

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 20-F**

(Mark One)

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934  
or
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2016  
or
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
or
- SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
Date of event requiring this shell company report  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission file number 001-31731

**Chunghwa Telecom Co., Ltd.**

(Exact name of Registrant as specified in its charter)

Chunghwa Telecom Co., Ltd.

(Translation of Registrant's name into English)

Taiwan, Republic of China

(Jurisdiction of incorporation or organization)

21-3 Hsinyi Road, Section 1, Taipei, Taiwan, Republic of China

(Address of principal executive offices)

Fufu Shen

21-3 Hsinyi Road, Section 1, Taipei,

Taiwan, Republic of China

Tel: +886 2 2344-5488

Email: chtir@cht.com.tw

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Shares, par value NTS10 per share	New York Stock Exchange*
American Depositary Shares, as evidenced by American Depositary Receipts, each representing 10 Common Shares	New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

7,757,446,545 Common SharesIndicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  Yes  NoIf this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.  Yes  NoIndicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.  Yes  NoIndicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).  Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Emerging growth company 

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board  Other If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. 

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.  Item 17  Item 18If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).  Yes  NoIndicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.  Yes  No

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\* Not for trading, but only in connection with the listing on the New York Stock Exchange of the American Depositary Shares

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**CHUNGHWA TELECOM CO., LTD.**  
**FORM 20-F ANNUAL REPORT**  
**FISCAL YEAR ENDED DECEMBER 31, 2016**

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## SUPPLEMENTAL INFORMATION

All references to “we,” “us,” “our” and “our company” in this annual report are to Chunghwa Telecom Co., Ltd. and our consolidated subsidiaries, unless the context otherwise requires. All references to “shares” and “common shares” are to our common shares, par value NT\$10 per share, and to “ADSs” are to our American depositary shares, each of which represents ten of our common shares. The ADSs are issued under the deposit agreement, as amended, supplemented or modified from time to time, originally dated as of July 17, 2003, among Chunghwa Telecom Co., Ltd. and the Bank of New York, and amended and restated on November 14, 2007, among Chunghwa Telecom Co., Ltd. and JP Morgan Chase Bank, as depository, and the holders and beneficial owners of American Depositary Receipts issued thereunder. All references to “Taiwan” are to the island of Taiwan and other areas under the effective control of the Republic of China. All references to “the government” or “the ROC government” are to the government of the Republic of China. All references to “the Ministry of Transportation and Communications” or “the MOTC” are to the Ministry of Transportation and Communications of the Republic of China. All references to “the National Communications Commission” or “the NCC” are to the National Communications Commission of the Republic of China. All references to the “Securities and Futures Bureau” are to the Securities and Futures Bureau of the Republic of China or its predecessors, as applicable. “ROC GAAP” means the generally accepted accounting principles of the Republic of China, “U.S. GAAP” means the generally accepted accounting principles of the United States, “IFRSs” means International Financial Reporting Standards as issued by the International Accounting Standards Board, and “Taiwan IFRSs” means the International Financial Reporting Standards as issued by the International Accounting Standards Board and endorsed by the Financial Supervisory Commission, or the FSC, which are required to be adopted by applicable companies in the ROC pursuant to the “Framework for Adoption of International Financial Reporting Standards by Companies in the ROC” promulgated by the FSC on May 14, 2009. Any discrepancies in any table between totals and sums of the amounts listed are due to rounding. Unless otherwise indicated, or the context otherwise requires, references in this annual report to financial and operational data for a particular year refer to the fiscal year of our company ending December 31 of that year.

When we refer to our “privatization” or our being “privatized” in this annual report, we mean our status as a non-state-owned entity after the government reduced its ownership of our outstanding common shares, including our common shares owned by entities majority-owned by the government, to less than 50%. We were privatized on August 12, 2005.

We publish our consolidated financial statements in New Taiwan dollars, the lawful currency of the Republic of China. In this annual report, “NT\$” and “NT dollars” mean New Taiwan dollars, “\$,” “US\$” and “U.S. dollars” mean United States dollars.

## FORWARD-LOOKING STATEMENTS IN THIS ANNUAL REPORT MAY NOT BE REALIZED

This annual report contains forward-looking statements, including statements regarding:

- our business and operating strategies;
- our network expansion plans;
- our business, operations and prospects;
- our financial condition and results of operations;
- our dividend policy;
- the telecommunications industry regulatory environment in Taiwan; and
- future developments in the telecommunications industry in Taiwan.

These forward-looking statements are generally indicated by the use of forward-looking terminology such as “believe,” “expect,” “anticipate,” “estimate,” “plan,” “aim,” “seek,” “project,” “may,” “will” or other similar words that express an indication of actions or results of actions that may or are expected to occur in the future. These statements reflect our current views with respect to future events and are subject to risks, uncertainties and assumptions, many of which are beyond our control. The forward-looking statements are contained principally in the sections entitled “Item 3. Key Information—D. Risk Factors,” “Item 4. Information on the Company” and “Item 5. Operating and Financial Review and Prospects.” These statements are made under the “safe harbor” provisions of the U.S. Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. You should not place undue reliance on these statements, which apply only as of the date of this annual report. These forward-looking statements are based on our own information and on information from other sources we believe to be reliable. Actual results may differ materially from those expressed or implied by these forward-looking statements. Factors that could cause differences include, but are not limited to, those discussed under “Item 3. Key Information—D. Risk Factors.” In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this annual report might not occur and our actual results could differ materially from those anticipated in these forward-looking statements. The forward-looking statements made in this annual report relate only to events or information as of the date on which the statements are made in this annual report. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events. You should read this annual report completely and with the understanding that our actual future results may be materially different from what we expect.

## **PART I**

### **ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

### **ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

### **ITEM 3. KEY INFORMATION**

#### **A. Selected Financial Data**

The selected consolidated statements of comprehensive income data and consolidated cash flows data for the years ended December 31, 2014, 2015 and 2016, and the selected consolidated balance sheets data as of December 31, 2015 and 2016 set forth below are derived from our audited consolidated financial statements included elsewhere in this annual report and should be read in conjunction with, and are qualified in their entirety by reference to, our consolidated financial statements and the related notes. The selected consolidated statements of comprehensive income data and consolidated cash flows data for the years ended December 31, 2012 and 2013, and the selected consolidated balance sheet data as of December 31, 2012, 2013 and 2014 set forth below are derived from our audited consolidated financial statements, which are not included this annual report. The consolidated financial statements have been prepared and presented in accordance with IFRSs.

	Year Ended December 31					
	2012	2013	2014	2015	2016	
	NTS	NTS	NTS	NTS	NTS	US\$
	(in billions, except for per share and per ADS data)					
<b>Consolidated Statements of Comprehensive Income Data:</b>						
Revenues	221.4	228.0	226.6	231.8	230.0	7.1
Operating costs	(141.5)	(147.3)	(148.4)	(148.1)	(147.6)	(4.6)
Gross profit	79.9	80.7	78.2	83.7	82.4	2.5
Operating expenses	(29.9)	(33.1)	(34.0)	(33.2)	(33.8)	(1.0)
Other income and expenses	(1.6)	0.1	0.6	(0.1)	(0.5)	(0.0)
Income from operations	48.4	47.7	44.8	50.4	48.1	1.5
Non-operating income and expenses <sup>(1)</sup>	1.6	1.4	1.8	1.6	1.3	0.0
Income before income tax	50.0	49.1	46.6	52.0	49.4	1.5
Income tax expense	(7.4)	(6.5)	(9.0)	(9.1)	(7.8)	(0.2)
Consolidated net income	42.6	42.6	37.6	42.9	41.6	1.3
Attributable to:						
Stockholders of the parent	41.5	41.5	37.0	42.1	40.5	1.3
Noncontrolling interests	1.1	1.1	0.6	0.8	1.1	0.0
	42.6	42.6	37.6	42.9	41.6	1.3
Earnings per share:						
Basic	5.35	5.35	4.77	5.42	5.22	0.16
Diluted	5.33	5.34	4.76	5.41	5.21	0.16
Earnings per ADS equivalent:						
Basic	53.49	53.49	47.66	54.19	52.19	1.61
Diluted	53.34	53.40	47.58	54.06	52.11	1.61

	As of December 31					
	2012	2013	2014	2015	2016	
	NTS	NTS	NTS	NTS	NTS	US\$
	(in billions)					
<b>Consolidated Balance Sheets Data:</b>						
Working capital	40.2	(0.3)	6.9	13.3	17.5	0.5
Long-term investments	19.7	15.3	13.1	10.5	7.2	0.2
Property, plant and equipment	297.3	302.7	302.7	296.4	291.2	9.0
Investment properties	7.8	8.0	7.6	7.9	8.1	0.3
Intangible assets	5.8	44.4	42.8	50.4	47.4	1.5
Net defined benefit assets	0.0	0.0	0.0	0.0	0.9	0.0
Total assets	440.0	441.0	446.5	452.8	446.9	13.8
Short-term loans	0.1	0.3	0.6	0.1	0.1	0.0
Current portion of long-term loans	—	0.3	—	0.0	—	—
Long-term loans <sup>(2)</sup>	2.1	1.4	1.9	1.7	1.6	0.0
Customers' deposits	4.9	4.8	4.8	4.7	4.6	0.1
Net defined benefit liabilities	4.6	5.5	6.5	7.1	1.5	0.0
Deferred revenue	3.8	3.7	3.4	3.6	3.5	0.1
Total liabilities	76.6	77.8	80.8	83.4	79.9	2.5
Net assets	363.4	363.2	365.7	369.4	367.0	11.3
Capital stock	77.6	77.6	77.6	77.6	77.6	2.4
Equity attributable to stockholders of the parent	359.1	358.3	360.8	364.3	360.7	11.1
Noncontrolling interests	4.3	4.9	4.9	5.1	6.3	0.2

	Year Ended December 31					
	2012	2013	2014	2015	2016	
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$
(in billions, except for percentages and per share)						
<b>Consolidated Cash Flows Data:</b>						
Net cash provided by operating activities	65.6	75.3	71.4	76.3	65.0	2
Net cash used in investing activities	(18.6)	(49.1)	(27.3)	(30.4)	(21.7)	(0.7)
Net cash used in financing activities	(42.5)	(42.5)	(35.1)	(39.2)	(42.5)	(1.3)
Net increase (decrease) in cash and cash equivalents	4.5	(16.3)	9.0	6.7	0.8	0.0
<b>Other Financial Data:</b>						
Gross margin <sup>(3)</sup>	36%	35%	35%	36%	36%	36%
Operating margin <sup>(4)</sup>	22%	21%	20%	22%	21%	21%
Net margin <sup>(5)</sup>	19%	18%	16%	18%	18%	18%
Capital expenditures	33.3	36.4	32.6	25.1	23.5	0.7
Depreciation and amortization	32.2	32.2	34.1	33.4	32.5	1.0
Cash dividends declared per share	4.63 <sup>(6)</sup>	2.39 <sup>(7)</sup>	4.86	5.49	4.94 <sup>(8)</sup>	0.15 <sup>(8)</sup>
Stock dividends declared per share	—	—	—	—	—	—

- (1) Includes interest income of NT\$742 million, NT\$563 million, NT\$288 million, NT\$306 million and NT\$189 million (US\$5.8 million) for the years ended December 31, 2012, 2013, 2014, 2015 and 2016, respectively, and interest expense of NT\$22 million, NT\$36 million, NT\$46 million, NT\$33 million and NT\$20 million (US\$0.6 million) for the years ended December 31, 2012, 2013, 2014, 2015 and 2016, respectively.
- (2) Excludes current portion of long-term loans.
- (3) Represents gross profit divided by revenues.
- (4) Represents income from operations divided by revenues.
- (5) Represents net income attributed to stockholders of the parent divided by revenues.
- (6) In addition to the cash dividends from unappropriated earnings disclosed in table above, we also made cash distributions of NT\$0.72 per share, which amounted to an aggregate of NT\$5.6 billion, from additional paid-in capital.
- (7) In addition to the cash dividends from unappropriated earnings disclosed in the table above, we also made cash distributions of NT\$2.14 per share, which amounted to an aggregate of NT\$16.6 billion, from additional paid-in capital. See “Item 5. Operating and Financial Review and Prospects—Overview—Effect of adopting Taiwan IFRSs on our dividends and employee bonuses.”
- (8) Dividends for 2016, which are calculated based on Taiwan IFRSs, were approved by the board of directors in March 2017 and are expected to be declared at our annual general stockholders’ meeting scheduled on June 23, 2017.

### Currency Translations and Exchange Rates

For the convenience of readers, NT dollar amounts used in this annual report for, and as of, the year ended December 31, 2016 have been translated into U.S. dollar amounts using US\$1.00=NT\$32.40, set forth in the statistical release of the Federal Reserve Board on December 30, 2016. The U.S. dollar translation appears in parentheses next to the relevant NT dollar amount. We make no representation that any New Taiwan dollar amounts or U.S. dollar amounts referred to in this annual report could have been or could be converted into U.S. dollars or NT dollars, as the case may be, at any particular rate or at all. On April 14, 2017, the exchange rate was NT\$30.31 to US\$1.00.

The following table sets forth, for each of the periods indicated, the low, average, high and period-end exchange rates of the NT dollar, expressed in NT dollar per U.S. dollar. These rates are provided solely for your convenience and are not necessarily the exchange rates that we used in this annual report or will use in the preparation of our periodic reports or any other information to be provided to you.

Year Ended December 31	Average <sup>(1)</sup>	High	Low	At Period End
2012	29.56	30.27	28.96	29.05
2013	29.73	30.20	29.93	29.83
2014	30.38	31.80	29.85	31.60
2015	31.80	33.17	30.37	32.79
2016	32.13	33.74	31.05	32.40
October	31.59	31.79	31.36	31.54
November	31.75	32.01	31.41	31.92
December	32.00	32.42	31.72	32.40
2017 (through April 14)	30.63	32.37	30.14	30.31
January	31.65	32.37	31.19	31.19
February	30.85	31.17	30.61	30.64
March	30.65	31.03	30.14	30.38
April (through April 14)	30.47	30.63	30.31	30.31

Source: Federal Reserve Statistical Release, Board of Governors of the Federal Reserve System.

- (1) Annual averages are calculated using the average of exchange rates on the last day of each month during the period. Monthly averages are calculated using the average of the daily rates during the relevant period.

## B. Capitalization and Indebtedness

Not applicable.

## C. Reasons for the Offer and Use of Proceeds

Not applicable.

## D. Risk Factors

Our business and operations are subject to various risks, many of which are beyond our control. If any of the risks described below actually occurs, our business, financial condition or results of operations could be seriously harmed.

### Risks Relating to Our Company and the Taiwan Telecommunications Industry

*Extensive regulation of our industry may limit our flexibility to respond to market conditions and competition, and our business may suffer.*

As a telecommunications service provider in Taiwan, we are subject to extensive regulation. See “Item 4. Information on the Company—B. Business Overview—Regulation” for a discussion of the regulatory environment applicable to us. Any changes in the regulatory environment applicable to us may adversely affect our business, financial condition and results of operations.

For example, the NCC has been focused on promulgating rules related to digital convergence. On August 3, 2016 the NCC published a new policy guideline, declaring to amend the framework governing digital convergence and to develop draft laws. On January 4, 2017 the NCC announced the preliminary draft of “Telecommunications Management Act” and the draft “Digital Communications Act” and solicited comments from the public. After completing the public opinions collection, the NCC revised the draft and obtained approval from the Commission’s meeting on April 5, 2017. The draft will be submitted to the Executive Yuan for review and consideration recently. The draft covers the following key areas: (i) to reduce the entry barrier to the telecommunications markets by changing the original concession/approval system to the approval/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 more stringent control measures; (iii) to revoke the right granted to telecommunications business to use private lands and buildings under the existing Telecommunications Act; and (iv) to introduce the internet governance principle whereby self-discipline and self-control are to be the main governance mechanism for the internet. The new draft laws will reduce the entry barrier to the telecommunications market, which is expected to increase the competition in the market. 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 will therefore be subject to special obligations involving a higher level of control by the authority. In addition, in view of the revocation of the right granted to telecommunications business to use private lands and buildings under the existing Telecommunications Act, the difficulty in the developing infrastructure of telecommunications networks will be greatly increased.



The amendments to the Radio and Television Act, the Cable Radio and Television Act and the Satellite Broadcasting Act were promulgated by the President on January 6, 2016. As these amendments focus primarily on lessening restrictions on cable broadcasting companies' business operating location and accelerating digital construction in the cable broadcasting industry, we believe that our broadband internet and multimedia on demand, or MOD, businesses may be faced with more vigorous competition. As the newly amended Radio and Television Act (a) prohibits system operators from forcing content providers to offer differential treatment to other platforms in an inappropriate way, and (b) provides a legal basis for licensed shopping channels to be listed on the MOD platform, the amendment is helpful for our MOD to obtain more comprehensive program content. Since lawmakers have not yet removed restrictions on governmental and political parties' investments in the broadcasting industries, our MOD business remains subject to such restrictions.

We have been designated by the government as a dominant provider of fixed communications and 2G and 3G mobile services within the meaning of applicable telecommunications regulations, and as a result, we are subject to special additional requirements imposed by the NCC. For example, the regulation governing the setting and changing of tariffs allows non-dominant telecommunications service providers greater freedom to set and change tariffs within the range set by the government. If we are unable to respond effectively to tariff changes by our competitors, our competitiveness, market position and profitability will be materially and adversely affected.

In particular, future decreases in tariff rates could immediately and substantially decrease our revenues. As a dominant Type I service provider under the Republic of China Telecommunications Act, or Telecommunications Act, we are constrained in our ability to raise prices. For example, the NCC adopted the first three-year tariff reduction plan from April 2007 to March 2010, a second three-year tariff reduction plan from April 2010 to March 2013, and a third four-year tariff reduction plan from April 2013 to March 2017, resulting in a number of price reductions in the tariff structures relating to our domestic fixed communications and mobile communications services. On March 8, 2017, the NCC announced a new plan for tariff reductions effective from April 1, 2017 to March 31, 2020. The reduction plan applies to the wholesale tariffs for IP peering and domestic leased line services, and to the monthly fees for fixed-line broadband access services (excluding fiber-to-the-home, or FTTH, fiber-to-the-building, or FTTB, asymmetric digital subscriber line, or ADSL, and the services which downlink and uplink speeds both over 100 Mbps). See "Item 4. Information on the Company—B. Business Overview—Regulation" and "Item 5. Operating and Financial Review and Prospects—Overview—Tariff adjustments." We cannot assure you that we will not be required to further reduce our tariffs again in the future. Any mandatory tariff reductions could have a material adverse effect on our revenues.

In addition, the relevant authority might require us to reduce tariffs over some services through other regulatory measures or administrative planning. For example, after the article 14 of the Regulations Governing Network Interconnection among Telecommunications Enterprises was amended, the NCC announced an administrative planning to decrease tariff in the mobile interconnection fees over a period of four years starting on January 5, 2013. On November 4, 2015, the NCC reviewed and determined to decrease our fixed telecommunications network interconnection fees and it was made retroactive since January 1, 2015. The regulatory framework within which we operate may limit our flexibility to respond to market conditions, competition or changes.

***If we fail to comply with the regulations of the ROC Fair Trade Act, we may be investigated and fined.***

As a provider of telecommunication products and services, our business operations are subject to the regulations of the ROC Fair Trade Act, or the FTA, which is administered and enforced by the ROC Fair Trade Commission, or the FTC. The FTA requires, among other things, that the marketing and promotional materials of a business to be true and not misleading. The FTA also prohibits a business from participating or engaging in a cartel or other anti-competitive conduct. The FTC has the authority under the FTA to investigate and, where appropriate, impose fines and penalties on a business that violates any regulations promulgated by the FTA. The consequences of any such violations could have a material adverse effect on our business and results of operations. See "Item 4. Information on the Company—B. Business Overview—Regulation" for a discussion of the FTA applicable to us. In March 2015, the FTC found us liable for providing false and misleading data in advertisement comparing our services against our competitors on our 100 million bits per second, or Mbps, fiber broadband plus TV programs service in the PingTung area. The FTC consequently ordered us to pay a fine of NT\$0.8 million, which we paid in March 2015. We have been investigated and penalized by the FTC in the past and may continue to be investigated or penalized by the FTC in the future if we fail to comply with the relevant regulations. As the FTA provides the FTC broad discretion to interpret anti-competition actions and enforce the relevant clauses under the FTA, we are unable to predict whether the FTC would initiate investigation on any of our daily business activities or find us liable for violating the FTA in the future. The investigations of and penalties imposed by the FTC could interrupt our provision of products or services and have a negative impact on our reputation, business operations and results of operations.

***If we do not or are unable to obtain and maintain the licenses to operate our business, our business prospects and future results of operations would be adversely affected.***

We operate our businesses with approvals and licenses granted by the government. If these approvals or licenses are revoked or suspended or are not renewed, or if we are unable to obtain any additional licenses that we may need to operate or expand our business in the manner we desire, then our financial condition and results of operations, as well as our prospects, will suffer. For example, our 3G mobile services license is valid until December 31, 2018, and may need to attend the auction for such license which will be held in the second half of 2017. On April 30, 2014, we obtained the mobile broadband services license adhering to the principle of technological neutrality for our 4G mobile broadband services, which is valid until the end of 2030. On March 23, 2016, we obtained the mobile broadband services license for 2500MHz and 2600MHz frequency bands, which is valid until the end of 2033. If we are unable to successfully acquire and maintain the rights to use the licenses or frequency spectrums that we need for our future business operations, our business prospects and future results of operations may be materially and adversely affected. Furthermore, our 2G service license will expire in June 2017 and the NCC will not issue a new 2G license to us in accordance with their policy to cease such 2G service in Taiwan. As a result, we may cease to provide such 2G service by the end of August 2017 according to the discussion with the NCC. If some of the 2G service customers are unwilling to migrate by the time, we may face complaint or even be liable for losses claimed from such customers.

***Increasing market competition may adversely affect our growth and profitability by causing us to lose customers, charge lower tariffs or spend more on marketing.***

As of the date of this annual report, there are five mobile network operators in Taiwan providing 4G mobile broadband services. Each mobile network operator, including us, has been offering aggressive promotional programs to attract consumers, such as unlimited data plans, when many mobile network operators around the world have eliminated unlimited data plans. We cannot assure you that we will be able to raise our revenues from 4G mobile broadband services in light of the intense market competition, which could have a material adverse effect on our business prospects and our future results of operations.

We also face increasing fixed broadband competition from cable operators. Cable operators have been using low-priced internet access packages to attract new customers in specific areas and buildings in Taiwan. The government has mandated the 100% digitization of cable television networks by December 31, 2017, which would increase the availability of high-speed internet services from cable operators. Furthermore, after the NCC relaxed the zoning restrictions on service areas for cable operators on July 27, 2012, new cable operators started to attract subscribers with limited channels and lower fee charges. As a result, we could face increased competition for our broadband access services and MOD IPTV services. If we are unable to compete successfully with the cable operators for broadband access services and MOD businesses, our results of operations could be impacted.

In addition, our over the top, or OTT, business may not be able to compete with video streaming providers such as Netflix, Inc. and iQiyi, which invest extensively in contents and productions of original films and TV series. Our OTT customers might be attracted by its massive and exclusive titles, and our OTT business growth might slow down and be limited.

As the mobile data access speeds have increased with newer technologies, such as 4G Long Term Evolution, or LTE, some customers have replaced fixed broadband services with high speed mobile broadband services. Rates of customer growth have declined in our fixed broadband and mobile businesses and may decline further, which may bring about further decreases in tariff rates and necessitate increases in our selling and promotional expenses. Any of these developments could adversely affect our business, financial condition and results of operations.

***Our ability to deliver services may be disrupted due to a systems failure, shutdown in our networks, earthquakes or other natural disasters.***

Taiwan is susceptible to earthquakes and typhoons. However, we do not carry insurance to cover damage caused by earthquakes, typhoons or other natural disasters or any resulting business interruption. Our services are currently carried through our fixed and mobile communications networks, as well as through our transmission networks consisting of optical fiber cable, microwave, submarine cable and satellite transmission links, which could be vulnerable to damage or interruptions in operations due to natural disasters. For example, in 2016, we recorded losses on property, plant and equipment arising from natural disasters such as earthquakes and typhoons in the amount of approximately NT\$11.2 million (US\$0.3 million). The occurrence of natural disasters could impact our ability to deliver services and have a negative effect on our results of operations.

Furthermore, we might also be liable for losses claimed from our customers that were incurred from our failure to deliver our services. These potential liabilities could also have a material adverse effect on our results of operations.

***We are subject to litigation or other legal proceedings that could expose us to substantial liabilities.***

We are from time to time involved in various litigation, arbitration or administrative proceedings in the ordinary course of our business. Any such claims, whether with or without merit, asserted or threatened, could be time-consuming and expensive to defend and could divert our management's attention and resources. See "Item 4. Information on the Company—B. Business Overview—Legal Proceedings." We cannot predict the outcome of these proceedings, and we cannot assure you that if a judgment is rendered against us in any or all of these proceedings, our financial condition and results of operations would not be materially and adversely affected.

***We depend on select personnel and could be affected by the loss of their services.***

We depend on the continued service of our executive officers and skilled technical and other personnel. Our business could suffer if we lose the services of any of these personnel and cannot adequately replace them. In particular, we are not insured against the loss of any of our personnel. We may not be able to retain our present personnel or attract additional qualified personnel as and when needed. Moreover, we may be required to increase substantially the number of these employees in connection with any expansion, and there is intense competition for experienced personnel in the Taiwan telecommunications industry. The major three telecom operators in Taiwan, including us, are expanding the information and communication technology, or ICT, business and may increase the number of their employees as part of this expansion. In addition to telecom operators, some computer design companies and manufacturers are also expanding their business into this area and have been recruiting information technology related employees as well. We cannot assure you that we will be able to successfully attract and retain new information technology related employees. In addition, we may need to increase employee compensation levels in order to attract and retain personnel. We cannot assure you that the loss of the services of any of these personnel would not disrupt our business and operations and materially and adversely affect the quality of our services and harm our reputation.

***We may not realize the benefits we expect from our investments, and this may materially and adversely affect our business, financial condition, results of operations and prospects.***

We have made significant capital investments in our network infrastructure and information technology systems to provide the services we offer. In order to continue to develop our business and offer new and more sophisticated services, we intend to continue to invest in different areas as well as new technologies. The launch of new and commercially viable products and services is important to the success of our business. We expect to continue making substantial capital expenditures to further develop our range of services and products.

Commercial acceptance by consumers of the new and more sophisticated services we offer may not occur at the rate or level expected, and we may not be able to successfully adapt these services to effectively and economically meet our customers' demand, thus impairing the expected return from our investments.

We cannot assure you that services enabled by the new technologies we are implementing, such as Internet of Things, or IoT, software-defined network, or SDN, network functions virtualization, or NFV, LTE WLAN aggregation, or LWA, license assisted access, or LAA, voice over LTE, or VoLTE, will be accepted by the public to the extent required to generate an acceptable rate of return. In addition, we could face the risk of unforeseen complications in the deployment of these new services and technologies, and we cannot assure you that we will not exceed our estimate of the necessary capital expenditure to offer such services. New services and technologies may not be developed and/or deployed according to expected schedules or may not achieve commercial acceptance or be cost effective.

The failure of any of our services to achieve commercial acceptance could result in additional capital expenditures or a reduction in profitability to the extent that we are required under applicable accounting standards to recognize a charge for impairment of assets. Any such charge could materially and adversely affect our financial condition and results of operations. We recognized impairment losses for investment properties, equipment and intangible assets in the past. In 2016, we concluded that the recoverable amount representing the fair value less costs to sell investment properties was higher than the carrying amount. Therefore, we recognized a reversal of impairment loss of NT\$0.1 billion (US\$4.6 million) and the amount was recognized only to the extent of impairment losses that had been recognized in prior years. In 2016, we also determined that parts of our telecommunications equipment were impaired and recognized an impairment loss of NT\$0.6 billion (US\$18.4 million).

We cannot assure you that we will be able to continue to maintain control of and consolidate the results of operations of our minority-owned subsidiaries. For example, we consolidate the results of operations of our subsidiary, Senao International Co., Ltd., or Senao, because we have remained control over Senao's relevant activities. Please refer to Note 3 and Note 15 to our consolidated financial statements included elsewhere in this annual report for details of the relationship between Senao and its parent company. We cannot assure you that we will be able to continue maintaining control over Senao's relevant activities. If we lose control of our minority-owned subsidiary, we will no longer be able to consolidate the results of operations of such subsidiary, which could adversely affect our consolidated results of operations and ability to meet the operating results guidance that we have projected.

We may also from time to time make equity investments in companies, but we cannot assure you of their profitability. We cannot assure you that losses related to our equity investments will not have a material adverse effect on our financial condition or results of operations. In 2016, we evaluated and concluded that certain investments were impaired, and as a result we recognized an impairment loss of NT\$0.6 billion (US\$17.8 million) for available-for-sale financial assets due to the decline in fair value owing to adverse changes in the industry conditions and the operating performance that was below our expectations. We may be required to record additional impairment charges in future periods, which may have a material adverse effect on our financial condition and future results of operations.

***Changes in technology may render our current technologies obsolete or require us to obtain licenses for introducing new services or make substantial capital investments, financing for which may not be available to us on favorable commercial terms or at all.***

The telecommunications industry in Taiwan has been characterized by rapid increases in the diversity and sophistication of the technologies and services offered. As a result, we expect that we will need to constantly upgrade our telecommunications technologies and services in order to respond to competitive industry conditions and customer requirements. Developments of new technologies have rendered some less advanced technologies unpopular or obsolete. If we fail to develop, or obtain timely access to, new technologies and equipment, or if we fail to obtain the necessary licenses to provide services using these new technologies, we may lose our customers and market share and become less profitable.

In addition, the cost of implementing new technologies, upgrading our networks or expanding capacity could be significant. In particular, we have made and will continue to make substantial capital expenditures in the near future in order to effectively respond to technological changes, such as the continued expansion of our fiber optic networks and 4G mobile broadband networks. To meet the increasingly robust high-bandwidth requirements of digital convergence services, we continue to expand construction of fiber optic networks, including passive optical networks, or PONs, and optical distribution networks, or ODNs. With respect to 4G mobile broadband networks, in December 2014, we expanded the network coverage by refarming the 900MHz frequency band from 2G to 4G mobile broadband and began implementing the carrier aggregation, or CA, technology of LTE-Advanced, or LTE-A, in the 900MHz and 1800MHz frequency bands to provide higher data transmission rates. Also, we continue to deploy 4G mobile broadband base stations with 900MHz, 1800MHz, and 2600MHz frequency bands of mobile broadband services and to enhance our 4G mobile broadband coverage and capacity. To the extent these expenditures exceed our cash resources, we will be required to seek additional debt or equity financing. Our ability to obtain additional financing on favorable commercial terms will depend on a number of factors. These factors include our financial condition, results of operations, cash flows and the prevailing market conditions in the domestic and international telecommunications industry, the cost of financing and conditions in the financial markets, and the issuance of relevant government and other regulatory approvals. Any inability to obtain the funding for our capital expenditures on commercially acceptable terms could jeopardize our expansion plans and materially and adversely affect our business prospects and future results of operations.

***If new technologies adopted by us do not perform as expected, or if we are unable to effectively deliver new services based on these technologies in a commercially viable manner, our revenue growth and profitability will decline.***

We are constantly evaluating new growth opportunities in the broader telecommunications industry. Some of these opportunities involve new services for which there are no proven markets, and may not develop as expected. Our ability to deploy and deliver these services will depend, in many instances, on new but unproven technologies. These new technologies may not perform as expected or generate an acceptable rate of return. In addition, we may not be able to successfully develop new technologies to effectively and economically deliver these services, or be able to compete successfully in the delivery of telecommunications services based on new technologies. Furthermore, the success of our IoT services is substantially dependent on the availability of applications and devices that are being developed by third-party developers, and on whether we will be able to achieve a sustainable business model for consumer segments of the market. These applications or devices may not be sufficiently developed to support the deployment of our mobile data services. If we are unable to deliver commercially viable services based on the new technologies that we adopt, our financial condition and results of operations may be materially and adversely affected.

***As an internet service provider, we may not be able to protect our customers and their information from cyber attacks, nor protect our services from disruptions due to cyber security breaches.***

As an internet service provider, our system is susceptible to cyber security risks, including hijack attacks, phishing attacks, hacker's intrusions to steal customer's information and distributed denial-of-service (DDoS) attacks. Our online services such as e-bills and multiple payment options through the internet are also vulnerable to cyber attacks. These attacks may disrupt our services and cause leakage of our customers' personal information, which may result in significant damage and material adverse effect to our customers and our operations. We cannot assure you that our data protection measures are sufficient to prevent any data leakage or disruption of our service due to cyber attacks. We may suffer negative consequences, such as remedial costs, increased cyber security protection costs, lost revenues, litigation and reputational damage due to cyber attacks.

***Our largest stockholder may take actions that conflict with our public stockholders' best interests.***

As of December 31, 2016, our largest shareholder, the government of the ROC, through the MOTC, owned approximately 35.29% of our outstanding common shares. Accordingly, the government, through its control over our board, as all non-independent board members were appointed by the MOTC, may continue to have the ability to control our business, including matters relating to:

- any sale of all or substantially all of our assets;
- the approval of our annual operation and projects budget;
- the composition of our senior management;

- the timing and distribution of dividends;
- the election of a majority of our directors; and
- our business activities and direction.

We cannot assure you that our largest shareholder will not take actions that impair our ability to conduct our business competitively or conflict with the best interests of our public stockholders.

***Actual or perceived health risks related to mobile handsets and base stations could lead to decreased mobile service usage and difficulties in increasing network coverage and could expose us to potential liability.***

According to some published reports, the electromagnetic signals from mobile handsets and cellular base stations may pose health risks or interfere with the operation of electronic equipment. Although the findings of those reports are disputed, actual or perceived risks of using mobile communications devices or of cellular base stations could have a material adverse effect on mobile service providers, including us. For example, our customer base could be reduced, our customers may reduce their usage of our mobile services, we could encounter difficulties in obtaining sites for additional cellular base stations required to expand our network coverage or we may be requested to reduce the number of existing cellular base stations. As a result, our mobile services business may generate less revenue and our financial condition and results of operations may be materially and adversely affected. In addition, we could be exposed to potential liability for any health problems caused by mobile handsets and base stations.

***Investor confidence in us may be adversely impacted if we or our independent registered public accountants are unable to attest to or express an unqualified opinion on the effectiveness of our internal control over financial reporting.***

We are subject to the reporting requirements of the SEC. The SEC, as directed by Section 404 of the U.S. Sarbanes-Oxley Act of 2002, adopted rules requiring U.S. public companies to include a report of management on our internal control over financial reporting in their annual reports that contain an assessment by management of the effectiveness of our internal control over financial reporting. The effectiveness of our internal control over financial reporting has been audited by Deloitte & Touche, an independent registered public accounting firm, which has also audited our consolidated financial statements for the year ended December 31, 2016. Deloitte & Touche has issued an attestation report on the effectiveness of our internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). See “Item 15. Controls and Procedures—Attestation Report of the Registered Public Accounting Firm.”

While the management report included in this annual report concluded that our internal control over financial reporting was effective, we cannot assure you that our management will be able to conclude that our internal control over financial reporting is effective in future years. If in future years we fail to maintain effective internal control over financial reporting in accordance with the Sarbanes-Oxley Act, we could suffer a loss of investor confidence in the reliability of our consolidated financial statements, which in turn could negatively impact the trading price of our ADSs, and could result in lawsuits being filed against us by our stockholders or otherwise harm our reputation.

***If we fail to maintain a good relationship with our labor unions, work stoppages or labor unrest could occur and the quality of our services as well as our reputation could suffer.***

In accordance with the articles of association of Chunghwa Telecom Workers’ Union, except for the chief manager of each department, most of our employees are members of our principal labor union, the Chunghwa Telecom Workers’ Union. Since our incorporation in 1996, we have experienced disputes with our labor unions on such issues as employee benefits and retirement benefits in connection with our privatization as well as the right to protest. Despite having taken measures to improve relations, increase cooperation and ensure mutual benefit with our labor unions, such as increasing channels of communications by holding periodic labor resource review meetings and guaranteeing our labor unions a seat on our board of directors, we cannot assure you that we will be able to maintain a good relationship with our labor unions. Any deterioration in our relationship with our labor unions could result in work stoppages, strikes or threats to take such an action, which could disrupt our business and operations, materially and adversely affect the quality of our services and harm our reputation.

***Any economic downturn or decline in the growth of the population in Taiwan may materially and adversely affect our financial condition, results of operations and prospects.***

We conduct most of our operations and generate most of our revenues in Taiwan. As a result, any decline in the Taiwan economy or a decline in the growth of the population in Taiwan may materially and adversely affect our financial condition, results of operations and prospects. In particular, Taiwan's economy is highly dependent on the technology industry, and any downturn in the global technology industry may have a material adverse effect on Taiwan's economy, which in turn, could adversely affect the demand for our products and services. There have also been concerns over the armed conflicts and civil unrest in the Middle East, Africa and Ukraine, which has resulted in higher volatility on oil prices and stock markets, and the economic slowdown in Mainland China, which could have a material adverse effect on economies around the world. There have also been concerns over the expected withdrawal of the United Kingdom from the European Union as well as the outcome of the upcoming elections in the European countries, such as France and Germany, which could also cause turbulence in the international markets and Taiwan's market as well.

As our business is dependent on economic growth, any uncertainty or further deterioration in economic conditions could have a material adverse effect on our financial condition and results of operations. We cannot assure you that economic conditions in Taiwan will continue to improve in the future or that our business and operations will not be materially and adversely affected by deterioration in the Taiwan economy.

***We face substantial political risks associated with doing business in Taiwan, particularly due to domestic political events and the tense relationship between the ROC and the People's Republic of China, which could adversely affect our financial condition and results of operations.***

Our principal executive offices and substantially all of our assets are located in Taiwan, and substantially all of our revenues are derived from our operations in Taiwan. Accordingly, our business, financial condition and results of operations and the market price of our common shares and the ADSs may be affected by changes in ROC governmental policies, taxation, inflation or interest rates and by social instability and diplomatic and social developments in or affecting Taiwan which are outside of our control. Taiwan has a unique international political status. Since 1949, Taiwan and the Chinese mainland have been separately governed. The People's Republic of China, or PRC, claims that it is the sole government in China and that Taiwan is part of China.

In addition, the PRC government has refused to renounce the use of military force to gain control over Taiwan. Past developments in relations between the ROC and the PRC have on occasion depressed the market prices of the securities of companies in the ROC. Relations between the ROC and the PRC and other factors affecting military, political or economic conditions in Taiwan could materially and adversely affect our financial condition and results of operations, as well as the market price and the liquidity of our securities. In addition, the complexities of the relationship between the ROC and PRC require companies involved in cross-strait business operations to carefully monitor their actions and manage their relationships with both ROC and PRC governments. In the past, companies in the ROC, including us, have received minor sanctions such as travel restrictions or minor monetary fines by the ROC and/or PRC governments. We cannot assure you that we will be able to successfully manage our relationships with the ROC and PRC governments for our cross-strait business operations, which could have an adverse effect on our ability to expand our business and conduct cross-strait business operations.

***Any future outbreak of contagious diseases may materially and adversely affect our business and operations, as well as our financial condition and results of operations.***

Any future outbreak of contagious diseases, such as avian influenza, Zika virus, dengue fever or Ebola virus, may disrupt our ability to adequately staff our business and may generally disrupt our operations. If any of our employees is suspected of having contracted any contagious disease, we may under certain circumstances be required to quarantine such employees and the affected areas of our premises. As a result, we may have to temporarily suspend part or all of our operations. Furthermore, any future outbreak may restrict the level of economic activity in affected regions, including Taiwan, which may adversely affect our business and prospects. As a result, we cannot assure you that any future outbreak of contagious diseases would not have a material adverse effect on our financial condition and results of operations.

***Stockholders may have more difficulty protecting their interests under the laws of the ROC than they would under the laws of the United States.***

Our corporate affairs are governed by our Articles of Incorporation, the Telecommunications Act, and by the laws governing corporations incorporated in the ROC. See “—Extensive regulation of our industry may limit our flexibility to respond to market conditions and competition, and our business may suffer.” The rights of stockholders and the responsibilities of management and the members of the board of directors of Taiwan companies are different from those applicable to a corporation incorporated in the United States. For example, controlling or major stockholders of Taiwan companies do not owe fiduciary duties to minority stockholders. As a result, holders of our common shares and ADSs may have more difficulties in protecting their interests in connection with actions taken by our management or members of our board of directors than they would as public stockholders of a United States corporation.

***Our actual financial results may differ materially from our published guidance.***

Prior to 2013, we voluntarily published our operating results guidance on an annual basis in accordance with the ROC GAAP. Starting in 2013, we continued to voluntarily publish our operating results guidance on an annual basis in accordance with the Taiwan IFRSs. We may from time to time update our operating results guidance after evaluating the effects of any changes to the estimates and assumptions that we used to calculate our projections of our operating results. Our projections are based on a number of estimates and assumptions that are inherently subject to significant uncertainties and contingencies, including the risk factors described in this annual report. In particular, our projections are forward-looking statements that are necessarily speculative in nature, and it can be expected that one or more of the estimates on which the projections were based will not materialize or will vary significantly from actual results, and such variances will likely increase over time.

***Our results of operations and financial condition under Taiwan IFRSs may differ materially from our reported results of operations and financial condition under IFRSs.***

While we have adopted Taiwan IFRSs for ROC reporting purposes, we adopt IFRSs for certain filings with the SEC, including our annual reports on Form 20-F. Taiwan IFRSs differs from IFRSs in certain significant respects, including to the extent that any new or amended standards or interpretations applicable under IFRSs may not be timely endorsed by the FSC. Furthermore, the dividends for 2016 that are expected to be declared at our 2017 annual general stockholders’ meeting are calculated based on Taiwan IFRSs. It is difficult for us to determine the differences between Taiwan IFRSs and IFRSs on our financial statements as any new or amended standards or interpretations applicable under IFRSs may not be timely endorsed by the FSC.

**Risks Relating to Ownership of Our ADSs and Common Shares**

***The value of your investment may be reduced by future sales of our ADSs or common shares by us, by the government of the ROC or by other stockholders.***

The government may continue to sell our common shares. Sales of substantial amounts of ADSs or common shares by the government or any other stockholder in the public market, or the perception that future sales may occur, could depress the prevailing market price of our ADSs and common shares.



***The market value of your investment may fluctuate due to the volatility of, and government intervention in, the Taiwan securities market.***

Our common shares are traded on the TWSE, which has a smaller market capitalization and is more volatile than the securities markets in the United States and many European countries. The market value of our ADSs may fluctuate in response to the fluctuation of the trading price of our common shares on the TWSE. The TWSE has experienced substantial fluctuations in the prices and trading volumes of listed securities, and there are currently limits on the range of daily price movements. During 2016, the TWSE Index reached a low of 7,664.01 on January 21, 2016, and peaked at 9,392.68 on December 9, 2016. On April 18, 2017, the TWSE Index closed at 9,746.56. The TWSE has experienced certain problems, including market manipulation, insider trading and payment defaults. The recurrence of these or similar problems could have a material adverse effect on the market price and liquidity of the securities of Taiwan companies, including our ADSs and common shares, in both the domestic and the international markets.

In response to declines and volatility in the securities markets in Taiwan, the government of the ROC formed the National Financial Stabilization Fund to support these markets through open market purchases of shares in Taiwan companies from time to time. The details of the transactions of the National Financial Stabilization Fund have not been made public. In addition, the government's Labor Insurance Fund and other funds associated with the government have in the past purchased, and may from time to time purchase, shares of Taiwan companies listed on the TWSE or other markets. As a result of these activities, the market price of common shares of Taiwan companies may have been and may currently be higher than the prices that would otherwise prevail in the open market. Market intervention by government entities, or the perception that such activity is taking place, may take place or has ceased, may cause sudden movements in the market prices of the securities of Taiwan companies, which may affect the market price and liquidity of our common shares and ADSs.

***We may be sanctioned or lose our licenses for violations of limits on foreign ownership of our common shares, and these limits may materially and adversely affect our ability to obtain financing.***

The laws of the ROC limit foreign ownership of our common shares. Prior to March 1, 2006, the MOTC, as the competent authority under the Telecommunications Act, had the power to prescribe the limits on foreign ownership of our common shares. After the formation of the NCC on March 1, 2006, the NCC replaced the MOTC as the competent authority under the Telecommunications Act pursuant to the National Communications Commission Organization Act, or the Organization Act. The NCC and the MOTC reached an agreement on foreign ownership of Chunghwa Telecom. An announcement issued by the MOTC on December 28, 2007 stipulated that direct holdings by foreign investors in Chunghwa Telecom cannot exceed 49% of our outstanding share capital and the total direct and indirect holdings by foreign investors cannot exceed 55% of our outstanding share capital. As of April 18, 2017, foreign direct holdings of our outstanding share capital is at 17.17%. If we fail to comply with the applicable foreign ownership limitations, our licenses to operate some of our businesses could be revoked. Moreover, we cannot predict the manner in which the NCC will exercise its authority over us, or whether NCC will lower the foreign ownership cap at any time.

If we are deemed to be in violation of our foreign ownership limitations, any consequences arising from such violation may materially and adversely affect us. Moreover, since we are unable to control ownership of our common shares or ADSs representing our common shares, and because we have no ability to stop transfers among stockholders, or force particular stockholders to sell their shares, we may be subject to monetary fine or lose our licenses through no fault of our own. In that event, our business could be disrupted, our reputation could be damaged and the market price of our ADSs and common shares could decline. These limitations may also materially and adversely affect our ability to obtain adequate financing to fund our future capital requirements or to obtain strategic partners, and alternate forms of financing may not be available on terms favorable to us or at all.

***Restrictions on the ability to deposit our common shares into our ADS program may adversely affect the liquidity and price of the ADSs.***

The ability to deposit shares into our ADS program is restricted by ROC law, under which no person or entity, including you and us, may deposit our common shares into our ADS program unless the Securities and Futures Bureau has not objected within a prescribed period following the filing with it of an application to do so, except for the deposit of the common shares into our ADS program and for the issuance of additional ADSs in connection with:

- distribution of share dividends or free distribution of our common shares;
- exercise of preemptive rights of ADS holders applicable to the common shares evidenced by our ADSs in the event of capital increases for cash; or

- purchases of our common shares in the domestic market in Taiwan by the investor directly or through the depositary and delivery of such shares or delivery of our common shares held by such investors to the custodian for deposit into our ADS program, subject to the following conditions: (a) the depositary may accept deposit of those shares and issue the corresponding number of ADSs with regard to such deposits only if the total number of ADSs outstanding after the deposit does not exceed the number of ADSs previously approved by the Securities and Futures Bureau, plus any ADSs issued pursuant to the events described above; and (b) this deposit may only be made to the extent previously issued ADSs have been cancelled.

As a result of the limited ability to deposit common shares into our ADS program, the prevailing market price of our ADSs on the New York Stock Exchange, or NYSE, may differ from the prevailing market price of the equivalent number of our common shares on the TWSE.

***You will be more restricted in your ability to exercise voting rights than the holders of our common shares, which may diminish your influence over our corporate affairs and may reduce the value of your ADSs.***

Holders of American depositary receipts evidencing our ADSs may exercise voting rights with respect to the common shares represented by these ADSs only in accordance with the provisions of our deposit agreement. The deposit agreement provides that, upon receipt of notice of any meeting of holders of our common shares, the depositary bank will, as soon as practicable thereafter if requested by us in writing, mail to ADS holders the notice of the meeting sent by us, voting instruction forms and a statement as to the manner in which instructions may be given by the holders.

Generally, ADS holders will not be able to exercise voting rights attached to the underlying securities on an individual basis. Under the deposit agreement, the voting rights attached to the underlying securities must be exercised as to all matters subject to a vote of stockholders collectively in the same manner, except in the case of an election of directors. The election of our directors is by means of cumulative voting. In the event the depositary does not receive voting instructions from ADS holders in accordance with the deposit agreement, our chairman or his or her designee will be entitled to vote the common shares represented by the ADSs in the manner he or she deems appropriate at his or her discretion, which may not be in your interest.

***Your right to participate in any future rights offerings may be limited, which may cause dilution to your holdings.***

We may from time to time distribute rights to our stockholders, including rights to acquire our securities. Under the deposit agreement, the depositary will not offer you those rights unless the distribution to ADS holders of both the rights and any related securities are either registered under the U.S. Securities Act of 1933, as amended, or the Securities Act, or exempt from registration under the Securities Act. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause such a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, you may be unable to participate in our rights offerings and may experience dilution in your holdings.

If the depositary is unable to sell rights that are not exercised or not distributed or if the sale is not lawful or reasonably practicable, it will allow the rights to lapse, in which case you will receive no value for these rights.

