.

The Company with the pension mechanism under the Labor Standards Law is considered as defined benefit plans. These pension plans provide benefits based on an employee's length of service and average six-month salary prior to retirement. The Company contributes an amount no more than 15% of salaries paid each month to their respective pension funds (the Funds), which are administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the names of the Committees in the Bank of Taiwan. The plan assets are held in a commingled fund which is operated and managed by the government's designated authorities; as such, the Company does not have any right to intervene in the investments of the funds. According to the Article 56 of the Labor Standards Law in the ROC revised in February 2015, entities are required to contribute the difference in one appropriation to the Funds before the end of next March when the balance of the Funds is insufficient to pay employees who will meet the retirement eligibility criteria within next year.

The amounts included in the balance sheets arising from the Company's obligation in respect of its defined benefit plans were as follows:

	December 31	
	2018	2017
Present value of funded defined benefit obligation	$ 41,088,052	$ 37,369,934
Fair value of plan assets	(38,817,587)	(34,770,538)
Funded status - deficit	$ 2,270,465	$ 2,599,396
Net defined benefit liabilities	$ 3,419,867	$ 2,599,396
Net defined benefit assets	(1,149,402)	-
	$ 2,270,465	$ 2,599,396

Movements in the defined benefit obligation and the fair value of plan assets were as follows:

	Present Value of Funded Defined Benefit Obligation	Fair Value of Plan Assets	Net Defined Benefit Liabilities (Assets)
Balance on January 1, 2017	$ 34,283,765	$ 33,749,106	$ 534,659
Current service cost	2,916,782	-	2,916,782
Interest expense/interest income	501,935	515,921	(13,986)
Amounts recognized in profit or loss	3,418,717	515,921	2,902,796
Remeasurement on the net defined benefit liability			
Return on plan assets (excluding amounts included in net interest)	-	(191,286)	191,286
Actuarial losses recognized from experience adjustments	1,819,762	-	1,819,762
Amounts recognized in other comprehensive income	1,819,762	(191,286)	2,011,048
Contributions from employer	-	2,627,873	(2,627,873)
Benefits paid	(1,931,076)	(1,931,076)	-
Benefits paid directly by the Company	(221,234)	-	(221,234)
Balance on December 31, 2017	37,369,934	34,770,538	2,599,396
Current service cost	3,023,221	-	3,023,221
Interest expense/interest income	545,268	540,995	4,273
Amounts recognized in profit or loss	3,568,489	540,995	3,027,494
Remeasurement on the net defined benefit liability			
Return on plan assets (excluding amounts included in net interest)	-	870,224	(870,224)
Actuarial losses recognized from changes in financial assumptions	1,255,589	-	1,255,589
Actuarial losses recognized from experience adjustments	816,104	-	816,104
Amounts recognized in other comprehensive income	2,071,693	870,224	1,201,469
Contributions from employer	-	4,366,333	(4,366,333)
Benefits paid	(1,730,503)	(1,730,503)	-
Benefits paid directly by the Company	(191,561)	-	(191,561)
Balance on December 31, 2018	$ 41,088,052	$ 38,817,587	$ 2,270,465

Relevant pension costs recognized in profit and loss for defined benefit plans were as follows:

	Year Ended December 31	
	2018	2017
Operating costs	$ 1,795,299	$ 1,733,699
Marketing expenses	883,744	845,311
General and administrative expenses	163,958	155,384
Research and development expenses	107,494	96,953
	$ 2,950,495	$ 2,831,347

The Company is exposed to following risks for the defined benefits plans under the Labor Standards Law:

a. Investment risk

Under the Labor Standards Law, the rate of return on assets shall not be lower than the average interest rate on a two-year time deposit published by the local banks and the government is responsible for any shortfall in the event that the rate of return is less than the required rate of return. The plan assets are held in a commingled fund mainly invested in foreign and domestic equity and debt securities and bank deposits which is operated and managed by the government's designated authorities; as such, the Company does not have any right to intervene in the investments of the funds.

b. Interest rate risk

The decline in government bond interest rate will increase the present value of the obligation on the defined benefit plan, while the return on plan assets will increase. The net effect on the present value of the obligation on defined benefit plan is partially offset by the return on plan assets.

c. Salary risk

The calculation of the present value of defined benefit obligation is referred to the plan participants' future salary. Hence, the increase in plan participants' salary will increase the present value of the defined benefit obligation.

The most recent actuarial valuation of plan assets and the present value of the defined benefit obligation were carried out by the independent actuary. The principal assumptions used for the purpose of the actuarial valuations were as follows:

	Measurement Date December 31	
	2018	2017
Discount rates	1.00%	1.50%
Expected rates of salary increase	1.20%	1.20%

If reasonably possible changes of the respective significant actuarial assumptions occur at the end of reporting periods, while holding all other assumptions constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	December 31	
	2018	2017
Discount rates		
0.5% increase	$ (1,240,406)	$ (1,214,303)
0.5% decrease	$ 1,318,726	$ 1,290,356
Expected rates of salary increase		
0.5% increase	$ 1,410,497	$ 1,378,983
0.5% decrease	$ (1,338,223)	$ (1,308,417)

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated. There is no change in the methods and assumptions used in preparing the sensitivity analysis from the previous period.

	December 31	
	2018	2017
The expected contributions to the plan for the next year	$ 2,229,507	$ 4,385,344
The average duration of the defined benefit obligation	6.5 years	6.8 years

As of December 31, 2018, the Company's maturity analysis of the undiscounted benefit payments was as follows:

Year	Amount
2019	$ 2,731,188
2020	6,082,705
2021	10,408,925
2022	12,556,781
2023 and thereafter	46,802,776
	$ 78,582,375

26. EQUITY

a. Share capital

1) Common stocks

	December 31	
	2018	2017
Number of authorized shares (thousand)	12,000,000	12,000,000
Authorized shares	$ 120,000,000	$ 120,000,000
Number of issued and paid shares (thousand)	7,757,447	7,757,447
Issued shares	$ 77,574,465	$ 77,574,465

The issued common stocks of a par value at $10 per share entitled the right to vote and receive dividends.

2) Global depositary receipts

The MOTC and some stockholders sold some common stocks of the Company in an international offering of securities in the form of American Depositary Shares ("ADS") (one ADS represents 10 common stocks) in July 2003, August 2005, and September 2006. The ADSs were traded on the New York Stock Exchange since July 17, 2003. As of December 31, 2018, the outstanding ADSs were 234,273 thousand common stocks, which equaled 23,427 thousand units and represented 3.02% of the Company's total outstanding common stocks.

The ADS holders generally have the same rights and obligations as other common stockholders, subject to the provision of relevant laws. The exercise of such rights and obligations shall comply with the related regulations and deposit agreement, which stipulate, among other things, that ADS holders are entitled to, through deposit agents:

a) Exercise their voting rights,

b) Sell their ADSs, and

c) Receive dividends declared and subscribe to the issuance of new shares.

b. Additional paid-in capital

The adjustments of additional paid-in capital for the years ended December 31, 2018 and 2017 were as follows:

	Share Premium	Movements of Additional Paid-in Capital for Associates and Joint Ventures Accounted for Using Equity Method	Movements of Additional Paid-in Capital Arising from Changes in Equities of Subsidiaries	Difference between Consideration Received and Carrying Amount of the Subsidiaries' Net Assets upon Disposal	Donated Capital	Stockholders' Contribution due to Privatization	Total
Balance on January 1, 2017	$ 147,329,386	$ 76,972	$ 390,030	$ 84,850	$ 13,170	$ 20,648,078	$ 168,542,486
Change in additional paid-in capital from investments in subsidiaries, associates and joint ventures accounted for using equity method	-	13,965	-	321	-	-	14,286
Partial disposal of interests in subsidiaries	-	-	-	76,393	-	-	76,393
Unclaimed dividend	-	-	-	-	3,023	-	3,023
Treasury stock transfer of subsidiaries	-	-	26,900	-	-	-	26,900
Change in additional paid-in capital for not participating in the capital increase of a subsidiary	-	-	801,727	-	-	-	801,727
Other change in additional paid-in capital in subsidiaries	-	-	84	-	-	-	84
Share-based payment transactions of subsidiaries	-	-	1,984	-	-	-	1,984
Balance on December 31, 2017	147,329,386	90,937	1,220,725	161,564	16,193	20,648,078	169,466,883
Unclaimed dividend	-	-	-	-	2,455	-	2,455
Change in additional paid-in capital from investments in subsidiaries, associates and joint ventures accounted for using equity method	-	(1,044)	-	109,310	-	-	108,266
Partial disposal of interests in subsidiaries	-	-	-	716,737	-	-	716,737
Treasury stock transfer of subsidiaries	-	-	54,934	-	-	-	54,934
Change in additional paid-in capital for not participating in the capital increase of a subsidiary	-	-	776,713	-	-	-	776,713
Share-based payment transactions of subsidiaries	-	-	10,776	-	-	-	10,776
Balance on December 31, 2018	$ 147,329,386	$ 89,893	$ 2,063,148	$ 987,611	$ 18,648	$ 20,648,078	$ 171,136,764

Additional paid-in capital from share premium, donated capital and the difference between consideration received and the carrying amount of the subsidiaries' net assets upon disposal may be utilized to offset deficits. Furthermore, when the Company has no deficit, it may be distributed in cash or capitalized, which however is limited to a certain percentage of the Company's paid-in capital except the additional paid-in capital arising from unclaimed dividend can only be utilized to offset deficits.

The additional paid-in capital from movements of paid-in capital arising from changes in equities of subsidiaries may only be utilized to offset deficits.

Among additional paid-in capital from movements of investments in associates and joint ventures accounted for using equity method, the portion arising from the difference between consideration received and the carrying amount of the subsidiaries' net assets upon disposal may be utilized to offset deficits; furthermore, when the Company has no deficit, it may be distributed in cash or capitalized. However, other additional paid-in capital recognized in proportion of share ownership may only be utilized to offset deficits.

c. Retained earnings and dividends policy

In accordance with the the Company's Articles of Incorporation, the Company must pay all outstanding taxes, offset deficits in prior years and set aside a legal reserve equal to 10% of its net income before distributing a dividend or making any other distribution to stockholders, except when the accumulated amount of such legal reserve equals to the Company's total issued capital, and depending on its business needs or requirements, may also set aside or reverse special reserves. No less than 50% of the remaining earnings comprising remaining balance of net income, if any, plus cumulative undistributed earnings shall be distributed as stockholders' dividends, of which cash dividends to be distributed shall not be less than 50% of the total amount of dividends to be distributed. If cash dividend to be distributed is less than $0.10 per share, such cash dividend shall be distributed in the form of common stocks.

The Company should appropriate or reverse a special reserve in accordance with Rule No. 1010012865 and Rule No. 1010047490 issued by the FSC and the directive entitled "Questions and Answers on Special Reserves Appropriated Following the Adoption of Taiwan-IFRSs". Distributions can be made out of any subsequent reversal of the debit to other equity items.

The appropriation for legal reserve shall be made until the accumulated reserve equals the aggregate par value of the outstanding capital stock of the Company. This reserve can only be used to offset a deficit, or, when the legal reserve has exceeded 25% of the Company's paid-in capital, the excess may be transferred to capital or distributed in cash.

The appropriations of the 2017 and 2016 earnings of the Company approved by the stockholders in their meetings on June 15, 2018 and on June 23, 2017 were as follows:

	Appropriation of Earnings		Dividends Per Share (NT$)	
	For Fiscal Year 2017	For Fiscal Year 2016	For Fiscal Year 2017	For Fiscal Year 2016
Provision for (reversal of) special reserve	$ (5,404)	$ 5,404		
Cash dividends	37,204,714	38,336,525	$ 4.796	$ 4.9419

The appropriations of earnings for 2018 had been proposed by the Company's Board of Directors on March 19, 2019. The appropriations and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT$)
Cash dividends	$ 34,745,603	$ 4.479

The appropriations of earnings for 2018 are subject to the resolution of the stockholders' meeting planned to be held on June 21, 2019. Information of the appropriation of the Company's earnings proposed by the Board of Directors and approved by the stockholders is available on the Market Observation Post System website.

d. Other adjustments

1) Exchange differences arising from the translation of the foreign operations

The exchange differences arising from the translation of the foreign operations from their functional currency to New Taiwan dollars were recognized as exchange differences arising from the translation of the foreign operations in other comprehensive income.