***Changes in exchange controls that restrict your ability to convert proceeds received from your ownership of ADSs may have an adverse effect on the value of your investment.***

Your ability to convert proceeds received from your ownership of ADSs depends on existing and future exchange control regulations of the ROC. Under the current laws of the ROC, an ADS holder or the depositary, without obtaining further approvals from the Central Bank of the ROC (Taiwan) or any other governmental authority or agency of the ROC, may convert NT dollars into other currencies, including U.S. dollars, in respect of:

- the proceeds of the sale of common shares represented by ADSs or received as share dividends with respect to the common shares and deposited into the depositary receipt facility; and
- any cash dividends or distributions received from the common shares represented by ADSs.

In addition, the depository may also convert into NT dollars incoming payments for purchases of common shares for deposit in the depository receipt facility against the creation of additional ADSs. If you withdraw the common shares underlying your ADSs and become a holder of our common shares, you may convert into NT dollars subscription payments for rights offerings. The depository may be required to obtain foreign exchange approval from the Central Bank of the ROC (Taiwan) on a payment-by-payment basis for conversion from NT dollars into foreign currencies of the proceeds from the sale of subscription rights of new common shares. Although it is expected that the Central Bank of the ROC (Taiwan) will grant approval as a routine matter, required approvals may not be obtained in a timely manner, or at all.

Under the ROC Foreign Exchange Control Law, the Executive Yuan of the ROC may, without prior notice but subject to subsequent legislative approval rendered within ten days from such imposition, impose foreign exchange controls or other restrictions in the event of, among other things, a material change in domestic or international economic conditions which might threaten the stability of the domestic economy in Taiwan.

***You are required to register with the TWSE and appoint several local agents in Taiwan if you withdraw common shares from our ADS facility and become our stockholder, which may make your ownership burdensome.***

If you are a non-ROC person and wish to withdraw common shares represented by your ADSs from our ADS facility and hold those common shares, you are required under the current laws and regulations of the ROC to appoint an agent, also referred to as a tax guarantor, in the ROC for filing tax returns and making tax payments. A tax guarantor must meet certain qualifications set by the Ministry of Finance of the ROC and, upon appointment, becomes a guarantor of your ROC tax obligations. If you wish to repatriate profits derived from the sale of withdrawn common shares or cash dividends or interest on funds derived from the withdrawn common shares, you will be required to submit evidence of your appointment of a tax guarantor and the approval of the appointment by the ROC tax authorities. You may not be able to appoint and obtain approval for a tax guarantor in a timely manner.

In addition, under the current laws of the ROC, you will be required to be registered as a foreign investor with the TWSE for making investments in the ROC securities market prior to your withdrawal and holding of common shares represented by the ADSs. You will be required to appoint a local agent in Taiwan to, among other things, open a securities trading account with a local securities brokerage firm and a bank account to remit funds, exercise stockholders' rights and perform other functions as holders of ADSs may designate. You must also appoint a local bank to act as custodian for handling confirmation and settlement of trades, safekeeping of securities and cash proceeds and reporting and declaration of information. Without the relevant registration and appointment of the local agent and custodian and the opening of a securities trading account and bank account, you will not be able to hold, subsequently sell or otherwise transfer our common shares withdrawn from the ADS facilities on the TWSE.

#### **ITEM 4. INFORMATION ON THE COMPANY**

##### **A. History and Development of the Company**

Our legal and commercial name is Chunghwa Telecom Co., Ltd. We were officially established on July 1, 1996 as part of the privatization efforts by the government of the ROC and operate under the Statute of Chunghwa Telecom Co., Ltd. Prior to our formation, we were operating as a business unit of the Directorate General of Telecommunications, which was formerly the NCC. The common shares of the Company have been listed on the TWSE under the number "2412" since October 2000 and its ADSs have been listed on the NYSE under the symbol "CHT" since July 2003. We were privatized as a result of a secondary ADS offering and concurrent domestic auction of our common shares on August 12, 2005, as the ownership by the government of the ROC was reduced to less than 50%. The privatization has enabled us to develop our business and respond to changing market conditions more rapidly and efficiently. Today, we are the largest full telecommunication service provider in Taiwan. Our principal executive offices are located at 21-3 Hsinyi Road, Section 1, Taipei, Taiwan, ROC, and our telephone number is (886) 2-2344-5488. Our website address is <http://www.cht.com.tw>. The information on our website does not form a part of this annual report. Our agent for service of process in any suit or proceeding arising out of or relating to our shares, ADSs, American depository receipt, or ADR, and deposit agreement in the United States is CT Corporation System, 111 Eighth Avenue, New York, NY 10011.

We are the largest telecommunications service provider in Taiwan and one of the largest in Asia in terms of revenue. As an integrated telecommunications service provider, our principal services include:

- domestic fixed communications services, including local and domestic long distance telephone services, broadband access services, local and domestic long distance leased line services, Wi-Fi services, MOD services, domestic data services and other domestic services;
- mobile communications services, including mobile voice and data services, sales of mobile handsets, tablets, data cards and other mobile services;
- internet services, including data communication services, such as HiNet, application value-added services, or VAS, and services provided to the government;
- international fixed communications services, including international long distance telephone services, international leased line services, international data services, satellite services and other international services; and
- other services, including non-telecom services.

In addition to these traditional telecommunication services, we also focus on selected ICT services and advanced development.

For each of our key services, we enjoy leading positions across a number of areas in terms of both revenues and customers:

- we are Taiwan’s largest fixed communications services provider as well as Taiwan’s largest mobile communications service provider;
- we are Taiwan’s largest broadband access provider; and
- we are Taiwan’s largest internet service provider.

In 2016, our revenues were NT\$230.0 billion (US\$7.1 billion), our consolidated net income was NT\$41.6 billion (US\$1.3 billion) and our basic earnings per share was NT\$5.22 (US\$0.16).

In 2016, we made capital expenditures totaling NT\$23.5 billion (US\$0.7 billion). See “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Capital Expenditures” for a detailed discussion of our capital expenditures.

### **Competitive Strengths**

We believe that we are well positioned to take advantage of the increasing opportunities in the telecommunications market in Taiwan as new technologies evolve. In particular, we have maintained our leading market share in mobile communications and internet services.

We believe that our primary competitive strengths are:

- our premium brand and broad customer base in Taiwan;
- our position as an integrated, full-service telecommunications provider in Taiwan; and

- our capital resources and technology, which we believe we can build on to expand our leading position in the mobile communications and internet services markets, including through our continued construction of our existing 4G mobile broadband networks, our expansion of fiber to the x, or FTTx, broadband access services, IP-based MOD services, fixed-line/mobile VAS and cloud computing related services.

***We have premium brand and broad customer base in Taiwan.***

We are the largest telecommunications service provider in Taiwan with a broad customer base across all of our service offerings. We believe our broad customer base in each of our service offerings grants us a competitive advantage to maintain our existing customers and increases the chance of success for the launch and popularization of new products. As the telecommunications industry continues its trend of converging fixed communications, mobile communications and internet services, we believe that our comprehensive service offerings place us in a positive position to offer converged products and services to our customers. In addition, by leveraging our capability to analyze Big Data, we are able to adopt marketing initiatives to target different customer groups' interests and preferences and increase the effectiveness of our cross-marketing efforts of our products and services to our existing and potential customers.

***We are an integrated full-service telecommunications provider in Taiwan.***

We are the largest telecommunications service provider in Taiwan with a leading position in fixed communications services, mobile communications services and internet services.

*Broad range of communications products and services.* We believe that our ability to provide an attractive and comprehensive range of telecommunications services positions us to provide bundled and VAS to our business and residential customers. In addition, we are able to offer innovative integrated services and tariff packages to meet the specific needs of our customers.

*Broad network coverage.* The breadth of our network and our ownership of the “last-mile” infrastructure in Taiwan, which comprises the connection between the local telephone service provider’s switching centers to the end-users’ buildings or homes, provides us with access to existing and potential customers and creates a platform for expanding our services. In order to provide higher bandwidth services for our customers, we have been constructing our FTTx network since 2003. We have successfully migrated many of our customers from ADSL service to FTTx service, which offers even higher speeds by using fiber optic technology. Since 2016, the number of our FTTx subscribers has exceeded three quarters of our total fixed broadband access subscribers. As of December 31, 2016, network coverage of FTTx with speeds of 100 Mbps and higher was approximately 88.7%. In addition, our mobile communications network provides nationwide coverage. Our large mobile spectrum allocation together with our extensive network coverage positions us well for the continued expansion of our mobile services in Taiwan. We are also continuing to build our Wi-Fi network to offload mobile network capacity in residential areas and public areas where subscriber density and usage is high, such as urban areas, airports and convenience stores.

*Brand awareness, distribution channels and customer service.* Our principal brands “Chunghwa Telecom,” “emome” and “HiNet” have a reputation for quality and reliability. We serve our large customer base through our extensive customer service network in Taiwan. See “—B. Business Overview—Marketing, Sales and Distribution—Sales and Distribution.” We are continuing to transform our retail stores while increasing the number of our service centers throughout Taiwan. We also offer comprehensive and high-quality point of sale and after sale services in our service centers, stores and over the internet. Our extensive sales and distribution channels help us attract additional customers and develop new business opportunities. In 2016, we obtained several domestic and international awards which recognized our service quality, corporate governance and our fulfillment of corporate social responsibility. In the Reader’s Digest Trusted Brands Awards, we have stood out and won the Platinum Award of Telecom Company in Taiwan for 12 consecutive years since 2005. We also were awarded the 2016 Best Practices Award for Asia Pacific LTE Service Provider by Frost & Sullivan. In addition, we have been awarded The Asset Corporate Platinum Award by The Asset Magazine for four consecutive years since 2013. We were also ranked among the top five percent of TWSE-listed companies and the Taipei Exchange traded companies for corporate governance based on an evaluation conducted by TWSE for two consecutive years since 2015. Furthermore, we were also awarded the Excellence in Corporate Social Responsibility Award in Taiwan by Common Wealth Magazine for 10 consecutive years since 2007.

*Operational expertise.* Our management and employees have extensive operating experience and technical knowledge, which we believe cannot be easily replicated by competitors. We also believe we will continue to attract and retain high quality employees.

***We have the capital resources and technology to enhance our leading position.***

*Strong capital structure.* We believe we have great financial resources in Taiwan. Our low debt-to-equity capital structure, together with our strong operating cash flows, provides us with the flexibility and resources to invest in capital intensive and growing businesses. In particular, we continue to invest in fiber-optic networks, 4G mobile broadband networks and service platforms. We will continue to make investments in or to acquire other companies which provide complementary telecommunications and ICT-related services to further expand our business and offer new products and services.

*Advanced network technology.* In recent years, we have upgraded some of our FTTx access networks to FTTH access networks, aiming at promoting our broadband services from megabit connectivity to gigabit connectivity and strengthening our leading position in bandwidth services in our industry. In 2016, we also continued to deploy our 4G mobile broadband networks. Our investment in network infrastructure places us in a position to capture a significant share of the internet and high-speed data transmission market.

*Research and development expertise.* In 2016, our research and development expenses accounted for 1.6% of our revenues. We believe our focus on research and development will allow us to efficiently develop and deploy new technologies and services ahead of our competitors.

**Business Strategies**

Our key strategic objectives are to maintain our position as a leading integrated telecommunications services provider in Taiwan and to enhance our profit margins of ICT services by leverage our strengths of research and development.

Consistent with our strategic objectives, we have developed the following business strategies:

***Focus on our core strengths while expanding our scope of services to capture new growth opportunities***

We endeavor to maintain our strong market position in telecommunication business and seek to expand the scope of our business beyond network services by offering service platforms and VAS to capture new opportunities and generate revenue growth, such as IoT platforms. We also continue to advance our MOD/OTT service platform which offers digital contents, live broadcasting, interactive video, and high quality subscription video on demand, or SVoD, services. In addition, we cooperate with content and software providers to develop new services.

*Broadband services:* We strive to maintain our broadband market share. We typically realize higher average revenue per user, or ARPU, for our FTTx internet services, and we expect to continue to offer various incentives for our FTTx customers to upgrade to even higher speed FTTx services and for our ADSL customers to upgrade to FTTx services. We are continuing the build-out of our FTTx infrastructure, and we believe these efforts will help us maintain our competitive advantage for broadband services. A high quality broadband network is also essential for our high-definition MOD services.

*Mobile Communications:* We obtained the 4G mobile broadband license in April 2014 and launched our 4G mobile broadband services in May 2014. In March 2016, we obtained the mobile broadband license for 2500MHz and 2600MHz frequency bands which enables us to enhance our 4G mobile broadband network. Our strategy for mobile services includes the following initiatives:

- Enhancing 4G mobile broadband network construction to accommodate the increasing mobile data usage from consumers as a result of the growth of connected devices, such as smartphones and tablets;
- Encouraging the migration of 2G service subscribers to 3G and 4G mobile services by offering promotions on various mobile handsets combined with attractive VAS and product packages;
- Introducing low- to mid-tier smartphones to expand our mobile internet subscriber base; and
- Maintaining ample Wi-Fi hotspots to offer more wireless internet access service and to offload data traffic from our mobile networks; we had established 60,000 Wi-Fi hotspots by the end of 2016.

*Internet services:* Our strategy for internet services is to continue to build on the success of our HiNet internet services and enhance our internet VAS, such as internet music and internet protocol video services, including CHT OTT service, an OTT platform where customers can view videos and multimedia content.

*Emerging services:* We have been providing ICT services since 2009. We continue to leverage our core telecommunication infrastructure and services to expand ICT services, including intelligent environment network service, or iEN, intelligent transportation service, or ITS and IoT. Our experience with ICT services positions us well to develop and offer cloud computing services. Underpinning the rollout of our cloud computing services is our capability and experience in offering data center services to corporate customers, which includes our initiative to build the largest cloud computing data center in Taiwan in anticipation of the growing demand for this service. The Panchiao Internet Data Center, or IDC, one of the highest-rated, TIA-942 Rated 4, data centers in the world, commenced operations since July 2016 and offer high reliability, high speed and high security cloud services to multi-national and domestic corporate customers. We will further expand our IDC business opportunities in areas of financials, securities, digital contents and e-commerce. With the strength and reliability of our technologies and services, we believe that we have the competitive advantages to continue expanding our ICT services in the future.

We consistently expand the scope and variety of our integrated services to create more value for our customers. We have been developing an OTT platform and building relationships with content providers and service providers to offer attractive content and services on the platform. Our strategy on MOD/VOD/OTT services is to enrich content, including by providing movies, drama, and TV series for SVOD, to enhance the user interface, to leverage our existing base of fixed broadband and 4G mobile broadband subscribers to boost our MOD and OTT subscribers, and to acquire content with all rights across different devices to become the leading IPTV/OTT service provider in Taiwan.

In addition, we continue to develop our mobile payment service, Hami Wallet, with our customer loyalty program.

### ***Emphasize quality of service and customer satisfaction***

Quality of service is critical in attracting and retaining customers and enhancing our long-term profitability. In order to continually enhance and improve the quality of our services, we have, in addition to the quality assurance function of our regular operating units, established a number of dedicated task forces to monitor our network performance. Our senior management sets our quality evaluation criteria and regularly reviews the quality of our performance.

In order to ensure that our quality of service will translate into strong customer loyalty, we continue to focus on and invest in the provision of a full range of services that emphasize customer care from the point of sale onward. Our corporate customer services cover small, medium-sized and large enterprises. As of December 31, 2016, our Enterprise Business Group employed 504 professionals and offered packaged and customized services, customer-oriented solutions and integrated ICT services. We have completed the integration of our call centers, all of which can now be reached by calling a single number “123.” We offer 24-hour customer service, including the handling of service and billing inquiries. To improve the quality of our customer services, we implemented a customer relationship management system, which encompasses a customer complaint system, a business information database for the use of our call centers, and a Big Data system to enhance our sales and market analysis efforts. For example, we leverage our capability to analyze Big Data in identifying locations for constructing base stations and target groups for marketing our services.

In addition, we own hundreds of physical service stores, and we will continue to renovate our traditional service stores to enhance user experience. Please refer to “—Competitive Strengths—We are an integrated full-service telecommunications provider in Taiwan” for a discussion of our distribution channels.

### ***Improve operational and cost efficiency***

We have historically been focused, and will continue to focus, on cost control. We continue to improve our operational and cost efficiency by migrating to more advanced networks and sophisticated operational support systems.

Our long-term goal is to optimize our capital expenditures by focusing on investing in innovative products and services with attractive return profiles. To catch up with the fast evolution of digital devices and network applications, we continue the construction of our fiber-based fixed-line and mobile network to increase the network bandwidth and enhance operational efficiencies. We continue to accelerate LTE network construction to enhance population coverage and construct high capacity Wi-Fi/Fiber-Wireless networks to offload mobile network traffic. We will continue to leverage our core telecommunication infrastructure and services to expand the ICT business, including cloud services, enterprise total solutions and government projects.

### ***Expand our business through alliances, acquisitions and investments***

We continuously expand our business in high-growth areas, such as ICT services, through alliances, acquisitions and investments. We believe that our experience, operational scale and large customer base make us an attractive ally for other service providers.

*Alliances.* We have formed and will continue to pursue alliances with content providers, multimedia service platform providers, customer premises equipment providers, internet portal operators, and ICT solutions partners to diversify our business operations and enhance our service offerings. In May 2016, we formed an alliance with Acer Inc. to help enterprises build intelligent mobile network in offices. In December 2016, we strengthened our relationship with China Mobile Ltd. on the Hand-in-Hand Program, or hi-H Program, in areas including mobile business, data business, innovation and internet business; members of hi-H Program include operators from some major countries such as German, France and Korea. In January 2017, we cooperated with Nokia to perform Pre-5G NarrowBand-IoT test, which help accelerate the application of IoT in Taiwan. In February 2017, we signed a memorandum with NTT Group and ITOCHU Corporation to develop SDN and NFV and further increase flexibility on framework of our network. In February 2017, we also cooperated with HTC Corporation, Sercomm Corporation and MediaTek Inc. to launch LWA service. In addition, in Mobile World Congress 2017, we entered into a memorandum of understanding with Nokia in respect of the cooperation in developing 5G technology, cloud computing, IoT and automation of telecommunications network. At the same congress, we also entered into a memorandum with Ericsson in respect of cooperation in developing 5G application, including traffic and public utilities. In March 2017, we cooperated with Cisco Systems, Inc. to provide enterprises total solutions in different areas, such as network, information security and data center virtualization.

*Acquisition and Investments.* We have focused our acquisition strategy on making acquisitions of companies that we believe to be complementary to our long-term strategic goals. We have focused our investment strategy on the development of new businesses and the enhancement of our operation efficiency. Recently we have entered into the following notable transactions:

In February 2014, we, together with Benefit One Asia Pte. Ltd., established Chunghwa Benefit One Co., Ltd., or Chunghwa Benefit One, and we owned a 50% equity interest in Chunghwa Benefit One. Chunghwa Benefit One mainly engages in providing an e-commerce platform for enterprises to provide employee benefits and for individuals. In December 2016, both Benefit One Asia Pte. Ltd. and we agreed to dissolve Chunghwa Benefit One, because the financial performance of the company is below our expectation.



Senao acquired 70% of the equity interests in Youth Co., Ltd and its subsidiaries, or Youth, in September 2015, and established 100% of the equity interests in Aval Technologies Co., Ltd. in October 2015. Both Youth and Aval Technologies Co., Ltd. are primarily engaged in the businesses of providing information technology services and selling communication products. In December 2015, Senao participated in the share subscription of Youth at a percentage different from its original ownership percentage. Therefore, Senao's ownership interest in Youth increased from 70% to 89.48%.

One of our consolidated subsidiaries, Chunghwa Precision Test Tech Co., Ltd., or CHPT, a semiconductor testing company, was listed on the General Stock Market of the Taipei Exchange (formerly known as Gre Tai Securities Market) since March 24, 2016. Benefitting from its advanced technology and one-stop shopping service, CHPT's business continued to grow in the past few years.

Chunghwa Leading Photonics Tech Co., Ltd., or CLPT, was founded in July 2016, and we hold 75% of its equity interests. CLPT's management team came from our Telecommunication Laboratories. The company has the fabrication and packaging technology for development and application on indium-gallium-arsenide photodetector.

Please also see Notes 3, 15, and 16 to our consolidated financial statements included elsewhere in this annual report for our current strategic investments.

Going forward, we will focus on digital economy and innovative businesses and may consider making other equity investments and acquisitions that we believe are complementary to our business and strategic goals. For example, we have joined Asian Silicon Valley Development Plan. By cooperating with other companies and leveraging our advantages, we strive to gain market share in the IoT business. Furthermore, pursuant to the government's southbound development policy, we will continue to explore opportunities to strengthen our cooperation with companies in ASEAN countries and expand our geographic footprint, either in traditional telecommunication business, IoT or ICT businesses.

#### ***Maintain focus on maximizing stockholder value***

We are committed to maximizing stockholder value and intend to maintain a sustainable dividend policy. Following our privatization, we have more flexibility to implement capital management initiatives, including possible repurchases of our outstanding common shares and increases in our leverage through debt financing.

Under the ROC Company Act, companies are allowed to distribute special cash dividend from capital surplus, which we had implemented at our annual general stockholders' meetings in 2013 and 2014. See "Item 5. Operating and Financial Review and Prospects—Overview—Effect of adopting Taiwan IFRSs on our dividends and employee bonuses." In addition, the accumulated legal reserve that we had set aside in previous years has amounted to the aggregate par value of our outstanding share capital. Therefore, according to relevant regulations, we are not required to appropriate profits to our legal reserve starting from 2015. With the approval of our board of directors in March 2017, our payout ratio was 95.7% in 2016 after adjusting for unappropriated earnings and setting aside the special reserve. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information."

## **B. Business Overview**

### **Our Principal Lines of Business**

Our core business segments are our domestic fixed communications business, mobile communications business, internet business and international fixed communications business.

## Domestic Fixed Communications Business

The provision of domestic fixed communications services is one of our principal business activities. Our domestic fixed communications business includes local telephone services and domestic long distance telephone services, broadband access services, local and domestic long distance leased line services, Wi-Fi services, MOD services, and other domestic services including ICT services. We also provide interconnection with our fixed-line network to other mobile and fixed-line operators. Our revenues from domestic fixed communications services were NT\$72.1 billion, NT\$72.5 billion and NT\$72.8 billion (US\$2.3 billion), respectively, in 2014, 2015 and 2016, representing 31.8%, 31.3% and 31.6% of our total revenue in such periods.

### Local Telephone

The following table sets forth our revenues from local telephone services for the periods indicated.

	Year Ended December 31			
	2014	2015	2016	
	NT\$	NT\$ (in billions)	NT\$	US\$ (in millions)
Local telephone revenues:				
Usage	16.0	14.5	12.9	399.2
Subscription	16.3	16.1	15.9	490.0
Interconnection	0.9	0.8	0.8	23.7
Pay telephone	0.3	0.3	0.2	6.9
Other	2.1	1.9	1.8	57.0
<b>Total</b>	<b>35.6</b>	<b>33.6</b>	<b>31.6</b>	<b>976.8</b>

We provide local telephone services to approximately 10.94 million customers in Taiwan. Our fixed-line network reaches virtually all homes and businesses in Taiwan. Revenues from local telephone services comprised 15.7%, 14.5% and 13.8% of our total revenues in 2014, 2015 and 2016, respectively. Approximately 73.7% of our local telephone customers as of December 31, 2016 were residential customers. We are currently the leader of the local telephone service market, with an average subscriber market share of approximately 94.3%, 94.0% and 93.5% in 2014, 2015 and 2016, respectively.

The following table sets forth information with respect to our local telephone customers and penetration rates as of the dates indicated.

	As of December 31		
	2014	2015	2016
	(in thousands, except percentages and per household data)		
Taiwan population <sup>(1)</sup>	23,434	23,492	23,540
Fixed line customers:			
Residential	8,395	8,239	8,067
Business	2,970	2,928	2,872
<b>Total</b>	<b>11,365</b>	<b>11,167</b>	<b>10,939</b>
Penetration rate (as a percentage of the population)	47.5%	47.5%	46.5%
Lines in service per household	1.00	0.97	0.94

(1) Data from the Department of Population, Ministry of the Interior, ROC.

With the continued development of mobile technologies, demand for local customer lines has been declining. The number of fixed-line customers decreased by 1.8% in 2014 compared to 2013, 1.7% in 2015 compared to 2014 and 2.0% in 2016 compared to 2015. We attribute the decrease in fixed-line customers to a general industry-wide trend of migrating from fixed-line services to mobile and internet telephony services.

The following table sets forth information with respect to local telephone usage for the periods indicated.

	Year Ended December 31		
	2014	2015	2016
	(in millions, except percentages)		
Minutes from local calls <sup>(1)(2)</sup>	11,567	10,511	9,481
Growth rate (compared to the same period in the prior year)	(10.6)%	(9.1)%	(9.8)%

- (1) Includes minutes from local calls made on pay telephones and minutes from fixed line-to-mobile calls.  
(2) Calls to our HiNet internet service, which are recorded as part of our internet services, are not included in our local call minutes or revenues.

Minutes from local calls decreased in 2014, 2015 and 2016 due to the impact of mobile substitution and increased use of voice over internet protocol, or VoIP, applications.

We charge our local telephone service customers a monthly fee and a usage fee. We also charge separate fees for some VAS. The monthly fees for our primary tariff plans are NT\$70 for residential customers and NT\$295 for business customers. Our primary peak time usage fee is NT\$1.6 for three minutes, and our off-peak usage fee is NT\$1.0 for ten minutes. Our usage fees are the same for residential and business customers.

The following table sets forth information with respect to the average local telephone usage charge per minute for the periods indicated.

	Year Ended December 31		
	2014	2015	2016
	NT\$		
Average local telephone usage fee (per minute)	1.39	1.39	1.37
Growth rate (compared to the same period in the prior year)	—	—	(1.4)%

Average per minute usage charges remained relatively stable from 2014 to 2016. Average per minute usage charges decreased 1.4% to NT\$1.37 in 2016, mainly due to the increase in number of users of mobile phones and VoIP telephony services, which also led to a decrease in total revenue derived from local telephone usage. Part of our competitive strategy is to offer customers innovative products and services intended to both secure customer loyalty and increase revenues. In particular, our VAS offerings are designed to increase our call revenues by increasing the number of calls our customers make and by receiving fees for usage of the VAS. These services include call waiting, caller identification, call forwarding, three-party calls, ring back tone and voicemail.

### ***Domestic Long Distance Telephone***

We provide domestic long distance telephone services in Taiwan. Total revenues from domestic long distance telephone services were NT\$3.3 billion, NT\$3.1 billion and NT\$2.9 billion (US\$0.1 billion) in 2014, 2015 and 2016, respectively, representing 1.5%, 1.3% and 1.3% of our total revenues in such periods. This decrease was mainly due to the continuous decline in call minutes resulting from the migration to mobile services and increased use of VoIP applications. Our average market share by minutes in the domestic long distance market was approximately 80.5%, 82.2% and 83.0% in 2014, 2015 and 2016, respectively.

We provide so-called “intelligent” network services over our domestic long distance network, including toll-free calling and virtual private networks, or VPN, services and others. We also focus on offering our customers an increasing number of VAS with flexible tariff packages.

### ***Broadband (FTTx and ADSL) Access***

We provide broadband internet access through connections based on our FTTx and ADSL technologies. FTTx generally offers a faster access medium for our internet customers compared to ADSL by using fiber optic technology. We are continuing the build-out of our FTTx infrastructure.

Our revenues from our broadband access services in 2014, 2015 and 2016 were NT\$19.1 billion, NT\$19.3 billion and NT\$19.0 billion (US\$0.6 billion), respectively. We provide broadband access services to other internet service providers that do not have their own network infrastructure, and as a result, our broadband customers also include some customers that use only our broadband data access lines and choose another provider for internet service provider, or ISP, services.

From 2014 to 2016, we continued accelerating our high speed FTTx household coverage. We currently offer various promotional packages to encourage more migration of our FTTx subscribers to higher speed FTTx service and migration of our ADSL subscribers to our FTTx service. In 2016, FTTx revenue reached 89.6% of our total broadband revenue. As of December 31, 2016, 92.5% of our FTTx service customers subscribe HiNet ISP service.

Our subscriber market share of Taiwan's broadband market was approximately 76.7%, 75.8% and 74.3% in 2014, 2015 and 2016, respectively.

The following table sets forth our broadband service customers as of each of the dates indicated.

	Year Ended December 31		
	2014	2015	2016
FTTx service customers (in thousands)	3,120	3,358	3,484
ADSL service customers (in thousands)	1,419	1,138	992

Our FTTx service offers downlink speeds of 16, 35, 60, 100, 300, 500 Mbps and 1 gigabits per second, or Gbps, matched with uplink speeds of 3, 6, 20, 40, 100, 250 and 600 Mbps, respectively. Our ADSL service offers downlink speeds that range from 2 Mbps to 8 Mbps and uplink speeds that range from 64 kilobits per second, or Kbps, to 640 Kbps.

We have experienced competition in broadband from cable operators and other fixed-line operators. In addition, as faster wireless technologies, such as 4G LTE, have been deployed, some customers have replaced fixed broadband services with high-speed mobile broadband services. Our strategy is to continue the deployment of higher speed FTTx network so as to maintain our competitiveness.

Charges for our FTTx and ADSL services include one-time installation charges and monthly subscription fees. These charges for our FTTx and ADSL services vary based on connection speed. Charges for our HiNet dial-up service include a monthly fee entitling the customer to a fixed number of minutes of service, with an additional charge per minute when the fixed number of minutes is exceeded.

The following table sets forth our ARPU for each of the periods indicated.

	Year Ended December 31		
	2014	2015	2016
	NT\$	NT\$	NT\$
ARPU for broadband services per month <sup>(1)</sup>	704	714	717
ARPU for FTTx services per month <sup>(2)</sup>	838	828	811

- (1) ARPU for our broadband services per month is calculated as the sum of (a) broadband access revenues for the relevant period divided by the average of the number of our broadband access customers on the first and last days of the period divided by the number of months in the relevant period and (b) HiNet ISP service revenues divided by the average of the number of HiNet ISP service subscribers on the first and last days of the period divided by the number of months in the relevant period.
- (2) ARPU for FTTx services per month is calculated as the sum of (a) FTTx access revenues for the relevant period divided by the average of the number of our FTTx access customers on the first and last days of the period divided by the number of months in the relevant period and (b) HiNet FTTx ISP service revenues divided by the average of the number of HiNet FTTx ISP service subscribers on the first and last days of the period divided by the number of months in the relevant period.

Despite tariff reductions mandated by the NCC, our overall broadband ARPU increased in 2015 and 2016, mainly due to our successful strategy in migration mentioned above. For more details of the NCC's mandatory tariff reduction, please see "Item 5. Operating and Financial Review and Prospects—Overview—Tariff adjustments."

### ***Leased Line Services—Local and Domestic Long Distance***

We are the leading provider of domestic leased line services in Taiwan. Leased line services involve offering exclusive lines that allow point-to-point connection for voice and data traffic. Leased lines are used by business customers to assemble their own private networks and by telecommunications service providers to establish networks to offer telecommunications services.

We provide data transmission services to major corporate customers in Taiwan. We also provide leased lines to other mobile and fixed-line service operators for interconnection with our fixed-line network and for connection within their networks. As of December 31, 2014, 2015 and 2016, the total bandwidths of local and domestic long distance lines leased to third parties were 1,359.1, 1,556.8 and 1,678.8 Gbps, respectively. The number increased from 2014 to 2016 mainly due to the increase in demand for the bandwidth of backbone network for 4G mobile broadband services.

We continue to experience a decline in rental fees for all of our leased line products. We attribute the general decline in rental fees since 2000 to a general migration toward broadband services and increased competition from other service providers constructing their own lines mentioned above. Our local and domestic long distance leased line services revenues were NT\$4.6 billion, NT\$4.4 and NT\$4.3 (US\$0.1 billion) in 2014, 2015 and 2016, respectively. Although the bandwidth leased to third parties increased, the revenue decreased year over year mainly due to the decline in rental fees described above.

### ***Wi-Fi Services***

As of December 31, 2014, 2015 and 2016, we had a total of approximately 2.0 million, 2.4 million and 2.6 million residential and business customers that leased our access points, respectively. In addition, we had 60,000 hot spots in public areas by the end of 2016, such as convenience stores, airports and international convention centers, where our smartphone subscribers can access our Wi-Fi network and help to offload mobile data network traffic.

### ***MOD Services***

Using video streaming technology through a set top box that connects to our FTTx and ADSL data connections, our MOD customers can access TV programs, video-on-demand and other services. We had over 193 broadcasting channels and over 20,000 hours of on-demand programs and served approximately 1.3 million customers as of December 31, 2016. Also, as of December 31, 2016, we offered 160 high definition, or HD, channels and other HD video-on-demand programming, such as sports, movies and knowledge materials. In addition to our regular packaged offerings, we also offer SVoD services for film and drama. As of December 31, 2016, we had 1.3 million MOD customers, including 718 thousand SVOD subscribers. Our MOD revenues from 2014 to 2016 were NT\$2.6 billion, NT\$2.5 billion and NT\$2.4 billion (US\$72.7 million) in 2014, 2015 and 2016, respectively. The decrease in revenue from 2014 to 2016 was mainly due to the adjustment of our cooperation schemes with channel providers starting from the third quarter of 2015. The new schemes bring down our operating expenses while also impacting our revenues at the same time. We expect this structural shift to enhance our IPTV margins in the mid-to-long term.

### ***ICT and Other Services***

Our ICT and other services in domestic fixed communications business include ICT services, corporate solution and bill handling services. See “Emerging Services.”

### ***Mobile Communications Business***

Mobile communications services are one of our principal business activities. Our mobile communications services include mobile services, sales of mobile handsets, tablets and data cards and ICT and other mobile services.

### Mobile Services

We are Taiwan's largest provider of mobile services in terms of both revenues and customers. In 2014, we generated revenues of NT\$77.5 billion, or 34.2% of our total revenues, from mobile services. In 2015, we generated revenues of NT\$80.9 billion, or 34.9% of our total revenues, from mobile services. In 2016, we generated revenues of NT\$78.8 billion (US\$2.4 billion), or 34.3% of our total revenues, from mobile services. Our mobile VAS revenue grew by 13.8% from 2014 to 2015 and by 4.8% from 2015 to 2016 due to the launch of our 4G mobile broadband services in May 2015 and fast development in the 4G mobile broadband segment in the industry.

	Year Ended December 31			
	2014	2015	2016	
	NT\$	NT\$	NT\$	US\$
	(in billions)		(in millions)	
Mobile services revenues:				
Usage <sup>(1)</sup>	36.0	35.8	33.0	1,018.9
Interconnection	4.8	3.7	2.7	83.7
Mobile VAS	34.8	39.6	41.5	1,280.8
Other	1.9	1.8	1.6	48.3
Total mobile services	<u>77.5</u>	<u>80.9</u>	<u>78.8</u>	<u>2,431.7</u>

(1) Includes monthly fees.

Owing to the saturation and subscriber identification module card, or SIM card, consolidation in the entire mobile market in Taiwan, we are facing the decrease in total number of customers in the market. However, we are still the largest mobile operator in Taiwan in terms of revenues and number of customers. We had 10.8 million mobile customers, for a market share of approximately 37.3% of total mobile customers and approximately 37.0% of total mobile services revenues in Taiwan, as of December 31, 2016.

In October 2013, we obtained a 4G mobile broadband services spectrum of 10 MHz paired spectrum in the 900 MHz frequency band and 25 MHz paired spectrum in the 1800 MHz frequency band. In November 2013, we paid NT\$39.1 billion to the government for the spectrum. The license is valid until December 31, 2030. We have launched 4G mobile broadband services in May 2014 and deployed our 4G mobile broadband networks for better coverage. By the end of 2015, our 4G mobile broadband network population coverage had reached 99% for the whole country.

In December 2015, we obtained additional spectrum for 4G mobile broadband services of 30 MHz paired spectrum in the 2500MHz and 2600MHz frequency bands, and we paid NT\$10.0 billion to the government in the same month. The license is valid until December 31, 2033. We put these 2500MHz and 2600MHz frequency bands into use on March 24, 2016. We will continue enhancing our 4G mobile broadband network capacity.

In February 2002, the MOTC granted 3G mobile services concessions to five companies, including us. In March 2002, we paid NT\$10.2 billion to the government for our concession. Our 3G mobile services license is valid until December 31, 2018. In July 2005, we launched our 3G mobile services, using WCDMA technology. See the detail in mobile spectrum allocation in "Network Infrastructure." The NCC plans to re-auction this spectrum in the second half of 2017. Meanwhile, our 2G service license will expire in June 2017, and we will cease our 2G service upon the expiration of the license.

We offer the largest international roaming network among Taiwan mobile service providers. By the end of 2016, our 3G roaming contracts includes 385 networks in 149 countries, our 2G GSM roaming contracts include 469 networks in 197 countries, and our 2.5G GPRS roaming contracts include 411 networks in 158 countries. We have also established 4G LTE roaming contracts with 106 networks in 57 countries.

The following table sets forth information regarding our mobile service operations and our mobile customer base for the periods indicated.

	As of or for the Year Ended December 31		
	2014	2015	2016
Taiwan population (in thousands) <sup>(1)</sup>	23,434	23,492	23,540
Total mobile revenues in Taiwan (in billions) <sup>(2)</sup>	NT\$207.6	NT\$217.1	NT\$211.9
Annualized churn rate <sup>(3)</sup>	13.61%	18.17%	22.80%
Minutes of usage (in millions of minutes):			
Incoming	12,043	11,428	9,953
Outgoing	12,243	11,626	10,245
Average minutes of usage per user per month <sup>(4)(5)</sup>	186	172	153

- (1) Data from the Department of Population, Ministry of the Interior, ROC.
- (2) Data from the statistical monthly release by the NCC, in the ROC, which include mobile revenues from 2G, 3G, 4G mobile broadband and personal handy-phone system, or PHS, services.
- (3) Measures the rate of customer disconnections from mobile service, determined by dividing (a) our aggregate voluntary and involuntary deactivations (excluding deactivations due to customers switching from one of our mobile services to another) during the relevant period by (b) the average number of customers during the period (calculated by averaging the number of customers at the beginning of the period and the end of the period), and multiplying the result by the fraction where (c) the numerator is 12 and (d) the denominator is the number of months in that period. The calculation includes both prepaid and postpaid customers.
- (4) The number of mobile customers is based on the number of SIM cards. The total number of mobile customers in Taiwan included 2G, 3G, 4G mobile broadband, PHS, prepaid card and VPN customers.
- (5) Average minutes of use per user per month is calculated by dividing the total minutes of use during the period by the average of the number of our mobile customers on the first and last days of the period and dividing the result by the number of months in the relevant period.

The total mobile customers in Taiwan had reached approximately 28.9 million as of December 31, 2016. Mobile penetration was approximately 122.9% on the same date. The overall mobile services market experienced a slight decrease of 2.4% in revenues in 2016 mainly due to the decrease in total number of customers in the mobile market. As of December 31, 2016, we had 6.7 million, 3.8 million and 0.3 million subscribers for 4G, 3G and 2G services, respectively.

We began offering prepaid card services in October 2000, prepaid 3G card services in February 2008, and prepaid 4G card services in April 2015. As of December 31, 2016, we had approximately 1.6 million prepaid customers, representing approximately 15.0% of our total mobile customers. Prepaid customers do not pay monthly fees but pay a higher usage charge on a per second basis. Once the prepayment has been fully utilized, a prepaid customer can make additional prepayments to continue the service. Alternatively, the customer may convert to become a post-paid customer while retaining the same telephone number.

We offer incentives, such as mobile handset subsidies, when new customers agree to sign a service contract with us or when existing customers renew their contracts with us ranging from 12 months to 30 months.

Our tariffs for post-paid mobile customers primarily consist of usage fees and monthly fees. We also offer discounts on usage fees for calls made between our mobile customers to encourage subscription to our mobile service.

When our customers are outside Taiwan, they pay roaming charges plus international long distance charges and, where applicable, local charges in roaming destinations. We have already signed agreements with some providers in foreign countries for strategic cooperation for our roaming business.

Our ARPU per month increased to NT\$604 in 2015 from NT\$593 in 2014, primarily due to successful 4G mobile broadband migration which attracted additional mobile internet subscribers. Our ARPU per month decreased to NT\$598 in 2016 from NT\$604 in 2015, primarily because we were focusing on gaining customers who are more price-sensitive to our 4G mobile broadband services in 2016.

In addition to our basic mobile services, we also offer a broad range of value-added telecommunications and information services. Revenues from mobile VAS represented 44.9%, 49.0% and 52.7% of our total mobile services revenues in 2014, 2015 and 2016, respectively. The increase of mobile VAS revenue percentage was mainly attributed to the increase in mobile data plan subscriber number.

### *Sales of Mobile Handsets, Tablets and Data Cards*

We engage in the distribution and sales of mobile handsets, tablets and data cards for use on our mobile network to customers through our directly-owned stores, our subsidiary Senao, and also through third-party retailers. See “Marketing Strategy—Distribution Channels” and “Sales and Distribution” in “—Marketing, Sales and Distribution.”

### *ICT and Other Services*

Our ICT and other services in our mobile communications business include ICT services, corporate solution and bill handling services. See “Emerging Services.”

### **Internet Business**

Our internet business includes data communication services, application VAS and services provided to the government. Our revenues from internet business represented 11.5%, 11.1% and 12.2% of our revenues in 2014, 2015 and 2016, respectively. In 2016, our revenues from internet business as a percentage of our revenues increased mainly due to the increase in revenues generated from services such as IDC, cloud computing, information security and IoT, and some increases generated from the growth in HiNet and HiLink services.

### *Data Communication*

Our data communication service includes HiNet, our brand name as an ISP, and HiLink, a VPN service for enterprises. The following table sets forth HiNet’s subscribers as of each of the dates indicated.

	<b>As of December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	(in thousands)		
Total internet subscribers in Taiwan	6,178	6,151	6,099
HiNet subscribers:			
HiNet FTTx subscribers	2,843	3,083	3,221
HiNet ADSL subscribers	948	688	539
HiNet dial-up subscribers	439	426	413
Other access technology subscribers	3	2	2
Total HiNet subscribers	<u>4,233</u>	<u>4,199</u>	<u>4,175</u>

Our ISP service subscribers decreased from 2014 to 2016 mainly due to substitution by mobile broadband services and the competition from cable broadband operators. We are still the largest ISP in Taiwan, with a subscriber market share of 68.7% among 412 ISPs in ROC as of December 31, 2016. As of December 31, 2016, approximately 84.0% of our broadband customers were also HiNet subscribers, using HiNet as their ISP. We expect the competitive conditions currently prevailing in the internet service provider market to continue to intensify.

### *Application VAS and Services Provided to the Government*

Application VAS and services provided to the government includes services regarding to IDC, cloud computing, information security and IoT. See “Emerging Services.” IDCs are facilities providing the physical environment necessary to keep computer network servers running at all times. These facilities are custom-designed with high-volume air conditioning temperature control systems, secure access, reliable electricity supply and connections to high-bandwidth internet networks. Data center houses protect and maintain network server computers that store and deliver internet and other network content, such as web pages, applications and data. We currently have the largest floor area of internet data centers in Taiwan compared to our competitors in Taiwan.



## International Fixed Communications Business

Our international fixed communications business includes international long distance telephone services, international leased line services, satellite services and ICT and other international services.

### *International Long Distance Telephone*

We provide international long distance telephone services in Taiwan. Total revenues from international long distance telephone services comprised 4.6%, 4.2% and 3.8% of our revenues in 2014, 2015 and 2016, respectively. In addition, we provide wholesale international long distance services to international simple resale operators that do not possess their own telephone network or infrastructure. Our international long distance telephone revenues decreased by 7.5% to NT\$9.6 billion in 2015, and further decreased by 8.5% to NT\$8.8 billion (US\$0.3 billion) in 2016, primarily due to the intense competition from VoIP-based international long distance service providers and free VoIP applications. Our average market share of the international long distance market by minutes was approximately 56.0%, 57.8% and 55.8% in 2014, 2015 and 2016, respectively. Our international long distance services consist primarily of international direct dial services and the wholesale of international long distance traffic.

International calls to our top five destinations represented 62.7% of our outgoing international long distance call traffic in 2016, including Mainland China, Philippines, Indonesia, the United States and Hong Kong. International calls from our top five destinations represented 54.5% of our incoming international long distance call traffic in 2016, including Mainland China, Canada, the United States, Japan and Indonesia.

The following table sets forth information with respect to usage of our international long distance services for the periods indicated.

	Year Ended December 31		
	2014	2015	2016
	(in millions, except incoming/outgoing ratio)		
Incoming minutes	983	937	787
Outgoing minutes	1,658	1,346	1,022
Total minutes	2,641	2,283	1,809
Incoming/outgoing ratio	0.59	0.70	0.77

Total incoming call volume decreased by 4.7% from 2014 to 2015, and further decreased by 16.0% in 2016, mainly due to the intensified market competition from VoIP-based international long distance service providers, free VoIP applications and other international long distance service providers. Similarly, due to this intensified competition, total outgoing call volume decreased by 18.8% from 2014 to 2015 and further decreased by 24.1% in 2016.

Outgoing calls made by customers in Taiwan and by customers from foreign destinations using Taiwan direct service are billed in accordance with our international long distance rate schedule for the destination called. Rates vary depending on the time of day at which a call is placed. Customers are billed on a six-second unit basis for international direct dial services.

Average international long distance usage charge per minute that we received for outgoing international calls was NT\$4.4, NT\$5.0 and NT\$5.5 in 2014, 2015 and 2016, respectively. Average charge per minute increased 15.8%, 13.6% and 10.0% in 2014, 2015 and 2016, respectively, mainly due to our focus on expanding the wholesale of international long distance minutes in higher-unit-price areas, such as Central and South America, Africa, Asia and Middle East.

We pay for the use of networks of carriers in foreign destinations for outgoing international calls and receive payments from foreign carriers for the use of our network for incoming international calls. Traditionally, these payments have been made pursuant to settlement arrangements under the general auspices of the International Telecommunications Union. Settlement payments are generally denominated in U.S. dollars and are made on a net basis.

### ***Leased Line Services—International***

We are a leading provider of international leased line services in Taiwan. Leased line services involve offering exclusive lines that allow point-to-point connection for voice and data traffic. Leased lines are used by business customers to assemble their own private networks and by telecommunications service providers to establish networks to offer telecommunications services.

We provide data transmission services to major corporate customers in Taiwan. Since August 2001, licenses have been awarded to four undersea cable operators to engage in leased line services. Demand for high-speed data transmission services has been growing rapidly, as a result of growing consumer demand and lower tariffs due to increased competition. The total bandwidth of our lines leased increased by 39.2% from 2,009.6 Gbps in 2015 to 2,796.6 Gbps in 2016.

Rental fees for international long distance leased line are generally based on transmission speed and distance. We continue to experience a decline in rental fees for international leased lines, partly as a result of competition from other international leased line service providers. In response, we continue to implement marketing and service campaigns to retain our high-value corporate customers. Our international leased line services revenues were NT\$1.5 billion, NT\$1.7 billion and NT\$1.8 billion (US\$55.6 million) in 2014, 2015 and 2016, respectively, mainly due to our expansion to the overseas markets and growing consumer demand mentioned above.

### ***Satellite Services***

We entered into a contract with ST-2 Satellite Ventures Pte., Ltd. on March 12, 2010 to lease capacity on the ST-2 satellite. The lease term is 15 years starting from the official start of operations of the ST-2 satellite, and the total contract value is approximately NT\$6.0 billion. This contract requires a prepayment of NT\$3.1 billion, and the remaining amount will be paid annually. The ST-2 telecommunications satellite launched on May 21, 2011 and began commercial operation in August 2011. Please refer to Note 40 of our consolidated financial statements included elsewhere in this annual report for further details.

In addition, we have two satellite communication centers that enable us to provide TV broadcast, satellite VAS and backup systems for use in major emergencies. We also provide satellite services to Southeast Asia.

### ***ICT and Other Services***

Our ICT and other services in our international fixed communications business include corporate solution services. See “Emerging Services.”

### ***Others***

Our other business segment includes our non-telecom services, including electronic products sales made by our subsidiary, CHPT, and property sales made by our subsidiary, Light Era Development Co., Ltd., or Light Era.

### ***Emerging Services***

We continue leveraging our advantages in network infrastructure and IDC to offer customized ICT total solutions to enterprise customers and to expand our ICT business. The revenues from our ICT business are classified in “ICT and Other Services” of each business segment besides internet business. We are offering ICT total solutions by integrating our capabilities of cloud, information security, IoT and customization expertise. We are developing in-house Big Data capability for future commercialization as well as cooperating with partners to develop an IoT ecosystem across various industries.

Our ICT services includes integrated services such as our iEN, ITS, and Internet of Vehicles. Our iEN service helps companies and corporations implement energy-saving measures through computer-driven data analysis. Our ITS service provides navigation, real-time traffic information and infotainment through mobile devices for cars and drivers. By leveraging high speed 4G mobile broadband networks, we offer innovative Internet of Vehicles services including GPS, audio and video streaming, car information, etc. available for tablets. In addition to developing ICT businesses mentioned above, we also pursue ICT projects from both public and private sectors aiming to expand our revenue streams.

A content delivery network, or CDN, is a system of distributed servers that deliver webpages and other web content to a user based on the geographic locations of the user, the origin of the webpage and a content delivery server. This service is effective in speeding the delivery of content of websites with high traffic. The closer the CDN server is to the user geographically, the faster the content will be delivered to the user. We provide CDN service to internet content providers to ensure stable quality when programs are broadcasted.

## Interconnection

We provide interconnection of our fixed line network and mobile network with other operators.

The following table sets forth our interconnection fee revenues and costs for the periods indicated. These revenues and costs are included, depending on the nature of the call made, in domestic fixed communications or mobile communications revenues and expenses, respectively.

	Year Ended December 31			
	2014 NT\$	2015 NT\$ (in billions)	2016 NT\$	2016 US\$ (in millions)
Interconnection fee revenues:				
Fixed line	1.1	1.0	0.9	26.7
Mobile	4.8	3.7	2.7	83.7
Interconnection costs:				
Fixed line	3.3	2.3	1.6	48.5
Mobile	4.9	3.9	3.0	92.7

The interconnection rate between fixed-line customers and other fixed-line customers is NT\$0.32 per minute during peak times and NT\$0.09 per minute during off-peak times. The interconnection rate for calls initiated by mobile customers to fixed-line customers is NT\$0.4851 per minute during peak times and NT\$0.2531 per minute during off-peak times.

The NCC has mandated mobile interconnection rate reduction over a period of four years starting on January 5, 2013. The rate should be reduced from NT\$2.15 per minute to NT\$1.15 per minute in four years with a CAGR of -14.5%. Therefore, our mobile interconnection revenues and costs decreased from 2014 to 2016.

Before January 1, 2011, the rates of telecommunication fees for telephone calls between fixed-line customers and mobile customers were set by the mobile network operators: mobile network operators collected such telecommunication fees from customers and paid the fixed-line network operators interconnection fees based on usage, regardless of which party of the interconnection initiated the call. Starting from January 1, 2011, the fixed-line network operators that initiate the call have the right to set the rates of telecommunication fees and to collect such fees from customers for fixed-line-to-mobile calls; fixed-line network operators have to pay interconnection fees to mobile network operators in accordance with the interconnection rate set forth by the NCC. In addition, to balance the competition between us, the market leader of fixed-line network operators, and other mobile network operators, we are also required by the NCC to pay transition fees (in addition to the interconnection fees) to the other mobile network operators for a period of six years starting from January 1, 2011. The transition fees will decrease gradually over the six-year period, and we are not required to pay such transition fees from January 1, 2017.

Fixed interconnection costs decreased from 2014 to 2016 mainly due to (1) decreasing transition fees year over year, (2) reduction of mobile interconnection rate for fixed-line-to-mobile calls, and (3) decreasing traffic volume.

In accordance with governmental regulations, the contracts governing our interconnection arrangements must specifically address a number of prescribed issues. For example, our interconnection charge should reflect our costs with respect to the network elements used. In addition, cost increases are subject to approval by the regulatory authorities. We expect that our interconnection contracts will generally be reviewed annually, although we may also enter into long-term contracts. See “Regulation—Telecommunications Act—Interconnection Arrangements.”

## **Marketing, Sales and Distribution**

### ***Marketing Strategy***

In order to retain and expand our large customer base and to encourage our customers to increase their use of our services and products, we continue to focus our marketing strategy on the following areas.

- **Services, Products and Bundled Offerings.** We continually develop new VAS and products, and bundle our services and products based on different market segments, with the aim of increasing our high-usage customers and enhancing customer loyalty.
- **Pricing and Promotions.** We design flexible pricing packages that allow customers to select, and design special promotional packages to encourage usage.
- **Distribution Channels.** We seek to broaden our distribution reach by strengthening our cross-industry alliances and marketing relationships. Furthermore, to expand our sales channels more effectively, we also implement an external sales agent system by collaborating with Senao, Synnex Technology International Corporation and Tsann Kuen Trans-Nation Group, which collaborations enable us to get closer to every customer.
- **Business Customers.** We devote a project manager or project engineer to serve corporate customers. These account managers are responsible for developing customized solutions and tariff packages to meet the specific needs of our customers. We continually update and expand our service offerings so that we can remain a one-stop telecommunications services provider to our corporate customers and provide for all of their telecommunications needs. We also use our data bank to identify and target potential clients for promoting our e-commerce and mobile services. In addition, we help our corporate customers improve their efficiency and competitiveness by creating information systems for them.
- **Advertising.** We are committed to further strengthening the Chunghwa Telecom brand and image as well as strengthening and expanding market recognition of our specialized product brands, such as HiNet and emome. We plan to leverage our leading market position and status to strengthen the overall advantage of our product brands.

### ***Sales and Distribution***

As of December 31, 2016, we had 17 operations offices for operations, 463 service centers and 6 customer service call centers for sales and customer service.

We also had 279 Senao exclusive service stores as of December 31, 2016. In January 2007, we acquired 31.33% equity ownership of Senao, a major distributor of mobile handsets in Taiwan. Senao has been listed on the TWSE under the number “2450” since May 2001. Our equity ownership in Senao decreased from 31.33% as of January 15, 2007 to 29.31% as of March 31, 2017. Our investment in Senao enhanced our mobile handset distribution and sales capabilities. Our customers can subscribe for our broadband service, MOD service and other services at Senao retail stores. See “Item 7. Major Stockholders and Related Party Transactions—B. Related Party Transactions” for a discussion of the agreement between the parent company and Senao about our business cooperation.

## Competition

We face competition in virtually all aspects of our business.

### *Domestic Fixed Communications*

- Local and domestic long distance telephone services: Revenue from local and domestic long distance telephone service of telecommunication services providers has continuously decreased in the past years primarily due to mobile and VoIP substitution. Competition from mobile data service providers increased significantly due to the popularity of smart mobile devices and mobile applications such as LINE and WeChat. Although there are other providers of fixed communications, including TWM Broadband, New Century Infocomm Tech. Co., Ltd. and Asia Pacific Telecom Co., Ltd., or APTG, competition from these providers was not significant in the past few years.
- Leased line services: Major competitors in this field are four fixed line operators including TWM Broadband, New Century Infocomm Tech. Co., Ltd., APTG and Taiwan Optical Platform Co., Ltd. The leased line services providers primarily compete on the basis of price and the bandwidth speed of services.
- Broadband access services: Major competitors in this field are five multiple-system operators, or MSOs, including Kbro Co., Ltd., China Network Systems Co., Ltd., TWM Broadband, Taiwan Broadband Communication Co., Ltd. and Taiwan Optical Platform Co., Ltd., and one fiber broadband service provider, namely Taiwan Intelligent Fiber Optic Network. With the increasing speed of mobile data service, we also face fierce competition from mobile data providers. The broadband access service providers primarily compete on the basis of price and the bandwidth speed of services.
- MOD services: Major competitors in this field include five cable TV MSOs and 28 independent MSOs. The different service providers compete on the basis of the multimedia content offered along with the ability to offer converged services by offering comprehensive solutions including data communications, voice communications and multimedia content.

### *Mobile Communications*

There are five mobile operators in Taiwan, including Chunghwa Telecom, Taiwan Mobile, Far EasTone, Taiwan Star Telecom Corporation Ltd., or T-Star, and APTG. All of these five operators have 4G mobile broadband licenses. In addition to the big three, T-Star and APTG underwent mergers and acquisitions in order to compete in the market for 4G mobile broadband services. T-Star merged with VIBO Telecom Inc., a former 3G operator, in October 2014, while APTG merged with Ambit Corporation, one of the 4G mobile broadband license winners, in December 2015, with APTG as the surviving company. Each 4G mobile broadband network operator has been providing promotional programs to attract consumers, including unlimited data plans. In addition to the 2G, 3G and 4G mobile network operators discussed above, First International Telecom used to operate a personal handy-phone network but was declared bankrupt by the Taiwan Taipei District Court on December 26, 2014, and discontinued operations on March 31, 2015.

In addition to the mobile network operators, the NCC has issued a total of 14 mobile virtual network operator, or MVNO, licenses, which allow operators without a spectrum allocation to provide 3G mobile services by leasing the capacity and facilities of a mobile service network from a licensed mobile service provider. We are currently cooperating with Carrefour Telecom Co., Ltd. We may cooperate with other mobile virtual network operators in the future.

As of the end of 2016, there were no WiMAX service providers in Taiwan. The NCC has already recalled and released the 2500MHz and 2600MHz frequency band spectrum for 4G mobile broadband services through a bidding process in December 2015. We compete in the wireless services market primarily on the basis of premium brand, price, quality of service, network reliability and attractiveness of service packages.

### ***Internet***

Our primary competitors in internet services are other internet services providers, including SeedNet and TWM Broadband. We compete in the internet services market primarily on the basis of price, technology, speed of transmission, amount of bandwidth available for use, network coverage and VAS.

### ***International Fixed Communications***

Our major competitors are TWM Broadband, New Century Infocomm Tech. Co., Ltd. and APTG, which have provided fixed-line services since June 2001. These operators are primarily focused on international long distance services and corporate customer services, which typically generate higher revenue than residential customers.

There have been four submarine cable services licenses granted since August 2001. These submarine cable operators, including East Asia Network Inc., Reach Cable Networks Limited, Taiwan International Gateway Corporation and FLAG Telecom Taiwan Services Limited, offer international leased line services to other fixed-line operators, internet service providers and ISR operators.

Our international long distance services compete with international long distance resale services and VoIP services such as those provided by Line and Skype.

### ***Emerging Services***

Our major competitors in ICT services are system integration service providers, including HwaCom Systems Inc., MiTAC Information Technology Corp., NEC Taiwan Ltd., Acer Incorporated, Tatung Company, SYSTEX Corporation and SYSCOM Group.

### **Customer Service and Billing**

We believe that our reputation of offering high-qualified customer services has enhanced our customers' loyalty and helped us attract new customers. We regularly survey our customers' demands and preferences to develop new products and services accordingly.

We provide convenient services to our customers as follows:

- 24-hour customer service and technical support through our service centers, call centers and website;
- bill payment services at 24-hour convenience stores, bank service counters, automatic teller machines, and our service centers throughout Taiwan, via direct debit, over the phone, online at our website ([www.cht.com.tw](http://www.cht.com.tw)), and on mobile handset emome or Hami;
- online information and bill payment services at our website ([www.cht.com.tw](http://www.cht.com.tw)) and customer service hotline for telephone payment;
- free of charge itemized billing statements; and
- consolidated and automated billing for all services, including English billing documents available upon request.

## Network Infrastructure

Our network infrastructure consists of transmission networks that convey voice and data traffic, switching networks that route traffic between networks, and mobile, internet, leased line and data switching networks.

We purchase most of our network equipment from well-known international suppliers. As part of the purchase contract, these suppliers deliver and install the equipment for us. We also purchase from local suppliers a variety of components such as transmission lines, switches, telephone sets, MOD set-top boxes, and radio transmitters.

Approximately 13,195 of our employees were engaged in network infrastructure development, maintenance, operations and planning as of December 31, 2016.

### *Transmission Networks*

As of December 31, 2016, our transmission networks consisted of approximately 2.43 million fiber kilometers of fiber optic cable for trunking and approximately 9.01 million fiber kilometers of fiber optic cable for local loop.

Between 2009 and 2013, we deployed next generation synchronous digital hierarchy, or NG SDH, and optical cross connect, or OXC, equipment for providing TDM and data service. Due to the emergence of packet-transport network, or PTN, technology, which is a cost-effective method for transmitting packet-based data services, we began the deployment of PTN and stopped the deployment of NG SDH network in 2014. Between 2007 and 2014, we deployed 40/80-wavelength Re-configurable Optical Add-Drop Multiplexer, or ROADM, for backbone transmission network in order to provide new data services such as gigabit Ethernet, fiber channel, 2.5 gigabit and 10 gigabit packet over SDH and 10 gigabit Ethernet. Due to the high utilization of our existing ROADM network, we began to introduce the optical transport network, or OTN, trial network to meet the demand of 100G wavelength services in 2014. Between 2009 and 2013, we had already completed the deployment of 5,519 GbE OXC/NG SDH, which was stopped in 2014 due to the introduction of PTN. Between 2007 and 2015, we had already completed the deployment of 1,190 wavelength ROADM, which was also stopped in 2016 due to the deployment of OTN. In addition, we had completed the deployment of 158 wavelength OTN and 7,460 GbE PTN by the end of 2016. We will have a trial of one wavelength 200Gbps transmission technology in 2017. This trial will verify the scalability of the OTN to meet the explosive bandwidth demand.

As part of our strategic focuses on the internet and data markets, our local loop connections mainly adopt FTTx technology. This enables us to provide broadband services, such as MOD, high speed internet access and VPN. As of December 31, 2016, we have constructed approximately 7.46 million FTTx ports. Our FTTx service can offer high-speed broadband internet access rates up to 1 Gbps. For low bandwidth demand, we use ADSL technology to provide the internet connection services for the customers.

### *Switching Networks*

**Domestic telecommunications network.** Our domestic public switched telephone network currently consists of 19 message areas connected by a long distance network. As of December 31, 2016, we had 38 long distance exchanges, which are interconnection points between our telecommunications network and approximately 16.8 million telephone lines, which reached virtually all homes and businesses in Taiwan.

We currently have intelligent networks installed over our public switched telephone networks for our domestic long distance and international networks, as well as a local intelligent network in the Taipei, Taichung and Kaohsiung metropolitan areas. Our intelligent network is designed to facilitate the use of VAS by providing more information about calls and allowing greater management of those calls.

As of December 31, 2016, our next generation network, or NGN core network capacity consisted of 1,160,000 local telephone subscribers, comprising 448,000 Session Initiation Protocol-based, or SIP-based, and 712,000 Access Gateway-based, or AG-based, subscribers.

Our NGN Managed IP backbone network consists of an inner core network and an outer core network. We owned high-speed NGN Managed IP backbone network by the end of 2016 with 12 sets of 4Tbps/1.6Tbps switch routers for the inner core network and more than 34 sets of 4Tbps/1.6Tbps switch routers for the outer core network. The bandwidth of the network is approximately 1,625 Gbps as of the end of 2016. We believe this network will enable us to meet the increasing demand for NGN services, such as VoIP, and all managed services, including MOD and VPN.

**International network.** Our international transmission infrastructure consists of both submarine cable and satellite transmission systems, which link our national network directly to 97 telecommunications service providers in 43 international destinations.

International calls are routed between Taiwan and international destinations through one of our two international switching centers, one located in Taipei and the other in Kaohsiung. Each center had time-division multiplexing, or TDM, international gateway switches and NGN international gateway switch. We had a trunk capacity of 170,040 channels in total as of December 31, 2016.

As of December 31, 2016, we had invested in 20 submarine cables, 9 of which land in Taiwan. We had increased the capacity of each of our current submarine cables, increasing our aggregate total capacity from 2,245 Gbps in 2015 to 4,025 Gbps in 2016.

### ***Mobile Services Network***

Our mobile services network consists of:

- cell sites, which are physical locations equipped with a base station consisting of transmitters, receivers and other equipment used to communicate through radio channels with customers' mobile handsets within the range of a cell;
- BSC (base station controllers) for GSM or RNC (radio network controller) for 3G, which connect to, and control, the base station within each cell site;
- cellular switching service centers for GSM or 3G, which control the base station controllers and the processing and routing of telephone calls;
- GGSN (gateway GPRS support nodes), which connect our GPRS network to the internet;
- SGSN (serving GPRS support nodes), which connect the GPRS network to the base station controllers;
- MME (mobility management entity), which connects the base station to our 4G core network that is responsible for control side;
- S GW (Serving Gateway), which connects the base stations to our 4G core network that is responsible for data side;
- PDN GW (Packet Data Network Gateway), which connects our 4G core network to the internet; and
- transmission lines, which link (i) with respect to the GSM/3G/4G network, the mobile switching service centers, MME, S GW, base station controllers, base stations and the public switched telephone network, and (ii) with respect to the GPRS/4G core network, the base station controllers, the support nodes, PDN GW and the internet.



We provide 2G mobile services based on the GSM network standards. Prior to October 22, 2014, we had the 900 MHz and 1800 MHz frequency bands paired with spectrum of 15 MHz and 11.25 MHz, respectively, for our 2G mobile services and the licenses will expire in June 2017. Due to the gradual migration of the 2G subscribers to 3G and 4G, we returned the 2G license in the 900 MHz frequency band to the NCC on October 22, 2014 and transferred the spectrum of 900 MHz frequency band to 4G mobile broadband license. Our usage right of the 900 MHz frequency band is changed from 15 MHz paired spectrum to 10 MHz paired spectrum since October 22, 2014, and the 10 MHz paired spectrum is shared by 2G GSM and 4G LTE networks adhering to the principle of technological neutrality of our 4G mobile broadband license. Since the launch of our 3G and 4G mobile services, we have gradually migrated GSM subscribers to 3G and 4G networks and have consolidated our GSM network. The number of our 2G subscribers has decreased from 1.5 million as of December 31, 2014, to 0.3 million as of December 31, 2016.

We have 15 MHz paired spectrum in the 2.1 GHz frequency band for our 3G mobile services, which was launched in July 2005 to provide voice communication services and 3G data services.

We have 10 MHz paired spectrum in the 900 MHz frequency band and 25 MHz paired spectrum in the 1800 MHz frequency band for our 4G mobile broadband services, which were launched in May 2014. In December 2015, we obtained additional spectrum for 4G mobile broadband services of 30 MHz paired spectrum in the 2500 MHz and 2600 MHz frequency bands. In March 2016, we implement three frequency band CA technology into our 900/1800/2600 MHz frequency band base stations that is expected to increase users' downlink speed over 300 Mbps.

We have also installed an intelligent network on our existing mobile services network infrastructure, which enable us to provide additional functions, such as prepaid and VPN services as well as a wide range of VAS.

### ***Internet Network***

HiNet, our internet service provider, has the largest internet access network in Taiwan, with 34 points of presence approximately 5,734,000 broadband remote access server ports and a backbone bandwidth of approximately 5,617 Gbps as of December 31, 2016. We aim to achieve HiNet's points of presence and backbone bandwidth to approximately 6,617 Gbps by the end of 2017.

HiNet's broadband backbone network consists of an inner core network and an outer core network. We had high-speed internet protocol backbone network by the end of 2016 with 18 sets of 30Tbps/12.8Tbps/10.24Tbps/4.48Tbps/4Tbps/1.6Tbps switch routers for the inner core network and more than 50 sets of 5.28Tbps/4Tbps/2.64Tbps/1.6Tbps/640Gbps switch routers for the outer core network. We also built CDN to meet the needs of Internet/OTT services. Our CDN consists of 12 domestic and five overseas point-of-presences and the total capacity is approximately 287 Gbps. We believe these networks will enable us to meet the increasing demand for our internet services.

HiNet's total international connection bandwidth is 1,037 Gbps as of December 31, 2016. As we expect that internet traffic flows to and from the United States will continue to increase, we have been continuously expanding our bandwidth to the United States. We also endeavor to increase our links to other countries, including Japan, Korea, Hong Kong, Singapore, Mainland China, Malaysia and Thailand.

### ***Leased Line and Data Switching Networks***

We operate leased line networks on both a managed and unmanaged basis. In addition, we operate a number of switched digital networks used principally for the provision of packet-switched, frame relay, asynchronous transfer mode technology and a multi-protocol label switching internet protocol VPN. As of December 31, 2016, we had 335 frame relay ports, 884 asynchronous transfer mode ports and approximately 97,573 multi-protocol label switching internet protocol VPN virtual ports.

Our data networks support a variety of transmission technologies, including frame relay, asynchronous transfer mode and ethernet technology. We have also built up our HiLink VPN that combines internet protocol and asynchronous transfer mode technologies. The advantage of HiLink VPN based on multi-protocol label switching technology is that it can carry different classes of services, such as video, voice and data together to provide services with various qualities of service, high performance transmission and fast forward solution in an enhanced security network. HiLink VPN can be accessed by xDSL/FTTx/NG-SDH and can include built-in mechanisms that can deal with overlapping internet protocol addresses. Therefore, the network potentially is less costly and requires less management for business applications.

## Cybersecurity and Personal Information Protection

To prevent increasing cyber risks and threats, we have implemented the measures described below.

- We have built an online service system that enables Certificate Authority's Secure Socket Layer functions that performs as a secure tunnel to transmit encrypted customer's information. In addition, we offered the Global Trust Secure Site Seal to prevent from phishing attacks on payment web sites.
- The high-availability systems in our data centers deploy firewall and Intrusion Prevention System, or IPS, to defend against hackers' attacks.
- All information systems and websites are scanned for vulnerabilities and a team of information security experts is responsible for conducting penetration testing on our information system, websites and Apps, to prevent leakage of customer information.
- We have enhanced the firewall policy and adopted minimum principle to limit the IPs and ports access control, in order to reduce intrusion risk from hackers.
- We have enhanced our system access controls including, among other measures, by using two-factor authentication and by limiting daily operational access to dedicated terminals in a separate network.
- We have enhanced the retention and monitoring for all system, database, and applications logs as an additional information security measure and our managers review system logs and inquiry records on a daily basis.
- We required our branch offices to comply with ISO27001 and obtain the ISO27001 certification.
- We established CHT Security Operation Center, or SOC, which is responsible for incidents and threats monitoring, notification and emergency response.

To prevent harm on personality rights, the Personal Information Protection Act, or PIPA, governs all the collection, processing and use of personal information, and it applies to all individuals, legal entities, and enterprises. We have conducted inventory checks of personal information that we currently hold, established standard operating procedures, or SOP, to comply with the requirements under PIPA, and have taken information security measures to protect the data.

To comply with the PIPA, we implemented a series of measures to avoid the leakage of customers' information:

- Personal information protection policies and regulations are defined in the operational rules of all of our business and service contracts.
- According to our personal data safety and awareness plan, all of our employees are required to take training programs and to pass the awareness test once a year.
- We required our branch offices to implement a drill in personal data leakage incident handling once a year.
- Our auditing department completes an annual audit plan and regularly audits information circulation in each department on customer information management and protection.
- We enforced customer service center and call center to comply with BS10012 and obtain the BS10012 certification.
- Documents containing customer's personal information are labeled "highly confidential."

**Property, plant and equipment**

Our property, plant and equipment consist mainly of telecommunications equipment, land and buildings located throughout Taiwan. Although we have a significant amount of land and buildings throughout Taiwan, most of our properties are for operational use and only a small part of them are for investment purposes, which were classified as “investment properties” in our consolidated financial statements included in this annual report. Notes 17 and 18 to our consolidated financial statements, included elsewhere in this annual report, provide additional details as to our “Property, plant and equipment” and “Investment properties,” respectively. See “Item 3. Key Information—D. Risk Factors—Our ability to deliver services may be disrupted due to a systems failure, shutdown in our networks, earthquakes or other natural disasters” for a discussion of environmental issues that may affect utilization of our assets.

We are now focusing more on rental income and will continue seeking development opportunities from the ROC central and local government urban planning programs to increase the value of our land, buildings and equipment. We have received approximately NT\$605.4 million (US\$18.7 million) in rental income from properties in 2016.

**Insurance**

We do not carry comprehensive insurance for our properties or any insurance for business disruptions. We do, however, maintain in-transit insurance for key materials, such as cables, equipment and equipment components. We do not carry insurance for the ST-2 satellite since we only lease capacity for our operations instead of owning the satellite.

**Employees**

Please refer to “Item 6. Directors, Senior Management and Employees—D. Employees” for a discussion of our employees.

**Our Pension Plans**

Currently, we offer two types of employee retirement plans—our defined contributions plan and defined benefits plan—which are administered in accordance with the Republic of China Labor Standards Act and the Republic of China Labor Pension Act.

**Legal Proceedings**

From time to time, we are involved in various legal and arbitration proceedings of a nature considered to be in the ordinary course of our business. It is our policy to provide for reserves related to these legal matters when it is probable that a liability has been incurred and the amount is reasonably estimable. From time to time, we have also been assessed fines by various government agencies such as the NCC and FTC, but none of these fines have had a significant effect on our financial condition or results of operations.

Except as disclosed in our annual report, we believe that we have not been involved in any legal or arbitration proceedings during 2014, 2015 or 2016 that would have a significant effect on our financial condition or results of operations; however, we cannot give you any assurance with respect to the ultimate outcome of any asserted claims against us or legal or arbitration proceedings involving us.

**Capital Expenditures**

See “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Capital Expenditures” for a discussion of our capital expenditures.

## **Enforceability of Judgments in Taiwan**

We are a company limited by shares and incorporated under the ROC Company Act. All of our directors, executive officers and some of the experts named in this annual report are residents of Taiwan and a substantial portion of our assets and the assets of those persons are located in Taiwan. As a result, it may not be possible for investors to effect service of process upon us or those persons outside of Taiwan, or to enforce against them judgments obtained in courts outside of Taiwan. We have been advised by our ROC counsel that in their opinion any final judgment obtained against us in any court other than the courts of the ROC in connection with any legal suit or proceeding arising out of or relating to the ADSs will be enforced by the courts of the ROC without further review of the merits only if the court of the ROC in which enforcement is sought is satisfied that:

- the court rendering the judgment has jurisdiction over the subject matter according to the laws of the ROC;
- the judgment and the court procedure resulting in the judgment are not contrary to the public order or good morals of the ROC;
- if the judgment was rendered by default by the court rendering the judgment, we, or the above mentioned persons, were duly served within a reasonable period of time in accordance with the laws and regulations of the jurisdiction of the court or process was served on us with judicial assistance of the ROC; and
- judgments at the courts of the ROC are recognized and enforceable in the court rendering the judgment on a reciprocal basis.

A party seeking to enforce a foreign judgment in the ROC would be required to obtain foreign exchange approval from the Central Bank of the ROC (Taiwan) for the payment out of Taiwan of any amounts recovered in connection with the judgment denominated in a currency other than NT dollars if a conversion from NT dollars to a foreign currency is involved.

## **Regulation**

### ***Overview***

We were subject to the Statute of Chunghwa Telecom Co., Ltd. prior to our privatization. Although we have been privatized since August 2005, the Statute of Chunghwa Telecom Co., Ltd. was still effective until December 24, 2014. The President of the ROC promulgated the abolishment of Statute of Chunghwa Telecom Co., Ltd. effective from December 24, 2014. The abolishment of the Statute of Chunghwa Telecom Co., Ltd. did not and will not have any material impact on our company.

### ***Regulatory Authorities***

Prior to March 1, 2006, we were under the supervision of the MOTC and the Directorate General of Telecommunications. On March 1, 2006, the NCC was formed in accordance with the Organization Act, which was intended to transfer regulatory authority over the Taiwan telecommunications industry from the MOTC and the Directorate General of Telecommunications to the NCC.

Under the National Communications Commission Organization Act, or the Organization Act, the NCC was comprised of seven commissioners, which are full-time positions. The premier of the Executive Yuan shall nominate the commissioners and appoint one of them to serve as chairperson, and one as vice chairperson. The nomination shall be approved and appointed by the Legislative Yuan. The tenure of the commissioners is four years, and the commissioners may be re-appointed to serve a consecutive term. Accordingly, now there are seven commissioners, including the chairperson Ting-I Chan and the vice chairperson Po-Tsung Wong, both of them began serving on August 1, 2016.

In accordance with the Organization Act, the NCC is responsible for:

- formulating, implementing and interpreting telecommunications laws and regulations;
- issuing telecommunications licenses and regulating the operation of telecommunications industry participants;
- assessing and testing telecommunication systems and equipment;
- drafting and promulgating technical standards for telecommunications and broadcasting;
- classifying and censoring the contents of telecommunications and broadcasting;
- managing telecommunications and media resources in Taiwan;
- maintaining competition order in the telecommunication and broadcasting industries;
- governing technical standards in connection with the safety of information communications;
- managing and facilitating the resolution of disputes pertaining to the Taiwan telecommunications and broadcasting industries;
- managing offshore matters relating to Taiwan's telecommunications and broadcasting industries including matters of international cooperation;
- managing funds allocated for the development of Taiwan's telecommunications and broadcasting industries;
- monitoring, investigating and determining matters in relating to Taiwan's telecommunications and broadcasting industries;
- enforcing restrictions under telecommunications and broadcasting laws and punishing violators; and
- supervising other matters in relation to communications and media.

#### ***Telecommunications Act***

The Telecommunications Act and the regulations under the Telecommunications Act establish the framework and govern the various aspects of the Taiwan telecommunications industry, including:

- licensing of telecommunications services;
- telecommunication numbers;
- restrictions on dominant telecommunications service providers;
- tariff control and price cap regulation;
- accounting separation system;

- interconnection arrangements;
- bottleneck facilities;
- spectrum allocation;
- provision of universal services;
- equal access;
- number portability;
- local loop unbundling;
- co-location; and
- ownership limitations.

Each of these aspects is described below. The Telecommunications Act also establishes a non-auction pricing system for assignment of radio frequencies.

### ***Licensing of Telecommunications Services***

#### *Type I and Type II Service Providers*

Under the Telecommunications Act, telecommunications service providers are classified into two categories:

*Type I.* Type I service providers are providers that install network infrastructure, such as network transmission, switching and auxiliary equipment for the provision of telecommunications services. Type I services include fixed-line services such as local, domestic long distance and international long distance services, as well as interconnection, leased line, ADSL and satellite services and wireless services such as mobile, including mobile data and trunked radio services.

*Type II.* Type II service providers are defined as all telecommunications service providers other than Type I service providers. Type II services are divided into special services and general services. Special services include simple voice resale, E.164 internet telephony service, Non-E.164 internet telephony service, international telecommunications services that provide to unspecific customers by leasing international circuit and other services specified by the MOTC before March 1, 2006 or by the NCC from March 1, 2006. General services include any Type II service other than special services.

Until 1996, we were the sole provider of Type I services in Taiwan. In 1996, the government opened the market for mobile, paging and trunked radio, mobile data and digital low power cordless telephone services. In 1998, the government opened the market for fixed-line and mobile satellite services. In June 2001, the government granted licenses to three operators for establishing fixed-line services, thereby opening the market for fixed-line services. Since August 2000, the government has permitted four undersea cable operators to engage in the undersea cable leased-circuit business.

Commencing in 2007, the NCC began accepting applications for licenses to provide fixed-line services in March, June, September and December of each year. The NCC started to accept applications for fixed-line services on a daily basis beginning in 2008. There is no limit on the number of fixed-line licenses that they may decide to issue.

## Granting of Licenses

### Type I

Type I service providers are more closely regulated than Type II service providers. The government has broad powers to limit the number of providers and their business scope and to ensure that they meet their facilities roll-out obligations. Under the Telecommunications Act, Type I service providers are subject to pre-licensing merit review of their business plans and tariff rates.

Before March 1, 2006, licenses for Type I services were granted by the MOTC through a three-step procedure. Applicants obtained a concession from the MOTC. After obtaining a concession, the applicant obtained a network construction permit and an assignment of spectrum, in the case of mobile telephone services and satellite services, from the Directorate General of Telecommunications or the MOTC prior to applying for a license. Upon completion of construction of its network and review by the Directorate General of Telecommunications, the applicant was granted a Type I license. The MOTC had the authority to grant Type I licenses for each of fixed-line services, wireless services and satellite services. Type I licenses have different minimum paid-in capital requirements for applicants and varying durations depending on the particular type of service.

Since March 1, 2006, the same procedure applies except that the licenses are granted by the NCC.

The Telecommunications Act further authorizes the competent authority, now the NCC, to promulgate separate regulations governing each Type I service, including the business scope of the Type I service provider, as well as the procedures and conditions for granting special permits and the length of the period of the special permits of each Type I service. Each holder of a Type I license will pay a fee ranging from 0.5% to 2% of their annual revenues or their bid price ratio (Article 2 of the Type I Service Provider Special Tariff Standards) multiplied by their annual revenues generated from the particular Type I service for which a license has been granted.

*Fixed Line Services.* Under the Telecommunications Act, the Regulations for Administration on Fixed Network Telecommunications Business govern the issuance of fixed-line service licenses and the business scope of fixed-line providers. Fixed-line service licenses are subdivided into the following categories, and we conduct our fixed line services with a license for integrated services.

- integrated services, including local, domestic long distance and international long distance telephone services;
- local telephone services;
- domestic long distance telephone services;
- international long distance telephone services; and
- local, domestic long distance and international long distance leased line services.

Licenses for local telephone and integrated services are valid for 25 years. Licenses for domestic long distance and international long distance telephone services are valid for 20 years. Licenses for leased line services are valid for 15 years. If the service provider wishes to continue operating, the service provider needs to apply for a license renewal to the NCC between nine months and six months before the expiration of their license. The minimum paid-in capital requirements for integrated services providers that applied for a license before June 30, 2004, between July 1, 2004 and January 31, 2008 and on or after February 1, 2008 are NT\$21 billion, NT\$8.4 billion and NT\$6.4 billion, respectively. The minimum paid-in capital requirements for both domestic and international long distance telephone service providers that applied for a license between July 1, 2004 and January 31, 2008 and on or after February 1, 2008 are NT\$1.05 billion and NT\$800 million, respectively. The minimum paid-in capital requirements for international undersea leased cable service providers that applied for a license before June 30, 2004, between July 1, 2004 and January 31, 2008, between February 1, 2008 and June 30, 2013 and on or after July 1, 2013 are NT\$420 million, NT\$420 million, NT\$320 million, and NT\$300 million, respectively. The minimum paid-in capital requirement for local telephone service providers that applied for a license between July 1, 2004 and January 31, 2008 and on or after February 1, 2008 are NT\$6.3 billion and NT\$4.8 billion, respectively, multiplied by the Local Network Operation Weights for the regions in which local network managerial rights have been granted to the service provider. The Local Network Operation Weights are calculated as the population of the region as a proportion of the entire population of Taiwan and are announced by the competent authority every three years. If an applicant for a license is also a Type I service provider, it will need to combine the minimum paid-in-capital requirements for all relevant services.

In March 2000, the government granted three new concessions to fixed-line services providers for integrated services. Recipients of these concessions are required to apply for a network construction permit to deploy broadband local access networks. Each recipient of these concessions is required to have capacity for 150,000 customers before it is able to apply for a fixed-line license to launch its proposed services. The three fixed-line service providers have since obtained fixed-line licenses and are required to achieve capacity for one million customers by the sixth year following the date of the grant of the network construction permit awarded. Operators that applied for integrated service provider licenses before June 30, 2004, between July 1, 2004 and January 31, 2008 and on or after February 1, 2008 must achieve a capacity for 1.0 million, 0.4 million and 0.3 million customers, ports or a combination of both, respectively, by the fourth year following the date of the grant of the network construction permit.

*Wireless Services.* Under the Telecommunications Act, the Regulations for Administration of Mobile Communications Business promulgated by the MOTC before March 1, 2006 or by the NCC from March 1, 2006 continue to govern the issuance of wireless services licenses and the business scope of wireless service providers. Wireless service licenses are subdivided into the following categories:

- mobile services;
- paging services;
- mobile data services;
- digital low-power cordless telephone services; and
- trunked radio services.

Wireless service licenses are granted to both regional and national service providers through review and bidding procedures.

The wireless service license for mobile or paging service, once granted, should be valid for a term of 15 years starting from the date when such license is granted, and licenses for mobile data, digital low-power cordless telephone and trunked radio are valid for 10 years starting from the date when such license is granted. According to the Regulations for Administration of Mobile Communications Businesses amended by the NCC on September 19, 2011, the wireless service provider may file an application with the NCC for extension of the valid term of its license for providing mobile or paging service one year prior to the expiry of the 15-year valid term. Once the NCC approves the application, the valid term of the wireless service license for mobile or paging service will be extended to June 30, 2017. The valid terms of our licenses granted by the ROC government authorities for providing 2G mobile services on the 900MHz and 1800MHz spectrum expired in 2012 and 2013 respectively. We filed the application with the NCC for extending the valid terms of our 2G licenses on November 29, 2011. Our application was approved by the NCC in November 2012 and the terms of our licenses for providing 2G mobile services on the 900MHz and 1800MHz spectrum should be valid until June 2017. See “Item 4. Information on the Company—B. Business Overview—Network Infrastructure—Mobile Services Network” for the discussion of our early return of the 2G license in the 900 MHz frequency band to the NCC on October 22, 2014.



The minimum paid-in capital requirements for different mobile communication businesses are as follows: Digital Low-Power Wireless Telephone Business, NT\$200 million; Trunking Wireless Telephone Business, NT\$20 million for regional operation and NT\$60 million for island-wide operation; Mobile Data Communication Business, NT\$50 million for regional operation and NT\$150 million for island-wide operation; Radio Paging Business, NT\$200 million for regional operation and NT\$400 million for island-wide operation; Mobile Telephone Business, NT\$2 billion for regional operation and NT\$6 billion for island-wide operation. If one single applicant acquires operational licenses of two or more businesses with minimum paid-in capital requirements, the paid-in capital for the businesses should be calculated and collected by the applicant separately.

For an operator who obtains the permission of operation over two businesses through the legal procedure, its minimum paid-in capital shall be separately calculated upon approval for establishment, if such other businesses are subject to the minimum paid-in capital restriction.

*Third Generation Mobile Services.* The MOTC promulgated the Regulations for Administration of the Third Generation Mobile Communications Business on October 15, 2001. The NCC amended the above regulations on July 5, 2007, designating itself as the authority in charge of the third generation, or 3G, mobile services regulations and further amended such regulations on December 30, 2008 for the establishment of base stations. The regulations govern voice and non-voice telecommunications services provided using the spectrum assigned by the MOTC, and now governed by the NCC, that utilizes the IMT-2000 technical standards as announced by the International Telecommunications Union. Licenses for 3G mobile services were granted by the MOTC and are now granted by the NCC. We have received our 3G mobile services license, which is valid from May 26, 2005 to December 31, 2018.

Under the Regulations for Administration of the Third Generation Mobile Communications Business, the operation area of this business is the whole nation; the minimal paid-in capital for operating this business shall be NT\$6 billion. If the applicant operates another business of a Type I telecommunications enterprise at the same time and there is a restriction on the paid-in capital to the other business, after acquiring the establishment approval, the required minimal paid-in capital shall be calculated by aggregating the minimal requirement of each service.

*Mobile Broadband Services.* Pursuant to the Regulations for Administration of Mobile Broadband Businesses, the 4G mobile broadband service providers must obtain the concession license issued by the NCC before providing 4G mobile broadband services. The license granted for the application in 2013 is valid from the license issue date until December 31, 2030 and the license granted for the application in 2015 is valid from the license issue date until December 31, 2033. The operation area of 4G mobile broadband services covers throughout the ROC.

The minimum paid-in capital for operating the mobile broadband services is NT\$6 billion. If an applicant also operates another business of Type I telecommunications enterprise, the minimal paid-in capital required for operating the mobile broadband services and the other Type I telecommunications services shall be determined by aggregating the paid-in capital of the entity required for operating the mobile broadband services and that of the entity required for operating the other Type I telecommunications services.

The mobile broadband services license was released for the first time in 2013. We received the 4G mobile broadband services license on April 30, 2014, and launched the services on May 29, 2014. Mobile broadband services licenses were released for bidding for a second time in 2015, and we were declared the winning bidder on December 7, 2015. After the revision of our 2500MHz and 2600MHz business plan was approved by the NCC on January 27, 2016, we received a permit for establishment by the NCC on February 17, 2016, in accordance with such business plan, and now we are accelerating the deployment of 4G mobile broadband base stations with these frequency bands. We received the license to operate these frequency bands on March 23, 2016, and put these frequency bands into use on March 24, 2016.

*Satellite Services.* Under the Telecommunications Act, the Regulations for Administration on Satellite Communication Services promulgated by the MOTC govern the issuance of satellite services licenses and the business scope of satellite service providers. The NCC amended the above regulations on July 20, 2007, designating itself as the authority in charge of the Satellite Regulations. Satellite services licenses are subdivided into fixed satellite services licenses and mobile satellite services licenses.

The satellite services license should be valid for a term of 10 years starting from the date when such license is granted. If the service provider wants to re-new its satellite services license before the expiry of the 10-year term, such service provider needs to file a renew application with the NCC within the period from 9 months to 6 months before the expiry date of the original satellite license. The valid term of the renewed satellite license will be 10 years. Minimum paid-in capital requirements for fixed satellite service providers and mobile satellite service providers are NT\$100 million and NT\$500 million, respectively. If an applicant applies to operate fixed satellite services and mobile satellite services at the same time, its minimum paid-in capital should be calculated separately. The same also applies to an applicant who operates another business of Type I telecommunications enterprise at the same time.

We currently hold a fixed satellite services license, valid from December 10, 2008 to December 9, 2018.

### *Type II*

The Telecommunications Act was amended in 1996 to open the market for all Type II services. Under the Regulations for Administration on Type II Telecommunications Business, Type II services are divided into special services and general services. Special services include simple resale, network telephone service of E.164 and non-E.164 user numbers (VoIP), international leased circuit and other services specified by governing authority. General services include any Type II service other than special services. The policy for granting a Type II service license is as follows:

- there is no limit on the number of licenses to be issued;
- licenses were granted by the Directorate General of Telecommunications before March 1, 2006 and are now granted by the NCC; and
- no bidding procedure is required.

We hold a license to operate all Type II services. Type II service licenses issued before November 15, 2005 are valid for ten years and may be renewed by submitting an application within two months prior to the expiration date. Type II service licenses issued or renewed on or after November 15, 2005 are valid for three years and may be renewed during the period commencing two months prior to the expiration date. There is no minimum paid-in capital requirement for Type II service providers. Our license to operate Type II services is included in our license to operate integrated services, and is valid from July 29, 2000 to July 28, 2025.

Under the Type II Telecommunications Enterprise Permit Fee Schedule, operators of simple resale or network telephone services of E.164 or non-E.164 user numbers must pay an annual license fee equal to 1% of annual revenues generated from these services during the previous year. Type II service operators providing services other than simple resale or network telephone services of E.164 or non-E.164 user numbers must pay license fees ranging from NT\$6,000 to NT\$150,000 depending on their respective paid-in capital. For operators who operate over two or more businesses, their license fee shall be separately calculated but jointly collected. These regulations do not apply to integrated services providers who are permitted to provide Type II services without additional Type II Licenses.

### ***Telecommunications Numbers***

According to the Telecommunications Act, numbering codes, subscriber numbers, identification numbers and other telecommunication numbers will be distributed and managed by the NCC. These telecommunication numbers may not be used or changed without approval by the NCC. In order to maintain effective use of available telecommunication numbers, the Telecommunications Act empowers the NCC to reallocate and retrieve assigned telecommunication numbers and to collect a usage fee for distributed telecommunication numbers. According to the Regulations for Usage Fees of Specific Telecommunications Numbers, telecommunications service providers have to pay 70% of revenues collected from the auctioning off and selection of “golden numbers” and the standard usage rates for “special identification numbers” in use.

### ***Restrictions on Dominant Telecommunications Services Providers***

Under the Telecommunications Act, the regulations governing dominant telecommunications services providers apply only to Type I service providers. A Type I service provider is deemed to be dominant if it meets any of the following criteria and was declared by the MOTC or now the NCC as dominant:

- controls key basic telecommunications infrastructure;
- has dominant power over market price; or
- has more than a 25% market share in terms of customers or revenues.

We have been declared by the former competent authority MOTC as a dominant Type I service provider for fixed-line and GSM mobile services. On July 7, 2012, we have been classified as a dominant Type I service provider for 3G mobile services by the NCC. Under the Telecommunications Act, a dominant Type I service provider must not engage in the following activities:

- directly or indirectly hinder a request for interconnection with its proprietary technology by other Type I service providers;
- refuse to release to other Type I service providers the calculation methods of its interconnection fees and other relevant materials;
- improperly determine, maintain or change its tariffs or means of services;
- reject, without due cause, a request for leasing network components by other Type I service providers;
- reject, without due cause, a request for leasing lines by other service providers or customers;
- reject, without due cause, a request for negotiation or testing by other service providers or customers;
- reject, without due cause, a request for negotiation for co-location by other service providers;
- discriminate, without due cause, against other service providers or customers; or
- abuse its position as a dominant provider, or engage in other unfair competition activities as determined by the regulatory authorities.

In addition, a dominant Type I service provider is subject to special regulations limiting its tariff changes.

### ***Tariff Control and Price Cap Regulation***

In order to promote competition in the telecommunications market, and as part of the government's overall policy toward deregulation, the Telecommunications Act was amended in 1999 to abolish the former rate of return system on tariff setting in favor of price cap regulation of Type I services.

Under the Administrative Regulation Governing Tariffs of Type I Telecommunications Enterprises, a dominant Type I service provider must submit its proposed adjustment in primary tariffs and promotional packages including primary tariffs to the NCC for approval at least 14 days prior to the date of the proposed tariff changes and announce such change on media, website and business locations on the day after the NCC grants the approval. The tariff change will come into effect seven days after the announcement.

Primary tariffs include:

- for fixed line local telephone services: monthly fees, usage fees, monthly rental fees of leased lines, pay telephone usage fees and internet connection service fees;
- for fixed line domestic long distance telephone services: monthly rental fees of leased lines;
- for fixed line international long distance telephone services: leased line monthly rental fees;
- for wireless services, including 3G mobile services: monthly rental fees and the prepaid communication charges;
- the wholesale price enacted in accordance with this regulation; and
- other fees or tariffs announced by the NCC.

In addition, a dominant Type I service provider is required to set wholesale prices for the provision of its telecommunication services to other telecommunications enterprises. Factors affecting the determination and adjustments of the wholesale price include the establishment, change, cancellation and connection fees. These telecommunication services and their suitable targets, all of which are subject to annual reviews by the NCC, include:

- interface circuits (local and long distance) between internet access service providers and customers for Type I and Type II service providers;
- interface circuits (local and long distance) between internet access service providers for Type I and Type II service providers that are internet access service providers;
- interconnection circuits between Type I service providers and between Type I and Type II service providers of international simple resale, or ISR, and E.164 VoIP services;
- DSL-family (xDSL) circuits for fixed line service providers and internet service providers;
- other local and long distance data circuits for Type I and Type II service providers; and
- broadband internet interconnection for Type I and Type II service providers that are internet access service providers.

The initial wholesale prices set by a dominant Type I service provider may be the retail price less fees and expenses which need not be incurred, but shall not be higher than its promotional pricing. Changes in the wholesale price charged by a dominant Type I service provider may not be greater than (i) the retail price less fees and expenses which need not to be incurred but not greater than the promotional pricing; or (ii) the annual growth rate of the consumer price index in Taiwan minus the constant set by the NCC, whichever is the lower. The Administrative Regulations Governing Tariffs of Type I Telecommunications Enterprises further prohibits a dominant Type I service provider from practicing unfair competition against other telecommunications enterprises.

In addition, changes in tariffs charged by dominant Type 1 service providers (notwithstanding the type of their respective services) may not, in any event, be greater than the annual growth rate of the consumer price index in Taiwan adjusted by a set constant, which will be periodically determined and announced by the NCC. For example, if:

- the annual growth rate of the consumer price index in Taiwan minus the set constant is positive, the increased percentage of tariffs must not exceed such positive figure;
- the annual growth rate of the consumer price index in Taiwan minus the set constant is negative, the decreased percentage of tariffs must be at least the absolute value of such negative figure, and the tariffs used in the given year must not be higher than the decreased tariff; and
- the annual growth rate of the consumer price index in Taiwan minus the set constant equals to zero, no increase in tariffs is allowed to be made by any Type I service providers.

On February 7, 2013, the NCC announced that effective from April 1, 2013 to March 31, 2017:

- the set constant to be applied to the tariff adjustment for the fixed line integrated services is 5.1749% and covers the following:
  - dominant providers of local network services and long-distance network services in Type I service
  - tariffs of the following:
    - the monthly fee for fixed-line broadband access services (excluding FTTH and FTTB)
    - wholesale prices of the following:
      - the monthly fee for leased lines services (including local and domestic long distance leased lines) between internet service providers and their customers
      - the monthly fee for leased lines services (including local and domestic long distance leased lines) between an internet service provider and another internet service provider
      - the monthly fee for the interconnection (including local and domestic long distance lines) between a Type 1 telecommunication service provider and another Type 1 telecommunication service provider; the monthly fee for the interconnection (including local and domestic long distance lines) between a Type 1 telecommunication service provider and a Type 2 telecommunication service provider who provides simple resale and network telephone service of E.164 user numbers
      - the monthly fee for other local and domestic long distance leased lines
      - the interconnection fee for internet bandwidth interconnection
- 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 in Taiwan, no increase in tariffs is allowed.