2) Unrealized gain or loss on available-for-sale financial assets

Balance on January 1, 2017	$ (50,885)
Unrealized gain or loss on available-for-sale financial assets	619,512
Share of unrealized loss on available-for-sale financial assets of subsidiaries, associates and joint ventures accounted for using equity method	(10,518)
Balance on December 31, 2017 under IAS 39	558,109
Effect of retrospective application of IFRS 9	(558,109)
Balance on January 1, 2018 under IFRS 9	$ -

3) Unrealized gain or loss on financial assets at FVOCI

	Year Ended December 31, 2018
Balance on January 1, 2018 under IAS 39	$ -
Effect of retrospective application of IFRS 9	883,420
Balance on January 1, 2018 under IFRS 9	883,420
Unrealized gain or loss for the year	
Equity instruments	(345,148)
Balance on December 31, 2018	$ 538,272

27. REVENUES

	Year Ended December 31, 2018
Revenue from contracts with customers	$ 184,335,136
Other revenues	
Rental income	705,623
Other	290,940
	996,563
	$ 185,331,699

The information of performance obligations in customer contracts, please refer to Note 3 Summary of Significant Accounting Policies for details.

a. Disaggregation of revenue_

2018

	Domestic Fixed Communi-cations Business	Mobile Communi-cations Business	Internet Business	International Fixed Communi-cations Business	Others	Total
Main Products and Service Revenues						
Mobile services revenue	$ -	$ 67,868,502	$ -	$ -	$ -	$ 67,868,502
Sales of products	1,731,703	9,878,434	-	8,299	-	11,618,436
Local telephone and domestic long distance telephone services revenue	30,018,026	-	-	-	-	30,018,026
Broadband access and domestic leased line services revenue	22,489,839	-	-	-	-	22,489,839
Data Communications internet services revenue	-	-	19,784,304	-	-	19,784,304
International network and leased telephone services revenue	-	-	-	8,329,981	-	8,329,981
Others	12,036,469	268,469	8,200,599	3,597,271	123,240	24,226,048
	$ 66,276,037	$ 78,015,405	$ 27,984,903	$ 11,935,551	$ 123,240	$184,335,136

b. Contract balances

	December 31, 2018
Trade notes and accounts receivable (Note 10)	$ 27,851,879
Contract assets	
Products and service bundling	$ 2,225,636
Other	101,890
Less: Loss allowance	(6,381)
	$ 2,321,145
Current	$ 1,653,886
Noncurrent	667,259
	$ 2,321,145
Contract liabilities	
Telecommunications business	$ 8,443,296
Project business	4,439,286
Products and service bundling	28,689
Other	231,812
	$ 13,143,083
Current	$ 10,686,892
Noncurrent	2,456,191
	$ 13,143,083

The changes in the contract asset and the contract liability balances primarily result from the timing difference between the satisfaction of performance obligations and the payments collected from customers. Significant changes of contract assets and liabilities recognized resulting from product and service bundling were as follows:

	Year Ended December 31, 2018
Contract assets	
Net increase of customer contracts	$ 1,266,174
Reclassified to trade receivables	(2,483,958)
	$ (1,217,784)
Contract liabilities	
Net increase of customer contracts	$ 22,162
Recognized as revenues	(34,567)
	$ (12,405)

The Company applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for receivables. Contract assets will be reclassified to trade receivables when the corresponding invoice is billed to the client. Contract assets have substantially the same risk characteristics as the trade receivables of the same types of contracts. Therefore, the Company concluded that the expected loss rates for trade receivables can be applied to the contract assets.

Revenue recognized for the period that was included in the contract liability at the beginning of the period was as follows:

	Year Ended December 31, 2018
Telecommunications business	$ 7,147,288
Project business	619,731
Others	142,940
	$ 7,909,959

c. Incremental costs of obtaining contracts

	December 31, 2018
Noncurrent	
Incremental costs of obtaining contracts	$ 7,620,704

The Company considered the past experience and the default clauses in the telecommunications service contract and believes the commissions and equipment subsidy paid for obtaining contracts are expected to be recoverable; therefore, incremental costs of obtaining contracts are recognized as an asset. Amortization expense of incremental costs of obtaining contracts for the year ended December 31, 2018 was $9,958,119 thousand.

d. Remaining Performance Obligations

As of December 31, 2018, the aggregate amount of transaction price allocated to performance obligations for non-cancellable telecommunications service contracts that are unsatisfied is $43,939,076 thousand. The Company expects to recognize revenue when service is provided over contract terms in the next 36 months, $27,789,924 thousand, $12,944,606 thousand and $3,204,546 thousand for 2019, 2020 and 2021, respectively. The variable consideration collected from customers on nonrecurring basis resulting from exceeded usage from monthly fee and revenue recognized for contracts that the Company has a right to consideration from customers in the amount corresponding directly with the value to the customers of the Company's performance completed to date have been excluded from the disclosure of remaining performance obligations.

As of December 31, 2018, the aggregate amount of transaction price allocated to performance obligations for non-cancellable project business contracts that are unsatisfied is $20,831,032 thousand. The Company recognizes revenues when the project business contract is completed and accepted by customers. The Company expects to recognize such revenue of $3,542,079 thousand, $12,854,531 thousand and $4,434,422 thousand in 2019, 2020 and 2021, respectively. Project business contracts whose expected duration are less than a year have been excluded from the aforementioned disclosure.

2017

The main source of revenue of the Company includes various telecommunications services in different streams. The information of disaggregation of revenue please refer to Note 40.

28. NET INCOME AND OTHER COMPREHENSIVE INCOME (LOSS)

a. Net income

1) Other income and expenses

	Year Ended December 31 2018	2017
Gain (loss) on disposal of property, plant and equipment	$ 151,309	$ (101,798)
Reversal of impairment loss on investment properties	19,133	10,979
	$ 170,442	$ (90,819)

2) Other income

	Year Ended December 31 2018	2017
Dividend income	$ 389,651	$ 322,158
Others	131,526	339,892
	$ 521,177	$ 662,050

3) Other gains and losses

	Year Ended December 31	
	2018	2017
Net foreign currency exchange gain (loss)	$ 22,375	$ (45,133)
Loss on disposal of investments accounted for using equity method	-	(223)
Valuation gain (loss) on financial assets and liabilities at fair value through profit or loss, net	(25,961)	1,262
Others	(61,108)	(29,830)
	$ (64,694)	$ (73,924)

4) Impairment loss (reversal of impairment loss)

	Year Ended December 31	
	2018	2017
Contract assets	$ 6,381	$ -
Trade notes and accounts receivable	$ 786,250	$ 572,409
Other receivables	$ 96,213	$ 65,390
Inventories	$ 352,833	$ 45,285
Investment properties	$ (19,133)	$ (10,979)

5) Depreciation and amortization expenses

	Year Ended December 31	
	2018	2017
Property, plant and equipment	$ 26,846,702	$ 27,566,593
Investment properties	20,777	20,831
Intangible assets	4,312,043	3,693,706
Incremental costs of obtaining contracts	9,958,119	-
Total depreciation and amortization expenses	$ 41,137,641	$ 31,281,130
Depreciation expenses summarized by functions		
Operating costs	$ 25,585,731	$ 26,009,009
Operating expenses	1,281,748	1,578,415
	$ 26,867,479	$ 27,587,424
Amortization expenses summarized by functions		
Operating costs	$ 14,090,573	$ 3,459,018
Marketing expenses	99,161	137,149
General and administrative expenses	60,526	73,515
Research and development expenses	19,902	24,024
	$ 14,270,162	$ 3,693,706

6) Employee benefit expenses

	Year Ended December 31	
	2018	2017
Post-employment benefit		
Defined contribution plans	$ 274,252	$ 243,614
Defined benefit plans	2,950,495	2,831,347
	3,224,747	3,074,961
Other employee benefit		
Salaries	20,376,978	20,127,088
Insurance	2,025,300	2,064,757
Others	12,369,640	13,598,839
	34,771,918	35,790,684
Total employee benefit expenses	$ 37,996,665	$ 38,865,645
Summary by functions		
Operating costs	$ 21,972,929	$ 22,628,602
Operating expenses	16,023,736	16,237,043
	$ 37,996,665	$ 38,865,645

The Company distributes employees' compensation at the rates from 1.7% to 4.3% and remuneration to directors not higher than 0.17%, respectively, of pre-tax income. As of December 31, 2018, the payables of the employees' compensation and of the remuneration to directors were $1,404,264 thousand and $38,216 thousand, respectively. Such amounts have been approved by the Company's Board of Directors on March 19, 2019 and will be reported to the stockholders in their meeting planned to be held on June 21, 2019.

If there is a change in the proposed amounts after the annual financial statements are authorized for issue, the differences are recorded as a change in accounting estimate.

The compensation to the employees and remuneration to the directors of 2017 and 2016 approved by the Board of Directors on March 13, 2018 and March 7, 2017, respectively, were as follows.

	2017	2016
	Cash	Cash
Compensation distributed to the employees	$ 1,596,012	$ 1,702,164
Remuneration paid to the directors	40,750	42,087

There was no difference between the initial accrual amounts and the amounts proposed in the Board of Directors in 2018 and 2017 of the aforementioned compensation to employees and the remuneration to directors.

Information of the appropriation of the Company's employees compensation and remuneration to directors and those approved by the Board of Directors is available on the Market Observation Post System website.

b. Reclassification adjustments of other comprehensive income (loss)

	Year Ended December 31, 2017
Cash flow hedges	
Gain arising during the year	$ 3,896
Reclassification adjustments included in profit or loss	(1,748)
Adjusted against the carrying amount of hedged items	(2,411)
	$ (263)

29. INCOME TAX

a. Income tax recognized in profit or loss

The major components of income tax expense were as follows:

	Year Ended December 31 2018	2017
Current tax		
Current tax expenses recognized for the year	$ 7,751,176	$ 7,522,334
Income tax adjustments on prior years	5,419	-
Income tax on unappropriated earnings	298	29
Others	6,874	11,895
	7,763,767	7,534,258
Deferred tax		
Deferred tax expenses recognized for the year	200,763	(103,687)
Income tax adjustments on prior years	19,766	-
Change in tax rate	31,060	-
Income tax expense recognized in profit or loss	$ 8,015,356	$ 7,430,571

Reconciliation of accounting profit and income tax expense was as follows:

	Year Ended December 31 2018	2017
Income before income tax	$ 43,516,978	$ 46,304,476
Income tax expense calculated at the statutory rate (20% and 17% in 2018 and 2017, respectively)	$ 8,703,396	$ 7,871,761
Nondeductible income and expenses in determining taxable income	10,422	25,064
Tax-exempt income	(580,553)	(278,423)
Investment credits	(188,773)	(199,755)
Income tax on unappropriated earnings	298	29
Adjustments of tax expense on prior years	25,185	-
Change in tax rate	31,060	-
Others	14,321	11,895
Income tax expense recognized in profit or loss	$ 8,015,356	$ 7,430,571

In 2017, the applicable corporate income tax rate used by the Company is 17%.

Income Tax Act in the ROC was amended in February 2018 and the corporate income tax rate is adjusted from 17% to 20%. Such amendment is effective from 2018. In addition, the rate of the corporate surtax applicable to 2018 unappropriated earnings is reduced from 10% to 5%.

b. Income tax benefit recognized in other comprehensive income

	Year Ended December 31 2018	2017
Deferred tax		
Remeasurement on defined benefit plan	$ (240,294)	$ (341,878)
Change in tax rate	(205,017)	-
Total income tax benefit recognized in other comprehensive income	$ (445,311)	$ (341,878)

c. Current tax liabilities

	December 31 2018	2017
Current tax liabilities		
Income tax payable	$ 4,070,910	$ 4,438,738

d. Deferred income tax assets and liabilities

The movements of deferred income tax assets and liabilities were as follows:

For the year ended December 31, 2018

	January 1, 2018	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2018
Deferred income tax assets				
Temporary differences				
Defined benefit obligation	$ 1,706,451	$ 133,659	$ 445,311	$ 2,285,421
Allowance for doubtful receivables over quota	287,279	144,259	-	431,538
Deferred revenue	105,741	5,188	-	110,929
Impairment loss on property, plant and equipment	112,219	(18,808)	-	93,411
Accrued award credits liabilities	15,388	(1,475)	-	13,913
Valuation loss on inventory	13,393	60,448	-	73,841
Estimated warranty liabilities	9,919	942	-	10,861
Unrealized foreign exchange loss, net	13,024	(13,024)	-	-

(Continued)

	January 1, 2018	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2018
Trade-in right	$ 14,887	$ (4,552)	$ -	$ 10,335
Others	823	10,927	-	11,750
	$ 2,279,124	$ 317,564	$ 445,311	$ 3,041,999
Deferred income tax liabilities				
Temporary differences				
Land value incremental tax	$ 94,986	$ -	$ -	$ 94,986
Unrealized foreign exchange gain, net	-	499	-	499
Defined benefit obligation	1,264,554	566,774	-	1,831,328
Deferred revenue for award credits	28,810	1,880	-	30,690
	$ 1,388,350	$ 569,153	$ -	$ 1,957,503

(Concluded)

For the year ended December 31, 2017

	January 1, 2017	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2017
Deferred income tax assets				
Temporary differences				
Defined benefit obligation	$ 1,358,629	$ 5,944	$ 341,878	$ 1,706,451
Allowance for doubtful receivables over quota	228,138	59,141	-	287,279
Deferred revenue	117,193	(11,452)	-	105,741
Impairment loss on property, plant and equipment	122,632	(10,413)	-	112,219
Accrued award credits liabilities	19,926	(4,538)	-	15,388
Valuation loss on inventory	8,153	5,240	-	13,393
Estimated warranty liabilities	8,074	1,845	-	9,919
Unrealized foreign exchange loss, net	-	13,024	-	13,024
Trade-in right	-	14,887	-	14,887
Others	117	706	-	823
	$ 1,862,862	$ 74,384	$ 341,878	$ 2,279,124

(Continued)

	January 1, 2017	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2017
Deferred income tax liabilities				
Temporary differences				
Land value incremental tax	$ 94,986	$ -	$ -	$ 94,986
Unrealized foreign exchange gain, net	9,239	(9,239)	-	-
Defined benefit obligation	1,267,738	(3,184)	-	1,264,554
Deferred revenue for award credits	45,690	(16,880)	-	28,810
	$ 1,417,653	$ (29,303)	$ -	$ 1,388,350

(Concluded)

e. All deductible temporary differences were recognized as deferred tax assets in the balance sheets.

f. Income tax examinations

Income tax returns of the Company have been examined by the tax authorities through 2015.

30. EARNINGS PER SHARE

Net income and weighted average number of common stocks used in the calculation of earnings per share were as follows:

Net Income

	Year Ended December 31 2018	2017
Net income used to compute the basic earnings per share	$ 35,501,622	$ 38,873,905
Assumed conversion of all dilutive potential common stocks		
Employee stock options and employee compensation of subsidiaries	(6,333)	(459)
Net income used to compute the diluted earnings per share	$ 35,495,289	$ 38,873,446

Weighted Average Number of Common Stocks

(Thousand Shares)

	Year Ended December 31 2018	2017
Weighted average number of common stocks used to compute the basic earnings per share	7,757,447	7,757,447

(Continued)

	Year Ended December 31	
	2018	2017
Assumed conversion of all dilutive potential common stocks		
Employee compensation	9,062	10,486
Weighted average number of common stocks used to compute the diluted earnings per share	7,766,509	7,767,933

(Concluded)

Because the Company may settle the employee compensation in shares or cash, the Company shall presume that it will be settled in shares and takes those shares into consideration when calculating the weighted average number of outstanding shares used in the calculation of diluted EPS if the shares have a dilutive effect. The dilutive effect of the shares needs to be considered until the approval of the number of shares to be distributed to employees as compensation in the following year.