On March 8, 2017, the NCC announced that effective from April 1, 2017 to March 31, 2020:

- the set constant to be applied to the tariff adjustment for the fixed line integrated services is 3.19% and covers the following:
  - dominant providers of local network services and long-distance network services in Type I service
  - tariffs of the following:
    - the monthly fee for fixed-line broadband access services (excluding FTTH, FTTB, ADSL, and the services which downlink and uplink speeds both over 100 Mbps)
- the set constant to be applied to the tariff adjustment for the fixed line integrated services is 5.1749% and covers the following:
  - dominant providers of local network services and long-distance network services in Type I service
  - tariffs of the following:
    - wholesale prices of the following:
      - the monthly fee for leased lines services (including local and domestic long distance leased lines) between internet service providers and their customers
      - the monthly fee for leased lines services (including local and domestic long distance leased lines) between an internet service provider and another internet service provider
      - the monthly fee for the interconnection (including local and domestic long distance lines) between a Type 1 telecommunication service provider and another Type 1 telecommunication service provider; the monthly fee for the interconnection (including local and domestic long distance lines) between a Type 1 telecommunication service provider and a Type 2 telecommunication service provider who provides simple resale and network telephone service of E.164 user numbers
      - the monthly fee for other local and domestic long distance leased lines
      - the interconnection fee for internet bandwidth interconnection
- 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 in Taiwan, no increase in tariffs is allowed.

In comparison, all non-dominant Type I service providers are only required to fully disclose and notify the public of their proposed tariff adjustments and promotional packages, through the media, websites, and at all business premises, in an appropriate manner, and to report to the NCC prior to the date of the proposed tariff change, with respect to all tariffs.

Type II service providers are free to establish their own tariff schemes, but are required to notify the NCC and the public upon adoption and upon any subsequent adjustments.

### ***Accounting Separation System***

The Telecommunications Act requires that a Type I service provider, including one who concurrently offers Type II services, separately calculate the profits and losses for its different services and prohibits any cross-subsidization among services that will impede fair competition.

### ***Interconnection Arrangements***

The Telecommunications Act requires all Type I service providers to allow other Type I service providers access to their networks. It further requires Type I service providers, within three months upon request by the other Type I service provider, to reach an agreement on the relevant terms for the interconnection. Prices charged for interconnection must be based on cost. If the parties fail to reach an agreement within three months, the NCC may, either at the request of the parties or on its own accord, arbitrate and determines the interconnection terms for the parties. The Telecommunications Act authorizes the Directorate General of Telecommunications or, from March 1, 2006, the NCC to issue rules and regulations pertaining to interconnection.

The Regulations Governing Network Interconnection among Telecommunications Enterprises establishes the basis for determining the interconnection charge of a dominant Type I service provider, which shall be reviewed every four years. The interconnection charge of a dominant Type I service provider shall be reviewed by the NCC in advance, and the NCC has the right to modify the rate.

A dominant fixed-line service provider shall unbundle its network elements. The unbundled network elements shall contain the following:

- local loops;
- local switch transmission equipment;
- local trunks;
- toll switch transmission equipment;
- long distance trunks;
- international switch transmission equipment;
- network interfaces;
- directory equipment and services; and
- signaling network equipment.

Unless otherwise provided by the laws, interconnection charge of the providers for mobile communications businesses and the 3G mobile communications business should be calculated based on the decrees issued by NCC. The foregoing shall apply, *mutatis mutandis*, to the calculation and reviewing method of the interconnection charge of the dominant providers for fixed communication services.

Unbundled network components of the providers for mobile communications businesses and the 3G mobile communications business include:

- mobile telecommunications trunks;
- mobile telecommunications base stations;

- controlling equipment of mobile telecommunications base stations;
- mobile telecommunications switch transmission equipment; and
- other items recognized by the NCC.

The Regulations Governing Network Interconnection among Telecommunications Enterprises specifies the charges for network interconnection among Type I service providers as follow:

- Before January 1, 2011, except for international communications, tariffs for communications between a mobile telecommunications network and a fixed-line network were collected from the call-originating subscribers by the call-originating service provider pursuant to the tariff schedules set by the mobile communication service provider, and revenues or any uncollectible accounts from such tariffs went to the mobile service provider. However, from January 1, 2011, although the tariffs shall still be paid by the call-originating subscribers, the tariff schedules are set by the call-originating network service provider, and revenues or any uncollectible accounts from such tariff shall go to the call-originating service provider. During the transition period from January 1, 2011 to December 31, 2016, we, as a dominant Type I fixed-line service provider, shall pay extra transition fee in addition to access charges to the mobile communications service providers.
- Tariffs for communications between mobile telecommunications networks shall be paid by the call-originating subscribers pursuant to the tariff schedules set by the call-originating service providers, and the revenues or any uncollectible accounts from such tariffs shall go to the call-originating service providers.
- Tariffs for communications between fixed-line network will be determined by the following principles:
  - tariffs for communications between the local telephone networks shall be paid by the call- originating subscribers pursuant to the tariff schedules set forth by the call-originating service providers, and revenues or any uncollectible accounts from such tariffs shall be allocated to the call-originating service providers;
  - tariff schedules for local telephone network subscribers using domestic long-distance telephone services shall be set by the domestic long-distance telephone service provider and tariffs shall be collected from local telephone network subscribers using domestic long-distance telephone services. Revenues or any uncollectible accounts from such tariffs shall be allocated to the domestic long-distance telephone service providers; and
  - tariff schedules for local telephone network subscribers using international long-distance telephone services shall be set by the international long-distance telephone service provider and collected from local telephone network subscribers using international long-distance telephone services. Revenues or any uncollectible accounts from such tariffs shall be allocated to the international long-distance telephone service providers.
- Tariffs schedules for communications between satellite mobile networks and between satellite mobile networks and fixed-line communications networks or mobile communications networks shall both be set by the call-originating service providers. Revenues or any uncollectible accounts from such the tariffs shall go to the call-originating service providers.
- Tariffs schedules for communications between the E. 164 VoIP networks provided by the Type I service providers and mobile telecommunications networks, or local telephone networks, or satellite mobile networks shall be set by the call-originating service providers. Revenues or any uncollectible accounts from such tariffs shall go to the call-originating service providers.



### ***Bottleneck Facilities***

Under the Telecommunications Act, when a Type I service provider cannot construct bottleneck facilities within a reasonable period of time or substitute those facilities with other available technologies, it may request for co-location on a fee basis from the owner of the facilities located at the bottleneck of the relevant telecommunications network. The owner of the facilities so requested may not reject these requests without due cause. The NCC has the authority to prescribe facilities as bottleneck facilities, and has prescribed bridges, tunnels, lead-in tubes and telecommunications chambers located within buildings and horizontal and vertical telecommunications cables and lines as bottleneck facilities in relation to fixed-line telecommunications networks. The NCC, in an announcement on December 21, 2006, has defined local loop facilities as the “bottleneck” of the telecommunications network and amended the Administrative Rules for Network Interconnection Between Telecommunication Service Providers in April 2007, providing that we, as a Type I service provider, can only charge other local telephone service providers at cost for local loop services. The rental tariff is derived from a cost basis and must be approved by the NCC each year.

### ***Spectrum Allocation***

The MOTC is responsible for allocating all radio related frequencies primarily according to the standards set by the International Telecommunications Union. The NCC is responsible for the licensing of operators to use these frequencies. The 900 MHz and 1,800 MHz frequency bands have been allocated for 2G mobile services and the licenses will be expired in June 2017. A total of 40 MHz of FDD spectrum around the 850 MHz frequency band and a total of 110 MHz of FDD spectrum around the 2.1 GHz band have been allocated for 3G mobile services, and the licenses will be expired in December 2018.

On October 30, 2013, NCC completed the bidding process for the spectrum to provide 4G mobile broadband services and a total of 270MHz of FDD spectrum over 700MHz, 900MHz, and 1800MHz frequency bands have been assigned to six nominated bidders, including us, and the licenses will expire in December 2030. The spectrum for 4G mobile broadband services was released adhering to the principle of technological neutrality. Mobile broadband services can be offered by HetNet, including the 4G network and the 2G network under this technology-neutral spectrum. On December 7, 2015, the NCC completed a second round of bidding on 4G mobile broadband spectrum. A total of 190 MHz spectrum of the 2500 MHz and 2600 MHz frequency bands were assigned to four nominated bidders, Far EasTone, T-Star, APTG and us, and the licenses will expire in December 2033.

### ***Provision of Universal Services***

Under the Telecommunications Act, a Type I service provider may be required by the NCC, previously the MOTC, to provide universal telecommunications services in remote or unprofitable areas. These services include voice communication services, such as public phones, and data communication services, such as internet provision for libraries and public primary and secondary schools. All Type I service providers and certain Type II service providers designated by the NCC, previously the MOTC, will be required to contribute a fixed portion of their annual revenues to a universal services fund. Such a fund will be used to compensate for any losses, bad debts and management fees incurred by the relevant Type I service provider in providing the universal services. All providers of universal services cannot refuse any request for service, unless for legitimate reasons, and cannot charge more than the predetermined tariffs.

### ***Equal Access***

As a result of the liberalization of Taiwan’s telecommunications industry, a Type I service provider, including a 3G mobile services provider, a WiMax service operator and a mobile broadband services provider, is required to provide its customers with equal access to the domestic and international long distance telephone services provided by other service providers. A Type I service provider may provide equal access through pre-selection or call-by-call selection. When a customer makes a call using call-by-call selection, such customer has the option to select a service provider by dialing the network identification prefix assigned to the service provider of his choice. This will result in the automatic selection of the preferred service provider for the provision of relevant telecommunication services. The pre-selection function allows any customer to select in advance a long distance or international service provider of his or her choice. When such customer makes a call using this function, the communications network will automatically interconnect to the long distance or international network previously selected by such customer.

### ***Number Portability***

According to the Telecommunications Act and the Regulations Governing Number Portability, Type I service providers shall provide number portability service which enables customers to retain their existing local and toll free fixed-line telephone numbers or mobile phone numbers when they switch from the original Type I service provider to other Type I service providers. Meanwhile, Type I service providers shall mutually grant each other number portability services on a reciprocal basis, and shall conform in accordance with the principle of impartiality and reasonableness, and shall not be discriminatory.

Under the regulation, we are required to provide number portability service for fixed-line customers in Taipei City, Taipei County (now New Taipei City), Keelung City, Taichung City, Kaohsiung City and other areas where there are two or above fixed-line service providers. We have also provided number portability service for mobile communication customers since October 15, 2005. Pursuant to the regulation, we shall compile and submit related information of number portability for the previous six months to NCC by January 10 and July 10 of each year.

### ***Local Loop Unbundling***

In December 2006, the NCC defined the local loop as facilities “at the bottleneck of telecommunications networks” in accordance with the Regulations for Administration on Fixed Network Telecommunications Businesses. The NCC requires us to unbundle the local loops and allow other telecommunications operators to use these connections. The local loop or last mile connections are the physical wire connections between the telephone exchange’s central office to the customer’s premises usually owned by the incumbent telephone company. The NCC further amended the Regulations Governing Network Interconnection among Telecommunications Enterprises in April 2007 which provides that we can only charge other local telephone service providers at cost for local loop services instead of on the basis of commercial negotiations.

### ***Co-location***

We have been declared by the governmental authority as a dominant Type I service provider for fixed-line, 2G and 3G services. According to the Telecommunication Act, the Regulations for Administration on Fixed Network Telecommunications Business and the Regulations Governing Network Interconnection among Telecommunications Enterprises, if any other service provider requests for co-location, we must negotiate with them, unless otherwise provided by laws or regulations.

### ***Ownership Limitations***

The laws of the ROC limit foreign ownership of our common shares. Prior to March 1, 2006, the MOTC, as the competent authority under the March 1, 2006, the NCC replaced the MOTC as the competent authority under the Telecommunications Act pursuant to the Organization Law. On July 18, 2006, the MOTC and the NCC reached an agreement where the MOTC will have the authority to adjust foreign ownership limits only after negotiations with the NCC. On June 14, 2007, we applied to both the NCC and the MOTC, asking for an increase in direct and indirect foreign ownership cap of our common shares. After consultation with the NCC, the MOTC raised our foreign ownership cap of direct and indirect shareholdings from 49% to 55%. Our foreign ownership limitation of total direct shareholdings remained at 49%.

### ***Fair Trade Act***

The requirements and restrictions under the Telecommunication Act regarding price control, IP peering, equal access and accounting separation regulates certain competitive activities among telecommunication industries and aims to reduce the occurrence of anti-competition activities.

By comparison to the Telecommunications Act, the Fair Trade Act, or the FTA, plays a more comprehensive role in regulating all matters relating to competition between enterprises. The Fair Trade Act seeks to deter and prevent anti-competitive conduct by granting the Fair Trade Commission's powers to investigate and to impose penalties.

The Fair Trade Act is administered and enforced by the Fair Trade Commission, or the FTC, which has independent administration rights granted to it under the Fair Trade Act and is empowered to impose disciplinary actions for fair trade matters. The Fair Trade Commission may initiate an investigation either on its own account in accordance with its discretion granted by the Fair Trade Act or upon receipt of a complaint.

### ***Regulation on Telecommunications Enterprise with Monopoly Status***

The term "monopoly" used in the FTA refers to the circumstance where an enterprise conducts its business operation in a relevant market without facing any competition or where an enterprise is able to dominate the relevant market and block competition in the market. If there are two or more enterprises within the same market that do not engage in any price competition with each other, the whole group of non-competing enterprises should be deemed as a single monopoly enterprise in the market.

According to the FTA, an enterprise or a group of enterprises will not be considered as monopolistic enterprise(s) if none of the following circumstances exists:

- the market share of the enterprise in a relevant market reaches one-half of the market;
- the combined market share of two enterprises in a relevant market reaches two-thirds of the market; and
- the combined market share of three enterprises in a relevant market reaches three-fourths of the market.

If the market share of any respective enterprise does not reach one-tenth of the relevant market or if the amount of the enterprise's total sales in the preceding fiscal year is less than the amount which the authority announces, such enterprise shall not be considered as a monopolistic enterprise in the relevant market. Notwithstanding the above, the FTC has the ultimate discretion to consider an enterprise as a monopolistic enterprise upon any other events evidencing such enterprise's capability to affect the supply and demand in relevant market or eliminate competition.

Under the FTA, any enterprise with monopoly status is prohibited from engaging in any of the following activities:

- directly or indirectly, by using any unfair method to prevent any other enterprises from competing;
- improperly set, maintain or change the price for goods or the remuneration for services;
- forcing the enterprise's trading counterpart to give preferential treatment without justification; or
- abusing its market power.

According to the FTC's Explanation on Regulations Governing Telecommunication Industry, a telecommunications enterprise with monopoly status is likely to be involved with the following activities regulated by the FTA: conducting predatory pricing, price squeezing, cross-subsidies, price discrimination, blocking access to essential facilities, inappropriate preference or differential treatment and entering into long-term agreements to restrict the ability to change counterparties.

If the FTC finds an enterprise liable for violation of regulations governing monopoly, the FTC could impose a monetary fine of not more than NT\$100,000,000 each time. If the FTC finds such violation is serious, it may further impose a monetary fine exceeding the NT\$100,000,000 but up to 10% of the total sales of the enterprise in the preceding fiscal year. The responsible person of such enterprise may be sentenced to imprisonment of not more than three years.

### ***Regulations on Combination Between Telecommunications Enterprises***

The term "merger" used in the FTA refers to any of the following circumstances:

- where an enterprise and another enterprise are merged into one;
- where any enterprise holds or acquires more than one-thirds of total voting shares or capital of another enterprise;
- where any enterprise is assigned by or leases from another enterprise the whole or the major part of the business or properties of such other enterprise;
- where any enterprise operates jointly with another enterprise on a regular basis or is entrusted by another enterprise to operate the latter's business; or
- where any enterprise directly or indirectly controls the business operation or the appointment or discharge of personnel of another enterprise.

If any merger between or among multiple enterprises falls within any of the following circumstances, a prior approval granted by the FTC shall be required:

- as a result of the merger, the enterprise will own at least one-third of the total market share;
- there is any enterprise involved with the merger has one-fourth of the market share; or
- the aggregate sales amount for the preceding fiscal year of the enterprises and the entities controlled by or affiliated with such enterprise involved with the merger exceeds the threshold amount publicly announced by the FTC from time to time.

Once the telecommunications enterprise files the merger application with the FTC, the FTC will evaluate the pros and cons of the merger by weighing the potential economic efficiency against the disadvantage of reduced competition. If the FTC finds the potential economic efficiency generated from the merger should be able to offset the disadvantage of reduced competition caused, the FTC will grant the approval for the merger. Furthermore, the FTC may, when granting an approval, impose certain conditions or undertakings on the applicants to ensure that the overall economic benefit to be generated from the merger outweighs the disadvantage of the reduction in competition.

### ***Regulations on Concerted Action (Cartel) in Telecommunication Industry***

The term "concerted action (cartel)" as used in the FTA means the conduct of any enterprise, by means of contract, agreement or any other form of mutual understanding, with any other competing enterprise, to jointly determine the price of goods or services, quantity, technology, products, facilities, trading counterparts, or trading territory with respect to such goods and services, and thereby to restrict each other's business activities. The FTC may assume a concerted action exists based on the market condition, the feature of goods or services, cost and profit, and the economic feasibility for enterprises to conduct concerted action. Notwithstanding the above, the term concerted action as used in the FTA is limited to any concerted action at the same production and/or marketing stage that would affect the market function of production, trade in goods, or supply and demand of services. Under the FTA, enterprises are prohibited from engaging in any concerted actions unless the FTC holds the concerted action may be beneficial to overall economy and public interest.

According to the FTC's Explanation on Regulations Governing Telecommunication Industry, a telecommunications enterprise may be able to involve with the following concerted actions: entering into common pricing agreement, restriction of output and market segregation, concerted refusal to deal, or entering into agreement for exchange of information.

If the FTC finds an enterprise liable for violation of regulations governing concerted action (cartel), the FTC could impose a monetary fine of not more than NT\$100,000,000 each time. If the FTC finds such violation is serious, it may further impose a monetary fine exceeding the NT\$100,000,000 but up to 10% of the total sales of the enterprise in the preceding fiscal year. The responsible person of such enterprise may be sentenced to imprisonment of not more than three years.

### ***Regulations on Unfair Competition in Telecommunication Industry***

The FTA prohibits any enterprise from conducting any of the following activities that may restrict competition or impede fair competition:

- forcing another enterprise to discontinue supply, purchase or other business transactions with a particular enterprise for the purpose of injuring such particular enterprise;
- treating another enterprise discriminatively without justification;
- preventing competitors from participating or engaging in competition by inducing customers with low price or other illegal inducements;
- forcing another enterprise to refrain from competing in price, or to take part in a merger, or a concerted action, or to perform vertical restrictions by coercion, inducement with interest, or other improper methods; or
- setting improper restrictions on its trading counterparts' business activity as the condition to reach business engagement.

According to the FTC's Explanation on Regulations Governing Telecommunication Industry, the telecommunications enterprise may be involved with the following activities that may restrict competition or impede fair competition: conducting vertical trading restraint, boycott, discrimination, improper sales discount, sales with gift or lottery or tie-in sales.

If any enterprise violates the regulations governing unfair competition, the FTC may order it to cease therefrom, rectify its conduct or take necessary corrective action within the time prescribed in the order; in addition, the FTC may assess upon such enterprise an administrative fine of not less than NT\$100,000 nor more than NT\$50,000,000. Should such enterprise fail to cease therefrom, rectify the conduct or take any necessary corrective action after the lapse of the prescribed period, the FTC may continue to order such enterprise to cease therefrom, rectify the conduct or take any necessary corrective action within the time prescribed in the order, and each time may successively assess thereupon an administrative fine of not less than NT\$200,000 nor more than NT\$100,000,000 until its ceasing therefrom, rectifying its conduct or taking the necessary corrective action.

### ***Regulations on the Representations or Symbol Used by Telecommunications Enterprise on Goods or in Advertisement***

The FTA prohibits any enterprise from making or using false or misleading representations or symbol as to price, quantity, quality, content, production process, production date, valid period, method of use, purpose of use, place of origin, manufacturer, place of manufacturing, processor, place of processing on goods, or any items which attract customers or in advertisements, or in any other way making known to the public.

If an enterprise violates the applicable provisions under the FTA that prohibit false or misleading representations, the FTC may order it to cease therefrom, rectify its conduct or take necessary corrective action within the time prescribed in the order; in addition, the FTC may assess upon such enterprise an administrative fine. Should such enterprise fail to cease therefrom, rectify the conduct or take any necessary corrective action after the lapse of the prescribed period, the FTC may continue to order such enterprise to cease therefrom, rectify the conduct or take any necessary corrective action within the time prescribed in the order, and each time may successively assess thereupon an administrative fine until its ceasing therefrom, rectifying its conduct or taking the necessary corrective action.

### ***Other Regulations***

In addition to the competitive activities expressly regulated by the FTA, the enterprise shall further be prohibited from conducting any fraudulent activity or significantly unfair activity that may impact the trade order.

### ***Administrative Fee Law and Public Road Law***

According to the Administrative Fee Law, central and local governments, government agencies and schools are empowered to collect administrative fees from us and other telecommunications services providers for the telecommunications facilities built on public roads and properties. Under the Administrative Fee Law, Urban Road Act and Local Road Act, road authorities of municipal governments may collect usage fees from users of local roads, including us, for establishing lines along with the local roads. The fee schedule is set up in the Standard for Usage Fees of Local Roads.

Under the Public Road Law, administrative authorities of public roads may collect usage fees from the users of public roads. According to the Rules Governing Collection of Usage Fees on Public Roads, the relevant collection agencies, including agencies designated by the MOTC and municipal governments, depending on the types of public roads, may collect usage fees from users, including us, for establishing lines along with the public roads.

In addition, legislators proposed to amend Article 72 of the Public Road Law. The draft of amendment includes stipulations that manhole and hand-hole covers shall be level with the pavement after establishment or repair. The difference shall be no more than 0.6 centimeters high, within a radius of three meters. Moreover, the anti-slip test value in wet conditions shall be no less than 60 BPN, British Pendulum Test value. Such new stipulations might result in an increase in our operational costs. The amendment is currently reviewed by the Legislative Yuan, and there is no clear indication as to when the amendment will be adopted, if at all.

### ***Personal Data Protection***

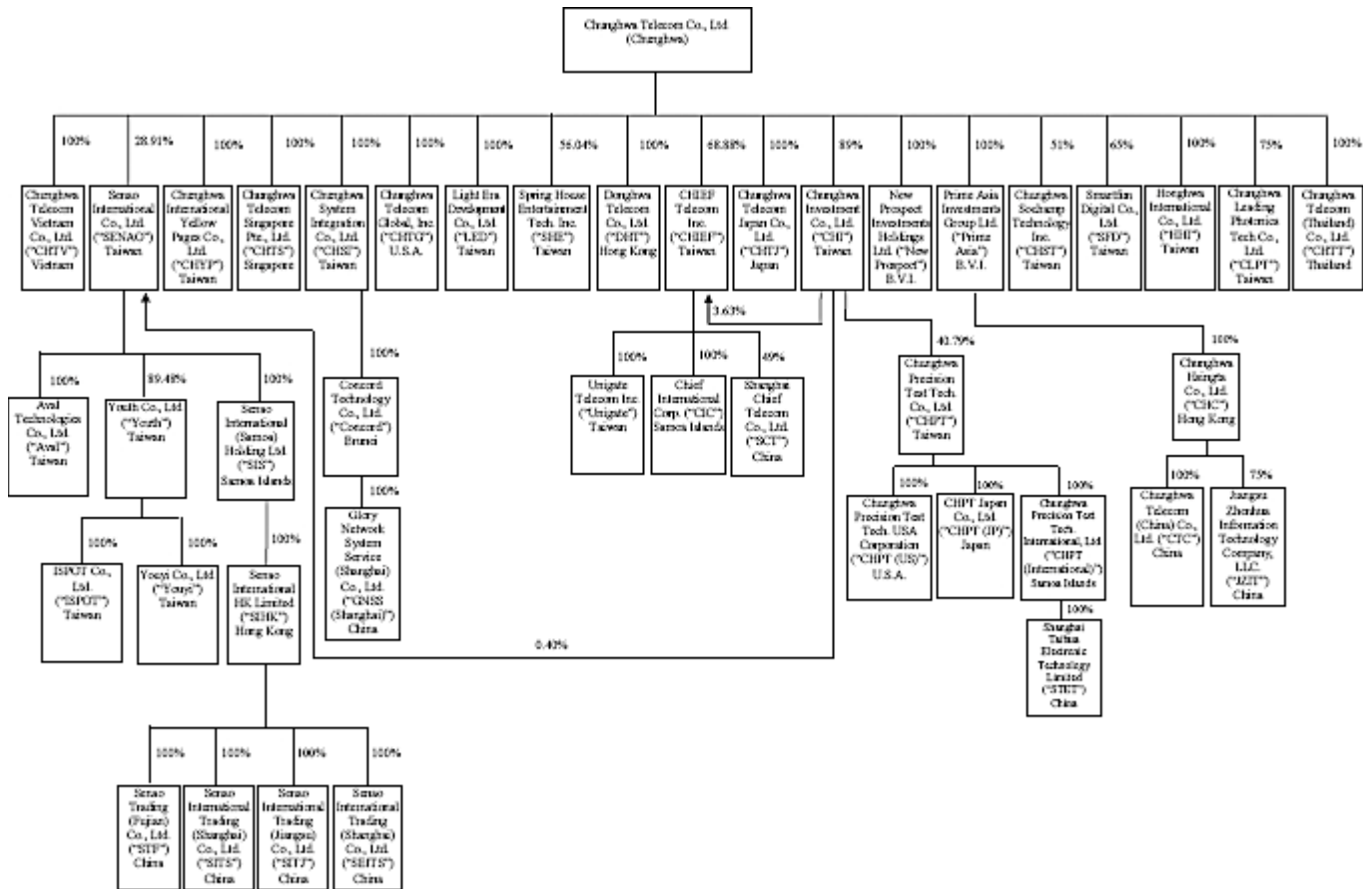
Under the Personal Information Protection Act, or PIPA, every individuals or governmental or non-governmental agencies, including us, should be subject to certain requirements and restrictions for collecting, processing or using personal data. The definition of "personal data" is extended to cover a broad scope, including name, birthday, ID, special features, fingerprints, marriage status, family, education, occupation, medical records, medical history, generic information, sex life, health examination report, criminal records, contact information, financial status, social activities, and any other data which is sufficient to directly or indirectly identify a specific person. If we fail to comply with the PIPA, we may be subject to serious punishment for civil claims, criminal offenses and administrative liabilities: the ceiling of the aggregate compensation amount for damages payable in a single case will be up to NT\$200 million or the actual value of loss arising from our violation provided the amount of actual value of such loss is higher than NT\$200 million; the defendant may be subject to an imprisonment of up to five years; and the penalty for administrative liabilities will be up to NT\$500,000 for each violation, and may be imposed consecutively if such violation continues.

**Statute of Chunghwa Telecom Co., Ltd.**

The Executive Yuan, on April 27, 2012, proposed a motion for the abolishment of the Statute of Chunghwa Telecom Co., Ltd. for legislative approval. The Legislative Yuan formally approved the motion on December 9, 2014 and the President of the ROC pronounced the abolishment of the law effective from December 24, 2014. The abolishment has no material impact on our company.

**C. Organizational Structure**

Set forth below is a diagram indicating our organization structure as of March 31, 2017.



**D. Property, Plant and Equipment**

Please refer to “—B. Business Overview” for a discussion of our property, plant and equipment.

**ITEM 4A. UNRESOLVED STAFF COMMENTS**

None.

## ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion of our financial condition and results of operations together with the consolidated financial statements and the notes to such statements included in this annual report.

For the convenience of readers, NT dollar amounts used in this section for, and as of, the year ended December 31, 2016 have been translated into U.S. dollar amounts using US\$1.00=NT\$32.40, set forth in the statistical release of the Federal Reserve Board on December 30, 2016. The U.S. dollar translation appears in parentheses next to the relevant NT dollar amount.

### Overview

A number of recent and expected future developments have had, and in the future may have, a material impact on our financial condition and results of operations. These developments include:

- changes in our revenue composition and sources of revenue growth;
- tariff adjustments;
- capital expenditures as a result of technological improvements and changes in our business;
- personnel expenses;
- taxation; and
- effect of adopting Taiwan IFRSs on our dividends and employee bonuses.

Each of these developments is discussed below.

### *Changes in our revenue composition and sources of revenue growth*

Our domestic fixed communications business revenues are derived primarily from the provision of local, domestic long distance, broadband access, leased line service, MOD, and other domestic services including ICT, cloud services, corporate solution services, billing handling services and the leasing of real estate properties. In addition, we also derive fixed-line revenues from providing interconnection services to other carriers. Our revenues from mobile communications business are principally derived from the provision of mobile services, sales of mobile handsets, tablets and data cards and other mobile services. Our revenues from internet business are generated principally from HiNet internet service, data communication services, internet VAS, internet data center, and other internet services including ICT and cloud services. Our revenues from international fixed communications business are derived primarily from international long distance, international leased line, international data services, satellite services, and other international services. Our other revenues are principally derived from non-telecom services.

The table below sets forth the revenues from our principal lines of business as a percentage of total revenues for the periods indicated.

	Year Ended December 31		
	2014	2015	2016
Revenues:			
Domestic fixed communications business	31.8%	31.3%	31.6%
Mobile communications business	48.8	49.6	48.2
Internet business	11.5	11.1	12.2
International fixed communications business	6.8	6.7	6.3
Others	1.1	1.3	1.7
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>



Our domestic fixed communications business has been an important source of revenue over the last three years. We derive domestic fixed communications from the provision of FTTx and ADSL access services that provides customers with data access lines. The percentage of total revenues derived from domestic fixed communication decreased in 2015 mainly due to the decline of domestic long distance and local call service revenue because of mobile and VoIP substitution, and reductions in tariffs for FTTx and ADSL services. The percentage increased in 2016 mainly attributable to the increase in ICT revenues, which was partially offset by the decline in domestic long distance and local call service revenue. We believe that domestic fixed communications business will continue to generate a significant portion of our revenues.

Revenues from our mobile communications business made a major contribution to our revenues over the last three years. We have experienced an increase in revenues in 2015 generated by our mobile VAS due to the raise in mobile internet subscribers. In 2016, the percentage of total revenues derived from mobile communications business decreased mainly due to the decline in voice revenue and revenue from our sales of mobile handsets, tablets and data cards, which was partially offset by the increase in mobile VAS revenue. We believe that our mobile communications business will continue to generate a significant portion of our revenues.

Our internet business was another important source of revenues over the last three years. We derived internet business revenues from the provision of data communication services, application VAS and services provided to the government. The percentage of revenues from internet services within total revenues decreased from 2014 to 2015, mainly due to the decrease in revenue generated from information services of the land administration system that we established for the Land Administration Department of local governments, and the decrease was primarily affected by the downturn in the property market. In 2016, the percentage of revenues from internet services within total revenues increased mainly due to the increase in revenues generated from services such as IDC, cloud computing, information security and IoT, and some increases in revenues driven by the growth in HiNet and HiLink services.

We derived our international fixed communications revenues mainly from international long distance telephone services and international ICT services. Revenues from our international fixed communications business as a percentage of our total revenues decreased from 2014 to 2016, because our international long distance telephone services revenue continued to decline due to VoIP substitution.

Our other revenues increased from 2014 to 2016, and the increase was mainly due to operating growth derived from one of our subsidiaries, CHPT, a semiconductor testing company.

### ***Tariff adjustments***

We adjust our tariffs and offer promotional packages from time to time primarily in response to market conditions. We also from time to time are required to adjust our pricing in line with domestic regulations.

On February 7, 2013, the NCC announced a plan for tariff reductions in wholesale tariffs for IP peering and domestic leased line services, and in monthly fees for fixed-line broadband access services (excluding FTTH and FTTB) over a period of four years starting on April 1, 2013, which was subject to a reduction by  $\Delta\text{CPI}-5.1749\%$ , where  $\Delta\text{CPI}$  is the year-over-year change of the consumer price index of previous year released by the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan. While mobile tariffs were not regulated in this round, according to the revised Administrative Rules for Network Interconnection, the mobile interconnection fees were reduced from the current NT\$2.15 per minute to NT\$1.15 per minute, over the period of four years starting from January 5, 2013. On March 8, 2017, the NCC announced a new plan for tariff reductions effective from April 1 2017 to March 31, 2020. The reduction plan applies to the wholesale tariffs for IP peering and domestic leased line services, which was subject to a reduction by  $\Delta\text{CPI}-5.1749\%$ , and to the monthly fees for fixed-line broadband access services (excluding FTTH, FTTB, ADSL, and the services which downlink and uplink speeds both over 100 Mbps), which was subject to a reduction by  $\Delta\text{CPI}-3.19\%$ . The  $\Delta\text{CPI}$  for 2016 that was used for the tariff reduction starting from April 1, 2017 was 1.40%. In response to the tariff reduction plan announced by the NCC and to further support the government's policy with respect to the development of digital economy, we voluntarily adopted a more aggressive tariff reduction rate for our IP peering service. We do not expect such tariff reduction to have a material adverse impact on our results of operations.

Besides mandatory tariff reduction mentioned above, we, from time to time, voluntarily implemented tariff adjustments in our broadband and mobile businesses in the past few years to consolidate our market share.

### ***Capital expenditures as a result of technological improvements and changes in our business***

In recent years, we have focused on modernizing and upgrading our mobile services network and on developing our FTTx network, which enables transmission of digital information at a high bandwidth over fiber loops. Constructing fiber networks in new buildings and areas with demand for 500 Mbps and 1 Gbps is our priority. Our long-term goal is to optimize our capital expenditures by focusing on investing in innovative products and services with attractive return profiles. We evaluate our investment opportunities by benchmarking them against internal return requirements.

### ***Personnel expenses***

Personnel expenses constitute a significant portion of our operating costs and expenses. In 2014, 2015 and 2016, personnel expenses represented 25.5%, 26.1% and 26.4% of our total operating costs and expenses, respectively, and pension costs represented 1.9%, 1.9% and 1.9% of our total operating costs and expenses, respectively. The table below sets forth information regarding our personnel expenses and as a percentage of our total operating costs and expenses for the periods indicated.

	Year Ended December 31					
	2014		2015		2016	
	(in billions of NT\$, except percentages)					
Personnel expenses:						
Salaries	24.9	13.6%	25.5	14.1%	26.0	14.3%
Insurance	2.6	1.4	2.6	1.4	2.7	1.5
Pension	3.4	1.9	3.4	1.9	3.4	1.9
Other <sup>(1)</sup>	15.7	8.6	15.8	8.7	15.7	8.7
Total personnel expenses	46.6	25.5%	47.3	26.1%	47.8	26.4%
Total operating costs and expenses	182.4	100.0%	181.3	100.0%	181.4	100.0%

(1) Includes employees' bonus or compensation.

At the time of our privatization, we settled all of our then existing defined benefit pension obligations in full. After completing our privatization on August 12, 2005, all of our continuing employees were deemed to have commenced employment as of August 12, 2005 for seniority purposes under our pension plans in effect after privatization. Under applicable ROC regulations, upon our privatization, the MOTC assumed the obligation to make annuity payments to all of our employees that retired before our privatization.

### ***Taxation***

The income tax rate for profit-seeking enterprises is 17% in the ROC. We benefit from tax incentives, including tax credits of up to 15% of some of our research and development expenses in accordance with the Statute for Innovating Industries.

In 1997, the Income Tax Act of the ROC was amended to integrate corporate income tax and stockholder dividend tax to eliminate the double taxation effect for resident stockholders of Taiwan companies. Under the amendment, after-tax earnings generated from January 1, 1998 and not distributed to stockholders as dividends in the following year are assessed with a 10% unappropriated earnings tax. See "Item 10. Additional Information—E. Taxation—ROC Taxation—Dividends." Under IFRSs, the 10% tax on unappropriated earnings is accrued during the year the earnings arise and adjusted to the extent that distributions are approved by the stockholders in the following year. In 2014, due to the reversal of the 10% unappropriated earnings tax accrued in 2013, which was much lower than that accrued in 2014, net unappropriated earnings tax accrued in 2014 was higher than that accrued in 2015, and our effective tax rate decreased from 19.3% in 2014 to 17.5% in 2015 as a result. In 2016, due to the reversal of the 10% unappropriated earnings tax accrued in 2015, which was much higher than that accrued in 2016, net unappropriated earnings tax accrued in 2016 was lower than that accrued in 2015. As a result, our effective tax rate decreased from 17.5% in 2015 to 15.8% in 2016.

### ***Effect of adopting Taiwan IFRSs on our dividends and employee bonuses***

Beginning on January 1, 2013, we have adopted Taiwan IFRSs for reporting our annual and interim consolidated financial statements in the ROC in accordance with the requirements of the FSC. At the same time, we have adopted IFRSs, which has certain significant differences from Taiwan IFRSs, for reporting our annual and interim consolidated financial statements with the SEC, including this annual report and future annual reports on Form 20-F.

Our dividends have been calculated based on Taiwan IFRSs since 2013. According to local regulations, our unappropriated earnings before earnings distributions for the year ended December 31, 2013 needs to first offset the decrease of unappropriated earnings on the date of transition to Taiwan IFRSs (January 1, 2012), which led to a decrease in earnings available for our dividends and employee bonuses compared to prior years. As a result of these decreases in our dividends and employee bonuses, in March 2014, our board of directors approved an additional distribution to our shareholders from additional paid-in capital in the amount of NT\$16.6 billion and a one-time additional bonus to our employees in the amount of NT\$0.7 billion. The NT\$16.6 billion additional distributions to our shareholders were approved at our annual general stockholders' meeting on June 24, 2014 and such amount was subsequently paid in August 2014.

Our consolidated financial statements prepared under Taiwan IFRSs have not been included in this annual report and do not form a part of this annual report.

### **Critical Accounting Policies**

Summarized below are our accounting policies that we believe are both important to the portrayal of our financial results and involve the need for management to make estimates about the effect of matters that are uncertain in nature. Actual results may differ from these estimates, judgments and assumptions. Certain accounting policies are particularly critical because of their significance to our reported financial results and the possibility that future events may differ significantly from the conditions and assumptions underlying the estimates used and judgments made by our management in preparing our financial statements. The following discussion should be read in conjunction with the consolidated financial statements and related notes, which are included in this annual report.

#### ***Revenue Recognition***

Revenue from the sale of goods is recognized when the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

- We have transferred to the buyer the significant risks and rewards of ownership of the goods;
- We retain neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- The amount of revenue can be measured reliably;
- It is probable that the economic benefits associated with the transaction will flow to us; and
- 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 receivables 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 we enter 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 that is not contingent upon the delivery of products or services. Relative fair values are based on the selling prices of handsets on a standalone basis and the monthly fees provided in the subscription contracts.

Revenue from a contract to provide services is recognized by reference to the stage of completion of the contract.

Our 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. We consider the following factors to determine whether we are a principal of the transaction: whether we are the primary obligation provider of the agreements, our exposures to inventory risks and the discretion in establishing prices, etc. The determination of whether we are a principal or an agent will affect the amount of revenue recognized by us. Only when we are acting as a principal, gross inflows of economic benefits arising from transactions is recognized as revenue.

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 benefits related to the transactions will flow to us 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 us 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.

#### ***Impairment of Trade notes and Accounts Receivable***

When there is objective evidence showing indications of impairment, we consider the estimation of future cash flows. The amount of impairment will be measured as 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.

We maintain an allowance for doubtful accounts for estimated losses that result from the inability of our customers to make required payments. When determining the allowance, we consider the probability of recoverability based on past customers default experience and their credit status, and economic and industrial factors. Credit risks are assessed based on historical write-offs, net of recoveries, and an analysis of the aged accounts receivable balances with allowances generally increasing as the receivable ages. Accounts receivable may be fully reserved when specific collection issues are known to exist, such as pending bankruptcy or catastrophes. The analysis of receivables is performed monthly, and the allowances for doubtful accounts are adjusted through expense accordingly.

### ***Provision for inventory valuation and obsolescence***

Inventories are stated at the lower of cost or net realizable value. Estimates of net realizable value are based on the most reliable evidence available at the time the estimates are made at the end of reporting period. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the end of the period to the extent that such events confirm conditions existing at the end of the period. Inventory write-downs are determined on an item by item basis, except for those similar items which could be categorized into the same groups. We use the inventory holding period and turnover as the evaluation basis for inventory obsolescence losses.

### ***Useful Lives of Long-Lived Assets***

A significant portion of our total assets consists of long-lived assets, primarily property, plant and equipment and definite-lived intangibles. We estimate the useful lives of property, plant and equipment and other long-lived assets with finite lives in order to determine the period of time over which depreciation and amortization expenses should be recorded. The useful lives are estimated at the time assets are acquired and are based on historical experience with similar assets as well as the anticipated technological evolution or other environmental changes. Further, we review the estimated useful lives of long-lived assets at the balance sheet date. If technological changes were to occur more rapidly than anticipated or in a different form than anticipated, the useful lives assigned to these assets may need to be shortened, resulting in the recognition of increased depreciation and amortization in the relevant periods.

### ***Control over Subsidiaries***

Some entities are our subsidiaries although we only own less than 50% ownership interest in these entities. After considering our 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 us and other investors, potential voting interests and the written agreement between stockholders, the management concluded that we have a sufficiently dominant voting interest to direct the relevant activities of the entity and therefore we have control over these entities.

### ***Investments in Unconsolidated Companies***

An associate is an entity over which we have significant influence and that is neither a subsidiary nor an interest in a joint venture. A joint venture is a joint arrangement whereby we and other parties that have joint control of the arrangement and 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 joint venture is initially recognized at cost and adjusted thereafter to recognize our share of profit or loss and other comprehensive income of the associate and joint venture as well as the distribution received.

When we reduce our ownership interest in an associate or a joint venture but we continue to use the equity method, we reclassify to profit or loss the proportion of the gain or loss that had previously been recognized in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

Any excess of the cost of acquisition over our share of the fair value of the identifiable net assets and liabilities of an associate and 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 our share of the net fair value of the identifiable assets and liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

We assess the impairment of investments accounted for using the equity method whenever triggering events or changes in circumstances indicate that an investment may be impaired and carrying value may not be recoverable. 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. We measure the impairment based on the projected future cash flow of the investees, the underlying assumptions for which had been formulated by such investees' internal management team, taking into account sales growth and capacity utilization. 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.

Our other equity investments are classified as available-for-sale, or AFS, financial assets including: listed stocks, emerging market stocks, and unlisted 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. 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.

The process of assessing whether a particular investment's net realizable value is less than its carrying cost requires a significant amount of judgment. We periodically evaluate these investments based on quoted market prices, if available, the financial condition of the investee company, economic conditions in the industry and our intent and ability to hold the investment for a long period of time. If quoted market prices are not available, we estimate the fair value using the recoverable amounts in consideration of the financial condition of the investee company. This information may be based on information that we request from the investee companies and may not be subject to the same disclosure and audit requirements as required of non-foreign private issuers, and as such, the reliability and accuracy of the information may vary. If we deem the fair value of an investment to be less than the carrying value based on the above factors, and the decline in value is deemed to be other than temporary, we record the difference as impairment in the period of occurrence. In 2014, 2015 and 2016, we recognized impairment losses of NT\$23 million, NT\$107 million and NT\$577 million (US\$17.8 million), respectively, for the investments classified as AFS financial assets.

#### ***Impairment of long-lived assets and intangible assets***

We assess the impairment of long-lived assets and intangible assets whenever triggering events or changes in circumstances indicate that the asset may be impaired and carrying value may not be recoverable. Indications we consider important which could trigger an impairment review include, but are not limited to, the following:

- External sources of information:
  - during the period, an asset's market value has declined significantly more than what would be expected as a result of the passage of time or normal use.
  - significant changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated.
  - market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset's value in use and decrease the asset's recoverable amount materially.
  - the carrying amount of the net assets of the entity is more than its market capitalization.

- Internal sources of information:
  - evidence is available of obsolescence or physical damage of an asset.
  - significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used.
  - evidence is available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected.

When an indication of impairment is identified for long-lived assets and intangible assets other than goodwill, any excess of the carrying amount of an asset over its recoverable amount is recognized as a loss. If the recoverable amount increases in a subsequent period, the amount previously recognized as impairment would be reversed and recognized as a gain. However, the adjusted amount may not exceed the carrying amount that would have been determined, as if no impairment loss had been recognized.

Goodwill represents the excess of the consideration paid for business acquisition over the fair value of identifiable net assets acquired. Goodwill is tested for impairment at least annually, or if an event occurs or circumstances change which indicates that the fair value of goodwill is below its carrying amount, an impairment loss is recognized. A subsequent reversal of such impairment loss is not allowed.

In 2014, 2015 and 2016, we determined that some of our telecommunications equipment and miscellaneous equipment were impaired and recognized an impairment loss of NT\$64 thousand, NT\$138 million and NT\$596 million (US\$18.4 million) respectively.

In 2015 and 2016, we determined that some of our investment properties' recoverable amount which represented the fair value less costs to sell of some land and buildings was higher than the carrying amount and recognized reversals of impairment loss of NT\$142 million and NT\$148 million (US\$4.6 million), respectively.

### ***Pension Benefits***

Payments to defined contribution retirement benefit plans are recognized as an expense when employees rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and rereasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Actuarial assumptions comprise the discount rate, rate of employee turnover, and long-term average future salary increase. 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.

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 our defined benefit plans. 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.

Curtailment or settlement gains or losses on the defined benefit plan are recognized when the curtailment or settlement occurs.

## *Accounting for Income Taxes*

Income tax expense represents the sum of the tax currently payable and deferred tax.

The current tax is based on taxable profit for the year. Taxable profit differs from profit as reported in the consolidated statements of comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period. Income tax (10%) on undistributed earnings is accrued during the period the earnings arise and adjusted to the extent that distributions are approved by the stockholders in the following year. Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

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 purchase 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 we are 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 balance sheet date, 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 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 we expect, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

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.



## Our Financial Reporting Obligations

Our ongoing financial reporting in our Form 20-F annual reports and interim financial reporting furnished to the SEC on Form 6-K had been based on U.S. GAAP through fiscal year 2007. Beginning with our first quarter interim financial report furnished on Form 6-K and our Form 20-F annual report for fiscal year 2008, we prepared our financial statements under ROC GAAP, with reconciliations of net income and balance sheet differences of our consolidated financial statements to U.S. GAAP. Beginning in 2013, we adopted Taiwan IFRSs for our reporting obligations in the ROC, including our annual consolidated financial statements and our interim quarterly unaudited consolidated financial statements beginning in the first quarter of 2013. While we have adopted Taiwan IFRSs for ROC reporting obligations, we prepared financial statements under IFRSs for certain filings with the SEC, including our annual reports on Form 20-F for the year ended December 31, 2013 and thereafter. Following our adoption of IFRSs for the SEC filing purposes, we are no longer required to provide any reconciliation of our consolidated financial statements with U.S. GAAP.

## A. Operating Results

The following table sets forth our revenues, operating costs and expenses, income from operations and other financial data for the periods indicated.

	Year Ended December 31			
	2014	2015	2016	
	NT\$	NT\$	NT\$	US\$
	(in billions)			
Revenues:				
Domestic Fixed Communications	72.1	72.5	72.8	2.3
Mobile communications	110.7	114.9	110.8	3.4
Internet	26.0	25.8	28.1	0.9
International fixed communications	15.3	15.5	14.4	0.4
Others	2.5	3.1	3.9	0.1
Total revenues	226.6	231.8	230.0	7.1
Operating costs	148.4	148.1	147.6	4.6
Operating expenses:				
Marketing	26.1	25.1	25.5	0.8
General and administrative	4.4	4.5	4.5	0.1
Research and development	3.5	3.6	3.8	0.1
Total operating expenses	34.0	33.2	33.8	1.0
Other income and expenses	0.6	(0.1)	(0.5)	(0.0)
Income from operations	44.8	50.4	48.1	1.5
Non-operating income and expenses	1.8	1.6	1.3	0.0
Income before income tax	46.6	52.0	49.4	1.5
Income tax expense	9.0	9.1	7.8	0.2
Consolidated net income	37.6	42.9	41.6	1.3
Attributable to:				
Stockholders of the parent	37.0	42.1	40.5	1.3
Noncontrolling interests	0.6	0.8	1.1	0.0

The following table sets forth our revenues, operating costs and expenses, income from operations and other financial data as a percentage of our total revenues for the periods indicated.

	Year Ended December 31		
	2014	2015	2016
	(as percentages of total revenues)		
<b>Revenues:</b>			
Domestic fixed communications	31.8%	31.3%	31.6%
Mobile communications	48.8	49.6	48.2
Internet	11.5	11.1	12.2
International fixed communications	6.8	6.7	6.3
Others	1.1	1.3	1.7
<b>Total revenues</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Operating costs	65.5%	63.9%	64.2%
<b>Operating expenses:</b>			
Marketing	11.5	10.8	11.1
General and administrative	2.0	1.9	2.0
Research and development	1.5	1.6	1.6
<b>Total operating expenses</b>	<b>15.0</b>	<b>14.3</b>	<b>14.7</b>
Other income and expenses	0.3	(0.1)	(0.2)
<b>Income from operations</b>	<b>19.8</b>	<b>21.7</b>	<b>20.9</b>
Non-operating income and expenses	0.8	0.7	0.6
<b>Income before income tax</b>	<b>20.6</b>	<b>22.4</b>	<b>21.5</b>
Income tax expense	4.0	3.9	3.4
<b>Consolidated net income</b>	<b>16.6%</b>	<b>18.5%</b>	<b>18.1%</b>
<b>Attributable to:</b>			
Stockholders of the parent	16.3%	18.2%	17.6%
Noncontrolling interests	0.3%	0.3%	0.5%

Each of our operating segments is managed separately because each represents a strategic business unit that serves a different market. We measure our segment performances mainly based on revenues and income before income tax.

### The year ended December 31, 2016 compared with the year ended December 31, 2015

#### Revenues

Our revenues decreased by 0.8% from NT\$231.8 billion in 2015 to NT\$230.0 billion (US\$7.1 billion) in 2016. This decrease was primarily due to the decrease in revenues generated from mobile communications.

#### Domestic fixed communications

Domestic fixed communications revenues accounted for 31.3% and 31.6% of our revenues in 2015 and 2016, respectively. Our domestic fixed-line revenues increased by 0.3% from NT\$72.5 billion in 2015 to NT\$72.8 billion (US\$2.3 billion) in 2016 primarily due to growth in ICT revenues generated by enterprises and government, which was partially offset by a decrease in local and domestic long distance telephone revenues.

*Local telephone services.* Our local telephone revenues decreased from NT\$33.6 billion in 2015 to NT\$31.6 billion (US\$1.0 billion) in 2016 with a 9.8% decline in traffic volume from 10.5 billion minutes in 2015 to 9.5 billion minutes in 2016. The decline in traffic volume was primarily due to the traffic migration from fixed-line services to mobile and internet telephone services. We expect this trend to continue as broadband and mobile services become more popular in Taiwan.

*Domestic long distance telephone services.* Our domestic long distance telephone revenues decreased by 7.6% from NT\$3.1 billion in 2015 to NT\$2.9 billion (US\$0.1 billion) in 2016. This decrease was mainly due to the traffic migration to mobile services and the increased use of VoIP applications.

*Broadband access.* The number of our FTTx customers increased from approximately 3.4 million in 2015 to approximately 3.5 million in 2016. The number of our ADSL customers decreased from 1.1 million in 2015 to approximately 1.0 million in 2016 due to the customers' migration to our FTTx services. Revenues generated from broadband access slightly decreased from NT\$19.3 billion in 2015 to NT\$19.0 billion (US\$0.6 billion) in 2016, mainly due to increased competition in the market and the mandatory tariff reduction.

*Domestic leased line.* Our tariffs for overall leased line services continued to decrease due to competition from other fixed-line operators, as well as the continued migration of domestic leased line customers to high speed broadband services. Revenues generated from domestic leased line services decreased from NT\$4.4 billion in 2015 to NT\$4.3 billion (US\$0.1 billion) in 2016.

*MOD.* Revenues generated from our MOD services decreased by 5.5% from NT\$2.5 billion in 2015 to NT\$2.4 billion (US\$72.7 million) in 2016. This decrease was due to the adjustment of our cooperation schemes with channel providers started from third quarter in 2015. The new schemes bring down our operating expenses while also impacting our revenues at the same time. We expect this structural change to enhance our IPTV margins in the mid-to-long term.

*Domestic ICT and other services.* Other revenues increased by 30.5% from NT\$9.6 billion in 2015 to NT\$12.6 billion (US\$0.4 billion) in 2016. This increase was mainly due to the increased revenue from ICT projects.

#### *Mobile communications*

Revenues from our mobile communications business segment accounted for 49.6% and 48.2% of our revenues in 2015 and 2016, respectively. Revenues from our mobile communications business segment decreased by 3.5% from NT\$114.9 billion in 2015 to NT\$110.8 billion (US\$3.4 billion) in 2016. This decrease was due to the decline in mobile voice telecommunication revenues and sales of mobile handsets, tablets and data cards and was offset by growth in mobile VAS revenues. The decrease in mobile voice telecommunication traffic was mainly due to migration to free VoIP applications.

*Mobile services.* Revenues from our mobile services accounted for 34.9% and 34.2% of our revenues in 2015 and 2016, respectively. Revenues from our mobile services decreased by 2.6% from NT\$80.9 billion in 2015 to NT\$78.8 billion (US\$2.4 billion) in 2016 due to a decrease in mobile voice telecommunication revenues from NT\$41.3 billion in 2015 to NT\$37.3 billion (US\$1.2 billion) in 2016, which was partially offset by the growth in mobile VAS revenues.

*Sales of mobile handsets, tablets and data cards.* Revenues from our sales of mobile handsets, tablets and data cards accounted for 14.3% and 13.4% of our revenues in 2015 and 2016, respectively. Revenues from our sales of mobile handsets, tablets and data cards decreased by 7.0% from NT\$33.2 billion in 2015 to NT\$30.8 billion (US\$1.0 billion) in 2016. This decrease was primarily due to lower sales of smartphones and tablets, as a result of the overall decrease in sales of smart devices in the entire market in Taiwan.

#### *Internet*

Revenues from internet business accounted for 11.1% and 12.2% of our revenues in 2015 and 2016, respectively. Revenues from our internet services increased by 9.0% from NT\$25.8 billion in 2015 to NT\$28.1 billion (US\$0.9 billion) in 2016 mainly due to the increase in revenues generated from services such as IDC, cloud computing, information security and IoT.

#### *International fixed communications*

International fixed communications revenues accounted for 6.7% and 6.3% of our revenues in 2015 and 2016, respectively. Our international fixed communications revenues decreased by 6.6% from NT\$15.5 billion in 2015 to NT\$14.4 billion (US\$0.4 billion) in 2016. This decrease was mainly due to the decrease in revenues generated from international long distance telephone service.

*International long distance telephone services.* Our international long distance telephone revenues decreased by 8.5% from NT\$9.6 billion in 2015 to NT\$8.8 billion (US\$0.3 billion) in 2016 due to the migration to VoIP-based international long distance service providers and free VoIP applications.

*International ICT and other services.* Our international ICT and other revenues increased by 12.2% from NT\$1.6 billion in 2015 to NT\$1.7 billion (US\$53.8 million) in 2016. The main reason for the revenue growth in 2016 is that we provide overseas ICT service for multinational enterprises and our customers benefit from our one stop shopping service for total solutions to overseas business sites.

#### *Others*

Other revenues accounted for 1.3% and 1.7% of our revenues in 2015 and 2016, respectively. Our other revenues increased by 23.1% from NT\$3.1 billion in 2015 to NT\$3.9 billion (US\$0.1 billion) in 2016. The increase was mainly due to operating growth derived from one of our subsidiaries, CHPT, a semiconductor testing company.

### **Operating Costs**

Our operating costs include depreciation and amortization expenses, personnel expenses, cost of goods sold, interconnection and service expenses, costs of materials and maintenance and spectrum usage and license fees.

Our operating costs decreased by 0.4% from NT\$148.1 billion in 2015 to NT\$147.6 billion (US\$4.6 billion) in 2016. This decrease was primarily due to a decrease of NT\$1.8 billion (US\$0.1 billion) in interconnection and service expenses, and a decrease of NT\$1.5 billion (US\$45.6 million) in cost of goods sold. The decrease was partially offset by an increase of NT\$2.8 billion (US\$0.1 billion) in ICT costs.

### **Operating Expenses**

Our operating expenses increased by 1.9% from NT\$33.2 billion in 2015 to NT\$33.8 billion (US\$1.0 billion) in 2016. This increase was primarily due to an increase in marketing expenses.

### **Marketing**

Our marketing expenses, which include personnel expenses, expenses relating to advertising and marketing-related activities and provision for bad debt, increased by 1.8% from NT\$25.1 billion in 2015 to NT\$25.5 (US\$0.8 billion) billion in 2016. This increase was primarily due to increases of provision for bad debt and personnel expenses. The increase was partially offset by a decrease of outsourcing expenses.

### **General and administrative**

Our general and administrative expenses remained stable at NT\$4.5 billion (US\$0.1 billion) in 2015 and 2016.

### **Research and development**

Our research and development expenses increased by 4.6% from NT\$3.6 billion in 2015 to NT\$3.8 billion (US\$0.1 billion) in 2016. This increase was primarily due to an increase in personnel expenses. In 2015 and 2016, we did not capitalize any research and development expenses as intangible assets because there were no research and development expenses related to development or the development phase of an internal project in 2015 and 2016.

### **Operating Costs and Expenses by Business Segment**

	<u>Domestic Fixed Communications</u>	<u>Mobile Communications</u>	<u>Internet</u>	<u>International Fixed Communications</u>	<u>Others</u>	<u>Adjustment</u>	<u>Total</u>
	<u>(in billions of NT\$)</u>						
<b>For the year ended December 31, 2016</b>							
Operating costs and expenses	70.3	99.1	22.1	16.0	10.6	(36.7)	181.4
Depreciation and amortization	16.4	10.6	3.6	1.5	0.4	—	32.5
<b>For the year ended December 31, 2015</b>							
Operating costs and expenses	71.0	98.9	20.6	16.5	9.2	(34.9)	181.3
Depreciation and amortization	17.5	10.4	3.6	1.5	0.4	—	33.4

### **Domestic fixed communications**

Our domestic fixed communications costs and expenses decreased by 0.9% from NT\$71.0 billion in 2015 to NT\$70.3 billion (US\$2.2 billion) in 2016, primarily due to a decrease of NT\$1.5 billion (US\$44.8 million) in interconnection costs, a decrease of NT\$1.1 billion (US\$33.3 million) in depreciation and amortization expenses, and a decrease of NT\$0.5 billion (US\$15.4 million) in personnel expenses. The decrease in our operating costs and expenses was partially offset by an increase of NT\$2.6 billion (US\$0.1 billion) in ICT costs.

*Mobile communications*

Our mobile communications operating costs and expenses increased by 0.2% from NT\$98.9 billion in 2015 to NT\$99.1 (US\$3.1 billion) billion in 2016. This increase was primarily due to an increase of NT\$1.6 billion (US\$49.4 million) in intersegment leased line expenses, an increase of NT\$0.5 billion (US\$14.2 million) in marketing expenses, an increase of NT\$0.2 billion (US\$5.6 million) in depreciation and amortization expenses, an increase of NT\$0.2 billion in intersegment internet VAS expenses (US\$5.2 million), an increase of NT\$0.2 billion (US\$5.2 million) in maintenance expenses, and an increase of NT\$0.2 billion (US\$4.6 million) in rental expenses. The increase in our operating costs and expenses was partially offset by a decrease of NT\$1.5 billion (US\$46.6 million) in cost of goods sold from our subsidiary, Senao, and a decrease of NT\$1.1 billion (US\$33.0 million) in interconnection expenses.

*Internet*

Our internet operating costs and expenses increased by 7.5% from NT\$20.6 billion in 2015 to NT\$22.1 billion (US\$0.7 billion) in 2016. This increase was primarily due to an increase of NT\$0.6 billion (US\$17.9 million) in ICT costs, an increase of NT\$0.4 billion (US\$12.0 million) in maintenance and rental expenses, an increase of NT\$0.3 billion (US\$8.6 million) in costs of award credits and an increase of NT\$0.1 billion (US\$3.1 million) in leased line expenses.

*International fixed communications*

Our international fixed communications costs and expenses decreased by 2.8% from NT\$16.5 billion in 2015 to NT\$16.0 billion (US\$0.5 billion) in 2016. The decrease was primarily due to a decrease of NT\$0.3 billion (US\$8.6 million) in intersegment interconnection costs, a decrease of NT\$0.2 billion (US\$6.8 million) in international settlement expenses, and a decrease of NT\$0.1 billion (US\$2.2 million) in personnel expenses. The decrease in our operating costs and expenses was partially offset by an increase of NT\$0.2 billion (US\$6.5 million) in ICT costs.

*Others*

The costs and expenses from our other business increased by 13.8% from NT\$9.2 billion in 2015 to NT\$10.6 billion (US\$0.3 billion) in 2016. The increase was primarily due to an increase in operating costs and expenses from our subsidiaries, Honghwa International Co., Ltd., or Honghwa, and CHPT due to the business growth of these two entities. The increase was partially offset by a decrease in intersegment cloud service expenses.

***Other Income and Expenses***

We recorded net other expense of NT\$0.1 billion in 2015 and NT\$0.5 billion (US\$15.3 million) in 2016, respectively. The difference between 2015 and 2016 was primarily due to the impairment losses on some telecommunications equipment of NT\$0.6 billion (US\$18.4 million) in 2016.

***Income from Operations and Operating Margin***

As a result of the foregoing, our income from operations decreased by 4.5% from NT\$50.4 billion in 2015 to NT\$48.1 billion (US\$1.5 billion) in 2016. Our operating margin decreased from 21.7% in 2015 to 20.9% in 2016.

The following table sets forth certain information regarding our revenues and income before income tax by business segment for the periods indicated.

	<u>Domestic Fixed Communications</u>	<u>Mobile Communications</u>	<u>Internet</u>	<u>International Fixed Communications</u>	<u>Others</u>	<u>Adjustment</u>	<u>Total</u>
	<u>(in billions of NTS)</u>						
<b>For the year ended December 31, 2016</b>							
Revenues from external customers	72.8	110.8	28.1	14.4	3.9	—	230.0
Intersegment service revenues	22.7	2.5	4.7	2.7	4.1	(36.7)	—
	<u>95.5</u>	<u>113.3</u>	<u>32.8</u>	<u>17.1</u>	<u>8.0</u>	<u>(36.7)</u>	<u>230.0</u>
Segment income before income tax	<u>25.7</u>	<u>13.9</u>	<u>10.7</u>	<u>1.1</u>	<u>(2.0)</u>	<u>—</u>	<u>49.4</u>
<b>For the year ended December 31, 2015</b>							
Revenues from external customers	72.5	114.9	25.8	15.5	3.1	—	231.8
Intersegment service revenues	21.4	3.5	4.7	2.1	3.2	(34.9)	—
	<u>93.9</u>	<u>118.4</u>	<u>30.5</u>	<u>17.6</u>	<u>6.3</u>	<u>(34.9)</u>	<u>231.8</u>
Segment income before income tax	<u>23.3</u>	<u>19.4</u>	<u>9.9</u>	<u>1.1</u>	<u>(1.7)</u>	<u>—</u>	<u>52.0</u>

As a result of the foregoing, segment income before tax for our domestic fixed communications business increased by 10.4% from NT\$23.3 billion in 2015 to NT\$25.7 billion (US\$0.8 billion) in 2016; segment income before tax for our mobile communications business decreased by 28.2% from NT\$19.4 billion in 2015 to NT\$13.9 (US\$0.4 billion) billion in 2016; segment income before tax for our internet business increased by 8.2% from NT\$9.9 billion in 2015 to NT\$10.7 billion (US\$0.3 billion) in 2016; segment income before tax for our international fixed communications business remained stable at NT\$1.1 billion (US\$33.9 million) in 2015 and 2016; and segment loss for our other business segments increased by 16.8% from NT\$1.7 billion in 2015 to NT\$2.0 billion (US\$61.6 million) in 2016.

#### ***Non-operating Income and Expenses***

Our non-operating income decreased from NT\$1.6 billion in 2015 to NT\$1.3 billion (US\$40.4 million) in 2016. This decrease was primarily due to an increase in impairment losses on available-for-sale financial assets.

#### ***Income Tax***

Our income tax was NT\$9.1 billion and NT\$7.8 billion (US\$0.2 billion) in 2015 and 2016, respectively. Our effective tax rate was 17.5% in 2015 and 15.8% in 2016. The decrease in our effective tax rate from 2015 to 2016 was primarily due to a decrease in the 10% tax on unappropriated earnings. See “Item 5. Operating and Financial Review and Prospects—Overview—Taxation” for a discussion of the change in tax rate.

#### ***Net Income***

As a result of the foregoing, our net income attributable to stockholders of the parent was NT\$42.1 billion and NT\$40.5 billion (US\$1.3 billion) in 2015 and 2016, respectively. Our net margin decreased from 18.2% in 2015 to 17.6% in 2016.

#### **The year ended December 31, 2015 compared with the year ended December 31, 2014**

##### ***Revenues***

Our revenues increased by 2.3% from NT\$226.6 billion in 2014 to NT\$231.8 billion in 2015. This increase was primarily due to the increase in revenues generated from mobile communications.

### *Domestic fixed communications*

Domestic fixed communications revenues accounted for 31.8% and 31.3% of our revenues in 2014 and 2015, respectively. Our domestic fixed-line revenues increased by 0.7% from NT\$72.1 billion in 2014 to NT\$72.5 billion in 2015 primarily due to growth in ICT revenues generated by enterprises and government, which was partially offset by a decrease in local and domestic long distance telephone revenues.

*Local telephone services.* Our local telephone revenues decreased from NT\$35.6 billion in 2014 to NT\$33.6 billion in 2015 with a 9.1% decline in traffic volume from 11.6 billion minutes in 2014 to 10.5 billion minutes in 2015. The decline in traffic volume was primarily due to the traffic migration from fixed-line services to mobile and internet telephone services. We expect this trend to continue as broadband and mobile services become more popular in Taiwan.

*Domestic long distance telephone services.* Our domestic long distance telephone revenues decreased by 5.7% from NT\$3.3 billion in 2014 to NT\$3.1 billion in 2015. This decrease was mainly due to the traffic migration to mobile services and the increased use of VoIP applications.

*Broadband access.* The number of our FTTx customers increased from approximately 3.1 million in 2014 to approximately 3.4 million in 2015. The number of our ADSL customers decreased from 1.4 million in 2014 to 1.1 million in 2015 due to the customers' migration to our FTTx services. Revenues generated from broadband access slightly increased from NT\$19.1 billion in 2014 to NT\$19.3 billion in 2015, mainly due to our successful migration strategy mentioned above.

*Domestic leased line.* Our tariffs for overall leased line services have continued to decrease due to competition from other fixed-line operators, as well as the continued migration of domestic leased line customers to high speed broadband services. Revenues generated from domestic leased line services decreased from NT\$4.6 billion in 2014 to NT\$4.4 billion in 2015.

*MOD.* Revenues generated from our MOD services decreased by 3.0% from NT\$2.6 billion in 2014 to NT\$2.5 billion in 2015. This decrease was due to the adjustment in our cooperation schemes with channel providers. The new schemes bring down our operating expenses while also impacting our revenues at the same time. We expect this structural shift to enhance our IPTV margins in the mid-to-long term.

*Others.* Other revenues increased by 39.6% from NT\$6.9 billion in 2014 to NT\$9.6 billion in 2015. This increase was mainly due to the increased number of ICT projects generated by enterprises and government.

### *Mobile communications*

Revenues from our mobile communications business segment accounted for 48.8% and 49.6% of our revenues in 2014 and 2015, respectively. Revenues from our mobile communications business segment increased by 3.8% from NT\$110.7 billion in 2014 to NT\$114.9 billion in 2015. This increase was principally due to growth in mobile VAS revenues and was partially offset by a decline in mobile voice telecommunication revenues. The decrease in mobile voice telecommunication traffic was mainly due to migration to free VoIP applications.

*Mobile services.* Revenues from our mobile services accounted for 34.2% and 34.9% of our revenues in 2014 and 2015, respectively. Revenues from our mobile services increased by 4.4% from NT\$77.5 billion in 2014 to NT\$80.9 billion in 2015 due to an increase in mobile VAS revenues from NT\$34.8 billion in 2014 to NT\$39.6 billion in 2015, which was partially offset by a decline in mobile voice telecommunication revenues.

*Sales of mobile handsets, tablets and data cards.* Revenues from our sales of mobile handsets, tablets and data cards accounted for 14.3% of our revenues both in 2014 and 2015. Revenues from our sales of mobile handsets, tablets and data cards increased by 2.2% from NT\$32.5 billion in 2014 to NT\$33.2 billion in 2015. This increase was principally due to an increase in sales of smart devices such as iPhone.

### *Internet*

Revenues from internet business accounted for 11.5% and 11.1% of our revenues in 2014 and 2015, respectively. Revenues from our internet services decreased slightly by 0.8% from NT\$26.0 billion in 2014 to NT\$25.8 billion in 2015 due to a decrease in VAS revenue generated from information services of the land administration system that we established for the Land Administration Department of local governments, and the decrease was primarily affected by the downturn in the property market.

### *International fixed communications*

International fixed communications revenues accounted for 6.8% and 6.7% of our revenues in 2014 and 2015, respectively. Our international fixed communications revenues increased by 1.0% from NT\$15.3 billion in 2014 to NT\$15.5 billion in 2015. This increase was mainly derived from one of our overseas subsidiaries, and from international leased line and international data services.

*International long distance telephone services.* Our international long distance telephone revenues decreased by 7.5% from NT\$10.4 billion in 2014 to NT\$9.6 billion in 2015 due to migration to VoIP-based international long distance service providers and free VoIP applications.

*International leased line and international data services.* Our international leased line and international data revenues increased by 13.1% from NT\$3.2 billion in 2014 to NT\$3.6 billion in 2015. The increase was mainly due to our expansion to overseas markets such as Japan, Hong Kong, Singapore, Thailand and Cambodia and increased demand for our international leased line, IP Transit and VPN services.

*International ICT and other services.* Our international ICT and other revenues increased by 50.1% from NT\$1.0 billion in 2014 to NT\$1.6 billion in 2015. The increase was mainly due to increased revenues generated from the wholesale of international long distance minutes derived from one of our overseas subsidiaries, Chunghwa Telecom Singapore Pte., Ltd.

### *Others*

Other revenues accounted for 1.1% and 1.3% of our revenues in 2014 and 2015, respectively. Our other revenues increased by 22.3% from NT\$2.5 billion in 2014 to NT\$3.1 billion in 2015. The increase was mainly due to operating growth derived from one of our subsidiaries, CHPT, a semiconductor testing company.

### ***Operating Costs***

Operating costs include depreciation and amortization expenses, personnel expenses, cost of goods sold, interconnection and service expenses, costs of materials and maintenance and spectrum usage and license fees.

Our operating costs decreased by 0.2% from NT\$148.4 billion in 2014 to NT\$148.1 billion in 2015. This decrease was primarily due to a decrease of NT\$2.8 billion in interconnection and service expenses, and a decrease of NT\$1.4 billion in depreciation expenses. The decrease was partially offset by an increase of NT\$2.3 billion in ICT costs, an increase of NT\$1.0 billion in cost of goods sold and an increase of NT\$0.8 billion in amortization expenses.

### ***Operating Expenses***

Our operating expenses decreased by 2.5% from NT\$34.0 billion in 2014 to NT\$33.2 billion in 2015. This decrease was primarily due to a decrease in marketing expenses.

### *Marketing*

Our marketing expenses, which include personnel expenses, expenses relating to advertising and marketing-related activities and provision for bad debt, decreased by 4.1% from NT\$26.1 billion in 2014 to NT\$25.1 billion in 2015. This decrease was primarily due to a decrease of outsourcing expenses in 2015 and the voluntary retirement program implemented in 2014, which resulted in a higher pension expense in 2014.



### *General and administrative*

Our general and administrative expenses increased by 2.3% from NT\$4.4 billion in 2014 to NT\$4.5 billion in 2015. This increase was primarily due to an increase in bonuses to employees.

### *Research and development*

Our research and development expenses increased by 3.2% from NT\$3.5 billion in 2014 to NT\$3.6 billion in 2015. This increase was primarily due to an increase in personnel expenses for research and development. In 2014 and 2015, we did not capitalize any research and development expenses as intangible assets because there were no research and development expenses related to development or the development phase of an internal project in 2014 and 2015.

### *Operating Costs and Expenses by Business Segment*

	<u>Domestic Fixed Communications</u>	<u>Mobile Communications</u>	<u>Internet</u>	<u>International Fixed Communications</u>	<u>Others</u>	<u>Adjustment</u>	<u>Total</u>
	<u>(in billions of NT\$)</u>						
<b>For the year ended December 31, 2015</b>							
Operating costs and expenses	71.0	98.9	20.6	16.5	9.2	(34.9)	181.3
Depreciation and amortization	17.5	10.4	3.6	1.5	0.4	—	33.4
<b>For the year ended December 31, 2014</b>							
Operating costs and expenses	72.6	96.9	21.3	17.5	8.5	(34.4)	182.4
Depreciation and amortization	18.6	9.9	3.4	1.8	0.4	—	34.1

### *Domestic fixed communications*

Our domestic fixed communications costs and expenses decreased by 2.2% from NT\$72.6 billion in 2014 to NT\$71.0 billion in 2015, primarily due to a decrease of NT\$2.1 billion in intersegment interconnection costs, a decrease of NT\$1.1 billion in depreciation and amortization expenses, a decrease of NT\$0.7 billion in personnel expenses, and a decrease of NT\$0.7 billion in material expenses. The decrease in our operating costs was partially offset by an increase of NT\$2.7 billion in ICT costs.

### *Mobile communications*

Our mobile communications operating costs and expenses increased by 2.1% from NT\$96.9 billion in 2014 to NT\$98.9 billion in 2015. This increase was primarily due to an increase of NT\$2.4 billion in leased line expenses, an increase of NT\$1.0 billion in cost of goods sold, and an increase of NT\$0.5 billion in depreciation and amortization expenses from 4G mobile broadband construction and license fees. The increase in our operating costs was partially offset by a decrease of NT\$1.6 billion in interconnection costs.

### *Internet*

Our internet operating costs and expenses decreased by 2.9% from NT\$21.3 billion in 2014 to NT\$20.6 billion in 2015. This decrease was primarily due to a decrease of NT\$0.6 billion in internet VAS expenses and a decrease of NT\$0.5 billion in ICT costs. The decrease in our operating costs was partially offset by an increase of NT\$0.6 billion in maintenance and rental expenses.

### International fixed communications

Our international fixed communications costs and expenses decreased by 5.6% from NT\$17.5 billion in 2014 to NT\$16.5 billion in 2015. The decrease was primarily due to a decrease of NT\$0.6 billion in intersegment interconnection costs, a decrease of NT\$0.3 billion in depreciation and amortization expenses, a decrease of NT\$0.2 billion in personnel expenses and a decrease of NT\$0.2 billion in rental expenses for international communications equipment. The decrease in our operating costs was partially offset by an increase of NT\$0.5 billion in operating costs and expenses from our subsidiaries, Chunghwa Telecom Singapore Pte., Ltd, and Donghwa Telecom Co., Ltd. due to the business growth of these two entities.

### Others

The costs and expenses from our other business increased by 9.4% from NT\$8.5 billion in 2014 to NT\$9.2 billion in 2015. The increase was primarily due to an increase in personnel expenses from our subsidiary, Honghwa. The increase was partially offset by a decrease in personnel costs and ICT costs of Chunghwa Telecom Co., Ltd.

### Other Income and Expenses

We recorded net other income of NT\$0.6 billion in 2014 and net other expenses of NT\$0.1 billion in 2015, respectively. The difference between 2014 and 2015 was primarily due to the gain on disposal of investment properties of NT\$0.6 billion in 2014 by our subsidiary, Light Era.

### Income from Operations and Operating Margin

As a result of the foregoing, our income from operations increased by 12.4% from NT\$44.8 billion in 2014 to NT\$50.4 billion in 2015. Our operating margin increased from 19.8% in 2014 to 21.7% in 2015.

The following table sets forth certain information regarding our revenues and income before income tax by business segment for the periods indicated.

	Domestic Fixed Communications	Mobile Communications	Internet	International Fixed Communications	Others	Adjustment	Total
	(in billions of NT\$)						
<b>For the year ended December 31, 2015</b>							
Revenues from external customers	72.5	114.9	25.8	15.5	3.1	—	231.8
Intersegment service revenues	21.4	3.5	4.7	2.1	3.2	(34.9)	
	93.9	118.4	30.5	17.6	6.3	(34.9)	231.8
Segment income before income tax	23.3	19.4	9.9	1.1	(1.7)	—	52.0
<b>For the year ended December 31, 2014</b>							
Revenues from external customers	72.1	110.7	26.0	15.3	2.6	—	226.6
Intersegment service revenues	19.7	5.3	4.7	2.3	2.4	(34.4)	
	91.8	116.0	30.7	17.6	4.9	(34.4)	226.6
Segment income before income tax	19.5	19.3	9.6	0.2	(2.0)	—	46.6

As a result of the foregoing, segment income before tax for our domestic fixed communications business increased by 18.9% from NT\$19.5 billion in 2014 to NT\$23.3 billion in 2015; segment income before tax for our mobile communications business increased by 0.4% from NT\$19.3 billion in 2014 to NT\$19.4 billion in 2015; segment income before tax for our internet business increased by 3.9% from NT\$9.6 billion in 2014 to NT\$9.9 billion in 2015; segment income before tax for our international fixed communications business increased by 486.4% from NT\$0.2 billion in 2014 to NT\$1.1 billion in 2015; and segment loss for our other business segments decreased by 16.3% from NT\$2.0 billion in 2014 to NT\$1.7 billion in 2015.

### *Non-operating Income and Expenses*

Our non-operating income decreased from NT\$1.8 billion in 2014 to NT\$1.6 billion in 2015. This decrease was primarily due to a decrease in foreign currency exchange gains and an increase in impairment losses on available-for-sale financial assets.

### *Income Tax*

Our income tax was NT\$9.0 billion and NT\$9.1 billion in 2014 and 2015, respectively. Our effective tax rate was 19.3% in 2014 and 17.5% in 2015. The decrease in our effective tax rate from 2014 to 2015 was primarily due to a decrease in the accrued 10% tax on unappropriated earnings. See “Item 5. Operating and Financial Review and Prospects—Overview—Taxation” for a discussion of the change in tax rate.

### *Net Income*

As a result of the foregoing, our net income attributable to stockholders of the parent was NT\$37.0 billion and NT\$42.1 billion in 2014 and 2015, respectively. Our net margin increased from 16.3% in 2014 to 18.2% in 2015.

## **B. Liquidity and Capital Resources**

### **Liquidity**

The following table sets forth the summary of our cash flows for the periods indicated:

	Year Ended December 31			
	2014	2015	2016	
	NT\$	NT\$	NT\$	US\$
	(in billions)			
Net cash provided by operating activities	71.4	76.3	65.0	2.0
Net cash used in investing activities	(27.3)	(30.4)	(21.7)	(0.7)
Net cash used in financing activities	(35.1)	(39.2)	(42.5)	(1.3)
Effect of exchange rate changes	0.0	0.0	0.0	0.0
Net increase in cash and cash equivalents	9.0	6.7	0.8	0.0
Cash and cash equivalents at end of year	23.6	30.3	31.1	1.0

Our primary source of liquidity is cash flow from operations, which represents operating profit adjusted for non-cash items, primarily depreciation and amortization and changes in current assets and liabilities. Notes 22 and 23 to our consolidated financial statements, included elsewhere in this annual report, provide additional details as to our bank loans. We believe that our working capital is sufficient to meet our present cash flow requirements.

In 2016, we generated NT\$65.0 billion (US\$2.0 billion) in net cash from operating activities as compared to NT\$76.3 billion in 2015. The decrease was primarily due to a decrease in income from our operations, an increase in cash outflows for the contribution to the pension funds according to the minimum contribution requirement in accordance with the revised Labor Standards Law of the ROC which was effective from 2016, and an increase in cash outflows relating to income tax from operating activities.

In 2015, we generated NT\$76.3 billion in net cash from operating activities as compared to NT\$71.4 billion in 2014. The increase was primarily due to an increase in income from our operations, an increase in cash inflows from accounts receivables, an increase in amortization expense, and a decrease in cash outflows relating to income tax from operating activities.

In 2014, we generated NT\$71.4 billion net cash from operating activities as compared to NT\$75.3 billion in 2013. The decrease was primarily due to the decrease in income from operation, the decrease in cash inflows relating to accounts receivables, and the increase in cash outflows relating to income tax and other payables from operating activities.

Historically, net cash from operating activities has been sufficient to cover our capital expenditures, including ongoing expansion and modernization of our networks.

In 2016, net cash used in investing activities was NT\$21.7 billion (US\$0.7 billion), a decrease from NT\$30.4 billion in 2015. The change was primarily due to a one-time payment of NT\$10.0 billion in 2015 for acquiring the 4G mobile broadband spectrum in the auction held by the NCC, but there was no such cash outflows in 2016.

In 2015, net cash used in investing activities was NT\$30.4 billion, an increase from NT\$27.3 billion in 2014. The change was primarily due to a one-time payment of NT\$10.0 billion in 2015 for acquiring the 4G mobile broadband spectrum in the auction held by the NCC, which payment was partially offset by a net decrease of NT\$7.5 billion for acquisition of property, plant and equipment.

In 2014, net cash used in investing activities was NT\$27.3 billion, a decrease from NT\$49.1 billion in 2013. The change was primarily due to the one-time payment of NT\$39.1 billion in 2013 for acquiring the 4G mobile broadband spectrum in the auction held by the NCC, which was partially offset by a net decrease of NT\$19.7 billion of time deposits and negotiable certificate of deposit with maturities of more than three months.

In 2016, our net cash used in financing activities totaled NT\$42.5 billion (US\$1.3 billion), which mainly reflected NT\$42.6 billion in dividends paid during that period.

In 2015, our net cash used in financing activities totaled NT\$39.2 billion, which mainly reflected NT\$37.7 billion in dividends paid during that period.

In 2014, our net cash used in financing activities totaled NT\$35.1 billion, which mainly reflected NT\$18.5 billion of payment of dividends during that period and NT\$16.6 billion of cash distribution from our capital surplus to our stockholders.

## Capital Resources

We have historically financed our capital expenditure requirements with our cash flows from operations and some bank loans. In future years, we have capital expenditure requirements for the ongoing expansion and upgrade of our networks, including 4G mobile broadband, FTTx, service platforms, and IDC. We also expect to make dividend payments on an ongoing basis. See “Item 8. Financial Information—A.” Consolidated Statements and Other Financial Information.” Furthermore, we may require working capital from time to time to finance purchases of materials for our maintenance and other overhead expenses. We expect to primarily rely on cash generated from operations and, to a lesser extent, loans from commercial banks to meet our planned capital expenditures, make our planned dividend payments, repay debts and fulfill other commitments over the next twelve months.

As of December 31, 2016, our primary source of liquidity was NT\$31.1 billion (US\$1.0 billion) in cash and cash equivalents. In addition, the unused line of credit for unsecured and secured bank loans amounted to NT\$46.2 billion (US\$1.4 billion) and NT\$0.2 billion (US\$6.2 million), respectively, as of December 31, 2016.

As of December 31, 2016, our subsidiary, Chunghwa Sochamp Technology Inc., had short-term unsecured loans of NT\$70.0 million (US\$2.2 million) at interest rates ranging from 2.14% to 2.25%.

As of December 31, 2016, our subsidiary, Youth Co., Ltd. had short-term unsecured loans of NT\$48.0 million (US\$1.5 million) at interest rates ranging from 1.95% to 1.97%; and short-term secured loans of NT\$20.0 million (US\$0.6 million) with an interest rate at 1.98%.

As of December 31, 2016, our subsidiary Light Era had long-term secured loans in the amount of NT\$1.6 billion (US\$49.4 million) due in 2018 with an interest rate at 0.91%.

As part of the government's effort to upgrade the existing telecommunications infrastructure, we and other public utility companies were required by the ROC government to contribute a total of NT\$1.0 billion to a Piping Fund, administered by the Taipei City Government. This fund is used to finance various telecommunications infrastructure projects. We accounted for the contribution as other financial assets on our consolidated balance sheets.

Note 41 to our consolidated financial statements included elsewhere in this annual report provides a description of the assets that are pledged as collateral for long-term bank loans and contract deposits.

### Capital Expenditures

Substantially all of our capital expenditures in 2014, 2015 and 2016 were made for operations in the ROC. We have financed our capital expenditures using cash flow from operations and bank loans. The following table sets forth a summary of our capital expenditures for the periods indicated.

	Year Ended December 31					
	2014		2015		2016	
	(in billions of NT\$, except percentages)					
<b>Capital Expenditures:</b>						
Domestic fixed communications business	16.2	50%	10.2	41%	9.9	42%
Mobile communications business	9.6	30	8.6	34	9.0	38
Internet business	4.4	14	4.8	19	2.7	12
International fixed communications business	1.5	4	1.0	4	1.1	5
Others	0.9	2	0.5	2	0.8	3
Total capital expenditures	<u>32.6</u>	<u>100%</u>	<u>25.1</u>	<u>100%</u>	<u>23.5</u>	<u>100%</u>

The following table sets forth a summary of our planned capital expenditures for the year ending December 31, 2017.

	Year Ending December 31, 2017	
	(in billions of NT\$, except percentages)	
<b>Capital Expenditures:</b>		
Domestic fixed communications business	14.2	47.0%
Mobile communications business	9.4	31.1
Internet business	3.3	10.8
International fixed communications business	1.8	5.8
Others	1.6	5.3
Total capital expenditures	<u>30.3</u>	<u>100.0%</u>

We expect our total capital expenditures to be approximately NT\$30.3 billion in 2017. Our capital expenditures for 2017 are planned to be allocated to our 4G LTE network deployment, FTTx network expansion, service platforms, cloud computing and IDC construction. We expect to finance these capital expenditures with our cash flows from operations and bank loans.

### Inflation

We do not believe that inflation in Taiwan has had a material impact on our results of operations in 2014, 2015 and 2016.

## Recent Accounting Pronouncements

### *Major differences between IFRSs and Taiwan IFRSs*

While we have adopted Taiwan IFRSs for ROC reporting purposes, we adopt IFRSs for certain filings with the SEC, including our annual reports on Form 20-F for the year ended December 31, 2013 and thereafter. Following our adoption of IFRSs for SEC filing purposes, we are no longer required to prepare any reconciliation of our consolidated financial statements with U.S. GAAP.

Taiwan IFRSs differs from IFRSs in certain significant respects, including to the extent that any new or amended standards or interpretations applicable under IFRSs may not be timely endorsed by the FSC. Therefore, these pronouncements will not be applicable to Taiwan IFRSs until endorsed by the FSC. Some of the major differences between IFRSs and Taiwan IFRSs that are relevant to us as of the date of this annual report are set forth below.

- The “income taxes on unappropriated earnings” should be recognized at the year of earnings under IFRSs, while it should be recognized at the year of distribution under Taiwan IFRSs.
- Prior to incorporation, according to the laws and regulations applicable to state-owned enterprises in Taiwan, we recorded revenue from fixed-line service at the time the connection service was performed or the prepaid card was sold. Upon incorporation, net assets greater than capital stock was credited as additional paid-in capital. Part of our additional paid-in capital was from unearned revenues from fixed-line services as of that date. Under IFRSs, following the revenue recognition guidance, the above service revenue should be treated as deferred income and recognized over the time when the service is continuously provided or as consumed. Therefore, upon our first adoption of IFRSs, we should retrospectively decrease additional paid-in capital while increase unappropriated earnings on the transition date of January 1, 2012. There is no difference in the recognition of unearned revenues or deferred income between IFRSs and Taiwan IFRSs. However, according to the guidance released by the TWSE in March 2012, which is a part of Taiwan IFRSs, the additional paid-in capital under ROC GAAP that is not specifically promulgated under Taiwan IFRSs should not be adjusted on the transition date of January 1, 2012. Therefore, we retain such additional paid-in capital under Taiwan IFRSs.

It is difficult for us to determine the differences between Taiwan IFRSs and IFRSs on our financial statements as any new or amended standards or interpretations applicable under IFRSs may not be timely endorsed by the FSC.

### *Other recent accounting pronouncements under IFRSs*

For a summary of new standards, amendments and interpretations issued under IFRSs but not effective for 2016 and which have not been adopted early by us, see Note 5 to our consolidated financial statements included elsewhere in this annual report.

## C. Research and Development, Patents and Licenses

### Research and Development

Our research and development efforts are focused on the development of advanced network services and operation technologies as well as the development of core technologies for the domestic telecommunications market. For 2014, 2015 and 2016, our research and development expenses were NT\$3.5 billion, NT\$3.6 billion and NT\$3.8 billion (US\$0.1 billion), or approximately 1.5%, 1.6% and 1.6% of our revenues, respectively.

As of March 31, 2017, we had 2,368 researchers focusing on the following areas:

- Convergence Services: value-add communications services, intelligent interactive technologies, location-based application technology, content convergence services, E-commerce, mobile lifestyle apps, and video convergence services;
- IoT: intelligent IoT service platform, driving behavioral analysis solutions, intelligent manufacturing solutions, and health cloud services;
- Information Security: identification solutions and enterprise advanced persistent threat defense solutions;
- Big Data: big data operations, storage and analysis solutions;
- Cloud Computing: virtual data center service solutions, integrated surveillance solutions of information and communications equipment; and
- Intelligent Broadband: LWA solutions, site selection and resource allocation solutions for telecom cloud stations, multiband carrier aggregation technology, VoIP four-in-one loading process, and intelligent data traffic forecast.

With our consistent investment in research and development, we have developed a number of advanced network services, operation technologies and VAS which successfully support our business operations and expansion, including our FTTx deployment, security, mobile payment, smart Home, enterprise ICT solution, cloud business and operation supporting system, and various IoT services, such as ITS, iEN, intelligent video surveillance, or IVS, and the solution of industry 4.0. As of December 31, 2016, we have been granted 916 domestic patents and 64 foreign patents.

#### D. Trend Information

See “—Overview” for a discussion of the most significant recent trends that have had, and in the future may have, a material impact on our results of operations, financial condition and capital expenditures. In addition, see discussions included in this Item for a discussion of known trends, uncertainties, demands, commitments or events that we believe are reasonably likely to have a material effect on our net operating revenues, income from continuing operations, profitability, liquidity or capital resources, or that would cause reported financial information not necessarily to be indicative of future operating results or financial condition.

#### E. Off-Balance Sheet Arrangements

There are no off-balance sheet arrangements that are material to investors.

#### F. Tabular Disclosure of Contractual Obligations

Set forth below are our total contractual obligations as of December 31, 2016.

	Payments Due by Period				
	Total	Less than 1 Year	1-3 years	3-5 years	More than 5 years
Contractual Obligations <sup>(1)</sup>					
Short-term loans	0.1	0.1	—	—	—
Long-term loans	1.6	—	1.6	—	—
Obligations related to ST-2 satellite	1.8	0.2	0.4	0.4	0.8
Operating leases <sup>(2)</sup>	9.2	2.8	3.7	1.7	1.0
Total	<u>12.7</u>	<u>3.1</u>	<u>5.7</u>	<u>2.1</u>	<u>1.8</u>

- (1) Unfunded defined benefit obligation is not included as the schedule of payments is difficult to determine. We made pension contributions of approximately NT\$11.2 billion (US\$0.3 billion) in 2016 and expected to made pension contributions of approximately NT\$2.7 billion (US\$0.1 billion) in 2017. See Note 28 to our consolidated financial statements for additional details regarding our pension plan.
- (2) Operating leases obligations are described in Note 36 to our consolidated financial statements included elsewhere in the annual report.

As of December 31, 2016, we had remaining commitments under non-cancelable contracts with various parties, including acquisition of lands and buildings of NT\$0.9 billion (US\$26.9 million) and acquisition of telecommunications equipment of NT\$12.3 billion (US\$0.4 billion).

### Foreign Exchange

Our revenues and costs and expenses are largely denominated in NT dollars. Our principal expenses denominated in foreign currencies are capital expenditures on telecommunications equipment and settlement payments for the use of networks of carriers in foreign countries for outgoing international calls. Settlement receipts have been a principal source of foreign currency for us. While future fluctuations of the NT dollar against foreign currencies could impact our financial condition and results of operations, we have not yet been materially affected in the past. See “Item 11. Quantitative and Qualitative Disclosures about Market Risk—Foreign Currency Risk” for further details.

### G. Safe Harbor

See “Forward-Looking Statements in This Annual Report May Not Be Realized.”

## ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

### A. Directors and Senior Management

Our Articles of Incorporation provides for a board of directors consisting of seven to fifteen directors bestowed with a three-year tenure. The following table sets forth the name, age and position of each of our directors and such person’s position as of March 31, 2017. There is no family relationship among any of these persons. These directors have terms until June 23, 2019. Pursuant to the ROC Company Act, a person may serve as our director in his or her personal capacity or as the representative of another legal entity. A director who serves as the representative of a legal entity may be removed or replaced at any time at the discretion of that legal entity, and the replacement director may serve the remainder of the term of office of the replaced director. All of our non-independent directors are representatives of the MOTC.

Name	Age	Position
Yu Cheng	63	Chairman, chief executive officer and director
Chi-Mau Sheih	62	President and director
Chih-Ku Fan	63	Director
Shin-Yi Chang	59	Director
Yi-Bing Lin	56	Director
Shu-Juan Huang	52	Director
Jen-Ran Chen <sup>(1)</sup>	58	Director
Zse-Hong Tsai <sup>(1)</sup>	56	Director
Kuo-Long Wu <sup>(1)</sup>	65	Director
Lo-Yu Yen <sup>(1)</sup>	62	Director
Chin-Tsai Pan	56	Director

(1) Independent director.

**Yu Cheng** is the chairman, chief executive officer and director of our company. He is also an independent director of Formosa Petrochemical Co., Ltd., Formosa Taffeta Co., Ltd. and Formosa Advanced Technologies Co., Ltd. Mr. Cheng assumed the role as a director of our company in August 2016. He was the former CEO of Contemporary Taiwan Development Foundation. He also served as the editor-in-chief of Commercial Times from 2009 to 2016, the chairman of Radio Taiwan International from 2006 to 2008, the president of Taiwan Television Enterprise Ltd. from 2002 to 2006, as well as the commissioner and vice chairman of Fair Trade Commission of Executive Yuan from 1995 to 2002. Mr. Cheng holds a MBA degree from National Chengchi University.



**Chi-Mau Sheih** has served as the president and director of our company since January 2017. Mr. Sheih served as a senior executive vice president of our company from 2010 to 2017, the president of Southern Taiwan Business Group from 2007 to 2010, and the president of Central Taiwan Business Group from 2006 to 2007. Mr. Sheih holds a master's degree in Business Administration from National Taiwan University.

**Chih-Ku Fan** is a director of our company. Mr. Fan is also currently the deputy administrative minister of the MOTC. Mr. Fan holds a Ph.D. degree in transportation technology and management from National Chiao Tung University in Taiwan.

**Shin-Yi Chang** has served as a director of our company since January 2017. Mr. Chang is also currently the director of the accounting department at the MOTC. He holds a MBA degree from National Taiwan University.

**Yi-Bing Lin** is a director of our company. Dr. Lin is the vice chancellor of the National Chiao Tung University of the University System of Taiwan, or the UST. He holds a Ph.D. degree in Computer Science and Engineering from University of Washington in Seattle.

**Shu-Juan Huang** is a director of our company. Ms. Huang is also currently the director of the Department of Planning of the Directorate General of Budget, Accounting and Statistics at the Executive Yuan. Ms. Huang served as our supervisor before June 25, 2013. Ms. Huang holds a bachelor's degree in Accounting from Fu Jen Catholic University in Taiwan.

**Jen-Ran Chen** is currently an independent director of our company. Mr. Chen is currently the executive board director of Pixnet Digital Media Technology Co., Ltd., the largest social media in Taiwan, and has been invited to be independent director and consultant for several IT companies and research institutes. He is the co-founder and ex-CEO of Yam, the very first Chinese search engine, and former president of Chinese Television System. Mr. Chen holds a master's degree in Sociology from National Taiwan University.

**Zse-Hong Tsai** is an independent director of our company. Dr. Tsai is also currently a professor of electrical engineering at the National Taiwan University. His research interest includes broadband networking, performance evaluation and telecommunication regulations. Dr. Tsai holds a Ph.D. degree and a Master of Science degree in Electrical Engineering from the University of California, Los Angeles, and a Bachelor of Science degree in Electrical Engineering from National Taiwan University.

**Kuo-Long Wu** is an independent director of our company. Mr. Wu is also currently the consultant of the National Information Infrastructure Enterprise Promotion Association. He was a board member of the Internet Corporation for Assigned Names and Numbers from 2010 to 2016. Mr. Wu holds a master's degree in Computer Science from Columbia University.

**Lo-Yu Yen** is an independent director of our company. Mr. Yen is the co-founder and principal of AAMA Taipei Cradle Program. He is also an independent director of ANZ Bank (Taiwan). Mr. Lo worked at international accounting and consulting firms in Taiwan, USA and Mainland China for 30 years. He holds a master's degree in Accounting from National Chengchi University. He has CPA certificates both in the ROC and the United States.