31. NON-CASH TRANSACTIONS

For the years ended December 31, 2018 and 2017, the Company entered into the following non-cash investing activities:

	Year Ended December 31	
	2018	2017
Increase in property, plant and equipment	$ 26,837,323	$ 25,273,333
Changes in other payables	653,256	436,055
	$ 27,490,579	$ 25,709,388

32. OPERATING LEASE ARRANGEMENTS

a. The Company as lessee

Except for the ST-2 satellite referred in Note 35 to the financial statements, the Company entered into several lease agreements for base stations located all over in Taiwan. The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	December 31	
	2018	2017
Within one year	$ 3,066,871	$ 2,969,769
Longer than one year but within five years	5,572,686	5,208,180
Longer than five years	695,162	752,335
	$ 9,334,719	$ 8,930,284

b. The Company as lessor

The Company leases out some land and buildings. The future aggregate minimum lease collection under non-cancellable operating leases are as follows:

	December 31	
	2018	2017
Within one year	$ 324,788	$ 382,715
Longer than one year but within five years	613,868	683,609
Longer than five years	206,433	242,799
	$ 1,145,089	$ 1,309,123

33. CAPITAL MANAGEMENT

The Company manages its capital to ensure that the Company will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of the debt and equity balance.

The capital structure of the Company consists of debt and the equity of the Company.

The Company is required to maintain minimum paid-in capital amount as prescribed by the applicable laws.

The management reviews the capital structure of the Company as needed. As part of this review, the management considers the cost of capital and the risks associated with each class of capital.

According to the management's suggestion, the Company maintains a balanced capital structure through paying cash dividends, increasing its share capital, purchasing outstanding shares, and proceeds from new debt or repayment of debt.

34. FINANCIAL INSTRUMENTS

Fair Value Information

The fair value measurement guidance establishes a framework for measuring fair value and expands disclosure about fair value measurements. The standard describes a fair value hierarchy based on three levels of inputs that may be used to measure fair value. These levels are:

Level 1 fair value measurements: These measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 fair value measurements: These measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3 fair value measurements: These measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

a. Financial instruments that are not measured at fair value but for which fair value is disclosed

The Company considers that the carrying amounts of financial assets and liabilities not measured at fair value approximate their fair values or the fair values cannot be reliable estimated, no financial instruments need to be disclosed on balance sheet date.

b. Financial instruments that are measured at fair value on a recurring basis

December 31, 2018

	Level 1	Level 2	Level 3	Total
Hedging financial assets	$ -	$ 1,069	$ -	$ 1,069
Financial assets at FVTPL				
Non-listed stocks	$ -	$ -	$ 517,362	$ 517,362
Financial assets at FVOCI				
Equity investment	$ 2,899,843	$ -	$ 3,633,210	$ 6,533,053
Financial liabilities at FVTPL				
Derivatives	$ -	$ 897	$ -	$ 897

December 31, 2017

	Level 1	Level 2	Level 3	Total
Financial liabilities at FVTPL				
Derivatives	$ -	$ 94	$ -	$ 94
Hedging derivative financial liabilities	$ -	$ 850	$ -	$ 850
Available-for-sale financial assets				
Listed securities				
Equity investments	$ 3,071,198	$ -	$ -	$ 3,071,198

There were no transfers between Levels 1 and 2 for the years ended December 31, 2018 and 2017.

The reconciliations for financial assets measured at Level 3 are listed below:

Financial Assets	Measured at Fair Value through Profit or Loss	Measured at Fair Value through Other Comprehensive Income	Total
Balance at January 1, 2018 (IAS 39)	$ -	$ -	$ -
The effect on retrospective adjustment of applying IFRS 9	542,521	3,725,187	-
4,267,708 Balance at January 1, 2018 (IFRS 9)	542,521	3,725,187	4,267,708

(Continued)

Financial Assets	Measured at Fair Value through Profit or Loss	Measured at Fair Value through Other Comprehensive Income	Total
Acquisition	$ -	$ 89,580	$ 89,580
Recognized in profit or loss under "Other gains and losses"	(25,159)	-	(25,159)
Recognized in other comprehensive income under "Unrealized gain or loss on investments in equity instruments at fair value through other comprehensive income"	-	(174,867)	(174,867)
Proceed from return of investees	-	(6,690)	(6,690)
Balance at December 31, 2018	$ 517,362	$ 3,633,210	$ 4,150,572
Unrealized loss in 2018	$ (25,159)		

(Concluded)

The fair values of financial assets and financial liabilities of Level 2 are determined as follows:

1) The fair values of financial assets and financial liabilities with standard terms and conditions and traded in active markets are determined with reference to quoted market prices.

2) For derivatives, fair values are estimated using discounted cash flow model. Future cash flows are estimated based on observable inputs including forward exchange rates at the end of the reporting periods and the forward and spot exchange rates stated in the contracts, discounted at a rate that reflects the credit risk of various counterparties.

The fair values of non-listed domestic and foreign equity investments were Level 3 financial assets, and determined using the market approach by reference the Price-to-Book ratios (P/B ratios) of peer companies that traded in active market or using assets approach. The significant unobservable inputs used were listed in the table below. A decrease in discount for the lack of marketability or noncontrolling interests discount would result in increases in the fair values.

	December 31, 2018
Discount for lack of marketability	20%
Noncontrolling interests discount	25%

If the inputs to the valuation model were changed to reflect reasonably possible alternative assumptions while all the other variables were held constant, the fair values of equity investments would increase as below table. When related discounts increase, the fair value of equity investments would be the negative amount of the same amount.

	December 31, 2018
Discount for lack of marketability	
5% decrease	$ 259,411
Noncontrolling interests discount	
5% decrease	$ 36,465

Categories of Financial Instruments

	December 31	
	2018	**2017**
Financial assets		
Measured at FVTPL		
Mandatorily measured at FVTPL	$ 517,362	$ -
Hedging financial assets	1,069	-
Loans and receivables (Note a)	-	55,601,658
Available-for-sale financial assets (Note b)	-	5,482,936
Financial assets at amortized cost (Note a)	53,922,997	-
Financial assets at FVOCI	6,533,053	-
Financial liabilities		
Measured at FVTPL		
Held for trading	897	94
Hedging financial liabilities	-	850
Measured at amortized cost (Note c)	36,930,268	36,464,843

Note a: The balances included cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other current monetary assets and refundable deposits (classified as other noncurrent assets) which were loans and receivables. Such amounts are reclassified as financial assets at amortized cost upon the application of IFRS 9 starting from 2018.

Note b: The balances included financial assets carried at cost which were classified as available-for-sale financial assets.

Note c: The balances included trade notes and accounts payable, payables to related parties, partial other payables and customers' deposits which were financial liabilities carried at amortized cost.

Financial Risk Management Objectives

The main financial instruments of the Company include equity investments, trade notes and accounts receivable as well as trade notes and accounts payable. The Company's Finance Department provides services to its business units, co-ordinates access to domestic and international capital markets, monitors and manages the financial risks relating to the operations of the Company through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk, and liquidity risk.

The Company seeks to minimize the effects of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives is governed by the Company's policies approved by the Board of Directors. Those derivatives are used to hedge the risks of exchange rate fluctuation arising from operating or investment activities. Compliance with policies and risk exposure limits is reviewed by the Company's Finance Department on a continuous basis. The Company does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

The Company reports the significant risk exposures and related action plans timely and actively to the audit committee and if needed to the Board of Directors.

a. Market risk

The Company is exposed to market risks of changes in foreign currency exchange rates and interest rates. The Company uses forward exchange contracts to hedge the exchange rate risk arising from assets and liabilities denominated in foreign currencies.

There were no changes to the Company's exposure to market risks or the manner in which these risks are managed and measured.

1) Foreign currency risk

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities at the balance sheet dates were as follows:

	December 31	
	2018	**2017**
Assets		
USD	$ 4,757,950	$ 4,827,655
EUR	29,102	27,364
SGD	986	-
JPY	329	15,650
Liabilities		
USD	6,698,663	4,737,033
EUR	1,216,812	1,322,803
SGD	49,977	96,482
JPY	14,448	11,510

The carrying amounts of the Company's derivatives with exchange rate risk exposures at the balance sheet dates were as follows:

	December 31	
	2018	**2017**
Assets		
EUR	$ 1,069	$ -
Liabilities		
EUR	897	944

Foreign currency sensitivity analysis

The Company is mainly exposed to the fluctuations of the currencies USD, EUR, SGD, and JPY listed above.

The following table details the Company's sensitivity to a 5% increase and decrease in the functional currency against the relevant foreign currencies. 5% is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible changes in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and forward exchange contracts. A positive number below indicates an increase in pre-tax profit or equity where the functional currency weakens 5% against the relevant currency.

	Year Ended December 31	
	2018	2017
Profit or loss		
Monetary assets and liabilities (a)		
USD	$ (97,036)	$ 4,531
EUR	(59,386)	(64,772)
SGD	(2,450)	(4,824)
JPY	(706)	207
Derivatives (b)		
EUR	9,596	3,454
Equity		
Derivatives (c)		
EUR	8,644	7,048

a) This is mainly attributable to the exposure to foreign currency denominated receivables and payables of the Company outstanding at the balance sheet dates.

b) This is mainly attributable to the forward exchange contracts.

c) This is mainly attributable to the changes in the fair value of derivatives that are designated as cash flow hedges.

For a 5% strengthening of the functional currency against the relevant currencies, it would have equal but opposite effect on the pre-tax profit or equity for the amounts shown above.

2) Interest rate risk

The carrying amounts of the Company's exposures to interest rates on financial assets at the balance sheet dates were as follows:

	December 31	
	2018	2017
Fair value interest rate risk		
Financial assets	$ 18,087,241	$ 19,895,493
Cash flow interest rate risk		
Financial assets	2,698,729	1,346,739

Interest rate sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to interest rates for non-derivative instruments at the end of the reporting period. A 25 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 25 basis points higher/lower and all other variables were held constant, the Company's pre-tax income would increase/decrease by $6,747 thousand and $3,367 thousand for the years ended December 31, 2018 and 2017, respectively. This is mainly attributable to the Company's exposure to floating interest rates on its financial assets.

3) Other price risk

The Company is exposed to equity price risks arising from holding other company's equity. Equity investments are held for strategic rather than trading purposes. The management managed the risk through holding various risk portfolios. Further, the Company assigned finance and investment departments to monitor the price risk.

Equity price sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to equity price risks at the end of the reporting period.

If equity prices had been 5% higher/lower, pre-tax profit and pre-tax other comprehensive income for the year ended December 31, 2018 would have increased/decreased by $25,868 thousand and $326,653 thousand as a result of the changes in fair value of financial assets at FVTPL and financial assets at FVTOCI, respectively. If equity prices had been 5% higher/lower, other comprehensive income would have increased/decreased by $153,560 thousand as a result of the changes in fair value of available-for-sale financial assets for the year ended December 31, 2017.

b. Credit risk

Credit risk refers to the risk that a counterparty would default on its contractual obligations resulting in financial loss to the Company. The maximum credit exposure of the aforementioned financial instruments is equal to their carrying amounts recognized in balance sheet as of the balance sheet date.

The Company has large trade receivables outstanding with its customers. A substantial majority of the Company's outstanding trade receivables are not covered by collateral or credit insurance. The Company has implemented ongoing measures including enhancing credit assessments and strengthening overall risk management to reduce its credit risk. While the Company has procedures to monitor and limit exposure to credit risk on trade receivables, there can be no assurance such procedures will effectively limit its credit risk and avoid losses. This risk is heightened during periods when economic conditions worsen.

As the Company serves a large number of unrelated consumers, the concentration of credit risk was limited.

c. Liquidity risk

The Company manages and maintains sufficient cash and cash equivalent position to support the operations and reduce the impact on fluctuation of cash flow.

1) Liquidity and interest risk tables

The following tables detailed the Company's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables had been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Company is required to pay.

	Weighted Average Effective Interest Rate (%)	Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	More than 5 Years	Total
December 31, 2018							
Non-derivative financial liabilities							
Non-interest bearing	-	$ 38,774,958	$ -	$ 2,590,721	$ 4,635,193	$ -	$ 46,000,872

(Continued)

	Weighted Average Effective Interest Rate (%)	Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	More than 5 Years	Total
December 31, 2017							
Non-derivative financial liabilities							
Non-interest bearing	-	$ 39,011,338	$ -	$ 2,881,562	$ 4,582,587	$ -	$ 46,475,487

(Concluded)

The following table detailed the Company's liquidity analysis for its derivative financial instruments. The table had been drawn up based on the undiscounted gross inflows and outflows on those derivatives that require gross settlement.

	Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	Total
December 31, 2018					
Gross settled					
Forward exchange contracts					
Inflow	$ -	$238,302	$126,401	$ -	$364,703
Outflow	-	238,459	126,072	-	364,531
	$ -	$ (157)	$ 329	$ -	$ 172
December 31, 2017					
Gross settled					
Forward exchange contracts					
Inflow	$ -	$173,068	$ 36,654	$ -	$209,722
Outflow	-	174,021	36,645	-	210,666
	$ -	$ (953)	$ 9	$ -	$ (944)

2) Financing facilities

	December 31	
	2018	2017
Unsecured bank loan facility		
Amount used	$ -	$ -
Amount unused	40,307,150	40,297,600
	$ 40,307,150	$ 40,297,600

35. RELATED PARTIES TRANSACTIONS

The ROC Government, one of the Company's customers, has significant equity interest in the Company. The Company provides fixed-line services, wireless services, internet and data and other services to the various departments and institutions of the ROC Government in the normal course of business and at arm's-length prices. The transactions with the ROC government bodies have not been disclosed because the transactions are not individually or collectively significant. However, the related revenues and operating costs have been appropriately recorded.

a. The Company engages in business transactions with the following related parties:

Company	Relationship
Senao International Co., Ltd. ("SENAO")	Subsidiary
Light Era Development Co., Ltd.	Subsidiary
Donghwa Telecom Co., Ltd.	Subsidiary
Chunghwa Telecom Singapore Pte., Ltd. ("CHTS")	Subsidiary
Chunghwa System Integration Co., Ltd. ("CHSI")	Subsidiary
Chunghwa Investment Co., Ltd. ("CHI")	Subsidiary
CHIEF Telecom, Inc. ("CHIEF")	Subsidiary
CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	Subsidiary
Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia")	Subsidiary
Spring House Entertainment Tech. Inc. ("SHE")	Subsidiary
Chunghwa Telecom Global, Inc.	Subsidiary
Chunghwa Telecom Vietnam Co., Ltd.	Subsidiary
Smartfun Digital Co., Ltd.	Subsidiary
Chunghwa Telecom Japan Co., Ltd.	Subsidiary
Chunghwa Sochamp Technology Inc.	Subsidiary
Honghwa International Co., Ltd.	Subsidiary
Chunghwa Leading Photonics Tech. Co., Ltd. ("CLPT")	Subsidiary
Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT")	Subsidiary
CHT Security Co., Ltd.("CHTSC")	Subsidiary
New Prospect Investments Holdings Ltd. (B.V.I.)	Subsidiary
Senao International (Samoa) Holding Ltd. ("SIS")	Subsidiary of SENAO
Youth Co., Ltd.	Subsidiary of SENAO
Aval Technologies Co., Ltd.	Subsidiary of SENAO
ISPOT Co., Ltd.	Subsidiary of SENAO
Youyi Co., Ltd.	Subsidiary of SENAO
SENYOUNG Insurance Agent Co., Ltd.	Subsidiary of SENAO
Unigate Telecom Inc.	Subsidiary of CHIEF
Chief International Corp.	Subsidiary of CHIEF
Shanghai Chief Telecom Co., Ltd.	Subsidiary of CHIEF
Concord Technology Co., Ltd. ("Concord")	Subsidiary of CHSI
Chunghwa Precision Test Tech. Co., Ltd. ("CHPT")	Subsidiary of CHI
Glory Network System Service (Shanghai) Co., Ltd.	Subsidiary of Concord
Chunghwa Precision Test Tech. USA Corporation	Subsidiary of CHPT
CHPT Japan Co., Ltd.	Subsidiary of CHPT
Chunghwa Precision Test Tech. International, Ltd. ("CHPT (International)")	Subsidiary of CHPT
Senao International HK Limited ("SIHK")	Subsidiary of SIS
Senao Trading (Fujian) Co., Ltd.	Subsidiary of SIHK
Senao International Trading (Shanghai) Co., Ltd.	Subsidiary of SIHK
Senao International Trading (Jiangsu) Co., Ltd.	Subsidiary of SIHK
Senao International Trading (Shanghai) Co., Ltd.	Subsidiary of SIHK
Chunghwa Hsingta Co., Ltd. ("CHC")	Subsidiary of Prime Asia
Chunghwa Telecom (China) Co., Ltd.	Subsidiary of CHC

(Continued)

Company	Relationship
Jiangsu Zhenhua Information Technology Company, LLC.	Subsidiary of CHC
Shanghai Taihua Electronic Technology Limited	Subsidiary of CHPT (International)
Taoyuan Asia Silicon Valley Innovation Co, Ltd.	Subsidiary of LED
Taiwan International Standard Electronics Co., Ltd.	Associate
So-net Entertainment Taiwan Limited	Associate
KKBOX Taiwan Co., Ltd.	Associate
KingwayTek Technology Co., Ltd.	Associate
UUPON Inc.	Associate
Viettel-CHT Co., Ltd.	Associate
International Integrated System, Inc.	Associate
Alliance Digital Tech Co., Ltd.	Associate
Taiwan International Ports Logistics Corporation	Associate
Chunghwa PChome Fund I Co., Ltd.	Associate
Cornerstone Ventures Co., Ltd.	Associate
Click Force Co., Ltd.	Associate of CHYP
ST-2 Satellite Ventures Pte., Ltd.	Associate of CHTS
Huada Digital Corporation	Joint venture
Chunghwa Benefit One Co., Ltd.	Joint venture
Other related parties	
Chunghwa Telecom Foundation	A nonprofit organization of which the funds donated by the Company exceeds one third of its total funds

(Concluded)

b. Terms of the foregoing transactions with related parties were not significantly different from transactions with non-related parties. When no similar transactions with non-related parties can be referenced, terms were determined in accordance with mutual agreements. Details of transactions between the Company and other related parties are disclosed below:

1) Operating transactions

	Revenues	
	Year Ended December 31	
	2018	2017
Subsidiaries	$ 3,006,332	$ 2,623,703
Associates	224,681	276,461
Joint ventures	-	39
Others	3,843	4,375
	$ 3,234,856	$ 2,904,578

	Operating Costs and Expenses	
	Year Ended December 31	
	2018	2017
Subsidiaries	$ 9,688,175	$ 18,018,012
Associates	1,270,638	1,119,991
Joint ventures	-	2,247
Others	57,700	51,700
	$ 11,016,513	$ 19,191,950

2) Non-operating transactions

	Non-operating Income and Expenses	
	Year Ended December 31	
	2018	2017
Subsidiaries	$ 11,255	$ 8,378
Associates	44	62
Others	-	2
	$ 11,299	$ 8,442

3) Receivables

	December 31	
	2018	2017
Subsidiaries	$ 814,642	$ 978,718
Associates	3,217	27,724
Others	15	-
	$ 817,874	$ 1,006,442

4) Payables

	December 31	
	2018	2017
Subsidiaries	$ 3,533,243	$ 3,562,820
Associates	909,969	660,245
	$ 4,443,212	$ 4,223,065

5) Customers' deposits

	December 31	
	2018	2017
Subsidiaries	$ 14,765	$ 9,536
Associates	5,925	5,700
	$ 20,690	$ 15,236

6) Acquisition of property, plant and equipment

	Year Ended December 31	
	2018	2017
Subsidiaries	$ 632,002	$ 428,004
Associates	311,519	367,294
	$ 943,521	$ 795,298

7) Prepayments

The Company entered into a contract with ST-2 Satellite Ventures Pte., Ltd. on March 12, 2010 to lease capacity on the ST-2 satellite. This lease term is for 15 years which should start from the official operation of ST-2 satellite and the total contract value is approximately $6,000,000 thousand (SG$260,723 thousand), including a prepayment of $3,067,711 thousand, and the rest of amount should be paid annually when ST-2 satellite starts its official operation. ST-2 satellite was launched in May 2011, and began its official operation in August 2011. The total rental expense for the year ended December 31, 2018 was $394,289 thousand, which consisted of an offsetting credit of the prepayment of $204,398 thousand and an additional accrual of $189,891 thousand. The total rental expense for the year ended December 31, 2017 was $391,691 thousand, which consisted of an offsetting credit of the prepayment of $204,398 thousand and an additional accrual of $187,293 thousand. The prepaid rents (classified as prepayments) as of December 31, 2018 and 2017 were as follows:

	December 31	
	2018	2017
Prepaid rents - current	$ 204,398	$ 204,398
Prepaid rents - noncurrent	1,345,623	1,550,021
	$ 1,550,021	$ 1,754,419

The Company sold the land with a carrying value of $936,016 thousand to LED at the consideration of $2,421,932 thousand in 2008. However, since the gain on disposal of land amounting to $1,485,916 thousand is unrealized, the gain was recognized as deferred credit - profit on intercompany transactions. There is no gain arising from disposal of land recognized in 2018 and 2017. The unrealized gain on disposal of land amounted to $83,859 thousand (classified as other noncurrent liabilities) as of December 31, 2018.

c. Compensation of key management personnel

The compensation of directors and key management personnel was as follows:

	Year Ended December 31	
	2018	2017
Short-term employee benefits	$ 70,793	$ 64,569
Post-employment benefits	6,266	5,532
	$ 77,059	$ 70,101

The compensation of directors and key executives was mainly determined by the compensation committee having regard to the performance of individual and market trends.

36. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

As of December 31, 2018, the Company's significant commitments and contingent liabilities, excluding those disclosed in other notes, were as follows:

a. Acquisitions of land and buildings of $134,766 thousand.

b. Acquisitions of telecommunications equipment of $16,931,437 thousand.

c. A commitment to contribute $2,000,000 thousand to a Piping Fund administered by the Taipei City Government, of which $1,000,000 thousand was contributed by the Company on August 15, 1996 (classified as other monetary assets - noncurrent). If the fund is not sufficient, the Company will contribute the remaining $1,000,000 thousand upon notification from the Taipei City Government.

37. SIGNIFICANT SUBSEQUENT EVENTS

The participation of establishing Next Commercial Bank Co., Ltd. ("NCB") was approved by the Company's Board of Directors in January 2019. The Company expects to invest $4,500,000 thousand at most in NCB's common stock and the Company's equity ownership interest in NCB will be no more than 45%. The establishment of NCB is subject to the approval of FSC.

38. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The information of significant assets and liabilities denominated in foreign currencies was as follows:

	December 31, 2018		
	Foreign Currencies (Thousands)	Exchange Rate	New Taiwan Dollars (Thousands)
Assets denominated in foreign currencies			
Monetary items			
Cash			
USD	$ 5,753	30.72	$ 176,709
EUR	822	35.20	28,924
SGD	44	22.48	986
JPY	1,183	0.278	329
Accounts receivable			
USD	149,153	30.72	4,581,241
EUR	5	35.20	178
Non-monetary items			
Investments accounted for using equity method			
USD	39,191	30.72	1,203,739
HKD	412,944	3.921	1,619,155
JPY	225,275	0.278	62,626
VND	327,166,873	0.0012	392,601
RMB	43,122	4.47	192,841
THB	99,592	0.9532	94,931
Liabilities denominated in foreign currencies			
Monetary items			
Accounts payable			
USD	218,091	30.72	6,698,663
EUR	34,569	35.20	1,216,812
SGD	2,223	22.48	49,977
JPY	51,972	0.278	14,448

	December 31, 2017		
	Foreign Currencies (Thousands)	Exchange Rate	New Taiwan Dollars (Thousands)
Assets denominated in foreign currencies			
Monetary items			
Cash			
USD	$ 3,548	29.76	$ 105,575
EUR	730	35.57	25,955
SGD	-	22.26	-
JPY	24,195	0.264	6,387
Accounts receivable			
USD	158,672	29.76	4,722,080
EUR	40	35.57	1,409
JPY	35,088	0.264	9,263
Non-monetary items			
Investments accounted for using equity method			
USD	39,026	29.76	1,161,422
HKD	401,191	3.807	1,527,333
JPY	184,583	0.264	48,730
VND	305,041,176	0.00119	362,999
RMB	46,495	4.565	212,251
Liabilities denominated in foreign currencies			
Monetary items			
Accounts payable			
USD	159,175	29.76	4,737,033
EUR	37,189	35.57	1,322,803
SGD	4,334	22.26	96,482
JPY	43,599	0.264	11,510

The unrealized foreign currency exchange gains and losses were gain of $2,495 thousand and loss of $76,791 thousand for the years ended December 31, 2018 and 2017, respectively. Due to the various foreign currency transactions of the Company, foreign exchange gains and losses cannot be disclosed by the respective significant foreign currency.

39. ADDITIONAL DISCLOSURES

Following are the additional disclosures required by the FSC for the Company:

a. Financing provided: None.

b. Endorsement/guarantee provided: Please see Table 1.

c. Marketable securities held (excluding investments in subsidiaries, associates and joint ventures): Please see Table 2.

d. Marketable securities acquired and disposed of at costs or prices at least $300 million or 20% of the paid-in capital: Please see Table 3.

e. Acquisition of individual real estate at costs of at least $300 million or 20% of the paid-in capital: Please see Table 4.

f. Disposal of individual real estate at prices of at least $300 million or 20% of the paid-in capital: None.

g. Total purchases from or sales to related parties amounting to at least $100 million or 20% of the paid-in capital: Please see Table 5.

h. Receivables from related parties amounting to $100 million or 20% of the paid-in capital: Please see Table 6.

i. Names, locations, and other information of investees on which the Company exercises significant influence (excluding investment in Mainland China): Please see Table 7.

j. Derivative instruments transactions: Please see Notes 7, 20 and 34.

k. Investment in Mainland China: Please see Table 8.

40. SEGMENT INFORMATION

The Company has the following reportable segments that provide different products or services. The reportable segments are managed separately because each segment represents a strategic business unit that serves different markets. Segment information is provided to CEO who allocates resources and assesses segment performance. The Company's measure of segment performance is mainly based on revenues and income before income tax. The Company's reportable segments are as follows:

a. Domestic fixed communications business - the provision of local telephone services, domestic long distance telephone services, broadband access, and related services;

b. Mobile communications business - the provision of mobile services, sales of mobile handsets and data cards, and related services;

c. Internet business - the provision of HiNet services and related services;

d. International fixed communications business - the provision of international long distance telephone services and related services;

e. Others - the provision of non-telecom services and the corporate related items not allocated to reportable segments.