**Chin-Tsai Pan** is a director of our company. Mr. Pan is currently a representative of the Member's Convention of Chunghwa Telecom Workers Union and an engineer of our Southern Taiwan Business Group. Mr. Pan graduated from Kaohsiung Industrial High School.

The following persons served as directors on our board during 2016 but are no longer serving with us due to retirement and replacement.

**Lih-Shyng Tsai** was the chairman, chief executive officer and director of our company from January 2014 to August 2016. Dr. Tsai was the chairman and chief executive officer of TSMC Solar Ltd. and TSMC Solid State Lighting Ltd. from 2011 to 2013, the president of TSMC's new business department from 2009 to 2011 and the president and chief executive officer of TSMC from 2005 to 2009. Dr. Tsai holds a Ph.D. degree in Material Science and Engineering from Cornell University.

**Mu-Piao Shih** was the president and director of our company from June 2013 to January 2017. Mr. Shih served as a senior executive vice president of our company from August 2011 to April 2013, an executive vice president of our company and the manager of our Mobile Business Group from September 2009 to August 2011. Mr. Shih holds a master's degree in Electronic Engineering from National Taiwan University.

**Yu-Fen Hong** was a director of our company from June 2013 to January 2017. Ms. Hong is currently the director of the accounting department at the Ministry of Economic Affairs. She holds a master's degree from National Chiao Tung University in Taiwan.

**Chieh-Chiang Fan** was a director of our company from September 9 to August 2016. Dr. Fan assumed chairmanship of Yuanta Commercial Bank Company Ltd. starting from March 2015, after his term as the chairman of Taiwan High Speed Rail Corporation from 2014 to 2015. Dr. Fan is also the chairman of Taiwan Futures Exchange starting from July 2010, after his term as the chairman of the Taiwan Depository & Clearing Corporation from 2008 to 2010. Dr. Fan received a Ph.D. degree from the University of Cambridge, United Kingdom, in 1993.

**Shih-Peng Tsai** was a director of our company from June 2016 to March 2017. Mr. Tsai is currently a representative of the Member's Convention of Chunghwa Telecom Workers Union. Mr. Tsai graduated from Ta Tung Junior Technological College of Commerce.

The following table sets forth the name, age and position of each of our executive officers and such person's position as of March 31, 2017. There is no family relationship among any of these persons.

Name	Age	Position
Bo-Yung Chen	53	Chief financial officer and senior executive vice president
Li-Show Wu	58	Senior executive vice president
Kuo-Feng Lin	61	Senior executive vice president
Shyang-Yih Chen	64	Senior executive vice president
Shui-Yi Kuo	51	Senior executive vice president
Ming-Shih Chen	61	President of business group
Hui-Min Wang	64	President of business group
Hsiu-Gu Huang	63	President of business group
Yuan-Kuang Tu	61	President of business group
Chih-Cheng Chien	56	President of business group
Hong-Chan Ma	60	President of business group

**Bo-Yung Chen** is our chief financial officer and senior executive vice president starting from May 2014. He served as the chief financial officer of TSMC Solid State Lighting from 2012 to 2014. Prior to that, he was the chief financial officer and the operation general manager of Ralink Technology Corp. from 2008 to 2011. He also served as the senior vice president of Silicon Integrated Systems Corp. from 2004 to 2008. Mr. Chen holds a master's degree in Business Administration from University of Pittsburgh.

**Li-Show Wu** is a senior executive vice president. Ms. Wu served as the vice president of our Marketing Department from August 2015 to October 2016. Prior to that, she served as the vice president of Enterprise Business Group from September 2012 to August 2015, and the assistant vice president of our Marketing Department from January 2011 to September 2012. Ms. Wu holds a master's degree in Applied Mathematics from National Chiao Tung University in Taiwan.

**Kuo-Feng Lin** is a senior executive vice president. He was the president of our Mobile Business Group from May 2012 to November 2016. Mr. Lin served as a deputy manager of our Mobil business group from October 2009 to May 2012. Prior to that, he served as the manager of Taipei Branch, Mobile Business Group from April 2006 to October 2009. Mr. Lin holds a bachelor's degree in Electronic Engineering from National Taipei Institute of Technology.

**Shyang-Yih Chen** is a senior executive vice president of our company and he is also the president of our Telecommunication Laboratories. Mr. Chen served as the president of our Telecommunication Laboratories from August 2015 to March 2017, a senior executive vice president of our company from August 2014 to August 2015, the president of our Telecommunication Training Institute from March 2012 to August 2014, and an executive vice president of our company and the president of the Data Communication Business Group from September 2006 to March 2012. Mr. Chen holds a master's degree in Electrical Engineering from National Taiwan University.

**Shui-Yi Kuo** is a senior executive vice president. Mr. Kuo was the vice president of our investment department from November 2014 to March 2017. Prior to that, he served as the president of our subsidiary Light Era from November 2013 to November 2014, and the vice president of our accounting department from March 2008 to November 2013. Mr. Kuo holds a master's degree in Accounting from National Chengchi University.

**Ming-Shih Chen** is the president of our Northern Taiwan Business Group. Dr. Chen is also a director of Senao. Prior to that, Dr. Chen was the president of our International Business Group from November 2016 to March 2017. Dr. Chen served as the vice president of our Data Communications Business Group from July 2012 to November 2016, the deputy manager of our Data Communications Business Group from May 2012 to July 2012, the senior managing director of our Information Technology Department from September 2008 to May 2012, and the assistant vice president of our Information Technology Department from October 2006 to September 2008. Dr. Chen holds a Ph.D. degree in Electrical Engineering from National Tsing Hua University in Taiwan.

**Hui-Min Wang** is the president of our Southern Taiwan Business Group since May 2016. Prior to that, he served as a vice president of our Southern Taiwan Business Group from October 2015 to April 2016, and as the president of our subsidiary Chunghwa Telecom (China), Co., Ltd. from March 2011 to October 2015. Mr. Wang holds a master's degree in Business Administration from Eastern New Mexico University in the United States.

**Hsiu-Gu Huang** is the president of our Enterprise Business Group. Mr. Huang is also a director of China Airlines Co., Ltd. He was a senior executive vice president from May 2013 to November 2016. He already served as the president of our Enterprise Business Group from September 2008 to May 2013, and an assistant vice president of our company and a deputy manager of our Enterprise Business Group from January 2007 to September 2008. Mr. Huang holds a master's degree in Management Science from National Chiao Tung University in Taiwan.

**Yuan-Kuang Tu** is the president of our Mobile Business Group. Dr. Tu is also a director of Senao. Dr. Tu served as the president of Enterprise Business Group from March 2015 to November 2016, the president of Northern Taiwan Business Group from March 2012 to February 2015, the president of Chunghwa Telecom Laboratories from May 2009 to March 2012, the senior managing director of our Corporate Planning Department from May 2007 to May 2009, and the vice president of Chunghwa Telecom Laboratories from March 2006 to April 2007. Dr. Tu holds a Ph.D. degree in Electrical Engineering from National Taiwan University.

**Chih-Cheng Chien** is the president of our International Business Group. Prior to that, Dr. Chien was the vice president of our International Business Group from July 2012 to March 2017, the deputy manager of our International Business Group from May 2012 to July 2012, the deputy manager of our Data Communications Business Group from February 2011 to May 2012, and the senior managing director of our Customer Services Department from January 2007 to February 2011. Dr. Chien holds a Ph.D. degree in Engineering Technology from National Taiwan University of Science and Technology.

**Hong-Chan Ma** is the president of our Data Communications Business Group. Before being promoted to this position, Mr. Ma served as the vice president of our Marketing Department from September 2012 to August 2015, and the assistant vice president of our Marketing Department from January 2011 to September 2012. Mr. Ma holds a master's degree in Management Science from National Chiao Tung University in Taiwan.

The following person served as our executive officer during 2016 but is no longer serving with us due to retirement and replacement.

**Fu-Kuei Chung** was the president of our Northern Taiwan Business Group. Mr. Chung was our senior executive vice president from August 2015 to October 2016. He previously served as the president of our Data Communications Business Group from March 2012 to August 2015, a deputy manager of our Data Communications Business Group from September 2010 to March 2012, and the senior managing director of our Corporate Planning Department from May 2009 to August 2010. Mr. Chung holds the master's degree in Information Management from National Taiwan University.

**Ming-Ching Cheng** was the president of our Northern Taiwan Business Group. Before being promoted to this position, Mr. Cheng served as a vice president of Mobile Business Group from July 2012 to February 2015. Mr. Cheng holds a bachelor's degree in Electrical Engineering from Provincial Kaohsiung Institute of Technology.

**Ming-Yuan Lee** was the president of our Southern Taiwan Business Group since November 2013. Prior to that, he served as a vice president of our Southern Taiwan Business Group from July 2012 to November 2013 and as the deputy manager of our Southern Taiwan Business Group from May 2007 to July 2012. Mr. Lee holds a master's degree in Telecommunications from National Chiao Tung University in Taiwan.

## B. Compensation

The board of directors has set up a compensation committee to be responsible for drafting, approving and periodically reviewing the compensation proposals for the directors and managers. See "C. Board Practices" for a discussion of our compensation committee.

- the chairman of our board of directors may receive a fixed monthly income of NT\$342,900 and a non-fixed income, including but not limited to performance-related bonuses or other rewards, which may not exceed his fixed income. The chairman will not receive any additional compensation for his role as a director;
- our president may receive a fixed monthly income of NT\$335,280 and a non-fixed income, including but not limited to performance-related bonuses or other rewards, which may not exceed his fixed income. The president will not receive any additional compensation for his role as a director;
- independent directors who concurrently serve in military, public office or hold teaching or administrative post may receive a fixed monthly compensation of NT\$8,000, and those who do not concurrently serve in military or public office or hold teaching or administrative post may receive a monthly compensation of NT\$60,000; and
- directors who serve in military, public office or hold teaching or administrative post may receive a monthly compensation of NT\$8,000, and those directors who do not serve in military and public office or hold teaching or administrative post may receive a monthly compensation of NT\$30,000.

Our chairman and president to our board of directors, Yu Cheng and Chi-Mau Sheih, respectively, do not receive monthly compensation for acting as our directors because they receive salaries as employees.

The aggregate amount of compensation to our directors and executive officers in 2014, 2015 and 2016 was NT\$152,242,029, NT\$126,799,952 and NT\$145,980,825 (US\$4,505,581.0), respectively. The aggregate amount of compensation in 2016 includes a NT\$85,103,585 (US\$2,626,653.9) salary payment for directors and executive officers, a NT\$12,719,821 (US\$392,587.1) pension payment for executive officers, a NT\$42,087,419 (US\$1,298,994.4) bonus accrued for directors and a NT\$6,070,000 (US\$187,345.7) bonus accrued for executive officers. See "Item 10. Additional Information—B. Memorandum and Articles of Incorporation—Dividends and Distributions" for a discussion of the distribution of bonuses and earnings.

All of our non-independent directors are legal representatives of the MOTC. The bonus in the amount of NT\$44,851,783 (US\$1,384,314.3) were paid directly to the MOTC in 2016 because such earnings distributions are not the individual income of these directors. Independent directors will not receive any earnings distributions.

Pursuant to ROC disclosure rules, we have disclosed the compensation range of our directors and senior management for the fiscal year ended December 31, 2016 as follows, excluding bonus accrued for legal entity the MOTC:

<b>Total Compensation</b>	<b>Directors</b>
Below NT\$2,000,000	Yu Cheng <sup>(2)</sup> , Chung-Yu Wang <sup>(1)</sup> , Zse-Hong Tsai, Chung-Fern Wu <sup>(1)</sup> , Tain-Jy Chen <sup>(1)</sup> , Yun-Tsai Chou <sup>(1)</sup> , Yi-Bing Lin, Yu-Fen Hong <sup>(1)</sup> , Chih-Ku Fan, Chich-Chiang Fan <sup>(1)</sup> , Shu-Juan Huang, Shih-Peng Tsai <sup>(1)</sup> , Lo-Yu Yen, Jen-Ran Chen, Kuo-Long Wu
NT\$2,000,000 to NT\$4,999,999	None
NT\$5,000,000 to NT\$9,999,999	Mu-Piao Shih <sup>(3)</sup>
Over NT\$10,000,000	Lih-Shyng Tsai <sup>(4)</sup>
Total	17 people

- (1) This person has ceased to be a director of our company due to resignation and replacement prior to March 31, 2017.
- (2) This person started to serve as our chief executive officer in December 2016. The compensation in 2016 was paid for his service as a director of our company.
- (3) This person has ceased to be the president and director of our company due to retirement in January 2017.
- (4) This person has ceased to be the chairman, a director and chief executive officer of our company due to replacement in December 2016. The compensation was counted as salary for serving as our chief executive officer prior to the cessation and retirement pension payment.

<b>Total Compensation</b>	<b>Senior Management</b>
Below NT\$2,000,000	None
NT\$2,000,000 to NT\$4,999,999	Li-Show Wu, Hui-Min Wang, Ming-Shih Chen
NT\$5,000,000 to NT\$9,999,999	Bo-Yung Chen, Chi-Mau Sheih, Hsiu-Gu Huang, Fu-Kuei Chung <sup>(4)</sup> , Ming-Yuan Lee <sup>(1)(2)</sup> , Kuo-Feng Lin, Yuan-Kuang Tu, Shyang-Yih Chen, Hong-Chan Ma
Over NT\$10,000,000	Ming-Ching Cheng <sup>(1)(3)</sup>
Total	13 people

- (1) Including retirement pension payment.
- (2) This person has ceased to be a member of the senior management of our company due to retirement in May 2016.
- (3) This person has ceased to be a member of the senior management of our company due to retirement in November 2016.
- (4) This person has ceased to be a member of the senior management of our company due to replacement in March 2017.

We accrued NT\$5,161,732 (US\$159,312.7) pension expense for executive officers mentioned above in 2016. See “Item 5. Operating and Financial Review and Prospects—Overview—Personnel expenses” and Note 28 to our consolidated financial statements included elsewhere in this annual report for descriptions about our pension plans. We do not have any service contracts with any directors providing for any benefits upon termination of employment.

### C. Board Practices

We currently have 11 directors, including four independent directors. All of our directors were elected on June 24, 2016 for a term of three years until June 23, 2019, except for Mr. Yu Cheng, Mr. Chi-Mau Sheih, Mr. Shin-Yi Chang and Mr. Chin-Tsai Pan, as they were reassigned as a juristic-person director by MOTC prior to March 31, 2017. Pursuant to the ROC Company Act, the directors may be removed from office at any time by a resolution adopted at a stockholders’ meeting. The chairman of our board of directors is elected by our directors. Our chairman presides at all meetings of our board of directors and also has the authority to act as our representative. We have not entered into any contract with any of our directors by which our directors are expected to receive benefits upon termination of their employment.

Our Articles of Incorporation provides for a board of directors consisting of seven to fifteen directors, one-fifth of whom shall be expert representatives. Pursuant to the ROC Company Act, the ROC Securities and Exchange Act and Article 12-1 of our Articles of Incorporation provides for the election of, starting from the fifth commencement of the board of directors, at least three independent directors out of the 7-to-15-member board. The term “independent director” may have a different meaning when used in Taiwan than in other jurisdictions. We have used a nominating process, with the stockholders choosing the independent directors from the list of nominees. With respect to certain material decisions to be made by our board of directors as specified in the ROC Securities and Exchange Act, including the adoption or amendment to our internal control system, material loans or guarantees, the issuance of equity-type securities, matters in which directors have personal interests, the appointment and discharge of auditors, approval of financial reports, the appointment and discharge of financial, accounting or internal auditing officers and other matters prescribed by the ROC FSC, the dissenting opinion or qualified opinion of an independent director is required to be noted in the minutes of the board of directors’ meeting.

Our audit committee was established in September 2004 in accordance with the rules set forth in the NYSE Listed Company Manual, and was comprised of three independent directors. See “Item 16G. Corporate Governance—Audit Committee.” Starting from the date of the annual general meeting in June 2013, we have established a new audit committee that replaces our supervisors and our old audit committee in accordance with Paragraph 1, Article 14-4 of the ROC Securities and Exchange Act and our Articles of Incorporation, and as a result, we simultaneously comply with the relevant rules of the NYSE Listed Company Manual and the relevant rules and regulations in the ROC. Accordingly, our audit committee is currently composed of the four independent directors, namely Zse-Hong Tsai, Mr. Kuo-Long Wu, Lo-Yu Yen and Jen-Ran Chen to be the members of the audit committee.

Under the ROC Company Act, a person may serve as our director in his personal capacity or as the representative of another legal entity. A director who serves as the representative of a legal entity may be removed or replaced at any time at the discretion of that legal entity, and the replacement director may serve the remainder of the term of office of the replaced director. Except for our four independent directors, all of our directors are representatives of the MOTC.

The business address of our directors and executive officers is the same as our registered address.

Our audit committee should approve and deal following matters: (i) the adoption or amendment of the internal control system pursuant to Article 14-1 of the Securities and Exchange Act; (ii) the assessment of the effectiveness of the internal control system; (iii) the adoption or amendment, pursuant to Article 36-1 of the Securities and Exchange Act, of procedures governing material financial or operational actions, such as acquisition or disposal of assets and derivatives trading, loaning of funds to others, and endorsements or guarantees for others; (iv) a matter relating to the personal interest of a director; (v) a material asset or derivatives transaction; (vi) a matter relating to significant loan, endorsement or guarantee arrangement; (vii) the offering, issuance, or private placement of any equity-related securities; (viii) the designation or dismissal of an attesting CPA, or the compensation given thereto; (ix) the appointment or discharge of a financial, accounting, or internal auditing officer; (x) annual and semi-annual financial reports; (xi) the first and third quarter financial reports; (xii) communicating with our independent auditor; (xiii) negotiating the conflicts over our financial reports between our management and independent auditor; (xiv) discussing and reporting other financial information and required disclosure under the Securities Exchange Act of 1934 with our management and independent auditor; (xv) accounting firm’s annual audit and non-audit service items; (xvi) performing one-self review each year; (xvii) evaluating the fairness and rationality of merger and acquisition transactions; and (xviii) any other material matter so required by the Company or the competent authorities. Our board of directors has concluded that Lo-Yu Yen is our audit committee financial expert.

In addition to our audit committee, we also have a corporate strategy committee. Our corporate strategy committee may be composed of five to nine directors. Currently, there are seven directors in the Committee. It is responsible for reviewing and advising on the budgets, financial forecasts, capital requirements, matters related to investments, business license matters, corporate reorganization, development plans and other major issues affecting our development. The conclusions of the corporate strategy committee are considered at a subsequent board of directors meeting.

The Article 14-6 of ROC Securities and Exchange Act requires all listed companies to establish a compensation committee for directors, supervisors and managers’ compensation, which includes salary, stock options and other rewards, as well as authorizes the Competent Authority (i.e., FSC) to enact a regulation on the authorities of the compensation committee and the qualifications of its members. Accordingly, our compensation committee is composed of three independent directors (Zse-Hong Tsai, Lo-Yu Yen and Jen-Ran Chen) and is responsible for drafting, assessing and periodically reviewing the compensation proposals for the directors and managers. See “Item 10. Additional Information—B. Memorandum and Articles of Incorporation—Directors and Audit Committee.”

In November 2003, the SEC approved changes to the NYSE's listing standards related to the corporate governance practices of listed companies. Under these rules, listed foreign private issuers, like us, must disclose any significant ways in which their corporate governance practices differ from those followed by NYSE-listed non-foreign private issuers under the NYSE's listing standards. See "Item 16G. Corporate Governance." A copy of the significant differences between our corporate governance practices and NYSE corporate governance rules applicable to non-foreign private issuers is also available on our website <http://www.cht.com.tw>. The information contained on our website is not a part of this annual report.

#### D. Employees

As of December 31, 2016, we had 32,856 employees on a consolidated basis. Approximately 99% of our employees were based in the ROC. The following table is a breakdown of our employees from 2014 to 2016 on a consolidated basis.

	<u>2014</u>	<u>2015</u>	<u>2016</u>
<b>Employees</b>			
Technical	15,217	15,467	15,760
Operations	15,640	15,558	15,417
Administrative	<u>1,739</u>	<u>1,709</u>	<u>1,679</u>
Total	<u>32,596</u>	<u>32,734</u>	<u>32,856</u>

The following table is a breakdown of our employees of Chunghwa Telecom Co., Ltd. from 2014 to 2016.

	<u>2014</u>	<u>2015</u>	<u>2016</u>
<b>Employees</b>			
Technical	13,773	13,540	13,195
Operations	8,464	8,312	8,191
Administrative	<u>1,298</u>	<u>1,289</u>	<u>1,268</u>
Total	<u>23,535</u>	<u>23,141</u>	<u>22,654</u>

As of December 31, 2016, approximately 77.03% of our employees of Chunghwa Telecom Co., Ltd. had university, graduate or post-graduate degrees. To improve our operational efficiency by reducing personnel costs, we offered a number of voluntary retirement programs between June 1, 2000 and December 31, 2014, which resulted in a reduction of approximately 14,386 employees.

As of December 31, 2016, approximately 99% of our employees on a non-consolidated basis were members of our principal labor union. Our collective agreement sets forth work rules, grievance procedures and provides for union participation in performance evaluations and promotion decisions. Our union members also occupy a majority of the seats on our employee welfare and pension fund committees. We will continue to maintain a good relationship with our labor unions. We strive to have good communication with our employees and the labor unions by inviting representatives of our labor unions to attend various meetings related to the performance of our employees.

Pursuant to our Articles of Incorporation, our employees are entitled to 1.7% to 4.3% of the distributable earnings as employee compensation. Our practice in the past to determine the amount of the compensation has been based on the operating results. In the third quarter of 2016, we distributed compensation to our employees of NT\$1.9 billion (US\$59.5 million).

## E. Share Ownership

As of March 31, 2017, our directors and executive officers personally held an aggregate 375,335 shares of our common shares, representing around 0.005% of our outstanding common shares. The following table sets forth information with respect to the beneficial ownership of our common shares as of March 31, 2017 by each of our directors and executive officers.

Name	Number	%
Yu Cheng	—	—
Chi-Mau Sheih	72,054	*
Shin-Yi Chang	—	—
Yi-Bing Lin	—	—
Jen-Ran Chen	—	—
Zse-Hong Tsai	—	—
Kuo-Long Wu	—	—
Chin-Tsai Pan	2,000	*
Shu-Juan Huang	—	—
Lo-Yu Yen	—	—
Chih-Ku Fan	—	—
Bo-Yung Chen	—	—
Li-Show Wu	32,964	*
Kuo-Feng Lin	42,771	*
Shyang-Yih Chen	78,840	*
Shui-Yi Kuo	—	—
Ming-Shih Chen	25,641	*
Hui-Min Wang	1,462	*
Hsiu-Gu Huang	18,698	*
Yuan-Kuang Tu	81,305	*
Chih-Cheng Chien	19,600	*
Hong-Chan Ma	—	—

\* Stockholder beneficially owns less than 1.0% of our outstanding common shares.

## Employee Stock Subscription Program

Under our Articles of Incorporation, we must reserve up to 10% to 15% of any new shares for subscription by our employees whenever we issue new shares for cash, unless otherwise approved by the central competent authority.

Our consolidated subsidiary, Senao, is publicly traded on the TWSE and resolved to grant the stock options plan for its employees to purchase common stock of Senao. As of December 31, 2014, 2015 and 2016, participants in Senao's stock incentive plan had outstanding stock options to purchase 9.0 million, 7.8 million and 6.6 million common shares of Senao, respectively.

In 2015, our consolidated subsidiary, CHIEF, which has been a public company since November 17, 2015, granted stock options to its employees entitling them to purchase common stock of CHIEF. As of December 31, 2015 and 2016, participants in CHIEF's stock incentive plan had outstanding stock options to purchase 2.0 million and 1.9 million common shares of CHIEF.

Our another consolidated subsidiary, CHPT, granted its employees the right to subscribe new shares reserved for employees under cash injection. See Note 34 to our consolidated financial statements, included elsewhere in this annual report, for additional details regarding CHPT's share-based payment arrangement.



## ITEM 7. MAJOR STOCKHOLDERS AND RELATED PARTY TRANSACTIONS

### A. Major Stockholders

The following table sets forth information known to us with respect to the beneficial ownership of our shares (i) as of March 31, 2017, the most recent practicable date and (ii) as of certain book closure dates in each of the preceding three years, for the stockholders known by us to own at least 5.0% of our outstanding common shares. Beneficial ownership is determined in accordance with the SEC's rules.

Name	As of March 31, 2014		As of March 31, 2015		As of March 31, 2016		As of March 31, 2017	
	number	%	number	%	number	%	number	%
The ROC government <sup>(1)(2)</sup>	3,099,602,788	39.96	3,095,559,716	39.90	3,123,092,684	40.11	3,086,749,684	39.79
The MOTC	2,737,718,976	35.29	2,737,718,976	35.29	2,737,718,976	35.29	2,737,718,976	35.29
Fubon Life Assurance Co., Ltd <sup>(2)</sup>	450,471,087	5.81	449,451,087	5.79	449,451,087	5.79	389,146,087	5.02

(1) Includes shares held through the MOTC and other government-controlled entities.

(2) The information as of July 18, 2013, July 18, 2014, July 19, 2015 and July 23, 2016, the latest book closure date, which were the most recent practicable dates for us to obtain complete ownership information.

As of March 31, 2017, 28 record holders held 29,332,729 ADSs (each representing ten common shares), which represents approximately 3.8% of our total outstanding common shares. Because many of these ADSs were held by brokers or other nominees, we cannot ascertain the exact number of beneficial shareholders with addresses in the United States.

None of our shareholders has different voting rights from other shareholders. See "Item 10. Additional Information—B. Memorandum and Articles of Incorporation—Voting Rights." We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

### B. Related Party Transactions

We have not extended any loans or credit to any of our directors or executive officers, and we have not provided guarantees for borrowings by any of these persons. We have not entered into any fee-paying contract with any of these persons for them to provide services not within his or her capacity as a director or executive officer of our company, except that two of our directors who are also our employees receive salaries from our company in their capacity as our employees.

Please refer to "Item 4. Information on the Company—A. History and Development of the Company" for a discussion of our alliances, acquisitions and investments. Please refer to Notes 3, 15, 16 and 40 to our consolidated financial statements included elsewhere in this annual report for descriptions of Chunghwa's subsidiaries, investments accounted for using equity method, and related party transactions.

On April 1, 2007, Chunghwa entered into an agreement with Senao making Senao the exclusive distributor of mobile handsets to Chunghwa's retail outlets. Under the terms of the agreement, Senao also provides mobile handset sales services in Chunghwa's retail outlets, exclusively sells Chunghwa's SIM cards in Senao's own retail stores, and gets commission, subsidies of handset sold and warranties from Chunghwa. For the year ended December 31, 2016, Senao received NT\$11.0 billion (US\$0.3 billion) from Chunghwa. Chunghwa also sells mobile handsets and data cards to Senao. For the year ended December 31, 2016, Chunghwa sold mobile handsets and data cards to Senao that amounted to NT\$0.8 billion (US\$26.1 million).

Honghwa contracted with Chunghwa to provide on-site sales services in Chunghwa's retail stores and on-site equipment installation services to Chunghwa's customers. Chunghwa paid Honghwa approximately NT\$4.5 billion (US\$0.1 billion) in 2016 for these services.

Chunghwa acquired network equipment and related supplies from Chunghwa System Integration for approximately NT\$1.4 billion (US\$42.6 million) in 2016.

Chunghwa paid Taiwan International Standard Electronics approximately NT\$0.8 billion (US\$25.9 million) in 2016 for the purchase of telecommunications exchange facilities and related supplies, and the maintenance expenses.

Terms and conditions 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 and conditions were determined in accordance with mutual agreements.

### C. Interests of Experts and Counsel

Not applicable.

## ITEM 8. FINANCIAL INFORMATION

### A. Consolidated Statements and Other Financial Information

See Item 18 for a list of all consolidated financial statements filed as part of this annual report on Form 20-F.

We are not currently involved in material litigation or other proceedings that may have or have had in the recent past, significant effects on our financial position or profitability, see “Item 4. Information on the Company—B. Business Overview—Legal Proceedings.”

For our policy on dividend distributions, see “Item 10. Additional Information—B. Memorandum and Articles of Incorporation—Dividends and Distributions.” The following table sets forth the dividends declared on each of our common shares and in the aggregate for each of the years from 2012 to 2016. All of these dividends were paid, in the fiscal year following the period with respect to which the dividends relate.

	<u>Dividends Per Common Share<sup>(1)</sup></u> NT\$	<u>Total Dividends<sup>(1)</sup></u> NT\$ in billions
Year ended December 31, 2012 <sup>(2)</sup>	4.63	35.9
Year ended December 31, 2013 <sup>(3)</sup>	2.39	18.5
Year ended December 31, 2014	4.86	37.7
Year ended December 31, 2015	5.49	42.6
Year ended December 31, 2016 <sup>(4)</sup>	4.94	38.3

(1) Cash dividend unless otherwise indicated.

(2) In addition to the cash dividends from unappropriated earnings disclosed in the table above, we also made cash distributions from additional paid-in capital of NT\$0.72 per share, which amounted to an aggregate of NT\$5.6 billion.

(3) In addition to the cash dividends from unappropriated earnings disclosed in the table above, we also made cash distributions from additional paid-in capital of NT\$2.14 per share, which amounted to an aggregate of NT\$16.6 billion. See “Item 5. Operating and Financial Review and Prospects—Overview—Effect of adopting Taiwan IFRSs on our dividends and employee bonuses.”

(4) Dividends for 2016, which are calculated based on Taiwan IFRSs, were approved by the board of directors in March 2017 and are expected to be declared at our annual general stockholders’ meeting scheduled on June 23, 2017. The accumulated legal reserve that we had set aside in the past years has amounted to the aggregate par value of our outstanding share capital. Therefore, according to the relevant regulations, we are not required to appropriate profits as legal reserve starting from 2016. Our payout ratio was 95.7% in 2016 after the adjustment of unappropriated earnings and the appropriation of special reserve.

We are committed to maximizing stockholder value and intend to maintain a sustainable dividend policy, subject to a number of commercial factors, including the interests of our stockholders, cash requirements for future capital expenditures and investments, as well as relevant industry and market practice. The amount of our net income determined for purposes of calculating our annual dividend payout will be calculated based on Taiwan IFRSs, which may differ from the amount of our net income determined in accordance with IFRSs.

## B. Significant Changes

Other than as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of the annual consolidated financial statements included in this annual report.

## ITEM 9. THE OFFER AND LISTING

### A. Offer and Listing Details

#### Market Price Information for Our Common Shares

Our common shares have been listed on the TWSE since October 27, 2000. There is no public market outside Taiwan for our common shares. The table below shows, for the periods indicated, the high and low closing prices and the average daily volume of trading activity on the TWSE for our common shares. The closing price for our common shares on the TWSE on April 18, 2017 was NT\$104.00 per share.

	Closing Price		Average Daily Trading Volume (in thousands)
	Per Common Share <sup>(1)</sup>		
	High NT\$	Low NT\$	
2012	81.42	70.70	11,753
2013	87.57	78.59	7,498
2014	89.35	81.59	6,307
2015	100.50	87.93	8,292
First Quarter	94.86	87.93	7,366
Second Quarter	94.67	90.97	6,177
Third Quarter	99.30	92.87	11,510
Fourth Quarter	100.50	97.30	7,942
2016	118.50	93.82	11,059
First Quarter	110.50	98.20	10,744
Second Quarter	116.50	107.00	7,982
Third Quarter	118.50	110.50	11,624
Fourth Quarter	112.50	101.00	13,621
October	112.50	108.00	13,179
November	110.00	104.00	14,346
December	106.50	101.00	13,298
2017 (through April 18)	106.00	100.00	9,942
First Quarter	106.00	100.00	10,602
January	104.50	101.00	9,716
February	102.00	100.00	12,545
March	106.00	101.50	9,697
Second Quarter (through April 18)	104.50	103.50	6,182
April (through April 18)	104.50	103.50	6,182

(1) The historical prices and volumes of our common shares traded on the TWSE have been adjusted based on prior cash dividend payments, capital increases and capital reductions.

#### Market Price Information for Our American Depositary Shares

Our ADSs have been listed on the NYSE under the symbol “CHT” since July 17, 2003. The outstanding ADSs are identified by the CUSIP number 17133Q502. The table below shows, for the periods indicated, the high and low closing prices and the average daily volume of trading activity on the NYSE for our ADSs. The closing price for our ADSs on the NYSE on April 18, 2017 was US\$33.95 per ADS. Each of our ADSs represents the right to receive ten shares.

	<b>Closing Price Per ADS <sup>(1)</sup></b>		<b>Average ADS</b>
	<b>High</b>	<b>Low</b>	<b>Daily Trading</b>
	<b>US\$</b>	<b>US\$</b>	<b>Volume</b>
2012	28.06	23.93	355
2013	29.64	26.43	206
2014	29.99	26.50	111
2015	31.58	27.66	186
First Quarter	30.58	27.66	128
Second Quarter	31.09	29.54	116
Third Quarter	31.58	29.20	284
Fourth Quarter	31.18	29.40	213
2016	37.38	28.24	262
First Quarter	34.22	29.57	257
Second Quarter	38.41	35.03	214
Third Quarter	37.38	34.64	215
Fourth Quarter	35.42	31.36	316
October	35.42	34.15	324
November	34.90	32.71	401
December	33.59	31.36	223
2017 (through April 18)	34.82	31.37	299
First Quarter	34.82	31.37	313
January	32.79	31.49	285
February	33.16	31.37	429
March	34.82	32.78	242
Second Quarter (through April 18)	34.27	33.65	216
April (through April 18)	34.27	33.65	216

(1) The historical prices and volumes of our ADSs traded on the NYSE have been adjusted based on prior cash dividend payments, capital increases and capital reductions.

As of April 18, 2017, a total of 28,772,429 ADSs and 7,757,446,545 common shares (including those represented by ADSs) were outstanding. With certain limited exceptions, holders of shares that are not ROC persons are required to hold these shares through a brokerage or custodial account in the ROC.

#### **B. Plan of Distribution**

Not applicable.

#### **C. Markets**

The principal trading market for our common shares is the TWSE and the principal trading market for our ADSs is the NYSE.

#### **D. Selling Stockholders**

Not applicable.

#### **E. Dilution**

Not applicable.

#### **F. Expenses of the Issue**

Not applicable.

### **ITEM 10. ADDITIONAL INFORMATION**

#### **A. Share Capital**

Not applicable.

## **B. Memorandum and Articles of Incorporation**

*Set forth below is information relating to our capital structure, including brief summaries of material provisions of our Articles of Incorporation, the ROC Securities and Exchange Law, the ROC Company Act, and the Telecommunications Act, all as currently in effect. The following summaries are qualified in their entirety by reference to our Articles of Incorporation, the ROC Securities and Exchange Law, the ROC Company Act, and the Telecommunications Act.*

### **Objects and Purpose**

The scope of business of Chunghwa Telecom Co., Ltd. as set forth in Article 2 of our Articles of Incorporation, includes (i) telecommunications Enterprise Type 1 and Type 2 businesses pursuant to the Telecommunications Act of the ROC, (ii) installation of the computer equipment and radio-frequency equipment whose operation is controlled by the telecommunication business, (iii) telecommunications equipment wholesale, retail and engineering businesses, (iv) engineering and operation of information software and information process service businesses, (v) apparatus and electric appliance installation and construction business, (vi) television program production, distribution and commercial business, (vii) broadcasting program distribution and commercial business, (viii) the third party payment business, (ix) water pipe construction business, (x) machinery and equipment manufacturing business, and (xi) other businesses, except any business requiring a special permit or otherwise restricted by law or regulation.

### **General**

Under our Articles of Incorporation, our authorized capital was NT\$120,000,000,000 divided into 12,000,000,000 common shares, with par value of NT\$10 per share. We have set aside 200,000,000 common shares from the aforementioned common shares for the exercise of any future issuances of stock warrants, preferred shares with warrants, and bonds with warrants. Our paid-in capital is NT\$77,574,465,450 divided into 7,757,446,545 common shares. We currently do not have any other equity in the form of preferred shares, bonds or otherwise outstanding as of the date of this annual report.

The MOTC, on behalf of the government of the ROC, owned approximately 35.29% of our outstanding common shares as of December 31, 2016. The remainder of our outstanding shares is held by public stockholders and other investors.

### **Directors and Audit Committee**

Our Articles of Incorporation provide for a board of directors consisting of seven to fifteen directors, and one-fifth of these directors shall be professionals of domain knowledge. See “Item 6. Directors, Senior Management and Employees—C. Board Practices.” Pursuant to Article 14-4 of the ROC Securities and Exchange Act, for a company that has established an audit committee, unless otherwise provided for by law, the provisions regarding supervisors in ROC Securities and Exchange Act, the ROC Company Act, and other laws and regulations shall apply mutatis mutandis to the audit committee.

Under the ROC Company Act, our board of directors, in conducting our business, shall act in accordance with laws and regulations, our Articles of Incorporation and the resolutions adopted at the meetings of stockholders. Where any resolution adopted by our board of directors contravenes laws, our Articles of Incorporation and the resolutions adopted at the meetings of stockholders, thereby causing loss or damage to us, all directors taking part in the adoption of such resolution shall be liable to compensate us for such loss or damage; however, those directors whose disagreement appears on record or is expressed in writing shall be exempted from liability.

If our board of directors decides, by resolution, to commit any act in violation of any law or our Articles of Incorporation, any of our independent directors or any stockholder who has continuously held our shares for a period of one year or longer may request our board of directors to discontinue such act. One or more stockholders who have held more than 3% of our issued and outstanding shares for over one year may send a written request to require an independent director to bring an action on our behalf against a director for losses suffered by us as a result of unlawful actions. In addition, if our stockholders’ meeting resolves to institute an action against a director, we shall, within 30 days from the date of such resolution, institute the action. In case of a lawsuit between us and a director, an independent director shall act on our behalf, unless otherwise provided by law; and our stockholders meeting may also appoint some other person to act on our behalf in a lawsuit.

According to the ROC Company Act, our board of directors owes fiduciary duty to us. Our directors are liable for the damages to be sustained by us if they breach their fiduciary duty. In addition, a director who has a personal interest in a matter to be discussed at the meeting of the board of directors, shall specify such conflict; if the conflict may cause damages to the company, the director shall abstain from voting on the matter, and shall not serve as a proxy and vote on behalf of another director.

According to our Articles of Incorporation, the remuneration and compensation of the directors shall be determined by the board of directors based on the participation and the contribution of each director in the business operation of the Company and referencing the regular standards of other corporations in the similar industry. Our Articles of Incorporation do not impose a mandatory retirement age for our directors. Furthermore, our Articles of Incorporation do not impose a shareholding qualification for each director. According to our Code of Ethics, we may not extend any loan to our directors.

### **Dividends and Distributions**

At each annual general stockholders' meeting, our board of directors submits to the stockholders for their approval any proposal for the distribution of dividend or the making of any other distribution to stockholders from our net income for the preceding fiscal year. All common shares outstanding and fully paid as of the relevant record date are entitled to share equally in any dividend or other distribution so approved. Dividends may be distributed in cash, in the form of common shares or a combination of the two, as determined by the stockholders at the meeting.

We are not permitted to distribute dividends or make other distributions to stockholders in any year in which we do not have any net income or unappropriated earnings (excluding reserves). The ROC Company Act also requires that 10% of our annual net income, less prior years' losses and outstanding tax, if any, be set aside as a legal reserve until the accumulated legal reserve equals our paid-in capital. We may also set aside special reserve by the resolution of our stockholders' meeting. In addition, our Articles of Incorporation provide that at least 50% of the remaining portion of the net income, less accumulated losses, outstanding taxes, the legal reserve and any special reserve, plus accumulated retained earnings from prior years will be distributed as dividends to stockholders. Under our Articles of Incorporation, not less than 50% of the total amount of the distributed dividends must be in cash, but if the cash dividends to be distributed are less than NT\$0.10 per share, the dividends may be distributed in the form of shares. The actual percentage of distribution would take actual profitability of the year, capital budgeting, and status of finance into consideration, and would be executed following a resolution of shareholders' meeting. According to the ROC Company Act amended as of May 20, 2015, earnings can no longer be distributed to employees. Rather, earnings may be distributed to shareholders, excluding employees and directors. To mitigate the impact on employees' lost potential earnings, the amended ROC Company Act provides that the company must stipulate a specific amount or percentage of profits to be distributed to employees as compensation. The 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. As a result, we amended our Articles of Incorporation at our annual general stockholders' meeting on June 24, 2016. Pursuant to our current Articles of Incorporation, in annual profit-making year, we should distribute 1.7% to 4.3% of profit as employees' compensation, and not more than 0.17% of profit should be distributed as directors' compensation; however, if we have any accumulated losses, an amount to offset losses should be reserved in advance. The changes do not have a material impact on our financial results, because we have categorized employee bonuses as an expense instead of as distributable earnings since 2008 in accordance with a clarification letter issued by the Ministry of Economic Affairs of Taiwan for the explanation of Article 64 of the Business Accounting Law.

Under the ROC Company Act, if we do not incur a loss, we are permitted to make distributions on a pro rata basis to our 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 us. We are allowed to make the above distributions to our stockholders by legal reserve only if the legal reserve exceeds 25% of our paid-in capital. Furthermore, subject to the provision under our Articles of Incorporation, such distribution should firstly be made by the premium derived from the issuance of new shares.

## **Changes in Share Capital**

Under the ROC Company Act, any change in our authorized share capital requires an amendment to our Articles of Incorporation, which in turn requires approval at our stockholders' meeting. Authorized but unissued common shares may be issued, subject to applicable ROC law, upon terms as our board of directors may determine.

## **Preemptive Rights**

Under the ROC Company Act and our Articles of Incorporation, when we issue new shares for cash, unless otherwise approved by the central competent authority, our employees have rights to subscribe for between 10% and 15% of the new issue, and we have rights to restrain the shares subscribed by employees from being transferred within a specific period of time, which should not be longer than two years. Except for the shares reserved in accordance with the ROC Company Act, we are required to inform our existing shareholders of their rights to subscribe for additional shares pro rata to their respective shareholding and to note that the shareholders will lose their pre-emptive right if they fail to subscribe for the new shares within the prescribed period. In the event that there is any new share that has not been subscribed by the existing shareholders pursuant to their respective pre-emptive rights, we may offer such shares to other investors through public offering or private negotiation with any person designated by us.

In addition, in accordance with the ROC Securities and Exchange Act, a public company that intends to offer new shares for cash must offer to the public at least 10% of the shares to be sold except in certain limited circumstances. This percentage can be increased by a resolution passed at a stockholders' meeting, held in accordance with the Company Act and our Articles of Incorporation which would diminish the number of new shares subject to the preemptive rights of existing stockholders.

## **Meetings of Stockholders**

Pursuant to the ROC Securities and Exchange Act, as a listed company, we must hold a general shareholders' meeting within six months after the end of each fiscal year and may not seek any extension for such meeting accordingly to Article 36 of Securities and Exchange Act. These meetings are generally held in New Taipei City, Taiwan. Special stockholders' meetings may be convened by resolution of the board of directors or by the board of directors upon the written request of any stockholder or stockholders who have held 3% or more of the outstanding common shares for more than one year. Stockholders' meetings may also be convened by an independent director. Notice in writing of general meetings of stockholders, stating the place, time and agenda must be dispatched to each stockholder at least 30 days, in the case of general meetings, and 15 days, in the case of special meetings, before the date set for each meeting. Except in certain circumstances described below, a majority of the holders of all issued and outstanding common shares present at a stockholders' meeting constitutes a quorum for meetings of stockholders. Stockholders of 1% or more of our issued and outstanding shares are entitled to submit, during the period of time prescribed by us no less than ten days, one written proposal each year for consideration at our annual general stockholders' meeting in accordance with the ROC Company Act.

## **Voting Rights**

As previously required by the ROC Company Act, our Articles of Incorporation provide that a holder of common shares has one vote for each common share. Cumulative voting applies to the election of our directors. The election of independent and non-independent directors should be held simultaneously while the ballots for the election of directors and independent directors are cast separately. According to Article 146-1 of the Insurance Act of the ROC, insurance companies that hold our shares may not be our directors or vote for the election of our directors.

In general, a resolution can be adopted by the holders of at least a majority of the common shares represented at a stockholders' meeting at which the holders of more than half of all issued and outstanding common shares are present. Under the ROC Company Act, the approval by at least a majority of the common shares represented at a stockholders' meeting in which a quorum of at least two-thirds of all issued and outstanding common shares are represented is required for major corporate actions, including:

- amendment to our Articles of Incorporation;
- entering into, modification or termination of any contracts regarding leasing of all business, outsourcing of operations or joint operations;
- transfer of the whole or substantial part of our business or assets;
- taking over of the whole of the business or assets of any other company which would have significant impact on our operations;
- distribution of any share dividend;
- dissolution;
- merger or spin-off; and
- removing of directors.

Alternatively, the ROC Company Act provides that in the case of a public company, such as us, a resolution may be adopted by the holders of at least two-thirds of the common shares represented at a meeting of stockholders at which holders of at least a majority of issued and outstanding common shares are present.

A stockholder may be represented at a general or special meeting by proxy if a valid proxy form is delivered to us five days before the commencement of the general or special stockholders' meeting. Except for trust enterprises or share registrar approved by the Securities and Futures Bureau of the FSC, where one person is appointed as proxy by two or more stockholders who together hold more than 3% of the total issued common shares, the votes of those stockholders in excess of 3% of the outstanding common shares shall not be counted. Alternatively, if the stockholder would like to exercise its voting right at a general or special meeting but cannot be present at the meeting in person, according to the regulations promulgated by the FSC on February 20, 2012, starting from our 2012 general meeting, we are required to set up an electronic voting mechanism for such stockholder to exercise voting right. The stockholder is not allowed to exercise voting right through electronic voting mechanism if such stockholder fails to revoke the granted proxy (if any) at least two days prior to the general or special meeting.

At the time of any vote, if a director of a public company has pledged more than half of the holding at the time the director was elected, such director will not be allowed to exercise the voting rights with respect to the number of shares pledged in excess of the half of the number of shares that such director held in such public company at the time the director was elected. The maximum number of shares ineligible for voting pursuant to the provision above cannot exceed half of the number of shares that such director held in such public company at the time the director was elected. In addition, any shares that were ineligible for voting pursuant to the above provision would not count as being present for such vote.

Any stockholder who has a personal interest in the matter under discussion at a stockholders' meeting, the outcome of which may impair our interests, shall not vote or exercise voting rights on behalf of another stockholder; however, the shares held by such stockholder may be counted as present for calculation of attendance quorum.

Holders of our ADSs generally will not be able to exercise voting rights on the common shares underlying ADSs on an individual basis.



## **Other Rights of Stockholders**

Under the ROC Company Act, dissenting stockholders are entitled to appraisal rights in certain major corporate actions, such as a planned transfer of the whole or part of the business or a proposed merger by us. A dissenting stockholder may request us to purchase back all of the shares owned by the stockholder at a fair price determined by mutual agreement or determined by the court if a mutual agreement cannot be reached. Stockholders may exercise their appraisal rights by serving notice in writing to us prior to the related stockholders' meeting and/or by raising his objection at the stockholders' meeting. Moreover, a stockholder has the right to file a petition in the court for annulment of any resolution adopted at a stockholders' meeting where the procedures for convening the stockholders' meeting or the method of adopting the resolutions at the meeting is contrary to law or our Articles of Incorporation. One or more stockholders who have held more than 3% of the issued and outstanding shares of a company continuously for more than one year may require an independent director to institute, on behalf of us, an action against a director. In addition, one or more stockholders who has/have continuously held 3% or more of the total number of the outstanding shares of our company for more than one year may require the board of directors to convene a special stockholders' meeting by sending a written request to the board of directors.

The ROC Company Act provides that a company may adopt a nomination procedure for election of directors. We have adopted a nomination procedure for election of directors as stipulated in our Articles of Incorporation which provides that stockholders holding 1% or more of our total issued shares may submit to us a list of candidates for director, including independent director, along with relevant information and supporting documents.

## **Register of Stockholders and Record Dates**

Our share registrar, Yuanta Securities Co., Ltd., maintains our register of stockholders at its offices in Taipei, Taiwan. Under the ROC Company Act, we may, by giving advance public notice, set a record date and close the register of stockholders for a specified period in order for us to determine the stockholders or pledgees that are entitled to rights pertaining to the common shares. The specified period starting from such record date (to determine the entitled stockholders or pledgees) required is as follows:

- general stockholders' meeting—60 days;
- special stockholders' meeting—30 days; and
- relevant record date for distribution of dividends or other entitlements—5 days.