Some operating segments have been aggregated into a single operating segment taking into account the following factors: (a) similar economic characteristics such as long-term gross profit margins; (b) the nature of the telecommunications products and services are similar; (c) the nature of production processes of the telecommunications products and services are similar; (d) the type or class of customer for the telecommunications products and services are similar; and (e) the methods used to provide the services to the customers are similar.

There was no material differences between the accounting policies of the operating segments and the accounting policies described in Note 3.

Segment Revenues and Operating Results

Analysis by reportable segment of revenues and operating results of continuing operations was as follows:

	Domestic Fixed Communications Business	Mobile Communications Business	Internet Business	International Fixed Communications Business	Others	Total
Year ended December 31, 2018						
Revenues						
From external customers	$ 67,003,798	$ 78,078,487	$ 28,051,785	$ 11,950,325	$ 247,304	$ 185,331,699
Intersegment revenues	16,871,612	1,359,403	3,818,619	1,837,410	12,384	23,899,428
Segment revenues	$ 83,875,410	$ 79,437,890	$ 31,870,404	$ 13,787,735	$ 259,688	209,231,127
Intersegment elimination						(23,899,428)
Revenues						$ 185,331,699
Segments operating costs and expenses	$ 63,026,647	$ 53,619,339	$ 13,198,074	$ 11,688,750	$ 3,603,417	$ 145,136,227
Segment income (loss) before income tax	$ 19,412,472	$ 12,749,895	$ 11,294,421	$ 837,939	$ (777,749)	$ 43,516,978
Year ended December 31, 2017						
Revenues						
From external customers	$ 71,596,500	$ 85,633,294	$ 27,303,824	$ 12,215,615	$ 236,541	$ 196,985,774
Intersegment revenues	22,052,441	1,807,132	4,060,618	1,913,157	8,141	29,841,489
Segment revenues	$ 93,648,941	$ 87,440,426	$ 31,364,442	$ 14,128,772	$ 244,682	226,827,263
Intersegment elimination						(29,841,489)
Revenues						$ 196,985,774
Segments operating costs and expenses	$ 66,938,259	$ 57,472,306	$ 12,940,636	$ 11,852,687	$ 3,545,330	$ 152,749,218
Segment income (loss) before income tax	$ 24,898,201	$ 11,632,004	$ 10,651,722	$ 879,433	$ (1,756,884)	$ 46,304,476

Other Segment Information

Other information reviewed by the chief operating decision maker or regularly provided to the chief operating decision maker was as follows:

	Domestic Fixed Communications Business	Mobile Communications Business	Internet Business	International Fixed Communications Business	Others	Total
Year ended December 31, 2018						
Share of profits of subsidiaries, associates and joint ventures accounted for using equity method	$ -	$ -	$ -	$ -	$ 2,579,961	$ 2,579,961
Interest revenue	$ 17,535	$ 405	$ 1,598	$ 1,453	$ 93,896	$ 114,887
Interest expenses	$ -	$ -	$ -	$ -	$ 267	$ 267
Depreciation and amortization	$ 15,027,196	$ 21,673,682	$ 2,982,357	$ 1,282,464	$ 171,942	$ 41,137,641
Capital expenditure	$ 12,692,526	$ 10,602,879	$ 2,662,238	$ 1,229,362	$ 303,574	$ 27,490,579
Reversal of impairment loss on investment properties	$ 19,133	$ -	$ -	$ -	$ -	$ 19,133
Year ended December 31, 2017						
Share of profits of subsidiaries, associates and joint ventures accounted for using equity method	$ -	$ -	$ -	$ -	$ 1,417,413	$ 1,417,413
Interest revenue	$ 21,282	$ 221	$ 1,447	$ 809	$ 129,446	$ 153,205
Interest expenses	$ -	$ 4	$ -	$ -	$ 1	$ 5
Depreciation and amortization	$ 15,614,051	$ 10,870,275	$ 3,247,442	$ 1,332,325	$ 217,037	$ 31,281,130
Capital expenditure	$ 11,647,266	$ 9,646,459	$ 2,650,181	$ 1,461,668	$ 303,814	$ 25,709,388
Reversal of impairment loss on investment properties	$ 10,979	$ -	$ -	$ -	$ -	$ 10,979

Main Products and Service Revenues

	Year Ended December 31 2018	2017
Mobile services revenue	$ 67,868,502	$ 75,813,668
Local telephone and domestic long distance telephone services revenue	30,018,026	32,275,544
Broadband access and domestic leased line services revenue	22,489,839	23,059,794
Data Communications internet services revenue	19,784,304	19,849,463
Sale of products	11,618,436	11,004,050
International network and leased telephone services revenue	8,329,981	8,902,641
Others	25,222,611	26,080,614
	$ 185,331,699	$ 196,985,774

Geographic Information

The users of the Company's services are mainly from Taiwan, ROC. The revenues it derived outside Taiwan are mainly revenues from international long distance telephone and leased line services. The geographic information for revenues was as follows:

	Year Ended December 31 2018	2017
Taiwan, ROC	$ 178,258,528	$ 190,022,997
Overseas	7,073,171	6,962,777
	$ 185,331,699	$ 196,985,774

The Company does not have material noncurrent assets in foreign operations.

Major Customers

As of December 31, 2018 and 2017, the Company did not have any single customer whose revenue exceeded 10% of the total revenues.

TABLE 1

CHUNGHWA TELECOM CO., LTD.

ENDORSEMENTS/GUARANTEES PROVIDED
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

No. (Note 1)	Endorsement/ Guarantee Provider	Guaranteed Party		Limits on Endorsement/ Guarantee Amount Provided to Each Guaranteed Party	Maximum Balance for the Period	Ending Balance	Actual Borrowing Amount	Amount of Endorsement/ Guarantee Collateralized by Properties	Ratio of Accumulated Endorsement/ Guarantee to Net Equity Per Latest Financial Statements	Maximum Endorsement/ Guarantee Amount Allowable	Endorsement/ Guarantee Given by Parent on Behalf of Subsidiaries	Endorsement/ Guarantee Given by Subsidiaries on Behalf of Parent	Endorsement/ Guarantee Given on Behalf of Companies in Mainland China	Note
		Name	Nature of Relationship (Note 2)											
1	Senao International Co., Ltd.	Youth Co., Ltd.	b	$ 580,807	$ 200,000	$ -	$ -	$ -	-	$ 2,904,039	Yes	No	No	Notes 3, 4 and 5
		ISPOT Co., Ltd.	b	580,807	150,000	-	-	-	-	2,904,039	Yes	No	No	Notes 3, 4 and 6
		Aval Technologies Co., Ltd.	b	580,807	300,000	300,000	300,000	-	5.17	2,904,039	Yes	No	No	Notes 3 and 4

Note 1: Significant transactions between the Company and its subsidiaries or among subsidiaries are numbered as follows:

a. “0” for the Company.
b. Subsidiaries are numbered from “1”.

Note 2: Relationships between the endorsement/guarantee provider and the guaranteed party:

a. A company with which it does business.
b. A company in which the Company directly and indirectly holds more than 50 percent of the voting shares.
c. A company that directly and indirectly holds more than 50 percent of the voting shares in the Company.
d. Companies in which the Company holds, directly or indirectly, 90% or more of the voting shares.
e. The Company fulfills its contractual obligations by providing mutual endorsements/guarantees for another company in the same industry or for joint builders for purposes of undertaking a construction project.
f. All capital contributing shareholders make endorsements/ guarantees for their jointly invested company in proportion to their shareholding percentages.
g. Companies in the same industry provide among themselves joint and several security for a performance guarantee of a sales contract for pre-construction homes pursuant to the Consumer Protection Act for each other.

Note 3: The limits on endorsement or guarantee amount provided to each guaranteed party is up to 10% of the net assets value of the latest financial statements of Senao International Co., Ltd.

Note 4: The total amount of endorsement or guarantee that the Company is allowed to provide is up to 50% of the net assets value of the latest financial statements of Senao International Co., Ltd.

Note 5: Senao International Co., Ltd. dissolved the endorsement or guarantee to Youth Co., Ltd. in August 2018.

Note 6: Senao International Co., Ltd. retrieved the guarantee letter and dissolved the endorsement or guarantee to ISPOT Co., Ltd. in August 2018.

CHUNGHWA TELECOM CO., LTD.

MARKETABLE SECURITIES HELD
DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	December 31, 2018				Note
				Shares (Thousands/ Thousand Units)	Carrying Value (Note 1)	Percentage of Ownership	Fair Value	
Chunghwa Telecom Co., Ltd.	Stocks							
	Taipei Financial Center Corp.	-	Financial assets at FVOCI	172,927	$ 3,485,638	12	$ 3,485,638	-
	Innovation Works Development Fund, L.P.	-	Financial assets at FVTPL	-	224,452	4	224,452	-
	Industrial Bank of Taiwan II Venture Capital Co., Ltd. (IBT II)	-	Financial assets at FVOCI	5,252	21,930	17	21,930	-
	Global Mobile Corp.	-	Financial assets at FVOCI	7,617	-	3	-	-
	Innovation Works Limited	-	Financial assets at FVOCI	1,000	2,850	2	2,850	-
	RPTI Intergroup International Ltd.	-	Financial assets at FVOCI	4,765	-	10	-	-
	Taiwan mobile payment Co., Ltd.	-	Financial assets at FVOCI	1,200	4,837	2	4,837	-
	Taiwania Capital Buffalo Fund Co., Ltd.	-	Financial assets at FVTPL	300,000	292,910	13	292,910	-
	China Airlines Ltd.	-	Financial assets at FVOCI	263,622	2,899,843	5	2,899,843	Note 2
	4 Gamers Entertainment Inc.	-	Financial assets at FVOCI	136	117,955	19.9	117,955	-
Senao International Co., Ltd.	Stocks							
	N.T.U. Innovation Incubation Corporation	-	Financial assets at FVOCI	1,200	9,768	9	9,768	-
CHIEF Telecom Inc.	Stocks							
	3 Link Information Service Co., Ltd.	-	Financial assets at FVOCI	374	930	10	930	-
Chunghwa Investment Co., Ltd.	Stocks							
	Tatung Technology Inc.	-	Financial assets at FVOCI	4,571	117,360	11	117,360	-
	iSing99 Inc.	-	Financial assets at FVOCI	10,000	52,574	7	52,574	-
	Powertec Energy Corp.	-	Financial assets at FVOCI	20,000	208,016	2	208,016	-
Chunghwa Hsingta Co., Ltd.	Stocks							
	Cotech Engineering Fuzhou Corp.	-	Financial assets at FVOCI	-	10,802	5	10,802	-

Note 1: Showed at carrying amounts with fair value adjustments.

Note 2: Fair value was based on the closing price on December 28, 2018.

TABLE 3

CHUNGHWA TELECOM CO., LTD.

MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Company Name	Marketable Securities Type and Name	Financial Statement Account	Counter-party	Nature of Relationship	Beginning Balance		Acquisition		Disposal				Ending Balance	
					Shares (Thousands/ Thousand Units)	Amount	Shares (Thousands/ Thousand Units)	Amount	Shares (Thousands/ Thousand Units)	Amount	Carrying Value	Gain on Disposal	Shares (Thousands/ Thousand Units)	Amount
Chunghwa Investment Co., Ltd.	Stocks Chunghwa Precision Test Tech. Co., Ltd.	Investments accounted for using equity method	-	Subsidiary	12,558	$ 2,207,100 (Note 1)	-	$ -	1,328	$ 1,041,689	$ 240,953 (Note 1)	$ 800,736 (Note 2)	11,230	$ 2,106,738 (Note 1)

Note 1: Including share of profit and other comprehensive income of associates accounted for using equity method.

Note 2: Differences arising from equity transactions are included in additional paid-in capital.

TABLE 4

CHUNGHWA TELECOM CO., LTD.

ACQUISITION OF INDIVIDUAL REAL ESTATE AT COSTS OF AT LEAST $300 MILLION OR 20% OF THE PAID-IN CAPITAL
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Buyer	Property	Event Date	Transaction Amount	Payment Status	Counterparty	Relationship	Information on Previous Title Transfer If Counterparty is a Related Party				Pricing Reference	Purpose of Acquisition	Other Terms
							Property Owner	Relationship	Transaction Date	Amount			
Chunghwa Precision Test Tech. Co., Ltd.	Headquarters	2017.7.29-2018.12.22	$ 539,695	Monthly settlement based on the construction progress and acceptance	Fu Tsu Construction Co., Ltd.	-	Not applicable	Not applicable	Not applicable	Not applicable	Bidding, price comparison and price negotiation	Manufacturing purpose	None

TABLE 5

CHUNGHWA TELECOM CO., LTD.

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Company Name	Related Party	Nature of Relationship	Transaction Details				Abnormal Transaction		Notes / Accounts Payable or Receivable	
			Purchase/Sales (Note 1)	Amount (Note 2)	% to Total	Payment Terms	Units Price	Payment Terms	Ending Balance (Note 3)	% to Total
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	Subsidiary	Sales	$ 2,090,888	1	30 days	$ -	-	$ 249,014	1
			Purchase	1,440,824	1	30-90 days	-	-	(916,854)	(5)
	CHIEF Telecom Inc.	Subsidiary	Sales	332,872	-	30 days	-	-	38,387	-
			Purchase	286,267	-	60 days	-	-	(37,417)	-
	Chunghwa System Integration Co., Ltd.	Subsidiary	Purchase	1,008,233	1	30 days	-	-	(629,455)	(3)
	CHYP Multimedia Marketing & Communications Co., Ltd	Subsidiary	Purchase	136,855	-	30 days	-	-	(25,116)	-
	Honghwa International Co., Ltd.	Subsidiary	Purchase	5,422,154	5	30-60 days	-	-	(1,059,239)	(6)
	Donghwa Telecom Co., Ltd.	Subsidiary	Sales	211,604	-	30 days	-	-	118,861	-
			Purchase	531,116	-	90 days	-	-	(189,148)	(1)
	Chunghwa Telecom Global, Inc.	Subsidiary	Purchase	337,300	-	90 days	-	-	(43,990)	-
	Chunghwa Telecom Singapore Pte., Ltd.	Subsidiary	Sales	150,673	-	30 days	-	-	102,253	-
			Purchase	189,339	-	90 days	-	-	(76,002)	-
	CHT Security Co., Ltd.	Subsidiary	Purchase	323,704	-	30 days	-	-	(97,675)	(1)
	ST-2 Satellite Ventures Pte. Ltd.	Associate	Purchase	394,289	-	30 days	-	-	(47,729)	-
	Taiwan International Standard Electronics Co., Ltd.	Associate	Purchase	677,295	1	30-90 days	-	-	(595,028)	(3)
	So-net Entertainment Taiwan Limited	Associate	Sales	158,158	-	60 days	-	-	7	-
	International Integrated System, Inc.	Associate	Purchase	160,307	-	30 days	-	-	(105,834)	(1)
Senao International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	6,570,414	21	30-90 days	-	-	924,130	51
			Purchase	1,904,795	7	30 days	-	-	(214,199)	(8)
	Senao Networks, Inc.	Associate	Sales	114,267	-	30 days	-	-	5,407	-
	Youth Co., Ltd.	Subsidiary	Sales	125,862	-	90 days	-	-	41,157	2
	Aval Technologies Co., Ltd.	Subsidiary	Purchase	297,248	1	30 days	-	-	(533)	-
CHIEF Telecom Inc.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	286,267	13	60 days	-	-	37,417	18
			Purchase	332,191	25	30 days	-	-	(38,387)	(31)
Chunghwa System Integration Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	1,733,260	87	30 days	-	-	628,180	85
CHYP Multimedia Marketing & Communications Co., Ltd	Chunghwa Telecom Co., Ltd.	Parent company	Sales	136,855	31	30 days	-	-	22,871	33
Honghwa International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	5,422,154	96	30-60 days	-	-	1,059,239	99
Donghwa Telecom Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	531,116	44	90 days	-	-	189,148	98
			Purchase	211,604	18	30 days	-	-	(118,861)	(83)
Chunghwa Telecom Global, Inc.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	337,300	56	90 days	-	-	43,990	70
Chunghwa Telecom Singapore Pte., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	189,339	15	90 days	-	-	76,002	21
			Purchase	150,673	13	30 days	-	-	(102,253)	(37)
CHT Security Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	345,563	91	30 days	-	-	97,677	70

Note 1: Purchase included acquisition of services costs.

Note 2: The differences were because Chunghwa Telecom Co., Ltd. and subsidiaries classified the amount as incremental costs of obtaining contracts, inventories, property, plant and equipment, intangible assets, and operating expenses.

Note 3: Notes and accounts receivable did not include the amounts collected for others and other receivables.

Note 4: Transaction terms with the related parties were determined in accordance with mutual agreements when there were no similar transactions with third parties. Other transactions with related parties were not significantly different from those with third parties.

TABLE 6

CHUNGHWA TELECOM CO., LTD.

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Company Name	Related Party	Nature of Relationship	Ending Balance	Turnover Rate (Note)	Overdue		Amounts Received in Subsequent Period	Allowance for Bad Debts
					Amounts	Action Taken		
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	Subsidiary	$ 446,718	11.28	$ -	-	$ 431,727	$ -
	Donghwa Telecom Co., Ltd.	Subsidiary	118,861	2.14	-	-	45,483	-
	Chunghwa Telecom Singapore Pte., Ltd.	Subsidiary	102,253	1.40	-	-	102,253	-
Senao International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	1,210,922	6.15	-	-	545,921	-
Chunghwa System Integration Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	628,180	2.94	-	-	478,332	-
Honghwa International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	1,059,239	5.23	-	-	634,207	-
Donghwa Telecom Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	189,148	5.37	-	-	68,792	-

Note: Payments and receipts collected in trust for others are excluded from the accounts receivable for calculating the turnover rate.

TABLE 7

CHUNGHWA TELECOM CO., LTD.

NAMES, LOCATIONS, AND OTHER INFORMATION OF INVESTEES IN WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INVESTMENT IN MAINLAND CHINA)
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2018			Net Income (Loss) of the Investee	Recognized Gain (Loss) (Notes 1, 2 and 3)	Note
				December 31, 2018	December 31, 2017	Shares (Thousands)	Percentage of Ownership (%)	Carrying Value (Note 3)			
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	Taiwan	Handset and peripherals retailer; sales of CHT mobile phone plans as an agent	$ 1,065,813	$ 1,065,813	71,773	28	$ 1,607,436	$ 403,281	$ 107,306	Subsidiary
	Light Era Development Co., Ltd.	Taiwan	Planning and development of real estate and intelligent buildings, and property management	3,000,000	3,000,000	300,000	100	3,853,824	8,051	8,051	Subsidiary
	Donghwa Telecom Co., Ltd.	Hong Kong	International private leased circuit, IP VPN service, and IP transit services	1,567,453	1,567,453	402,590	100	1,619,155	45,204	45,204	Subsidiary
	Chunghwa Telecom Singapore Pte., Ltd.	Singapore	International private leased circuit, IP VPN service, and IP transit services	574,112	574,112	26,383	100	915,532	141,993	141,993	Subsidiary
	Chunghwa System Integration Co., Ltd.	Taiwan	Providing system integration services and telecommunications equipment	838,506	838,506	60,000	100	738,139	16,226	21,487	Subsidiary
	CHIEF Telecom Inc.	Taiwan	Network integration, internet data center ("IDC"), communications integration and cloud application services	459,652	468,326	39,426	57	1,694,950	484,604	298,169	Subsidiary
	Chunghwa Investment Co., Ltd.	Taiwan	Investment	639,559	639,559	68,085	89	3,152,229	201,712	176,542	Subsidiary
	Prime Asia Investments Group Ltd. (B.V.I.)	British Virgin Islands	Investment	385,274	385,274	1	100	192,841	(1,911)	(1,911)	Subsidiary
	Honghwa International Co., Ltd.	Taiwan	Telecommunication engineering, sales agent of mobile phone plan application and other business services	180,000	180,000	18,000	100	465,889	221,203	211,985	Subsidiary
	CHYP Multimedia Marketing & Communications Co., Ltd.	Taiwan	Digital information supply services and advertisement services	150,000	150,000	15,000	100	197,996	25,318	25,318	Subsidiary
	Chunghwa Telecom Vietnam Co., Ltd.	Vietnam	Intelligent energy saving solutions, international circuit, and information and communication technology ("ICT") services.	148,275	148,275	-	100	106,091	(1,471)	(1,471)	Subsidiary
	Chunghwa Telecom Global, Inc.	United States	International private leased circuit, internet services, and transit services	70,429	70,429	6,000	100	288,207	58,899	61,154	Subsidiary
	CHT Security Co., Ltd.	Taiwan	Computing equipment installation, wholesale of computing and business machinery equipment and software, management consulting services, data processing services, digital information supply services and internet identify services	240,000	240,000	24,000	80	237,927	4,633	(2,078)	Subsidiary
	Chunghwa Telecom (Thailand) Co., Ltd.	Thailand	International private leased circuit, IP VPN service, ICT and cloud VAS services	100,000	100,000	1,000	100	94,931	(2,669)	(2,669)	Subsidiary
	Spring House Entertainment Tech. Inc.	Taiwan	Software design services, internet contents production and play, and motion picture production and distribution	62,209	62,209	10,277	56	98,298	7,906	4,431	Subsidiary
	Chunghwa leading Photonics Tech Co., Ltd.	Taiwan	Production and sale of electronic components and finished products	70,500	70,500	7,050	75	98,763	24,908	24,514	Subsidiary
	Smartfun Digital Co., Ltd.	Taiwan	Providing diversified family education digital services	65,000	65,000	6,500	65	72,031	9,931	8,215	Subsidiary
	Chunghwa Telecom Japan Co., Ltd.	Japan	International private leased circuit, IP VPN service, and IP transit services	17,291	17,291	1	100	62,626	11,103	11,103	Subsidiary
	Chunghwa Sochamp Technology Inc.	Taiwan	Design, development and production of Automatic License Plate Recognition software and hardware	20,400	20,400	2,040	51	(6,233)	5,169	3,964	Subsidiary
	International Integrated System, Inc.	Taiwan	IT solution provider, IT application consultation, system integration and package solution	283,500	283,500	22,498	32	310,842	76,335	23,307	Associate

(Continued)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount December 31, 2018	Original Investment Amount December 31, 2017	Balance as of December 31, 2018 Shares (Thousands)	Balance as of December 31, 2018 Percentage of Ownership (%)	Balance as of December 31, 2018 Carrying Value	Net Income (Loss) of the Investee	Recognized Gain (Loss) (Notes 1, 2 and 3)	Note
	Viettel-CHT Co., Ltd.	Vietnam	IDC services	$ 288,327	$ 288,327	-	30	$ 286,510	$ 215,549	$ 64,681	Associate
	Taiwan International Standard Electronics Co., Ltd.	Taiwan	Manufacturing, selling, designing, and maintaining of telecommunications systems and equipment	164,000	164,000	1,760	40	216,439	195,155	133,299	Associate
	KKBOX Taiwan Co., Ltd.	Taiwan	Providing of music on-line, software, electronic information, and advertisement services	67,025	67,025	4,438	30	147,360	22,268	7,269	Associate
	So-net Entertainment Taiwan Limited	Taiwan	Online service and sale of computer hardware	120,008	120,008	9,429	30	119,956	51,233	15,717	Associate
	KingwayTek Technology Co., Ltd.	Taiwan	Publishing books, data processing and software services	69,013	69,013	6,993	26	134,925	38,427	7,427	Associate
	Taiwan International Ports Logistics Corporation	Taiwan	Import and export storage, logistic warehouse, and ocean shipping service	80,000	80,000	8,000	27	49,650	10	19	Associate
	UUPON Inc.	Taiwan	Information technology service and general advertisement service	97,598	97,598	5,400	15	11,432	(38,469)	(5,786)	Associate
	Alliance Digital Tech Co., Ltd.	Taiwan	Development of mobile payments and information processing service	60,000	60,000	6,000	14	5,080	(65,337)	(9,408)	Associate
	Chunghwa PChome Fund I Co., Ltd.	Taiwan	Investment, venture capital, investment advisor, management consultant and other consultancy service	200,000	-	20,000	50	198,974	(2,052)	(1,026)	Associate
	Cornerstone Ventures Co., Ltd.	Taiwan	Investment, venture capital, investment advisor, management consultant and other consultancy service	4,900	-	490	49	4,757	(291)	(143)	Associate
Senao International Co., Ltd.	Senao Networks, Inc.	Taiwan	Telecommunication facilities manufactures and sales	202,758	202,758	16,579	34	919,841	465,415	156,130	Associate
	Senao International (Samoa) Holding Ltd.	Samoa Islands	International investment	2,416,645	2,416,645	81,175	100	470,230	(30,654)	(30,654)	Subsidiary
	UUPON Inc.	Taiwan	Information technology service and general advertisement service	24,000	24,000	2,400	7	5,215	(38,469)	(2,574)	Associate
	Youth Co., Ltd.	Taiwan	Sale of information and communication technologies products	364,950	335,450	8,462	93	206,539	(17,744)	(62,586)	Subsidiary
	Aval Technologies Co., Ltd.	Taiwan	Sale of information and communication technologies products	60,000	60,000	6,510	100	69,934	4,103	4,103	Subsidiary
	SENYOUNG Insurance Agent Co., Ltd.	Taiwan	Property and liability insurance agency	59,000	10,000	5,900	100	50,684	(7,832)	(7,832)	Subsidiary
Light Era Development Co., Ltd.	Taoyuan Asia Silicon Valley Innovation Co., Ltd.	Taiwan	Development of real estate	7,500	-	750	60	5,048	(4,086)	(2,452)	Subsidiary
CHIEF Telecom Inc.	Unigate Telecom Inc.	Taiwan	Telecommunications and internet service	2,000	2,000	200	100	887	(116)	(116)	Subsidiary
	Chief International Corp.	Samoa Islands	Telecommunications and internet service	6,068	6,068	200	100	64,344	11,409	11,409	Subsidiary
Chunghwa System Integrated Co., Ltd.	Concord Technology Co., Ltd.	Brunei	Investment	-	47,321	-	-	-	-	-	Subsidiary (Note 4)
Chunghwa Telecom Singapore Pte., Ltd.	ST-2 Satellite Ventures Pte., Ltd.	Singapore	Operation of ST-2 telecommunications satellite	409,061	409,061	18,102	38	496,033	292,852	111,077	Associate
Chunghwa Investment Co., Ltd.	Chunghwa Precision Test Tech. Co., Ltd.	Taiwan	Production and sale of semiconductor testing components and printed circuit board	178,608	199,736	11,230	34	2,106,738	716,024	259,425	Subsidiary
	CHIEF Telecom Inc.	Taiwan	Network integration, internet data center ("IDC"), communications integration and cloud application services	19,064	19,422	2,078	3	86,051	484,604	15,873	Associate
	Senao International Co., Ltd.	Taiwan	Selling and maintaining mobile phones and its peripheral products	49,731	49,731	1,001	-	43,275	403,281	1,503	Associate
Chunghwa Precision Test Tech. Co., Ltd.	Chunghwa Precision Test Tech USA Corporation	United States	Design and after-sale services of semiconductor testing components and printed circuit board	12,636	12,636	400	100	24,881	1,599	1,599	Subsidiary
	CHPT Japan Co., Ltd.	Japan	Related services of electronic parts, machinery processed products and printed circuit board	2,008	2,008	1	100	2,361	123	123	Subsidiary

(Continued)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2018			Net Income (Loss) of the Investee	Recognized Gain (Loss) (Notes 1, 2 and 3)	Note
				December 31, 2018	December 31, 2017	Shares (Thousands)	Percentage of Ownership (%)	Carrying Value			
Prime Asia Investments Group, Ltd. (B.V.I.)	Chunghwa Precision Test Tech. International, Ltd.	Samoa Islands	Wholesale and retail of electronic materials, and investment	$ 54,450	$ 54,450	1,700	100	$ 43,030	$ (3,503)	$ (3,503)	Subsidiary
	Chunghwa Hsingta Co., Ltd.	Hong Kong	Investment	375,274	375,274	1	100	195,368	(1,911)	(1,911)	Subsidiary
	MeWorks Limited (HK)	Hong Kong	Investment	10,000	10,000	-	20	-	-	-	Associate
Senao International (Samoa) Holding Ltd.	Senao International HK Limited	Hong Kong	International investment	2,393,646	2,393,646	80,440	100	431,552	(30,705)	(30,705)	Subsidiary
	HopeTech Technologies Limited	Hong Kong	Information technology and telecommunications products sales	-	21,177	-	-	-	(330)	(149)	Associate (Note 5)
Youth Co., Ltd.	ISPOT Co., Ltd.	Taiwan	Sale of information and communication technologies products	53,021	53,021	-	100	9,384	(4,979)	(9,830)	Subsidiary
	Youyi Co., Ltd.	Taiwan	Maintenance of information and communication technologies products	21,354	21,354	-	100	17,065	1,642	1,321	Subsidiary
CHYP Multimedia Marketing & Communications Co., Ltd	Click Force Marketing Company	Taiwan	Advertisement services	44,607	44,607	1,078	49	37,876	7,929	1,760	Associate

Note 1: The amounts were based on audited financial statements.