## **Annual Consolidated Financial Statements**

At least ten days before the annual general stockholders' meeting, our annual consolidated financial statements prepared in accordance with Taiwan IFRSs, the business report, and the earnings distribution or losses offsetting proposal, must be available at our principal office in Taipei, Taiwan for inspection by the stockholders.

## **Transfer of Common Shares**

Under the current ROC Company Act, a public company, such as our company, may issue individual share certificates, one master certificate or no certificate at all, to evidence common shares. In accordance with our Articles of Incorporation, all of our shares are currently issued and transferred in book-entry form instead of issuing physical share certificates. After the book closure date, the Taiwan Depository & Clearing Corporation, or the TDCC, will deliver the names and addresses of the shareholders as of the book closure date to our registrar, Yuanta Securities Co., Ltd. Only shareholders as of the book closure date can assert shareholder rights against us.

### **Acquisition of Our Own Common Shares**

Under the ROC Company Act, with minor exceptions, we cannot acquire our own common shares. Any common shares acquired by us, under certain of such minor exceptions, must be sold at the market price within six months after their acquisition.

In addition, under the Republic of China Securities and Exchange Act, a company whose shares are listed on the TWSE or traded on the Taipei Exchange (formerly known as Gre Tai Securities Market) may, pursuant to a board resolution adopted by a majority consent at a meeting attended by more than two-thirds of the directors and pursuant to the procedures prescribed by the Securities and Futures Bureau of the FSC, purchase its shares for the following purposes on the TWSE, the Taipei Exchange or by a tender offer:

- (1) for transfers of shares to its employees;
- (2) for conversion into shares from bonds with warrants, preferred shares with warrants, convertible bonds, convertible preferred shares or certificates of warrants issued by us; and
- (3) for maintaining its credit and its stockholders' equity, provided that the shares so purchased shall be cancelled thereafter.

The total shares purchased by us shall not exceed 10% of its total issued and outstanding shares. In addition, the total amount for purchase of the shares shall not exceed the aggregate amount of the retained earnings, the premium from shares issues and the realized portion of the capital surplus.

The shares purchased by us pursuant to items (1) and (2) above shall be transferred to the intended transferees within three years after the purchase; otherwise the same shall be cancelled. For the shares to be cancelled pursuant to item (3) above, we shall complete amendment registration for such cancellation within six months after the purchase.

The shares purchased by us shall not be pledged or hypothecated. In addition, we may not exercise any stockholders' rights attaching to these shares. Under ROC Company Act, we may transfer the treasury stock to our employees and impose transfer restrictions on the shares up to two years.

### **Liquidation Rights**

In the event of our liquidation, the assets remaining after payment of all debts, liquidation expenses and taxes will be distributed pro rata to the stockholders in accordance with the relevant provisions of the ROC Company Act.

### **Substantial Stockholders and Transfer Restrictions**

The ROC Securities and Exchange Act currently requires for public companies that (i) each director, supervisor, manager, as well as their respective spouses, minor children and nominees, and substantial stockholder (i.e., a stockholder who together with his or her spouse, minor children or nominees, holds more than 10% of the shares of a public company) to report any change in that person's shareholding to the issuer of the shares on a monthly basis and (ii) each director, supervisor, manager or substantial stockholder holding such common shares for more than a six month period to report his or her intent to transfer any shares listed on the TWSE or traded on the Taipei Exchange (formerly known as Gre Tai Securities Market) to the Securities and Futures Bureau of the FSC at least three days before the intended transfer, unless the number of shares to be transferred each day is no more than 10,000 shares. ADS holders holding more than 10% of our common shares, including common shares represented by ADSs, may be subject to the above-mentioned obligations.

In addition, the number of shares that can be sold or transferred on the TWSE or the Taipei Exchange (formerly known as Gre Tai Securities Market) by any person subject to the restrictions described above on any given day may not exceed:

- 0.2% of the outstanding shares of the company in the case of a company with no more than 30 million outstanding shares;
- 0.2% of 30 million shares plus 0.1% of the outstanding shares exceeding 30 million shares in the case of a company with more than 30 million outstanding shares; or
- in any case, 5% of the average daily trading volume (number of shares) on the TWSE or the Taipei Exchange for the ten consecutive trading days preceding the reporting day on which day the director, supervisor, manager or substantial stockholder or their respective spouse, minor child or nominee reports the intended share transfer to the Securities and Futures Bureau.

These restrictions do not apply to block trading, auction sale, purchase by auction, after-hour trading and sales or transfers of our ADSs. However, these restrictions will apply to sales of common shares upon withdrawal.

### **C. Material Contracts**

We have not entered into any material contracts other than in the ordinary course of business and other than those described elsewhere in this annual report.

### **D. Exchange Controls**

#### **Foreign Investment and Exchange Controls in Taiwan**

*We have extracted from publicly available documents the information presented in this section. Please note that citizens of the PRC and entities organized in the PRC are subject to special ROC laws, rules and regulations, which are not discussed in this section.*

#### **General**

Historically, foreign investments in the securities market of Taiwan were restricted. However, commencing in 1983, the Taiwan government has from time to time enacted legislation and adopted regulations to make foreign investment in the Taiwan securities market possible. Initially, only overseas investment trust funds of authorized securities investment trust enterprises established in Taiwan were permitted to invest in the Taiwan securities market. Since January 1, 1991, qualified foreign institutional investors are allowed to make investments in the Taiwan listed securities market. Since March 1, 1996, overseas Chinese, non-resident foreign institutional and individual investors (other than qualified foreign institutional investors), called “general foreign investors,” are permitted to make direct investments in the Taiwan securities market.

#### **Foreign Investment in Taiwan Securities Market**

On December 28, 1990, the Executive Yuan, the cabinet of the ROC government, approved guidelines drafted by the Securities and Futures Commission (the predecessor of the Securities and Futures Bureau), which, since January 1, 1991, has allowed direct foreign investment in Taiwan’s securities that are listed on the TWSE or other Taiwan securities approved by the Securities and Futures Bureau by certain eligible qualified foreign institutional investors.

In addition to qualified foreign institutional investors, certain individual and foreign institutional investors which meet certain qualifications set by the Securities and Futures Bureau may invest in the shares of TWSE-listed companies, the Taipei Exchange (formerly known as Gre Tai Securities Market) traded companies, emerging market companies or other Taiwan securities approved by the Securities and Futures Bureau up to a limit of US\$50 million (in the case of institutional investors) and US\$5 million (in the case of individual investors) after obtaining permission from the TWSE.

On September 30, 2003 and June 15, 2004, the Securities and Futures Bureau issued amendments to the “Guideline Governing Investment in Securities by Overseas Chinese and Foreign Nationals” and relevant regulations, in which the Securities and Futures Bureau lifted certain restrictions and simplified the procedures required for foreign investments in Taiwan’s securities market. The amendment focuses mainly on the following aspects:

- The concept of “qualified foreign institutional investors” no longer exists. Foreign investors are reclassified as “off-shore foreign institutional investors,” “on-shore foreign institutional investors,” “off-shore general foreign investors,” and “on-shore general foreign investors” based on whether they are institutions or natural persons, and whether they have presence in Taiwan.
- For foreign investors to invest in Taiwan’s securities market, registration with the TWSE, instead of the approval of the Securities and Futures Bureau, is required. The TWSE may withdraw or rescind the registration if the application documents submitted by foreign investors are untrue or incomplete, or if any material violation of the relevant regulations exists.
- Off-shore foreign investors may provide the securities they hold as the underlying shares of depositary receipts and act as selling stockholders in depositary receipts offerings.
- Off-shore foreign institutional investors are required to appoint their agent or nominee to attend the stockholders’ meeting of the invested company.

Currently, subject to the specific restriction imposed by relevant regulations, the off-shore foreign institutional investors may invest in the Taiwan securities market without any amount restriction. However, a ceiling will be separately determined by the Securities and Futures Bureau after consultation with the Central Bank of the ROC (Taiwan) for investment by offshore oversea Chinese and foreign individual investors.

### **Foreign Investment Approval**

Other than:

- foreign institutional investors;
- foreign individual investors; and
- investors in overseas convertible bonds and depositary receipts,

foreign investors who wish to make direct investments in the shares of Taiwan companies may submit a “foreign investment approval” application to the Investment Commission of the Ministry of Economic Affairs of Taiwan or other government authority to qualify for benefits granted under the Statute for Investment by Foreign Nationals. The Investment Commission or other government authority reviews each foreign investment approval application and approves or disapproves the application after consultation with other governmental agencies. Any non-Taiwan person possessing a foreign investment approval may remit capital for the approved investment and repatriate annual net profits and interests and cash dividends attributable to an approved investment. Stock dividends, investment capital and capital gains attributable to the investment may be repatriated with approval of the Investment Commission or other government authority.

In addition to the general restrictions against direct investment by non-Taiwan persons in Taiwan companies, non-Taiwan persons are currently prohibited from investing in prohibited industries in Taiwan under the Negative List promulgated by the Executive Yuan from time to time. The prohibition on direct foreign investment in the prohibited industries in the Negative List is absolute with the consequence of certain specific exemption from the application of the Negative List. Under the Negative List, some other industries are restricted so that non-Taiwan persons may directly invest only up to a specified level and with the specific approval of the relevant authority which is responsible for enforcing the legislation which the negative list is intended to implement. The telecommunication industry is a restricted industry under the Negative List.

## Depository Receipts

In April 1992, the Securities and Futures Bureau began allowing Taiwan companies listed on the TWSE, with the prior approval of the Securities and Futures Bureau, to sponsor the issuance and sale of depository receipts evidencing depository shares. In December 1994, the ROC Ministry of Finance began allowing companies whose shares are traded on the Taipei Exchange (formerly known as Gre Tai Securities Market) also to sponsor the issuance and sale of depository receipts evidencing depository shares representing shares of its capital stock. Approvals for these issuances are still required.

After the issuance of a depository share, a holder of the depository receipt evidencing the depository shares may request the depository issuing the depository share to cause the underlying shares to be sold in Taiwan and to distribute the proceeds of the sale to or to withdraw the shares and deliver the shares to the depository receipt holder. A citizen of the PRC is not permitted to withdraw and hold our shares.

If you are an offshore foreign institutional investor holding the depository receipts, you must register with the TWSE as a foreign investor before you will be permitted to withdraw the shares represented by the depository receipts. In addition to obtaining registration with the TWSE, you must also (i) appoint a qualified local agent to, among other things, open a securities trading account with a local securities brokerage firm and a bank account to remit funds, exercise stockholders' rights and perform other functions as holders of ADSs may designate, (ii) appoint a custodian bank to hold the securities and cash proceeds, confirm transactions, settle trades and report and declare other relevant information and; (iii) appoint a tax guarantor as guarantor for the full compliance of the withdrawing depository receipt holders' tax filing and payment obligations in the ROC. A depository receipt holder not registered as a foreign investor with the TWSE, or not has made the necessary appointments as outlined above, will be unable to hold or subsequently transfer the shares withdrawn from the depository receipt facility.

No deposits of shares may be made in a depository receipt facility and no depository shares may be issued against deposits without specific Securities and Futures Bureau approval, unless they are:

- (i) stock dividends;
- (ii) free distributions of shares;
- (iii) due to the exercise by the depository receipt holder preemptive rights in the event of capital increases for cash; or
- (iv) if permitted under the deposit agreement and custody agreement and within the amount of depository receipts which have been withdrawn, due to the direct purchase by investors or purchase through the depository on the TWSE or the Taipei Exchange (formerly known as Gre Tai Securities Market) or delivery by investors of the shares for deposit in the depository receipt facility. In this event, the total number of depository receipts outstanding after an issuance cannot exceed the number of issued depository receipts previously approved by the Securities and Futures Bureau of the FSC in connection with the offering plus any ADSs issued pursuant to the events described in (i), (ii) and (iii) above.

An ADS holder or the depository, without obtaining further approvals from the Central Bank of the ROC (Taiwan) or any other governmental authority or agency of the ROC, may convert NT dollars into other currencies, including U.S. dollars, in respect of:

- the proceeds of the sale of common shares represented by ADSs or received as share dividends with respect to the common shares and deposited into the depository receipt facility; and
- any cash dividends or distributions received from the common shares.

In addition, the depositary may also convert into NT dollars incoming payments for purchases of common shares for deposit in the depositary receipt facility against the creation of additional ADSs. If you withdraw the common shares underlying your ADSs and become a holder of our common shares, you may convert into NT dollars subscription payment for rights offerings. The depositary may be required to obtain foreign exchange payment approval from the Central Bank of the ROC (Taiwan) on a payment-by-payment basis for conversion from NT dollars into foreign currencies of the proceeds from the sale of subscription rights of new common shares. Although it is expected that the Central Bank of the ROC (Taiwan) will grant approval as a routine matter, required approvals may not be obtained in a timely manner, or at all.

### **Exchange Controls**

Taiwan's Foreign Exchange Control Statute and regulations provide that all foreign exchange transactions must be executed by banks designated to handle foreign exchange transactions by the FSC and by the Central Bank of the ROC (Taiwan). Current regulations favor trade-related foreign exchange transactions. Consequently, foreign currency earned from exports of merchandise and services may now be retained and used freely by exporters. All foreign currency needed for the importation of merchandise and services may be purchased freely from the designated foreign exchange banks.

Aside from trade-related foreign exchange transactions, Taiwan companies and residents may remit to and from Taiwan foreign currencies of up to US\$50 million (or its equivalent) and US\$5 million, (or its equivalent), respectively, in each calendar year. These limits apply to remittances involving a conversion between New Taiwan dollars and U.S. dollars or other foreign currencies. A requirement is also imposed on all private enterprises to register all medium and long-term foreign debt with the Central Bank of the ROC (Taiwan).

In addition, a foreign person without an alien resident card or an unrecognized foreign entity may remit to and from Taiwan foreign currencies of up to US\$100,000 per remittance if required documentation is provided to Taiwan authorities. This limit applies only to remittances involving a conversion between New Taiwan dollars and U.S. dollars or other foreign currencies.

## **E. Taxation**

### **ROC Taxation**

The discussion below describes the principal ROC tax consequences of the ownership and disposition of ADSs representing common shares and of common shares. It applies to you only if you are:

- an individual who is not a citizen of the ROC, who owns ADSs or common shares and who is not physically present in Taiwan for 183 days or more during any calendar year; or
- a corporation or a non-corporate body that is organized under the laws of a jurisdiction other than the ROC for profit-making purposes and has no fixed place of business or other permanent establishment in Taiwan.

You should also consult your tax advisors concerning the tax consequences of owning ADSs and common shares in the ROC and any other relevant taxing jurisdiction to which they are subject.

### ***Dividends***

Dividends declared by us out of our retained earnings and distributed to you are subject to ROC withholding tax, currently at the rate of 20%, on the amount of the distribution in the case of cash dividends or on the par value of the common shares in the case of stock dividends. However, a 10% ROC unappropriated earnings tax paid by us on our undistributed after-tax earnings, if any, may provide a credit of up to 10% of the gross amount of any dividends declared out of such earnings that would reduce the 20% ROC withholding tax imposed on these distributions. Starting from 2015, the allowed tax credit is adjusted to 50% of the unappropriated earnings tax paid by us.

Share or cash dividends paid by us out of our capital surplus which are derived from the issuance of shares at a premium are not subject to ROC withholding tax. According to the rulings of Ref. Tai-Tsai-Hsuei-Tzi-09504509440 issued by the Ministry of Finance of the ROC, if a company reduces its share capital and redeems for cash its outstanding common shares issued to the company's stockholders by capitalization of capital surplus, those premiums under the capitalized capital surplus derived from re-evaluation of assets, sale of lands and/or merger with other enterprise shall be deemed as the gain in the stockholders' capital investment, and shall be deemed as stockholders' dividend income (or investment revenue) and be subject to ROC income tax.

As the legal reserve is set-aside from company's profit earnings (after tax) in accordance with Article 237 of ROC Company Act, receipt of distribution of legal reserve shall be deemed as stockholders' dividend income (or investment revenue) and be subject to ROC income tax collected by way of withholding at the time of distribution, currently at the rate of 20%, unless a lower withholding rate is provided under a tax treaty between the ROC and the jurisdiction where the Non-ROC Stockholder is a resident.

### ***Capital Gains***

Gains from the sale of property in the ROC are generally subject to ROC income tax. Effective January 1, 2016, capital gains on the sale of common shares, including common shares withdrawn from the ADS facility, received by a Non-Resident Individual or Non-Resident Entity is no longer subject to the capital gain tax and is further exempted from Alternative Minimum Tax, or the AMT.

Sales of ADSs by you are regarded as transactions relating to property located outside the ROC and thus any gains derived therefrom are currently not subject to ROC income tax.

### ***Preemptive Rights***

Distributions of statutory preemptive rights for common shares in compliance with ROC law are not subject to any ROC tax. Proceeds derived from sales of statutory preemptive rights evidenced by securities are subject to securities transaction tax at the rate of 0.3% of the gross amount received. Proceeds derived from sales of statutory preemptive rights which are not evidenced by securities are subject to capital gains tax at the rate of 20% of the gains realized if the seller is a non-ROC resident regardless of whether the non-ROC resident is an individual or entity.

Subject to compliance with ROC law, we, at our sole discretion, can determine whether statutory preemptive rights shall be evidenced by issuance of securities.

### ***Securities Transaction Tax***

A securities transaction tax, at the rate of 0.3% of the gross amount received, payable by the seller will be withheld upon a sale of common shares in Taiwan. Transfers of ADSs are not subject to ROC securities transaction tax. According to a letter issued by the Ministry of Finance of the ROC in 1996, withdrawal of common shares from the deposit facility will not be subject to ROC securities transaction tax.

### ***Estate Taxation and Gift Tax***

ROC estate tax is payable on any property within Taiwan of a deceased person who is a non-resident individual, and ROC gift tax is payable on any property within Taiwan donated by any such person. Under ROC estate and gift tax laws, common shares issued by Taiwan companies are deemed located in Taiwan regardless of the location of the owner. It is not clear whether the ADSs will be regarded as property located in Taiwan under ROC estate and gift tax laws. Starting from January 21, 2009, the estate tax and gift tax rates were reduced to 10%.

### ***Tax Treaty***

The ROC does not have an income tax treaty with the United States. On the other hand, the ROC has income tax treaties with Indonesia, Israel, Singapore, South Africa, Australia, Vietnam, New Zealand, Malaysia, Macedonia, Swaziland, the Netherlands, United Kingdom, Gambia, Senegal, Sweden, Belgium, Denmark, Paraguay, Hungary, France, India, Slovakia, Germany, Thailand, Switzerland, Luxembourg, Kiribati, Austria, Italy, Japan, Canada and Poland, which may limit the rate of ROC withholding tax on dividends paid with respect to common shares in Taiwan companies. It is unclear whether if you hold ADSs, you will be considered to hold common shares for the purposes of these treaties. Accordingly, if you may otherwise be entitled to the benefits of the relevant income tax treaty, you should consult your tax advisors concerning your eligibility for the benefits with respect to the ADSs.

### ***Unappropriated Earnings Tax***

Under the ROC Income Tax Act, a 10% unappropriated earnings tax will be imposed on a company for its after-tax earnings generated after January 1, 1998 which are not distributed in the following year. The unappropriated earnings tax so paid will further reduce the retained earnings available for future distribution. When the company declares dividends out of those retained earnings, up to a maximum amount of 10% of the declared dividends may be credited against the 20% withholding tax imposed on the non-resident holders of its shares.

### **U.S. Federal Income Tax Considerations for U.S. Holders**

The following is a summary of certain U.S. federal income tax consequences of the ownership and disposition of our shares and ADSs as of the date hereof. The discussion set forth below is applicable to beneficial owners of our shares or ADSs that hold the shares or ADSs as capital assets and that are U.S. holders (defined below) and non-residents of the ROC. You are a U.S. holder if you are:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation for U.S. federal income tax purposes created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source;
- a trust that is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust; or
- a trust that has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

This summary is based on the provisions of the Internal Revenue Code of 1986, as amended (the “Code”), and regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be replaced, revoked or modified so as to result in U.S. federal income tax consequences different from those discussed below. It is for general purposes only and you should not consider it to be tax advice. In addition, it is also based in part on representations made by the depositary and assumes that the deposit agreement and any related agreement will be performed in accordance with their terms. This summary does not represent a detailed description of all the U.S. federal income tax consequences to you in light of your particular circumstances and does not address the effects of any state, local or non-U.S. tax laws (or other U.S. federal tax consequences, such as U.S. federal estate or gift tax consequences or the Medicare tax on net investment income). In addition, it does not represent a detailed description of the U.S. federal income tax consequences applicable to you if you are subject to special treatment under the U.S. federal income tax laws, including if you are:

- a dealer in securities or currencies;
- a trader in securities if you elect to use a mark-to-market method of accounting for your securities holdings;
- a financial institution or an insurance company;



- a regulated investment company;
- a real estate investment trust;
- a tax-exempt organization;
- a person liable for alternative minimum tax;
- a person holding shares or ADSs as part of a hedging, integrated or conversion transaction, constructive sale or straddle;
- a person owning, actually or constructively, 10% or more of our voting stock;
- a partnership or other pass-through entity for U.S. federal income tax purposes; or
- a person whose “functional currency” is not the U.S. dollar.

We cannot assure you that a later change in law will not alter significantly the tax considerations that we describe in this summary.

If a partnership (or other entity treated as a partnership for United States federal income tax purposes) holds our shares or ADSs, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our shares or ADSs, you should consult your tax advisor.

**You should consult your own tax advisor concerning the particular U.S. federal income tax consequences to you of the ownership and disposition of the shares or ADSs, as well as the consequences to you arising under the laws of any other taxing jurisdiction.**

In general, for U.S. federal income tax purposes, a U.S. holder who is the beneficial owner of an ADS will be treated as the owner of the shares underlying such ADS. Deposits or withdrawals of shares, actually or constructively, by U.S. holders for ADSs will not be subject to U.S. federal income tax.

### ***Taxation of Dividends***

The gross amount of distributions (other than certain pro rata distributions of shares to all stockholders) you receive on your shares or ADSs, including net amounts withheld in respect of ROC withholding taxes, will generally be treated as dividend income to you to the extent the distributions are made from our current and accumulated earnings and profits as calculated according to U.S. federal income tax principles. These amounts (including withheld taxes) will be includible in your gross income as ordinary income on the day you actually or constructively receive the distributions, which in the case of an ADS will be the date actually or constructively received by the depository. You will not be entitled to claim a dividends-received deduction allowed to corporations under the Code with respect to distributions you receive from us.

With respect to non-corporate U.S. holders, certain dividends received from a qualified foreign corporation, on shares, or ADSs backed by such shares, that are readily tradable on an established securities market in the United States may be subject to reduced rates of taxation, provided further that the foreign corporation was not, in the year prior to the year in which the dividends are paid, and is not, in the year in which the dividends are paid, a passive foreign investment company (see “Passive Foreign Investment Company” below). A foreign corporation is treated as a qualified foreign corporation with respect to dividends paid by that corporation on shares (or ADSs backed by such shares) that are readily tradable on an established securities market in the United States. Under current U.S. Treasury Department guidance, our ADSs, which are listed on the NYSE, but not our shares, are treated as readily tradable on an established securities market in the United States. Thus, we do not believe that dividends that we pay on our shares that are not represented by ADSs currently meet the conditions required for these reduced tax rates. There can be no assurance that our ADSs will continue to be readily tradable on an established securities market in later years, or that our shares will be readily tradable on an established securities market in any given year. Non-corporate U.S. holders that do not meet a minimum holding period requirement during which they are not protected from the risk of loss, or that elect to treat the dividend income as “investment income” pursuant to Section 163(d)(4) of the Code, will not be eligible for the reduced rates of taxation regardless of the trading status of our shares or ADSs. In addition, the rate reduction will not apply to dividends if the recipient of a dividend is obligated to make related payments with respect to positions in substantially similar or related property. This disallowance applies even if the minimum holding period has been met. You should consult your own tax advisor regarding the application of these rules given your particular circumstances.

The amount of any dividend paid in NT dollars will equal the U.S. dollar value of the NT dollars you receive, calculated by reference to the exchange rate in effect on the date you actually or constructively receive the dividend, which in the case of an ADS will be the date actually or constructively received by the depositary, regardless of whether the NT dollars are actually converted into U.S. dollars. If the NT dollars received as a dividend are converted into U.S. dollars on the date they are actually or constructively received, you generally will not be required to recognize foreign currency gain or loss in respect of the dividend income. If the NT dollars received as a dividend are not converted into U.S. dollars on the date of receipt, you will have a basis in the NT dollars equal to their U.S. dollar value on the date of receipt. Any gain or loss you realize if you subsequently sell or otherwise dispose of the NT dollars will be treated as ordinary income or loss from sources within the United States for foreign tax credit limitation purposes.

Subject to certain conditions and limitations under the Code, you may be entitled to a credit or deduction against your U.S. federal income taxes for the net amount of any ROC taxes that are withheld from dividend distributions made to you. In determining the amounts withheld in respect of ROC taxes, any reduction of the amount withheld on account of a ROC credit in respect of the 10% unappropriated earnings tax imposed on us is not considered a withholding tax and will not be treated as distributed to you or creditable by you against your U.S. federal income tax. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For purposes of calculating the foreign tax credit, dividends we pay with respect to shares or ADSs will generally be considered passive category income from sources outside the United States. Further, a U.S. holder that:

- has held shares or ADSs for less than a specified minimum period during which it is not protected from risk of loss, or
- is obligated to make payments related to the dividends,

may not be allowed a foreign tax credit for foreign taxes imposed on dividends paid on shares or ADSs. The rules governing the foreign tax credit are complex. We therefore urge you to consult your tax advisor regarding the availability of the foreign tax credit under your particular circumstances.

To the extent that the amount of any distribution you receive exceeds our current and accumulated earnings and profits for a taxable year, as determined under U.S. federal income tax principles, the distribution will first be treated as a tax-free return of capital, causing a reduction in your adjusted basis in the shares or ADSs and thereby increasing the amount of gain, or decreasing the amount of loss, you will recognize on a subsequent disposition of the shares or ADSs. The balance in excess of adjusted basis, if any, will be taxable to you as capital gain recognized on a sale or exchange. However, we do not expect to keep earnings and profits in accordance with U.S. federal income tax principles. Therefore, you should expect that a distribution will generally be treated as a dividend.

It is possible that pro rata distributions of shares or ADSs to all stockholders may be made in a manner that is not subject to U.S. federal income tax. The basis of any new shares or ADSs so received will generally be determined by allocating your basis in the old shares or ADSs between the old shares or ADSs and the new shares or ADSs, based on their relative fair market values on the date of distribution.

For U.S. tax purposes, any such tax-free share distribution would not result in foreign source income to you. Consequently, you may not be able to use the foreign tax credit associated with any ROC withholding tax imposed on such distributions unless you can use the credit (subject to applicable limitations) against U.S. federal income tax due on other foreign source income in the appropriate category for foreign tax credit purposes.

### ***Taxation of Capital Gains***

When you sell or otherwise dispose of your shares or ADSs, you will generally recognize capital gain or loss in an amount equal to the difference between the U.S. dollar value of the amount realized for the shares or ADSs and your basis in the shares or ADSs, determined in U.S. dollars. Such gain or loss will generally be long-term capital gain or loss if you have held the shares or ADSs for more than one year. If you are an individual or other non-corporate holder, long-term capital gains will be eligible for reduced rates of taxation. Your ability to deduct capital losses is subject to limitations. For foreign tax credit limitation purposes, such gain or loss will generally be treated as U.S. source gain or loss. Consequently, you may not be able to use the foreign tax credit arising from any ROC tax imposed on the disposition of shares or ADSs unless such credit can be applied (subject to applicable limitations) against tax due on other income treated as derived from foreign sources.

Any ROC securities transaction taxes that you pay generally will not be creditable foreign taxes for U.S. federal income tax purposes, but you may be able to deduct such taxes, subject to certain limitations under the Code. You are urged to consult your tax advisors regarding the U.S. federal income tax consequences of these taxes.

### ***Passive Foreign Investment Company***

We believe that we were not a “passive foreign investment company,” or PFIC, for U.S. federal income tax purposes for our taxable year ending on December 31, 2016, and we do not expect to become a PFIC for our current taxable year or in the future, although there can be no assurance in this regard. If we were treated as a PFIC for any taxable year during which you held our shares or ADSs, you could be subject to additional U.S. federal income taxes on gain recognized with respect to the shares or ADSs and on certain distributions, plus an interest charge on certain taxes treated as having been deferred under the PFIC rules.

Non-corporate U.S. holders will not be eligible for reduced rates of taxation on any dividends received from us, if we are a PFIC in the taxable year in which such dividends are paid or in the preceding taxable year.

### ***Information Reporting and Backup Withholding***

In general, information reporting will apply to dividends in respect of our shares or ADSs and the proceeds from the sale, exchange or other disposition of our shares or ADSs that are paid to you within the United States (and in certain cases, outside the United States), unless you are an exempt recipient such as a corporation. A backup withholding tax may apply to such payments if you fail to provide a taxpayer identification number or certification of other exempt status or fail to report in full dividend and interest income.

Backup withholding is not an additional tax and any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your U.S. federal income tax liability provided the required information is timely furnished to the Internal Revenue Service.

### **F. Dividends and Paying Agents**

Not applicable.

### **G. Statement by Experts**

Not applicable.

### **H. Documents on Display**

We have filed this annual report on Form 20-F, including exhibits, with the SEC. As allowed by the SEC, in Item 19 of this annual report, we incorporate by reference certain information we have already filed with the SEC. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this annual report.

You may read and copy this annual report, including the exhibits incorporated by reference in this annual report, at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 and at the SEC's regional offices in New York, New York and Chicago, Illinois. You also can obtain copies of this annual report, including the exhibits incorporated by reference in this annual report, from the SEC's Public Reference Room and regional offices upon payment of a duplicating fee.

The SEC also maintains a website at [www.sec.gov](http://www.sec.gov) that contains reports, proxy statements and other information regarding registrants that file electronically with the SEC. Our annual report and some of the other information submitted by us to the SEC may be accessed through this web site.

## **I. Subsidiary Information**

Not applicable.

## **ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Market risk is the risk of loss related to adverse changes in market prices, including interest rates and foreign exchange rates, of financial instruments. In the normal course of business, we are routinely subject to a variety of risks, including market risk associated with interest rate movements, currency rate movements on non-NT dollar denominated assets and liabilities and equity price movements on our portfolio of equity securities.

We regularly assess these financial instruments and their ability to address market risk and have established policies and business practices to protect against the adverse effects of these and other potential exposures.

### **Interest Rate Risk**

We do not expect interest rate risk to have a material impact on our financial condition and results of operations. Please refer to "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources" for a discussion of our loans.

For our non-fixed interest rate loans, the interest rates will change in accordance with the fixed rates of the banks we borrowed from. For the financial assets, the risk associated with fluctuating interest rates is principally confined to our cash deposits in banks, which is one of the many ways we manage our capital. Assuming an increase or decrease of 0.25% in the interest rates of our non-fixed interest rate financial assets and loans, our profit before tax for the year ended December 31, 2016 would have increased or decreased by NT\$12.1 million (US\$0.4 million). We have not used any derivative financial instruments to hedge interest rate risk. We have not been exposed nor do we anticipate being exposed to material risks due to changes in interest rates. As of December 31, 2016, our cash and cash equivalents amounted to NT\$31.1 billion (US\$1.0 billion). Interest income from our cash deposits in banks accounts for only a very small percentage of our total revenue. Therefore, we believe our exposure to interest rate risk is immaterial.

### **Foreign Currency Risk**

We are exposed to foreign currency risk as a result of (i) our foreign currency and derivative trading activities; (ii) our telecommunications equipment being sourced from overseas suppliers; (iii) our international settlement payments associated with our services for international calls and roaming traffic; and (iv) securities denominated in foreign currencies.

We entered into forward exchange contracts to reduce our exposure to foreign currency risk due to fluctuations in exchange rates. Outstanding forward exchange contracts on December 31, 2016 were as follows:

<b>FX Instrument</b>	<b>Currencies Involved</b>	<b>Maturity Period</b>	<b>Contract Amount</b>
Forward exchange contracts-Buy	EUR\$/NT\$	2017.03	EUR\$5 million/NT\$167 million
Forward exchange contracts-Buy	US\$/NT\$	2017.01	US\$2 million/NT\$55 million
Forward exchange contracts-Buy	EUR\$/NT\$	2017.03	EUR\$3 million/NT\$102 million

Note 38 to our consolidated financial statements included elsewhere in this annual report provides a sensitivity analysis for foreign currency risk.

### Equity Price Risk

We are exposed to equity price risk as a result of our available-for-sale equity securities, including publicly-traded equities, and we manage our equity investment portfolio in accordance with our internal policies and procedures.

The table below presents the carrying amount and unrealized gain or loss for our available-for-sale equity securities traded in an active market and with quoted market price as of December 31, 2016.

	<b>Carrying Amount</b>	<b>Unrealized Gain</b>	<b>Unrealized Loss</b>
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>
		<b>(in millions)</b>	
<b>Available-for-sale equity securities</b>			
Domestic listed stocks	<u>2,521</u>	<u>—</u>	<u>144</u>

The total value of our listed available-for-sale equity portfolio amounted to NT\$2.5 billion (US\$77.8 million) as of December 31, 2016, which decreased approximately 22.3% compared with the total value of our listed equity portfolio as of December 31, 2015. This decrease was mainly due to the decreasing price of the equity securities held by us. For the year ended December 31, 2016, we recognized other-than-temporary impairment losses for listed stocks of NT\$577.3 million (US\$17.8 million).

The value of our equity holdings fluctuates depending on the market conditions. Assuming an increase or decrease of 5% in the equity prices, our comprehensive income for the year ended December 31, 2016 would have increased or decreased by NT\$126.1 million (US\$3.9 million). However, we do not expect the gains and losses in the values of the equities that we hold to have a material impact on our financial condition and results of operations.

### Other Market Risk

We have made investments in corporate bonds and bank debentures issued by domestic public companies with strong industry leadership and solid profits. Industries in which we have invested include financials, utilities, technology, and so on. As of December 31, 2016, the fair value of our investments in corporate bonds and bank debentures amounted to NT\$2.1 billion (US\$66.2 million), all of which were classified as held-to-maturity financial assets. The fair value of these corporate bonds and bank debentures is valued using market-based observable inputs including duration, yield rate and credit rating, which are subject to fluctuation based on many factors such as prevailing market conditions. However, we do not expect the gains and losses in the values of these investments to have a material impact on our financial condition and results of operations.

## ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

### A. Debt Securities

Not applicable

### B. Warrants and Rights

Not applicable

**C. Other Securities**

Not applicable

**D. American Depositary Shares****Depositary Fees**

Under the terms of the deposit agreement for our ADSs, an ADS holder may have to pay the following service fees to the depositary:

Service	Fees
Issuance of ADSs	Up to US\$5.00 per 100 ADS issued
Cancellation of ADSs	Up to US\$5.00 per 100 ADS cancelled
Distribution of cash dividends or other cash distributions	Up to US\$2.00 per 100 ADS held
Distribution of ADSs pursuant to stock dividends, free stock distributions or exercises of rights	Up to US\$5.00 per 100 ADS held
Distribution of securities other than ADSs or rights to purchase additional ADSs	Up to US\$5.00 per 100 ADS held

**Depositary Charges**

In addition, an ADS holder shall be responsible for the following charges:

- taxes (including applicable interest and penalties) and other governmental charges;
- such registration fees as may from time to time be in effect for the registration of common shares or other deposited securities on the share register and applicable to transfers of common shares or other deposited securities to or from the name of the custodian, the depositary or any nominees upon the making of deposits and withdrawals, respectively;
- such cable, telex and facsimile transmission and delivery expenses as are expressly provided in the deposit agreement to be at the expense of ADS holders and beneficial owners of ADSs;
- the expenses and charges incurred by the depositary in the conversion of foreign currency; and
- the fees and expenses incurred by the depositary, the custodian or any nominee in connection with the servicing or delivery of deposited securities.

Depositary fees payable upon the issuance and cancellation of ADSs are typically paid to the depositary by the brokers (on behalf of their clients) receiving the newly-issued ADSs from the depositary and by the brokers (on behalf of their clients) delivering the ADSs to the depositary for cancellation. The brokers in turn charge these transaction fees to their clients.

Depositary fees payable in connection with distributions of cash or securities to ADS holders and the depositary services fee are charged by the depositary to the holders of record of ADSs as of the applicable ADS record date. The depositary fees payable for cash distributions are generally deducted from the cash being distributed. In the case of distributions other than cash (i.e., stock dividends, rights offerings), the depositary charges the applicable fee to the ADS record date holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or un-certificated in direct registration), the depositary sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts via the central clearing and settlement system, The Depository Trust Company, or DTC, the depositary generally collects its fees through the systems provided by DTC (whose nominee is the registered holder of the ADSs held in DTC) from the brokers and custodians holding ADSs in their DTC accounts. The brokers and custodians who hold their clients' ADSs in DTC accounts in turn charge their clients' accounts the amount of the fees paid to the depositary.

In the event of refusal to pay the depositary fees and charges, the depositary may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary fees from any distribution to be made to the ADS holder.

The fees and charges ADS holders may be required to pay may vary over time and may be changed by us and by the depositary. ADS holders will receive prior notice of such changes.

### **Payments by Depositary**

In 2016, we received US\$1.1 million net payments (after deducting the 30% U.S. withholding tax) from JPMorgan Chase Bank, N.A., the Depositary Bank for our ADR program. The payments were intended to cover certain of our expenses incurred in relation to the ADR program for the year, including:

- investor relations efforts;
- legal fees, NYSE listing fees, proxy process expenses, and SEC filing fees;
- Sarbanes-Oxley and accounting related expenses in connection with ongoing SEC compliance and listing requirements; and
- other ADR program-related expenses.

## **PART II**

### **ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

None.

### **ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

None.

### **ITEM 15. CONTROLS AND PROCEDURES**

#### **Disclosure Controls and Procedures**

As of the end of the period covered by this annual report, an evaluation has been carried out under the supervision and with the participation of our management, including our chief executive officer and our chief financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined under Rules 13a-14(c) and 15d-14(c) promulgated under the Securities Exchange Act of 1934, as amended. Based on that evaluation, our chief executive officer and chief financial officer have concluded that our disclosure controls and procedures are effective in ensuring that material information required to be disclosed in this annual report is recorded, processed, summarized and reported to them for assessment, and required disclosure is made within the time period specified in the rules and forms of the SEC.

#### **Management's Annual Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended, for our company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IASB), or IFRSs, and includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of a company's assets, (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with IFRSs, and that a company's receipts and expenditures are being made only in accordance with authorizations of a company's management and directors, and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of a company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance with respect to consolidated financial statement preparation and presentation and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act of 2002 and related rules as promulgated by the SEC, management assessed the effectiveness of our internal control over financial reporting as of December 31, 2016 using criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2016 based on the criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Deloitte & Touche, an independent registered public accounting firm who has also audited our consolidated financial statements as of and for the year ended December 31, 2016, has issued an attestation report on the effectiveness of our internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States).

### **Attestation Report of the Registered Public Accounting Firm**

#### **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

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

We have audited the internal control over financial reporting of Chunghwa Telecom Co., Ltd. and subsidiaries (the “Company”) as of December 31, 2016, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying “Management’s Annual Report on Internal Control over Financial Reporting.” Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company’s internal control over financial reporting is a process designed by, or under the supervision of, the company’s principal executive and principal financial officers, or persons performing similar functions, and effected by the company’s board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IASB) (“IFRSs”). A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRSs, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.



Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2016 of the Company and our report dated April 25, 2017 expressed an unqualified opinion on those financial statements and included an explanatory paragraph regarding the convenience translation of New Taiwan dollar amounts into U.S. dollar amounts.

/s/ DELOITTE & TOUCHE

Deloitte & Touche  
Taipei, Taiwan  
The Republic of China

April 25, 2017

#### **Changes in Internal Control Over Financial Reporting**

There were no changes in our internal control over financial reporting that occurred during the year ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### **ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT**

Lo-Yu Yen is our audit committee financial expert and independent director. See “Item 6. Directors, Senior Management and Employees —C. Board Practices.”

The SEC has indicated that the designation of Mr. Yen as the audit committee financial expert does not: (i) make Mr. Yen an “expert” for any purpose, including without limitation for purposes of Section 11 of the Securities Act of 1933, as amended, as a result of this designation; (ii) impose any duties, obligations or liability on Mr. Yen that are greater than those imposed on him as a member of the audit committee and the board of directors in the absence of such designation; or (iii) affect the duties, obligations or liability of any other member of the audit committee or the board of directors.

#### **ITEM 16B. CODE OF ETHICS**

We have adopted a Code of Ethics and Ethical Corporate Management Best Practice Principles that applies to our directors, managers and employees, including our chief executive officer and chief financial officer. We have posted a copy of our Code of Ethics and Ethical Corporate Management Best Practice Principles on our website at <http://www.cht.com.tw/en/aboutus/companyrules.html>.

**ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Deloitte & Touche, our principal accountant for the years indicated. We did not pay any other fees to Deloitte & Touche during the periods indicated below.

	<b>Year Ended December 31</b>		
	<b>2015</b>	<b>2016</b>	
	NTS	NTS	US\$
	(in millions)		
Audit fees <sup>(1)</sup>	63.0	47.2	1.5
Audit-related fees <sup>(2)</sup>	—	—	—
Tax fees <sup>(3)</sup>	0.2	—	—
All other fees <sup>(4)</sup>	—	—	—

- (1) “Audit fees” means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal accountant for the audit of our annual consolidated financial statements or services that are normally provided by the auditors in connection with statutory and regulatory filings or engagements.
- (2) “Audit-related fees” means the aggregate fees billed in each of the fiscal years listed for assurance and related services by our principal accountant that are reasonably related to the performance of the audit or review of our consolidated financial statements and are not reported under “Audit fees.” Services comprising the fees disclosed under the category of “Audit related fees” involve principally the issuance of agreed upon procedures letters.
- (3) “Tax fees” means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal accountant for tax compliance, tax advice and tax planning. Services comprising the fees disclosed under the category of “Tax Fees” involve tax advice.
- (4) “All other fees” means the aggregate fees billed in each of the last two fiscal years for products and services provided by our principal accountant other than the services reported in items (1) to (3) above.

All audit and non-audit services provided by Deloitte & Touche were pre-approved by our audit committee according to the revised Rule 201(c) (7) of Regulation S-X, entitled “Audit Committee Administration of the Engagement,” that served to strengthen requirements regarding auditor independence.

**ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES**

None.

**ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

Not applicable.

**ITEM 16F. CHANGE IN REGISTRANT’S CERTIFYING ACCOUNTANT**

Not applicable.

**ITEM 16G. CORPORATE GOVERNANCE**

As a ROC company listed on the NYSE, we are subject to the U.S. corporate governance rules to the extent that these rules are applicable to foreign private issuers. The following summary details the significant differences between our corporate governance practices and corporate governance standards for non-foreign private issuers (e.g., U.S. companies) under the NYSE Listed Company Manual.

Under Section 303A of the NYSE Listed Company Manual, NYSE-listed foreign private issuers may, in general, follow their home country corporate governance practices in lieu of most of the new NYSE corporate governance requirements. However, all NYSE-listed foreign private issuers must comply with Sections 303A.06, 303A.11, 303A.12(b) and 303A.12(c) of the NYSE Listed Company Manual.

**The Legal Framework.** In general, corporate governance principles for Taiwanese companies are set forth in the ROC Company Act, the ROC Securities Exchange Act, regulations promulgated by the Securities and Futures Bureau of the FSC and, to the extent they are listed on the TWSE, listing rules of the TWSE. Corporate governance principles under provisions of ROC law may differ in significant ways to corporate governance standards for non-foreign private issuers listed on the NYSE. Committed to high standards of corporate governance, we have generally brought our corporate governance in line with U.S. regulations. However, we have not adopted certain recommended NYSE corporate governance standards where such standards are not in conformity with ROC laws or regulations or generally prevailing business practices in Taiwan. We believe the following to be the significant differences between our corporate governance practices and NYSE corporate governance rules applicable to non-foreign private issuers listed on the NYSE.

**Director Independence.** The NYSE corporate governance rules applicable to non-foreign private issuers listed on the NYSE require companies to have a majority of independent directors on the board of directors. The ROC Securities Exchange Act requires the independent directors of a public company to comprise of no less than two persons and one-fifth of the total number of directors. We currently have four independent directors on our eleven-member board of directors. We follow the standards regulated under ROC Securities Exchange Act and by the FSC for determining director independence, which are comparable to the standards imposed by the NYSE.

In addition, under the ROC requirements, our board of directors is not required to make a formal determination of a director's independence. Nevertheless, we believe that our independent directors are free from any business or other relationships that would impair the exercise of their independent judgment. Furthermore, pursuant to the NYSE Listed Company Manual, non-executive directors must meet on a regular basis without the management directors present. All of our directors attend our board of directors' meetings; however, no separate meeting is held among non-executive directors.

**Audit Committee.** On April 1, 2003, the SEC adopted final rules relating to the audit committee requirements. Foreign private issuers listed on the NYSE were required to comply with the related NYSE corporate governance rules by July 31, 2005. Our audit committee was established in September 2004 in accordance with the rules set forth in the NYSE Listed Company Manual. According to the NYSE corporate governance rules applicable to non-foreign private issuers listed on the NYSE, the board must review status of any audit member that serves on more than three audit committees. There is no such requirement under the ROC law, which allows a person to serve as an independent director on up to four public companies in the ROC.

Section 303A.07 of the NYSE Listed Company Manual requires issuers to have at least three directors on the audit committee that meets the definition of independence set forth under Rule 10A-3 of the Exchange Act and Section 303A of the NYSE Listed Company Manual. There is no such requirement under the ROC law, which requires all independent directors of a public company to be members of the audit committee if the company has established such a committee.

On February 20, 2013, the FSC of the ROC announced that any (i) financial holding company, bank, bill finance company or insurance company, (ii) listed company whose paid-in capital reaches NT\$50 billion or (iii) integrated securities firm controlled by a financial holding company, should establish an audit committee to replace supervisors. As a result, our new audit committee started from the date of the annual general meeting on June 25, 2013. See "Item 6. Directors, Senior Management and Employees—C. Board Practices." As a result, we now simultaneously comply with the relevant rules of the NYSE Listed Company Manual and the relevant rules and regulations in the ROC.

**Nominating/Corporate Governance Committee and Corporate Governance Principles.** The NYSE corporate governance rules applicable to non-foreign private issuers listed on the NYSE require companies to have a nominating/corporate governance committee, composed entirely of independent directors. In addition to identifying individuals qualified to become board members, the nominating/corporate governance committee must develop and recommend to the board a set of corporate governance principles. The ROC Company Act does not require companies incorporated in the ROC to have a nominating/corporate governance committee. We do not currently have a nominating committee or a corporate governance committee.

Currently, our board of directors performs the duties of a corporate governance committee and regularly reviews our corporate governance principles and practices. The ROC Company Act requires that directors shall be elected by stockholders. Our Articles of Incorporation requires us, beginning in the fifth commencement, to establish at least three independent directors in the number of directors. The elections for directors shall proceed with the candidate nomination system; the stockholders shall elect the directors from among the nominees listed in the roster of director candidates. Stockholders holding 1% or more of our outstanding shares are entitled to nominate candidates of directors in written to us. The numbers of candidates nominated by stockholders shall not exceed the numbers of directors to be elected; neither the numbers of candidates nominated by the Board. Elections for independent and non-independent directors shall proceed concurrently, and the number of elected independent and non-independent directors shall be calculated separately.

Non-foreign private issuers listed on the NYSE are also required to adopt and disclose corporate governance guidelines. We currently comply with the ROC Non-Binding Corporate Governance Best Practice Principles for TWSE/GTSM Listed Companies promulgated by the TWSE, or Best Practice Principles, and we provide an explanation of differences between our practice and the principles, if any, in our ROC annual report.

**Compensation Committee.** The NYSE corporate governance rules applicable to non-foreign private issuers listed on the NYSE require companies to have a compensation committee, composed entirely of independent directors. The Article 14-6 of ROC Securities and Exchange Act requires all listed companies to establish a compensation committee for directors, supervisors and managers' compensation, which includes salary, stock options and other rewards, as well as authorizes the Competent Authority (i.e., FSC) to enact a regulation on the authorities of the compensation committee and the qualifications of its members. See "Item 6. Directors, Senior Management and Employees—C. Board Practices" for description of our compliance.

**Code of Business Conduct and Ethics.** The NYSE corporate governance rules applicable to non-foreign private issuers listed on the NYSE require companies must adopt a code of business conduct and ethics for directors, officers and employees and promptly disclose any waivers of the code for directors or executive officers. We have adopted Code of Ethics which applies to our directors, managers and employees, and Ethical Corporate Management Best Practice Principles that applies to our directors, managers, employees and persons having substantial control over us. We have filed Code of Ethics and Ethical Corporate Management Best Practice Principles as an exhibit to our annual report filed with the U.S. SEC and a copy is available to any stockholder upon request.