Note 2: Recognized gain (loss) of investees includes amortization of differences between the investment cost and net value and elimination of unrealized transactions.

Note 3: Recognized gain (loss) and carrying value of the investees did not include the adjustment of the difference between the accounting treatment on standalone basis and consolidated basis as a result of the application of IFRS 15.

Note 4: Concord Technology Co., Ltd. was approved to end and dissolve its business in August 2017. The liquidation of Concord was completed in January 2018.

Note 5: Senao International (Samoa) Holding Ltd disposed all shares of HopeTech Technologies Limited in June 2018.

Note 6: Investment in mainland China is included in Table 8.

(Concluded)

CHUNGHWA TELECOM CO., LTD.

INVESTMENT IN MAINLAND CHINA
YEAR ENDED DECEMBER 31, 2018
(Amounts in Thousands of New Taiwan Dollars)

Investee	Main Businesses and Products	Total Amount of Paid-in Capital	Investment Type (Note 1)	Accumulated Outflow of Investment from Taiwan as of January 1, 2018	Investment Flows		Accumulated Outflow of Investment from Taiwan as of December 31, 2018	Net Income (Loss) of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Loss) (Note 2)	Carrying Value as of December 31, 2018	Accumulated Inward Remittance of Earnings as of December 31, 2018	Note
					Outflow	Inflow							
Senao Trading (Fujian) Co., Ltd.	Sale of information and communication technologies products	$ 1,073,170	2	$ 1,073,170	$ -	$ -	$ 1,073,170	$ 6,382	100	$ 6,382	$ 194,021	$ -	Note 7
Senao International Trading (Shanghai) Co., Ltd.	Sale of information and communication technologies products	955,838	2	955,838	-	-	955,838	(34,866)	100	(34,866)	79,437	-	-
Senao International Trading (Shanghai) Co., Ltd. (Note 11)	Maintenance of information and communication technologies products	87,540	2	87,540	-	-	87,540	(968)	100	(968)	-	-	Note 8
Senao International Trading (Jiangsu) Co., Ltd.	Sale of information and communication technologies products	263,736	2	263,736	-	-	263,736	124	100	124	87,218	-	Note 9
Chunghwa Telecom (China) Co., Ltd.	Integrated information and communication solution services for enterprise clients, and intelligent energy network service	177,176	2	177,176	-	-	177,176	(971)	100	(971)	53,150	-	-
Jiangsu Zhenghua Information Technology Company, LLC	Providing intelligent energy saving solution and intelligent buildings services	189,410	2	142,057	-	-	142,057	(465)	75	(349)	-	-	Note 10
Shanghai Taihua Electronic Technology Limited	Design of printed circuit board and related consultation service	51,233	2	51,233	-	-	51,233	(3,526)	100	(3,526)	39,893	-	-
Shanghai Chief Telecom Co., Ltd.	Telecommunications and internet service	10,150	1	4,973	-	-	4,973	4,211	49	2,063	7,942	-	-

(Continued)

Investee	Accumulated Investment in Mainland China as of December 31, 2018	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on Investment Stipulated by Investment Commission, MOEA
SENAO and its subsidiaries (Note 3)	$ 2,380,284	$ 2,380,284	$ 3,494,200
Chunghwa Telecom (China) Co., Ltd. (Note 4)	177,176	177,176	231,943,392
Jiangsu Zhenghua Information Technology Company, LLC (Note 4)	142,057	142,057	231,943,392
Shanghai Taihua Electronic Technology Limited (Note 5)	51,233	97,965	3,690,636
Shanghai Chief Telecom Co., Ltd. (Note 6)	4,973	4,973	1,709,614

Note 1: Investments are divided into three categories as follows:

a. Direct investment.
b. Investments through a holding company registered in a third region.
c. Others.

Note 2: The amounts were calculated based on the investee's audited financial statements.

Note 3: Senao International Co., Ltd. and its subsidiaries were calculated based on the consolidated net assets value of Senao International Co., Ltd.

Note 4: Chunghwa Telecom (China) Co., Ltd. and Jiangsu Zhenghua Information Technology Company, LLC were calculated based on the consolidated net assets value of Chunghwa Telecom Co., Ltd.

Note 5: Shanghai Taihua Electronic Technology Limited was calculated based on the consolidated net assets value of Chunghwa Precision Test Tech. Co., Ltd.

Note 6: Shanghai Chief Telecom Co., Ltd. was calculated based on the consolidated net assets value of CHIEF Telecom Inc.

Note 7: Senao Trading (Fujian) Co., Ltd. was approved to end its business and dissolve in September 2018. The liquidation of Senao Trading (Fujian) Co., Ltd. is still in process.

Note 8: The liquidation of Senao International Trading (Shanghai) Co., Ltd. was completed in March 2018.

Note 9: Senao International Trading (Jiangsu) Co., Ltd. was approved to end its business and dissolve in April 2018. The liquidation of Senao International Trading (Jiangsu) Co., Ltd. is still in process.

Note 10: The liquidation of Jiangsu Zhenhua Information Technology Company, LLC. was completed in December 2018.

Note 11: The English name is the same as the above entity; however the Chinese name included in the respective Articles of Incorporations is different from the above entity.

(Concluded)

THE CONTENTS OF STATEMENTS OF MAJOR ACCOUNTING ITEMS

STATEMENT 1

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF CASH AND CASH EQUIVALENTS
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Item	Period	Annual Interest Rate / Earnings Rate	Amount
Cash			
Cash on hand			$ 210,125
Bank deposits			
Checking deposits			1,317,786
Demand deposits			2,698,729
			4,016,515
			4,226,640
Cash equivalents			
Commercial paper			
CTBC Bank Co., Ltd.	2018.12.26-2019.01.10	0.53%-0.54%	1,099,587
Taiwan Finance Corporation	2018.12.25-2019.01.15	0.54%-0.56%	999,180
Grand Bills Finance Corporation	2018.12.25-2019.01.10	0.53%-0.54%	898,755
Taishin International Bank Co., Ltd.	2018.12.24-2019.01.09	0.53%-0.54%	798,904
Mega Bills Finance Co., Ltd.	2018.12.25-2019.01.10	0.55%	599,473
China Bills Finance Corporation	2018.12.24-2019.01.15	0.57%	499,166
International Bills Finance Corporation	2018.12.25-2019.01.03	0.52%	199,988
			5,095,053
Time deposits	2018.12.21-2019.03.21	0.62%	1,158
Negotiable certificates of deposit	2018.10.22-2019.01.30	0.55%-0.60%	7,600,000
			12,696,211
			$ 16,922,851

Note: Including USD5,753 thousand @30.72, EUR822 thousand @35.20, JPY1,183 thousand @0.278 and SGD44 thousand@22.48.

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF CHANGES IN FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS-NONCURRENT
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Investee Company	Balance, January 1, 2018		Effect of Retrospective Application	Balance, January 1, 2018 as Adjusted	Additions in Investment (Note)		Decrease in Investment (Note)		Balance, December 31, 2018			Note
	Shares (In Thousand)	Amount			Shares (In Thousand)	Amount	Shares (In Thousand)	Amount	Shares (In Thousand)	Percentage of Ownership (%)	Amount	
Financial assets at fair value through profit or loss												
Taiwania Capital Buffalo Fund Co., Ltd.	300,000	$ 300,000	$ -	$ 300,000	-	$ -	-	$ 7,090	300,000	12.90	$ 292,910	
Innovation Works Development Fund, L.P.	-	242,521	-	242,521	-	-	-	18,069	-	4.44	224,452	
		$ 542,521	$ -	$ 542,521		$ -		$ 25,159			$ 517,362	

Note: Showed at amounts with fair value adjustments.

STATEMENT 3

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF TRADE NOTES AND ACCOUNTS RECEIVABLE, NET
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Mobile phone services revenue	$ 6,865,753
International call services revenue	6,834,001
Leased line services revenue	3,041,430
Local telephone services revenue	2,208,734
Internet and value-added services revenue	2,601,932
Project services revenue	5,999,355
Others (Note)	2,845,361
	30,396,566
Less: Loss allowance	(2,544,687)
	$ 27,851,879

Note: The amount of individual item included in others does not exceed 5% of the account balance.

STATEMENT 4

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF INVENTORIES
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount	
	Cost	Market Price (Note)
Merchandise	$ 3,645,462	$ 4,292,322
Project in process	6,826,297	7,503,033
	$ 10,471,759	$ 11,795,355

Note: Amount of net realizable value.

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF CHANGES IN FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME-NONCURRENT
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Investee Company	Balance, January 1, 2018		Effect of Retrospective Application	Balance, January 1, 2018 as Adjusted	Additions in Investment (Note 1)		Decrease in Investment (Note 1)		Balance, December 31, 2018			Note
	Shares (In Thousand)	Amount			Shares (In Thousand)	Amount	Shares (In Thousand)	Amount	Shares (In Thousand)	Percentage of Ownership (%)	Amount	
Financial assets at fair value through other comprehensive income												
Listed stocks												
China Airlines Ltd.	263,622	$3,071,198	$ -	$3,071,198	-	$ -	-	$ 171,355	263,622	4.86	$2,899,843	
Non-listed stocks												
Taipei Financial Center Corp.	172,927	1,789,530	1,873,060	3,662,590	-	-	-	176,952	172,927	11.76	3,485,638	
Industrial Bank of Taiwan II Venture Capital Co., Ltd. (IBT II)	5,252	40,853	(18,686)	22,167	-	2,430	-	2,667	5,252	16.67	21,930	Note 2
Global Mobile Corp.	7,617	-	-	-	-	-	-	-	7,617	2.76	-	
Innovation Works Limited	1,000	26,834	8,138	34,972	-	665	-	32,787	1,000	1.93	2,850	Note 2
RPTI Intergroup International Ltd.	4,765	-	-	-	-	-	-	-	4,765	10.19	-	
Taiwan mobile payment Co., Ltd.	1,200	12,000	(6,542)	5,458	-	-	-	621	1,200	2.00	4,837	
4 Gamers Entertainment Inc.	-	-	-	-	136	117,955	-	-	136	20.00	117,955	Note 3
		$4,940,415	$1,855,970	$6,796,385		$ 121,050		$ 384,382			$6,533,053	

Note 1: Showed at amounts with fair value adjustments.
Note 2: Proceed from return of investees was included in decrease in investment.
Note 3: Acquisition of investments was included in additions in investment.

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF CHANGES IN INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

	Balance, January 1, 2018		Additions in Investment		Decrease in Investment		Increase (Decrease) in Using the Equity Method	Effect of Application of IFRS 9	Effect of Application of IFRS 15	Balance, December 31, 2018			Market Value / Net Asset Value	Note
Investee Company	Shares (In Thousand)	Amount	Shares (In Thousand)	Amount	Shares (In Thousand)	Amount				Shares (In Thousand)	Percentage of Ownership (%)	Amount		
Investments accounted for using equity method														
Subsidiaries														
Listed stocks														
Senao International Co., Ltd.	71,773	$ 1,678,240	-	$ -	-	$ 227,249	$ 156,447	$ -	$ (1,271,809)	71,773	28	$ 335,629	$ 2,512,055	Notes 2 and 3
CHIEF Telecom Inc.	40,170	858,313	-	-	744	212,764	1,051,094	(1,693)	-	39,426	57	1,694,950	5,933,613	Notes 2, 3 and 4
Non-listed stocks														
Light Era Development Co., Ltd.	300,000	3,855,359	-	-	-	9,586	8,051	-	-	300,000	100	3,853,824	3,858,807	Notes 1 and 3
Donghwa Telecom Co., Ltd.	402,590	1,527,333	-	-	-	-	91,822	-	-	402,590	100	1,619,155	1,619,155	Note 1
Chunghwa Telecom Singapore Pte., Ltd.	26,383	848,442	-	-	-	106,955	174,045	-	-	26,383	100	915,532	915,532	Notes 1 and 3
Chunghwa System Integration Co., Ltd.	60,000	715,610	-	-	-	-	22,529	-	-	60,000	100	738,139	637,093	Note 1
Chunghwa Investment Co., Ltd.	68,085	2,316,100	-	-	-	102,128	933,974	4,283	-	68,085	89	3,152,229	3,228,330	Notes 1 and 3
Prime Asia Investments Group Ltd. B.V.I	1	212,251	-	-	-	-	(7,835)	(11,575)	-	1	100	192,841	192,841	Note 1
Honghwa International Co., Ltd.	18,000	459,096	-	-	-	205,191	211,984	-	(8,440)	18,000	100	457,449	477,002	Notes 1 and 3
CHYP Multimedia Marketing & Communications Co., Ltd.	15,000	194,808	-	-	-	22,130	25,318	-	-	15,000	100	197,996	197,996	Notes 1 and 3
Spring House Entertainment Tech. Inc.	10,277	93,907	-	-	-	-	4,391	-	-	10,277	56	98,298	82,564	Note 1
Chunghwa Telecom Global, Inc.	6,000	218,982	-	-	-	-	69,225	-	-	6,000	100	288,207	287,142	Note 1
Chunghwa Telecom Vietnam Co., Ltd.	-	106,676	-	-	-	-	(585)	-	-	-	100	106,091	106,091	Note 1
Smartfun Digital Co., Ltd.	6,500	73,049	-	-	-	9,232	8,214	-	-	6,500	65	72,031	73,011	Notes 1 and 3
Chunghwa Telecom Japan Co., Ltd.	1	48,730	-	-	-	-	13,896	-	-	1	100	62,626	62,626	Note 1
Chunghwa Sochamp Technology Inc.	2,040	(10,197)	-	-	-	-	3,964	-	-	2,040	51	(6,233)	7,187	Note 1
Chunghwa Leading Photonics Tech. Co., Ltd.	7,050	98,007	-	-	-	23,759	24,515	-	-	7,050	75	98,763	111,232	Notes 1 and 3
Chunghwa Telecom (Thailand) Co., Ltd.	1,000	93,998	-	-	-	-	933	-	-	1,000	100	94,931	94,931	Note 1
CHT Security Co., Ltd.	24,000	240,007	-	-	-	-	(2,080)	-	-	24,000	80	237,927	243,732	Note 1
		13,628,711		-		918,994	2,789,902	(8,985)	(1,280,249)			14,210,385		
Associates														
Non-listed stocks														
International Integrated System, Inc.	22,498	296,333	-	-	-	8,999	23,508	-	-	22,498	32	310,842	275,820	Notes 1 and 3
Viettel-CHT Co., Ltd.	-	256,323	-	-	-	36,603	66,790	-	-	-	30	286,510	286,376	Notes 1 and 3
Taiwan International Standard Electronics Co., Ltd.	1,760	136,885	-	-	-	56,123	135,677	-	-	1,760	40	216,439	354,398	Notes 1 and 3
KKBOX Taiwan Co., Ltd.	4,438	139,741	-	-	-	-	7,619	-	-	4,438	30	147,360	108,061	Note 1
So-net Entertainment Taiwan Limited	9,429	104,171	-	-	-	-	15,785	-	-	9,429	30	119,956	102,101	Note 1
KingwayTek Technology Co., Ltd.	5,926	128,269	1,067	-	-	770	7,426	-	-	6,993	26	134,925	104,632	Notes 1, 3 and 5
Alliance Digital Tech Co., Ltd.	6,000	14,488	-	-	-	-	(9,408)	-	-	6,000	14	5,080	8,636	Note 1
UUPON Inc.	5,400	17,218	-	-	-	-	(5,786)	-	-	5,400	15	11,432	11,432	Note 1
Taiwan International Ports Logistics Corporation	8,000	49,631	-	-	-	-	19	-	-	8,000	27	49,650	49,675	Note 1
Chunghwa PChome Fund I Co., Ltd.	-	-	20,000	200,000	-	-	(1,026)	-	-	20,000	50	198,974	198,974	Notes 1 and 6
Cornerstone Ventures Co., Ltd.	-	-	490	4,900	-	-	(143)	-	-	490	49	4,757	4,757	Notes 1 and 6
		1,143,059		204,900		102,495	240,461	-	-			1,485,925		
		$ 14,771,770		$ 204,900		$ 1,021,489	$ 3,030,363	$ (8,985)	$ (1,280,249)			$ 15,696,310		

Note 1: The amounts of net asset value were based on audited financial statements.
Note 2: Fair value was based on the closing price at the end of 2018.
Note 3: Decrease in investment was cash dividends paid.
Note 4: Decrease in investment was partial disposal of interests in subsidiary.
Note 5: Additions in shares of investment was stock dividends paid.
Note 6: Additions in investment was investment in new company.

STATEMENT 7

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF TRADE NOTES AND ACCOUNTS PAYABLE
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
International call allocation expenses	$ 6,523,179
Payable of spare parts for equipment	2,008,383
Payable of products	189,856
Other (Note)	8,052,059
	$ 16,773,477

Note: The amount of each item in others does not exceed 5% of the account balance.

STATEMENT 8

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF OPERATING COSTS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Depreciation	$ 25,585,731
Amortization	14,090,573
Cost of products	12,270,166
Salaries	11,748,400
Interconnection and call transfer fees	7,529,457
Repair, maintenance and warranty expenses	7,055,568
Compensation	6,181,706
Other (Note)	34,368,334
	$ 118,829,935

Note: The amount of each item in others does not exceed 5% of the account balance.

STATEMENT 9

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF OPERATING EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Marketing	General and Administrative	Research and Development	Expected Credit Loss	Total
Salaries	$ 6,063,241	$ 1,164,404	$ 1,400,933	$ -	$ 8,628,578
Compensation	3,213,047	602,092	736,526	-	4,551,665
Professional service fee	1,538,028	188,240	201,461	-	1,927,729
Outsourcing fee	1,238,664	3,810	3,103	-	1,245,577
Marketing and Promotion expenses	929,948	-	-	-	929,948
Depreciation	720,323	358,884	202,541	-	1,281,748
Expected credit loss	-	-	-	888,844	888,844
Other (Note)	5,104,552	1,109,607	638,044	-	6,852,203
	$ 18,807,803	$ 3,427,037	$ 3,182,608	$ 888,844	$ 26,306,292

Note: The amount of each item in others does not exceed 5% of the account balance.

STATEMENT 10

CHUNGHWA TELECOM CO., LTD.

STATEMENT OF EMPLOYEE BENEFIT, DEPRECIATION AND AMORTIZATION BY FUNCTION
FOR THE YEAR ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	Year Ended December 31, 2018			Year Ended December 31, 2017		
	Classified as Operating Costs	Classified as Operating Expenses	Total	Classified as Operating Costs	Classified as Operating Expenses	Total
Employee benefit expenses						
Salaries	$ 11,748,400	$ 8,628,578	$ 20,376,978	$ 11,712,162	$ 8,414,926	$ 20,127,088
Insurance	1,167,127	858,173	2,025,300	1,198,640	866,117	2,064,757
Pension	1,918,414	1,306,333	3,224,747	1,839,712	1,235,249	3,074,961
Remuneration to directors	-	43,478	43,478	-	45,647	45,647
Others	7,138,988	5,187,174	12,326,162	7,878,088	5,675,104	13,553,192
	$ 21,972,929	$ 16,023,736	$ 37,996,665	$ 22,628,602	$ 16,237,043	$ 38,865,645
Depreciation	$ 25,585,731	$ 1,281,748	$ 26,867,479	$ 26,009,009	$ 1,578,415	$ 27,587,424
Amortization	$ 14,090,573	$ 179,589	$ 14,270,162	$ 3,459,018	$ 234,688	$ 3,693,706

Note: The Company had 22,134 and 22,469 employees, including 10 and 9 non-employee directors as of December 31, 2018 and 2017, respectively.

Contact Information for
Chunghwa Telecom Headquarters and Branches

Headquarters
No. 21-3, Sec. 1, Hsinyi Rd., Taipei City 10048, Taiwan, R.O.C.
Tel: +886-2-2344-6789
Fax: +886-2-2356-8306
http://www.cht.com.tw

Northern Taiwan Business Group
No. 42, Sec. 1, Renai Rd., Taipei City 10052, Taiwan, R.O.C.
Tel: +886-2-2344-2485
Fax: +886-2-2344-3401

Southern Taiwan Business Group
No. 230, Linsen 1st Rd., Kaohsiung City 80002, Taiwan, R.O.C.
Tel: +886-7-344-3350
Fax: +886-7-344-3391

Mobile Business Group
No. 35, Aikuo E. Rd., Taipei City 10641, Taiwan, R.O.C.
Tel: +886-2-3316-6847
Fax: +886-2-3316-6454

International Business Group
No. 31, Aikuo Rd., Taipei City 10641, Taiwan, R.O.C.
Tel: +886-2-2344-3580
Fax: +886-2-2393-0144

Data Communications Business Group
No. 21, Sec. 1, Hsinyi Rd., Taipei City 10048, Taiwan, R.O.C.
Tel: +886-2-2344-4756
Fax: +886-2-2394-8404

Enterprise Business Group
16th Floor, No. 88, Sec. 4, Hsinyi Rd., Taipei City 10682, Taiwan, R.O.C.
Tel: +886-2-2326-6688
Fax: +886-2-2326-6837

Telecommunication Laboratories
No. 99, Dianyan Rd., Taoyuan City 32661, Taiwan, R.O.C.
Tel: +886-3-424-4512
Fax: +886-3-490-4464

Telecommunication Training Institute
No. 168, Minzu Rd., New Taipei City 22065, Taiwan, R.O.C.
Tel: +886-2-2963-9588
Fax: +886-2-2955-4144

Chunghwa Telecom Overseas Offices

Chunghwa Telecom (China) Co., Ltd.
Address: Room 2301, No.1118 Yan-an W.Road, Changning, Shanghai, China 200052
Contact: Jian Teng, General Manager
Tel: +86-21-5230-5021
Email: admin@cht-china.com

Chunghwa Telecom Co., Ltd. (Beijing Rep. Office)
Address: A1709 Vantone Plaza,2 Fuchengmenwai Dajie, Beijing 100037, China
Contact: Jian Teng, Representative
Tel: +86-10-6801-8035
Fax: +86-10-6801-6309
Email: jianteng@cht.com.tw

Chunghwa Telecom (Thailand) Co., Ltd.
Address:65/131 16th Floor Chamnan Phenjati Business Centre, Rama 9 Rd., Huay Kwang District, Bangkok 10320, Thailand
Contact: Wen-Jang Yang, General Manager
Tel: +66-2-248-7101~2
Fax: +66-2-248-7100
Email: arthur@cht.com.tw

Chunghwa Telecom Co., Ltd. (Yangon Rep. Office)
Address: 4F, No.171, 50th Street, Upper Block Yangon, Yangon Mynamar
Contact: Jian Cheng Ku, Representative
Tel: +95-9767-833-589
Email: chengku@cht.com.tw

Chunghwa Telecom Vietnam Co., Ltd.

Address: Room 703, 7th Floor, 3D Viet Nam, Duy Tan St., Dich Vong Hau Ward, Cau Giay Dist., Ha Noi, Vietnam 100000

Contact: Wen-Jang Yang, General Manager

Tel: +84-4-3795-1150~51

Fax: +84-4-3795-1149

Email: arthur@cht.com.tw

Chunghwa Telecom Vietnam Co., Ltd., HCMC Branch

Address: Room 3, 5th Floor, Crescent Plaza, 105 Ton Dat Tien Street, Tan Phu Ward, District 7, Hochiminh City, Vietnam 700000

Contact: Wen-Jang Yang, General Manager

Tel: +84-8-5413-8251

Email: arthur@cht.com.tw

Chunghwa Telecom Global, Inc.

Address: 2107 North First Street, Ste. 580, San Jose, CA 95131, USA

Contact: Phoebe Wang, General Manager

Tel: +1-408-454-1698

Fax: +1-408-5773-7168

Email: phoebe.wang@chtglobal.com

Chunghwa Telecom Global, Inc. (LA Office)

Address: 21671 Gateway Center Drive, Suite 212 Diamond Bar, CA 91765, USA

Contact: Phoebe Wang, General Manager

Tel: +1-909-978-5388 #101

Fax: +1-909-978-5380

Email: phoebe.wang@chtglobal.com

Donghwa Telecom Co., Ltd.

Address: Unit A,7/F., Tower A, Billion Centre, No.1 Wang Kwong Road, Kowloon Bay, Kowloon, Hong Kong

Contact: Morris Su, General Manager

Tel: +852-3586-2600

Fax: +852-3586-3936

Email: morris@donghwatele.com

Chunghwa Telecom Japan Co., Ltd.

Address: Level 5, Asagawa Building 2-1-17 Shiba Daimon, Minato-Ku, Tokyo 105-0012, Japan

Contact: Escudo Pai, General Manager

Tel: +81-3-3436-5988

Fax: +81-3-3436-7599

Email: escudo@cht.com.tw

Chunghwa Telecom Singapore Pte., Ltd.

Address: No. 331 North Bridge Road, #03-05, Odeon Towers, Singapore 188720

Contact: Cheng Chiao, General Manager

Tel: +65-6337-2010

Fax: +65-6337-2047

Email: ccjane@cht.sg

Chunghwa Telecom Singapore Pte., Ltd. (Jakarta office)

Address: Cyber Building 5th Floor, Room 501, Jl. Kuning Barat No. 8 Jakarta 12710, Indonesia

Contact: Cheng Chiao, General Manager

Tel: +65-6337-2010

Fax: +65-6337-2047

Email: ccjane@cht.sg

中華電信
Chunghwa Telecom

永遠走在最前面
Always Ahead

中華電信股份有限公司

董事長 鄭　優

總經理 謝繼茂

本年報依據中華民國公開發行公司年報應行記載事項準則及公司治理評鑑相關指標編制