**Equity Compensation Plans.** The NYSE corporate governance rules applicable to non-foreign private issuers listed on the NYSE require that equity compensation plans be approved by a company's stockholders. Under the ROC Company Act and the ROC Securities and Exchange Act, the distribution of compensation to employees should be decided by the board of directors and reported in stockholders' meeting. The approval of stockholders' meeting is required for any issuances of restricted stock to employees, and the board of director has authority to approve employee stock option plans and to grant options to employees pursuant to such plans, subject to the approval of the FSC, and to approve share buy-back programs and transfer of shares to employees under such programs. We intend to follow only the ROC requirements.

**Means to Communicate with Non-Management Directors.** The NYSE corporate governance rules applicable to non-foreign private issuers listed on the NYSE require companies to establish a means for stockholders, employees and other interested parties to communicate with non-management directors. The ROC law does not have comparable requirements. However, according to the Best Practice Principles, companies are required to establish channels of communication with employees and encourage employees to communicate directly with the management or directors so as to reflect employees' opinions about the management, financial conditions and material decisions of the company concerning employee welfare. We have complied with these provisions.

**Internal Audit Function.** The NYSE corporate governance rules applicable to non-foreign private issuers listed on the NYSE require companies to establish an internal audit function to provide management and the audit committee with assessments of the company's risk management processes and system of internal control. We have complied with the Best-Practice Principles by setting up an internal control/audit system in accordance with the ROC Regulations Governing Establishment of Internal Control Systems by Public Companies.

**CEO Certification to the NYSE.** The NYSE listing standards require the CEO of companies to certify compliance with NYSE corporate governance standards annually. ROC law does not contain such requirement. In this regard, we only follow ROC corporate governance requirement which does not require CEO annual certification. However, our CEO and CFO are required to certify in the 20-F annual report that, to his or her knowledge the information contained therein fairly represents in all material respects the financial condition and results of operations of our company.

**ITEM 16H. MINE SAFETY DISCLOSURE**

Not applicable.

**PART III**

**ITEM 17. FINANCIAL STATEMENTS**

The Registrant has elected to provide the consolidated financial statements and related information specified in Item 18 in lieu of Item 17.

**ITEM 18. FINANCIAL STATEMENTS**

The following is a list of the consolidated financial statements and report of independent registered public accounting firm included in this annual report beginning on page F-1.

## INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS

	<b><u>Page</u></b>
<a href="#"><u>Report of Independent Registered Public Accounting Firm</u></a>	F-1
<a href="#"><u>Consolidated Balance Sheets as of December 31, 2015 and 2016</u></a>	F-2
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<a href="#"><u>Consolidated Statements of Changes in Equity for the years ended December 31, 2014, 2015 and 2016</u></a>	F-6
<a href="#"><u>Consolidated Statements of Cash Flows for the years ended December 31, 2014, 2015 and 2016</u></a>	F-7
<a href="#"><u>Notes to Consolidated Financial Statements</u></a>	F-10

### ITEM 19. EXHIBITS

<b>Exhibit Number</b>	<b>Description of Exhibits</b>
1.1	Statute of Chunghwa Telecom Co., Ltd., as last amended on November 29, 2000, which was subsequently abolished by the President of the ROC on December 24, 2014 (English translation) (incorporated by reference to Exhibit 1.1 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2003 (File No. 001-31731) filed with the Commission on May 17, 2004).
1.2*	Articles of Incorporation of Chunghwa Telecom Co., Ltd. (English translation), as last amended by Annual General Meeting on June 24, 2016.
2.1	Form of Amended and Restated Deposit Agreement dated as of November 2007 among Chunghwa Telecom Co. Ltd., JPMorgan Chase Bank, N.A., as depositary, and all holders from time to time of ADRs issued thereunder, including the Form of American Depositary Receipt (incorporated by reference to Exhibit (a) to the Registrant's Registration Statement on Form F-6 (File No. 333-147321) filed with the Commission on November 13, 2007).
8.1*	List of Subsidiaries.
11.1	Code of Ethics as approved by the board of directors on August 13, 2013 (English translation) (incorporated by reference to Exhibit 11.1 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2013 (File No. 001-31731) filed with the Commission on April 28, 2014).
11.2	Ethical Corporate Management Best Practice Principles as approved by the board of directors on August 13, 2013 (English translation) (incorporated by reference to Exhibit 11.2 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2013 (File No. 001-31731) filed with the Commission on April 28, 2014).
12.1*	Certification of our Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
12.2*	Certification of our Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
13.1*	Certification of our Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
13.2*	Certification of our Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

\* Filed herewith.

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

CHUNGHWA TELECOM CO., LTD.

By: /s/ YU CHENG \_\_\_\_\_

Name: Yu Cheng

Title: Chairman and Chief Executive Officer

Date: April 25, 2017

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders  
Chunghwa Telecom Co., Ltd.

We have audited the accompanying consolidated balance sheets of Chunghwa Telecom Co., Ltd. and subsidiaries (the “Company”) as of December 31, 2015 and 2016, and the related consolidated statements of comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2016 all expressed in New Taiwan dollars. These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Chunghwa Telecom Co., Ltd. and subsidiaries as of December 31, 2015 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with International Financial Reporting Standards as issued by the International Accounting Standard Board.

Our audits also comprehended the translation of New Taiwan dollar amounts into U.S. dollar amounts and, in our opinion, such translation has been made in conformity with the basis stated in Note 6 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of the readers.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company’s internal control over financial reporting as of December 31, 2016, based on the criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated April 25, 2017 expressed an unqualified opinion on the Company’s internal control over financial reporting.

/s/ DELOITTE & TOUCHE

Deloitte & Touche  
Taipei, Taiwan  
The Republic of China

April 25, 2017



## CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS

DECEMBER 31, 2015 and 2016

(In Millions of New Taiwan or U.S. Dollars)

	Notes	2015	2016	
		NT\$	NT\$	US\$ (Note 6)
<b>ASSETS</b>				
<b>CURRENT ASSETS</b>				
Cash and cash equivalents	3, 7	\$ 30,271	\$ 31,100	\$ 960
Financial assets at fair value through profit or loss	3, 8	—	—	—
Hedging derivative financial assets	3, 21	1	—	—
Held-to-maturity financial assets	3, 10	1,881	2,140	66
Trade notes and accounts receivable, net	3, 4, 11	26,926	31,022	957
Receivables from related parties	40	42	14	—
Inventories	3, 4, 12, 41	8,780	7,423	229
Prepayments	13, 40	2,669	2,978	92
Other current monetary assets	14, 28	3,301	4,821	149
Other current assets	20, 32, 41	2,336	2,122	66
Total current assets		<u>76,207</u>	<u>81,620</u>	<u>2,519</u>
<b>NONCURRENT ASSETS</b>				
Available-for-sale financial assets	3, 9	5,511	4,764	147
Held-to-maturity financial assets	3, 10	2,140	—	—
Investments accounted for using equity method	3, 16	2,895	2,386	74
Property, plant and equipment	3, 4, 17, 40, 41	296,399	291,170	8,987
Investment properties	3, 4, 18	7,902	8,115	250
Intangible assets	3, 4, 19	50,447	47,353	1,462
Deferred income tax assets	3, 32	2,061	2,322	72
Net defined benefit assets	3, 4, 28	11	919	28
Prepayments	13, 40	3,612	3,241	100
Other noncurrent assets	20, 41	5,586	5,025	155
Total noncurrent assets		<u>376,564</u>	<u>365,295</u>	<u>11,275</u>
<b>TOTAL</b>		<u>\$452,771</u>	<u>\$446,915</u>	<u>\$ 13,794</u>

(Continued)

	Notes	2015 NTS	2016 NTS	US\$ (Note 6)
<b>LIABILITIES AND EQUITY</b>				
<b>CURRENT LIABILITIES</b>				
Short-term loans	22, 41	\$ 110	\$ 138	\$ 4
Financial liabilities at fair value through profit or loss	3, 8	—	1	—
Hedging derivative financial liabilities	3, 21	—	1	—
Trade notes and accounts payable	24	16,301	18,810	581
Payables to related parties	40	611	762	24
Current tax liabilities	3, 32	9,171	6,522	201
Other payables	25	25,487	26,418	815
Provisions	3, 26	190	119	4
Advance receipts	27	9,567	10,059	310
Current portion of long-term loans	23, 41	8	—	—
Other current liabilities		1,501	1,330	41
Total current liabilities		62,946	64,160	1,980
<b>NONCURRENT LIABILITIES</b>				
Long-term loans	23, 41	1,742	1,600	49
Deferred income tax liabilities	3, 32	148	1,464	45
Provisions	3, 26	58	66	2
Customers' deposits	40	4,726	4,610	142
Net defined benefit liabilities	3, 4, 28	7,099	1,537	48
Deferred revenue	3	3,616	3,546	110
Other noncurrent liabilities		3,097	3,004	93
Total noncurrent liabilities		20,486	15,827	489
Total liabilities		83,432	79,987	2,469
<b>EQUITY ATTRIBUTABLE TO STOCKHOLDERS OF THE PARENT</b>				
Common stocks		77,574	77,574	2,394
Additional paid-in capital		146,733	147,180	4,543
Retained earnings				
Legal reserve		77,574	77,574	2,394
Special reserve		2,676	2,676	83
Unappropriated earnings		59,448	55,657	1,718
Total retained earnings		139,698	135,907	4,195
Other adjustments		269	(5)	—
Total equity attributable to stockholders of the parent	15, 29	364,274	360,656	11,132
<b>NONCONTROLLING INTERESTS</b>	15, 29	5,065	6,272	193
Total equity		369,339	366,928	11,325
<b>TOTAL</b>		<b>\$452,771</b>	<b>\$446,915</b>	<b>\$ 13,794</b>

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

(Concluded)

## CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME  
YEARS ENDED DECEMBER 31, 2014, 2015 and 2016

(In Millions of New Taiwan or U.S. Dollars, Except Earnings Per Share That Are in New Taiwan or U.S. Dollars)

	Notes	2014	2015	2016	
		NT\$	NT\$	NT\$	US\$ (Note 6)
REVENUES	4, 30, 40, 43	\$226,609	\$231,795	\$229,991	\$ 7,099
OPERATING COSTS	12, 28, 31, 40	148,380	148,126	147,552	4,554
GROSS PROFIT		78,229	83,669	82,439	2,545
OPERATING EXPENSES					
Marketing		26,145	25,071	25,516	788
General and administrative		4,414	4,515	4,537	140
Research and development		3,504	3,617	3,785	117
Total operating expenses	28, 31, 40	34,063	33,203	33,838	1,045
OTHER INCOME AND EXPENSES	17, 18, 31	631	(105)	(496)	(15)
INCOME FROM OPERATIONS		44,797	50,361	48,105	1,485
NON-OPERATING INCOME AND EXPENSES					
Interest income		288	306	189	6
Other income	31, 40	587	650	1,072	33
Other gains and losses	31, 40	124	(228)	(448)	(14)
Interest expenses		(46)	(33)	(20)	(1)
Share of the profits of associates and joint ventures accounted for using equity method	16	802	897	515	16
Total non-operating income and expenses		1,755	1,592	1,308	40
INCOME BEFORE INCOME TAX		46,552	51,953	49,413	1,525
INCOME TAX EXPENSE	3, 32	8,985	9,101	7,787	240
NET INCOME		37,567	42,852	41,626	1,285
TOTAL OTHER COMPREHENSIVE INCOME (LOSS)					
Items that will not be reclassified to profit or loss:					
Remeasurements of defined benefit pension plans	28	(492)	(231)	(2,043)	(63)
Share of remeasurements of defined benefit pension plans of associates and joint ventures	16	1	(25)	(44)	(2)
Income tax benefit relating to items that will not be reclassified to profit or loss	32	84	39	347	11
		(407)	(217)	(1,740)	(54)

(Continued)

## CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME  
YEARS ENDED DECEMBER 31, 2014, 2015 and 2016

(In Millions of New Taiwan or U.S. Dollars, Except Earnings Per Share That Are in New Taiwan or U.S. Dollars)

	Notes	2014	2015	2016	
		NTS	NTS	NTS	US\$ (Note 6)
Items that may be reclassified subsequently to profit or loss:					
Exchange differences arising from the translation of the foreign operations		\$ 164	\$ 24	\$ (170)	\$ (5)
Unrealized gain (loss) on available-for-sale financial assets	31	878	(645)	(144)	(5)
Cash flow hedges	21, 31	—	1	(1)	—
Share of exchange differences arising from the translation of the foreign operations of associates and joint ventures	16	4	6	(3)	—
Income tax benefit (expense) relating to items that may be reclassified subsequently	32	3	(2)	2	—
		<u>1,049</u>	<u>(616)</u>	<u>(316)</u>	<u>(10)</u>
Total other comprehensive income (loss), net of income tax		642	(833)	(2,056)	(64)
<b>TOTAL COMPREHENSIVE INCOME</b>		<u>\$38,209</u>	<u>\$42,019</u>	<u>\$39,570</u>	<u>\$ 1,221</u>
NET INCOME ATTRIBUTABLE TO					
Stockholders of the parent		\$36,970	\$42,039	\$40,485	\$ 1,250
Noncontrolling interests		597	813	1,141	35
		<u>\$37,567</u>	<u>\$42,852</u>	<u>\$41,626</u>	<u>\$ 1,285</u>
COMPREHENSIVE INCOME ATTRIBUTABLE TO					
Stockholders of the parent		\$37,594	\$41,207	\$38,486	\$ 1,188
Noncontrolling interests		615	812	1,084	33
		<u>\$38,209</u>	<u>\$42,019</u>	<u>\$39,570</u>	<u>\$ 1,221</u>
EARNINGS PER SHARE					
Basic	33	\$ 4.77	\$ 5.42	\$ 5.22	\$ 0.16
Diluted		\$ 4.76	\$ 5.41	\$ 5.21	\$ 0.16
EARNINGS PER EQUIVALENT ADS					
Basic		\$ 47.66	\$ 54.19	\$ 52.19	\$ 1.61
Diluted		\$ 47.58	\$ 54.06	\$ 52.11	\$ 1.61

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, 2014, 2015 and 2016**  
**(In Millions of New Taiwan or U.S. Dollars)**

	Equity Attributable to Stockholders of the Parent												
	Retained Earnings					Other Adjustments					Total Equity Attributable to Stockholders of the Parent	Noncontrolling Interests	Total Equity
	Common stocks	Additional Paid-in Capital	Legal Reserve	Special Reserve	Unappropriated Earnings	Total Retained Earnings	Exchange Differences Arising from the Translation of the Foreign Operations	Unrealized Gain (Loss) on Available-for-sale Financial Assets	Cash Flow Hedges	Total Other Adjustments			
	NTS	NTS	NTS	NTS	NTS	NTS	NTS	NTS	NTS	NTS	NTS	NTS	NTS
BALANCE, JANUARY 1, 2014	\$ 77,574	\$ 163,294	\$ 74,819	\$ 2,676	\$ 40,075	\$ 117,570	\$ 6	\$ (150)	\$ —	\$ (144)	\$ 358,294	\$ 4,846	\$ 363,140
Appropriation of 2013 earnings	—	—	2,074	—	(2,074)	—	—	—	—	—	—	—	—
Legal reserve	—	—	2,074	—	(2,074)	—	—	—	—	—	—	—	—
Special reserve	—	—	—	144	(144)	—	—	—	—	—	—	—	—
Cash dividends paid by Chunghwa	—	—	—	—	(18,526)	(18,526)	—	—	—	—	(18,526)	—	(18,526)
Cash dividends distributed by subsidiaries	—	—	—	—	—	—	—	—	—	—	—	(797)	(797)
Cash distributed from additional paid-in capital	—	(16,577)	—	—	—	—	—	—	—	—	(16,577)	—	(16,577)
Change in additional paid-in capital from share subscription not based on original ownership of a subsidiary	—	3	—	—	—	—	—	—	—	—	3	—	3
Net income for the year ended December 31, 2014	—	—	—	—	36,970	36,970	—	—	—	—	36,970	597	37,567
Other comprehensive income for the year ended December 31, 2014	—	—	—	—	(406)	(406)	140	890	—	1,030	624	18	642
Total comprehensive income for the year ended December 31, 2014	—	—	—	—	36,564	36,564	140	890	—	1,030	37,594	615	38,209
Compensation cost of employee stock options of a subsidiary	—	—	—	—	—	—	—	—	—	—	—	93	93
Employee stock bonus issued by a subsidiary	—	—	—	—	—	—	—	—	—	—	—	5	5
Net increase in noncontrolling interests	—	—	—	—	—	—	—	—	—	—	—	162	162
BALANCE, DECEMBER 31, 2014	77,574	146,720	76,893	2,820	55,895	135,608	146	740	—	886	360,788	4,924	365,712
Appropriation of 2014 earnings	—	—	681	—	(681)	—	—	—	—	—	—	—	—
Legal reserve	—	—	681	—	(681)	—	—	—	—	—	—	—	—
Special reserve	—	—	—	(144)	144	—	—	—	—	—	—	—	—
Cash dividends paid by Chunghwa	—	—	—	—	(37,673)	(37,673)	—	—	—	—	(37,673)	—	(37,673)
Cash dividends distributed by subsidiaries	—	—	—	—	—	—	—	—	—	—	—	(350)	(350)
Reversal of special reserve recognized from land disposal	—	—	—	—	—	—	—	—	—	—	—	—	—
Partial disposal of interests in subsidiaries	—	27	—	—	—	—	—	—	—	—	27	18	45
Other changes in additional paid-in capital in subsidiaries	—	1	—	—	—	—	—	—	—	—	1	2	3
Change in additional paid-in capital from share subscription not based on original ownership of a subsidiary	—	—	—	—	—	—	—	—	—	—	—	—	—
Net income for the year ended December 31, 2015	—	—	—	—	42,039	42,039	—	—	—	—	42,039	813	42,852
Other comprehensive income for the year ended December 31, 2015	—	—	—	—	(215)	(215)	31	(649)	1	(617)	(832)	(1)	(833)
Total comprehensive income for the year ended December 31, 2015	—	—	—	—	41,824	41,824	31	(649)	1	(617)	41,207	812	42,019
Compensation cost of employee stock options of subsidiaries	—	—	—	—	—	—	—	—	—	—	—	36	36
Subsidiary purchased its treasury stock	—	(15)	—	—	(61)	(61)	—	—	—	—	(76)	(416)	(492)
Net increase in noncontrolling interests	—	—	—	—	—	—	—	—	—	—	—	39	39
BALANCE, DECEMBER 31, 2015	77,574	146,733	77,574	2,676	59,448	139,698	177	91	1	269	364,274	5,065	369,339
Appropriation of 2015 earnings	—	—	—	—	(42,551)	(42,551)	—	—	—	—	(42,551)	—	(42,551)
Cash dividends paid by Chunghwa	—	—	—	—	(42,551)	(42,551)	—	—	—	—	(42,551)	—	(42,551)
Cash dividends distributed by subsidiaries	—	—	—	—	—	—	—	—	—	—	—	(710)	(710)
Partial disposal of interests in subsidiaries	—	58	—	—	—	—	—	—	—	—	58	25	83
Change in additional paid-in capital for not participating in the capital increase of a subsidiary	—	389	—	—	—	—	—	—	—	—	389	786	1,175
Net income for the year ended December 31, 2016	—	—	—	—	40,485	40,485	—	—	—	—	40,485	1,141	41,626
Other comprehensive loss for the year ended December 31, 2016	—	—	—	—	(1,725)	(1,725)	(131)	(142)	(1)	(274)	(1,999)	(57)	(2,056)
Total comprehensive income (loss) for the year ended December 31, 2016	—	—	—	—	38,760	38,760	(131)	(142)	(1)	(274)	38,486	1,084	39,570
Share-based payment transactions of subsidiaries	—	—	—	—	—	—	—	—	—	—	—	17	17
Net increase in noncontrolling interests	—	—	—	—	—	—	—	—	—	—	—	5	5
BALANCE, DECEMBER 31, 2016	77,574	147,180	77,574	2,676	55,657	135,907	46	(51)	—	(5)	360,656	6,272	366,928
BALANCE, DECEMBER 31, 2016 (IN MILLIONS OF US\$ —Note 6)	2,394	4,543	2,394	83	1,718	4,195	1	(1)	—	—	11,132	193	11,325

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, 2014, 2015 and 2016

(In Millions of New Taiwan or U.S. Dollars)

	2014	2015	2016	
	NTS	NTS	NTS	US\$ (Note 6)
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>				
Income before income tax	\$46,552	\$51,953	\$49,413	\$ 1,525
Adjustments to reconcile income before income tax to net cash provided by operating activities:				
Depreciation	31,896	30,368	29,106	898
Amortization	2,218	3,080	3,379	104
Provision for doubtful accounts	326	519	941	29
Interest expenses	46	33	20	1
Interest income	(288)	(306)	(189)	(6)
Dividend income	(78)	(218)	(391)	(12)
Compensation cost of share-based payment transactions	93	36	17	1
Share of profits of associates and joint ventures accounted for using equity method	(802)	(897)	(515)	(16)
Loss (gain) on disposal of investments accounted for using equity method	7	(4)	2	—
Impairment loss on available-for-sale financial assets	23	107	577	18
Impairment loss on investments accounted for using equity method	—	8	—	—
Provision for inventory and obsolescence	288	198	192	6
Impairment loss on property, plant and equipment	—	138	596	18
Reversal of impairment loss on investment properties	—	(142)	(148)	(5)
Impairment loss on intangible assets	—	—	—	—
Gain on disposal of financial instruments	(46)	—	—	—
Loss (gain) on disposal of property, plant and equipment	(26)	109	48	1
Gain on disposal of investment properties	(605)	—	—	—
Loss on disposal of intangible assets	—	—	—	—
Valuation loss (gain) on financial assets and liabilities at fair value through profit or loss, net	(1)	—	1	—
Loss (gain) on foreign exchange, net	(164)	54	(80)	(2)
Changes in operating assets and liabilities:				
Decrease (increase) in:				
Financial assets held for trading	—	1	—	—
Trade notes and accounts receivable	(3,617)	(1,172)	(4,613)	(142)
Receivables from related parties	(12)	39	28	1
Inventories	463	(1,852)	1,166	36
Prepayments	(116)	(327)	62	2
Other current monetary assets	1,268	(357)	(242)	(7)
Other current assets	741	889	214	6
Increase (decrease) in:				
Trade notes and accounts payable	2,972	(2,223)	2,497	77
Payables to related parties	(149)	203	151	5
Other payables	(1,868)	1,644	(76)	(2)
Provisions	20	(24)	(63)	(2)
Advance receipts	449	1,134	504	16
Other current liabilities	13	(112)	7	—
Deferred revenue	(303)	218	(70)	(2)
Net defined benefit plans	494	439	(8,539)	(264)
Cash generated from operations	79,794	83,536	73,995	2,284
Interest paid	(43)	(33)	(20)	(1)
Income tax paid	(8,373)	(7,178)	(9,023)	(278)
Net cash provided by operating activities	71,378	76,325	64,952	2,005

(Continued)

## CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

YEARS ENDED DECEMBER 31, 2014, 2015 and 2016

(In Millions of New Taiwan or U.S. Dollars)

	2014	2015	2016	
	NTS	NTS	NTS	US\$ (Note 6)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>				
Acquisition of available-for-sale financial assets	\$ (59)	\$ (29)	\$ (53)	\$ (2)
Proceeds from disposal of available-for-sale financial assets	85	2	39	1
Acquisition of time deposits and negotiable certificate of deposit with maturities of more than three months	(411)	(11,494)	(4,119)	(127)
Proceeds from disposal of time deposits and negotiable certificate of deposit with maturities of more than three months	471	11,824	2,834	88
Acquisition of held-to-maturity financial assets	—	(1,002)	—	—
Proceeds from disposal of held-to-maturity financial assets	4,258	4,450	1,875	58
Proceeds from capital reduction of available-for-sale financial assets	84	44	37	1
Acquisition of investments accounted for using equity method	(252)	(6)	(30)	(1)
Proceeds from disposal of investments accounted for using equity method	—	16	182	6
Net cash outflow on acquisition of subsidiaries	—	(114)	—	—
Acquisition of property, plant and equipment	(32,559)	(25,084)	(23,517)	(726)
Proceeds from disposal of property, plant and equipment	150	4	44	1
Proceeds from disposal of investment properties	1,215	—	—	—
Acquisition of intangible assets	(644)	(10,380)	(282)	(9)
Acquisition of investment properties	—	—	—	—
Decrease (increase) in other noncurrent assets	(719)	72	63	2
Interest received	340	337	198	6
Cash dividends received	667	907	1,066	33
Net cash used in investing activities	<u>(27,374)</u>	<u>(30,453)</u>	<u>(21,663)</u>	<u>(669)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>				
Proceeds from short-term loans	895	2,750	1,415	44
Repayment of short-term loans	(585)	(3,258)	(1,387)	(43)
Proceeds from long-term loans	348	—	—	—
Repayment of long-term loans	(148)	(190)	(150)	(5)
Increase in repurchase agreement collateralized by bonds	13,000	—	—	—
Decrease in repurchase agreement collateralized by bonds	(13,000)	—	—	—
Decrease in customers' deposits	(69)	(37)	(294)	(9)
Increase (decrease) in other noncurrent liabilities	181	12	(104)	(3)
Cash dividends and cash distributed from additional paid-in capital	(35,103)	(37,673)	(42,551)	(1,313)
Partial disposal of interests in subsidiaries without losing control	—	45	83	3
Cash dividends distributed to noncontrolling interests	(797)	(350)	(710)	(22)
Change in other noncontrolling interests	162	(485)	1,180	36
Net cash used in financing activities	<u>(35,116)</u>	<u>(39,186)</u>	<u>(42,518)</u>	<u>(1,312)</u>

(Continued)

**CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

**YEARS ENDED DECEMBER 31, 2014, 2015 and 2016**

**(In Millions of New Taiwan or U.S. Dollars)**

	<u>2014</u>	<u>2015</u>	<u>2016</u>	
	NT\$	NT\$	NT\$	US\$ (Note 6)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	\$ 87	\$ 25	\$ 58	\$ 2
NET INCREASE IN CASH AND CASH EQUIVALENTS	8,975	6,711	829	26
CASH AND CASH EQUIVALENTS, BEGINNING OF THE YEAR	<u>14,585</u>	<u>23,560</u>	<u>30,271</u>	<u>934</u>
CASH AND CASH EQUIVALENTS, END OF THE YEAR	<u>\$23,560</u>	<u>\$30,271</u>	<u>\$31,100</u>	<u>\$ 960</u>

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

(Concluded)



**CHUNGHWA TELECOM CO., LTD. AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****(In Millions of New Taiwan Dollars, Unless Stated Otherwise)**

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**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.

As the dominant telecommunications service provider of domestic and international fixed-line, Global System for Mobile Communications (“GSM”), and Third Generation (“3G”) in the ROC, Chunghwa is subject to additional regulations imposed by the ROC.

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”.

**2. APPROVAL OF FINANCIAL STATEMENTS**

The consolidated financial statements were authorized for issue by the management on April 17, 2017.

**3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES****Statement of Compliance**

The accompanying consolidated financial statements have been prepared in conformity with International Financial Reporting Standards as issued by the International Accounting Standard Board (collectively, “IFRSs”).

### **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.

### **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).

Income and expenses of subsidiaries acquired during the period are included in the consolidated statements of comprehensive income from the acquisition date.

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 intra-company transactions, balances, income and expenses are eliminated in full upon consolidation.

#### Attribution of total comprehensive income to the noncontrolling interests

Profit or loss and each component of other comprehensive income are attributed to the stockholders of the parent and to the 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:

Name of Investor	Name of Investee	Main Businesses and Products	Percentage of Ownership		Note
			2015	2016	
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd. ("SENAO")	Handset and peripherals retailer; sales of CHT mobile phone plans as an agent	29	29	1)
	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	69	69	
	Chunghwa International Yellow Pages 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")	Digital entertainment contents production, animated character licensing and endorsement, and mobile digital platform construction	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	

(Continued)

Name of Investor	Name of Investee	Main Businesses and Products	Percentage of Ownership		Note
			2015	2016	
	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")	Telecommunication 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	2)
	New Prospect Investments Holdings Ltd. (B.V.I.) ("New Prospect")	Investment	100	100	13)
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	89	89	
	Aval Technologies Co., Ltd. ("Aval")	Sale of information and communication technologies products	100	100	4)
Youth Co., Ltd.	ISPO Co., Ltd. ("ISPO")	Sale of information and communication technologies products	100	100	3)
	Youyi Co., Ltd. ("Youyi")	Maintenance of information and communication technologies products	100	100	3)
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	5)
Chunghwa System Integration Co., Ltd.	Concord Technology Co., Ltd. ("Concord")	Investment	100	100	

(Continued)

Name of Investor	Name of Investee	Main Businesses and Products	Percentage of Ownership		Note
			2015	2016	
Spring House Entertainment Tech. Inc.	Ceylon Innovation Co., Ltd. (“CEI”)	E-book publishing and copyright negotiation of digital music	100	—	6)
Chunghwa Investment Co., Ltd.	Chunghwa Precision Test Tech. Co., Ltd. (“CHPT”)	Production and sale of semiconductor testing components and printed circuit board	46	41	7)
	Chunghwa Investment Holding Co., Ltd. (“CIHC”)	Investment	100	—	8)
Concord Technology Co., Ltd.	Glory Network System Service (Shanghai) Co., Ltd. (“GNSS (Shanghai)”)	Design, development and production of computer and internet software, installation, maintenance and consulting services of information system integration, and sales of self-production products	100	100	9)
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	
Chunghwa Investment Holding Co., Ltd.	CHI One Investment Co., Limited (“COP”)	Investment	100	—	10)
Senao International HK Limited	Senao Trading (Fujian) Co., Ltd. (“STF”)	Sale of information and communication technologies products	100	100	
	Senao International Trading (Shanghai) Co., Ltd. (“SITS”)	Sale of information and communication technologies products	100	100	
	Senao International Trading (Shanghai) Co., Ltd. (“SEITS”)	Maintenance of information and communication technologies products	100	100	14)
	Senao International Trading (Jiangsu) Co., Ltd. (“SITJ”)	Sale of information and communication technologies products	100	100	

(Continued)

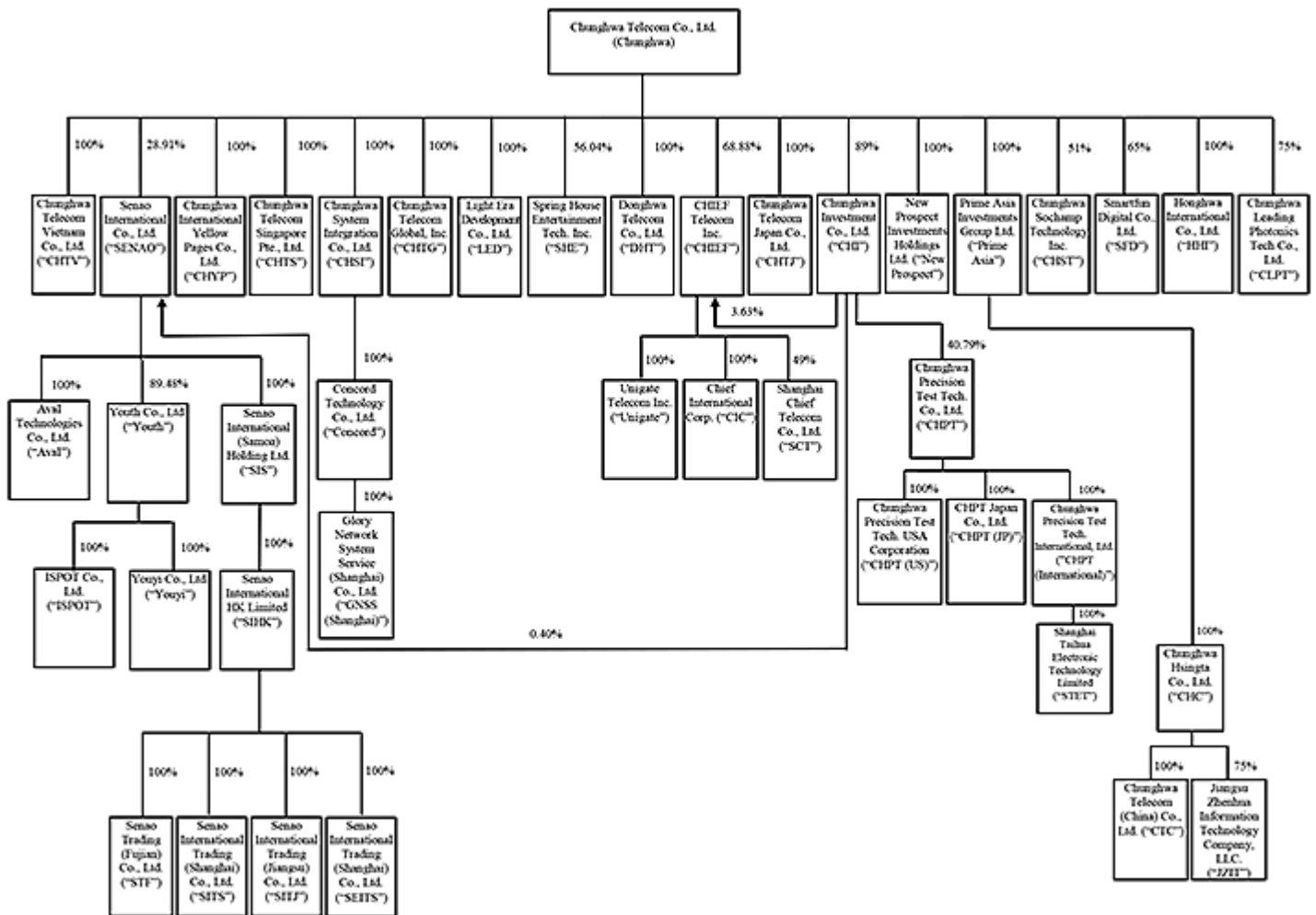
Name of Investor	Name of Investee	Main Businesses and Products	Percentage of Ownership		Note
			2015	2016	
Prime Asia Investments Group Ltd. (B.V.I.)	Chunghwa Hsingta Co., Ltd. ("CHC")	Investment	100	100	
Chunghwa Hsingta Co., Ltd. ("CHC")	Chunghwa Telecom (China) Co., Ltd. ("CTC")	Integrated information 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	75	11)
	Hua-Xiong Information Technology Co., Ltd. ("HXIT")	Providing intelligent buildings and smart home services	51	—	12)
Chunghwa Precision Test Tech. International, Ltd.	Shanghai Taihua Electronic Technology Limited ("STET")	Design of printed circuit board and related consultation service	100	100	

(Concluded)

- 1) Chunghwa owns approximately 29% equity shares of SENAO and had originally four out of seven seats of the Board of Directors of SENAO through the support of large beneficial stockholders. In order to comply with the local regulations, SENAO increased two seats of independent directors in June 2016; therefore, total seats of its Board of Directors increased to nine and Chunghwa continues to hold four out of nine seats of the Board of Directors. As Chunghwa remains the control over SENAO's relevant activities, the accounts of SENAO are included in the consolidated financial statements. The Company's equity ownership of SENAO increased to 29.31% due to SENAO's purchase of its treasury stock in June and July 2015.
- 2) Chunghwa invested 75% equity shares of CLPT in July 2016. CLPT mainly engages in production and sale of electronic components and finished products.
- 3) SENAO acquired 70% equity shares of Youth in September 2015. SENAO participated in Youth's cash capital increase in December 2015; therefore, the ownership interests of Youth increased to 89.48%. Youyi and ISPOT are 100% owned subsidiaries of Youth.
- 4) SENAO established a 100% owned subsidiary of Aval in October 2015. Aval mainly engages in sale of information and communication technologies products.
- 5) CHIEF invested 49% equity shares of SCT in August 2015. Based on the written agreement between the stockholders, CHIEF has two out of three seats of the Board of Directors of SCT. Therefore, CHIEF has control over SCT and the accounts of SCT are included in the consolidated financial statements.
- 6) CEI's liquidation was completed in August 2016 and SHE received the proceeds from the liquidation.
- 7) CHI disposed of some shares of CHPT in January 2015 and March 2016. Furthermore, CHI did not participate in the capital increase of CHPT in March 2016. Therefore, its ownership interest in CHPT decreased to 40.79%. However, considering the Company's absolute size, the relative size 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.

- 8) CIHC’s dissolution was approved in August 2016 and the liquidation was completed in September 2016. CHI received the proceeds from the liquidation.
- 9) GNSS (Shanghai) was approved to end its business and dissolve. The liquidation of GNSS (Shanghai) is still in progress.
- 10) COI completed its liquidation in July 2016 and CIHC received the proceeds from the liquidation.
- 11) JZIT was approved to end and dissolve its business in May 2016. The liquidation of JZIT is still in process.
- 12) HXIT’s dissolution was approved by local regulator in March 2016. HXIT completed its liquidation and annulled its company registration in May 2016. CHC received the proceeds from the liquidation.
- 13) New Prospect was approved to dissolve its business in April 2017. The liquidation of New Prospect is still in process.
- 14) SEITS was approved to end and dissolve its business in March 2017. The liquidation of SEITS is still in process.
- 15) Chunghwa invested 100% equity shares of Chunghwa Telecom (Thailand) Co., Ltd. (“CHTT”) in March 2017.

The following diagram presents information regarding the relationship and ownership percentages between Chunghwa and its subsidiaries as of December 31, 2016:



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**Business Combination**

Acquisitions of businesses are accounted for using the acquisition method. Acquisition-related costs are recognized in profit or loss as incurred.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any noncontrolling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

Noncontrolling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the present ownership instruments' proportionate share in the recognized amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of noncontrolling interests are measured at fair value.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Company reports its financial statements provisional amounts for the items for which the accounting is incomplete. During the measurement period, the Company retrospectively adjusts the provisional amounts recognized at the acquisition date or recognizes additional assets or liabilities to reflect new information obtained about facts and circumstances that existed as of the acquisition date and if known, would have affected the measurement of the amounts recognized as of that date.

**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 denominated in foreign currencies 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.

Chunghwa use New Taiwan dollars (NT\$) as the functional currency. 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 certificate 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.

When using the completed-contract method for its construction projects, LED recognizes the proceeds from customers as advances from customers for land and building before the construction project is completed. After completion of the construction project and ownership is transferred to the customers, LED recognizes the relevant revenues.

**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.

When the Company reduces its ownership interest in an associate or a joint venture but the Company continues to use the equity method, the Company reclassifies to profit or loss the proportion of the gain or loss that had previously been recognized in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

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.

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. 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.

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 and Intangible Assets Other Than Goodwill**

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 with indefinite useful lives and 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.

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 or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from 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. The regular way of transaction means the purchase or sale of financial assets delivered within the time frame established by regulation or convention in the marketplace.

##### **1) Measurement category**

###### **a) Financial assets at fair value through profit and loss (FVTPL)**

Financial assets are classified as at FVTPL when the financial asset is either held for trading or it is designated as at FVTPL.

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

Held-to-maturity financial assets are non-derivative financial assets with fixed or determinable payments and fixed maturity date that the Company has positive intention and ability to hold to maturity other than those that are designated as at fair value through profit or loss or as available-for-sale and those that meet the definition of loans and receivables on initial recognition.

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 unlisted 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. 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 are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. 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

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, 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 a trade note 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.

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 Company derecognizes financial liabilities when, and only when, the Company's obligations are discharged, cancelled or they expire. 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 a variety of 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.

Hedge accounting is discontinued prospectively when the Company revokes the designated hedging relationship, or when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer meets the criteria for hedge accounting. 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 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**

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 that is not contingent upon the delivery of products.

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 inflows 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.

### **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 rereasurement) 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 rereasurement 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

The current tax is based on taxable profit for the year. Taxable profit differs from profit as reported in the consolidated statement of comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Income tax (10%) on undistributed earnings is accrued during the period the earnings arise and adjusted to the extent that distributions are approved by the stockholders in the following year.

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 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 for the year

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, which are described in Note 3, 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 and 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

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. Provision for inventory valuation and obsolescence

Inventories are stated at the lower of cost or net realizable value. Estimates of net realizable value are based on the most reliable evidence available at the time the estimates are made at the end of reporting period. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the end of the period to the extent that such events confirm conditions existing at the end of the period. Inventory write-downs are 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.

d. Impairment of tangible and intangible assets

In the process of evaluating the potential impairment of tangible and intangible assets, the Company is required to consider internal and external indicators of impairment and make subjective judgments in determining the independent cash flows, useful lives, expected future revenue and expenses related to the specific asset groups within the context of the telecommunication industry. Any changes in these estimates based on changed economic conditions or business strategies could result in significant impairment charges in future periods.

e. 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.

f. 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, rate of employee turnover, and long-term average future salary increase. 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.

g. 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 INTERNATIONAL FINANCIAL REPORTING STANDARDS

### Amendments to IFRSs and the New Interpretation That Are Mandatorily Effective for the Current Year

The Company has applied the amendments to IFRSs included in the Annual Improvements to IFRSs 2012- 2014 Cycle, Amendments to IAS 1: Disclosure Initiative, and Amendments to IAS 16 and IAS 38: Clarification of Acceptable Methods of Depreciation and Amortization for the first time in 2016. The application of these amendments has had no impact on the disclosures or amounts recognized in the Company's consolidated financial statements.

### New and Revised IFRSs in Issue But Not Yet Effective

The Company has not applied the following new and revised IFRSs that have been issued but are not yet effective.

New, Revised or Amended Standards and Interpretations	Effective Date Issued by IASB (Note 1)
Amendments to IFRSs	Annual Improvements to IFRSs 2014-2016 Cycle
Amendments to IFRS 2	Classification and Measurement of Share-based Payment Transactions
IFRS 9	Financial Instruments
Amendments to IFRS 9 and IFRS 7	Mandatory Effective Date of IFRS 9 and Transition Disclosures
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture
IFRS 15	Revenue from Contracts with Customers
Amendments to IFRS 15	Clarifications to IFRS 15
IFRS 16	Leases
Amendments to IAS 7	Disclosure Initiative
Amendments to IAS 12	Deferred Tax: Recovery of Underlying Assets
Amendments to IAS 40	Transfers of investment property
IFRIC 22	Foreign Currency Transactions and Advance Consideration

Note 1: The aforementioned new, revised or amended standards or interpretations are effective after fiscal year beginning on or after the effective dates, unless specified otherwise.

Note 2: The amendment to IFRS 12 is retrospectively applied for annual periods beginning on or after January 1, 2017; the amendment to IAS 28 is retrospectively applied for annual periods beginning on or after January 1, 2018.

Except for the following items, the Company believes the adoption of the aforementioned new and revised IFRSs will not have material impact on the Company's consolidated financial statements.

a. 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 will supersede IAS 18 "Revenue", IAS 11 "Construction Contracts" and a number of revenue-related interpretations.

When applying IFRS 15, the Company shall recognize revenue by applying the following steps:

- 1) Identify the contract with the customer;
- 2) Identify the performance obligations in the contract;
- 3) Determine the transaction price;
- 4) Allocate the transaction price to the performance obligations in the contracts; and
- 5) Recognize revenue when the entity satisfies a performance obligation.

Upon the application of IFRS 15 and its related amendments, the Company will allocate 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 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 will not change the total revenue recognized, but will change 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 costs of obtaining a contract will be recognized as an asset to the extent the Company expects to recover those costs. Such asset will be amortized on a basis that is consistent with the transfer to the customer of the goods or services to which the asset relates. This will lead to the later recognition of charges for certain customer-obtaining costs.

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 determines 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.

When IFRS 15 and its amendments become effective, entities may elect to apply this Standard and the related amendments either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying this Standard recognized at the date of initial application. The Company is currently evaluating these transition methods and the related impacts on the Company's consolidated financial statements.

b. IFRS 16 “Leases”

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 and a number of related interpretations.

Under 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 low-value and short-term leases. The Company may elect to apply the accounting method similar to the accounting for operating lease under IAS 17 to the low-value and short-term leases. On the consolidated statements of comprehensive income, the Company should present the depreciation expense charged on the right-of-use asset separately from interest expense accrued on the lease liability and discloses such amounts in the footnotes; interest is computed by using effective interest method. On the consolidated statements of cash flows, cash payments for the principal portion of the lease liability are classified within financing activities; cash payments for interest portion are classified within operating activities.

The application of IFRS 16 is not expected to have a material impact on the accounting of the Company as lessor.

When IFRS 16 becomes effective, the Company may elect to apply this Standard either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of the initial application of this Standard recognized at the date of initial application.

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.

## 6. U.S. DOLLAR AMOUNTS

The Company maintains its accounts and expresses its consolidated financial statements in New Taiwan dollars. For readers’ convenience only, U.S. dollar amounts presented in the accompanying consolidated financial statements have been translated from New Taiwan dollars as set forth in the statistical release of the Federal Reserve Board of the United States as of December 30, 2016, which was NT\$32.40 to US\$1.00. The convenience translations should not be construed as representations that the New Taiwan dollar amounts have been, could have been, or could in the future be, converted into U.S. dollars at this or any other rate of exchange.

## 7. CASH AND CASH EQUIVALENTS

	December 31	
	2015	2016
	NT\$	NT\$
	(In Millions)	
Cash		
Cash on hand	\$ 333	\$ 370
Bank deposits	7,616	7,240
	<u>7,949</u>	<u>7,610</u>

(Continued)

	December 31	
	2015	2016
	NT\$	NT\$
(In Millions)		
Cash equivalents (investments with maturities of less than three months)		
Commercial paper	\$11,914	\$ 11,436
Negotiable certificate of deposit	7,600	10,800
Time deposits	2,808	1,254
	<u>22,322</u>	<u>23,490</u>
	<u>\$30,271</u>	<u>\$ 31,100</u>

(Concluded)

The annual yield rates of bank deposits, commercial paper, negotiable certificate of deposit and time deposits as of balance sheet dates were as follows:

	December 31	
	2015	2016
Bank deposits	0.00%-1.10%	0.00%-0.42%
Commercial paper	0.35%-0.41%	0.32%-0.42%
Negotiable certificate of deposit	0.36%-0.45%	0.35%-0.50%
Time deposits	0.55%-3.80%	0.40%-3.30%

#### 8. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2015	2016
	NT\$	NT\$
(In Millions)		
Financial assets held for trading		
Derivatives (not designated for hedge)		
Forward exchange contracts	<u>\$—</u>	<u>\$—</u>
Financial liabilities held for trading		
Derivatives (not designated for hedge)		
Forward exchange contracts	<u>\$—</u>	<u>\$ 1</u>

Outstanding forward exchange contracts not designated for hedge as of balance sheet dates were as follows:

	Currency	Maturity Period	Contract Amount (In Millions)
<u>December 31, 2015</u>			
Forward exchange contracts—buy	EUR/NT\$	2016.03-06	EUR18/NT\$659
Forward exchange contracts—buy	US\$/NT\$	2016.01	US\$1/NT\$26

(Continued)

	Currency	Maturity Period	Contract Amount (In Millions)
<b>December 31, 2016</b>			
Forward exchange contracts—buy	EUR/NT\$	2017.03	EUR5/NT\$167
Forward exchange contracts—buy	US\$/NT\$	2017.01	US\$ 2/NT\$55

(Concluded)

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.

## 9. AVAILABLE-FOR-SALE FINANCIAL ASSETS

	December 31	
	2015 NT\$	2016 NT\$
	(In Millions)	
Equity securities		
Domestic listed stocks	\$3,243	\$2,521
Domestic non-listed stocks	1,990	1,949
Foreign non-listed stocks	278	294
	<u>\$5,511</u>	<u>\$4,764</u>
Current	\$ —	\$ —
Noncurrent	<u>5,511</u>	<u>4,764</u>
	<u>\$5,511</u>	<u>\$4,764</u>

CHI evaluated and concluded its listed available-for-sale financial assets were partially impaired and recorded an impairment loss of \$26 million for the year ended December 31, 2015. Chunghwa evaluated and concluded its listed available-for-sale financial assets were impaired and recorded an impairment loss of \$577 million for the year ended December 31, 2016.

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 carried at costs less any impairment losses at the balance sheet dates.

The Company disposed non-listed available-for-sale financial assets with carrying amounts of \$6 million, \$2 million and \$9 million for the years ended 2014, 2015 and 2016, respectively, and recognized the gains (losses) from the disposal of \$1 million, \$(0.4) million and \$1 million for the years ended December 31, 2014, 2015 and 2016, respectively.

After the Company evaluated the financial positions and future operation results of non-listed available-for-sale financial assets, the Company concluded some of its investments that have ceased their operations were fully impaired, and recognized an impairment loss of \$9 million, \$77 million and nil for the years ended December 31, 2014, 2015 and 2016, respectively. In addition, some of its investments were encountering profit recession or deficit. The Company concluded the recoverable amount of such investments which represented present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset or based on the market approach using financial indicators such as PE ratios of the comparable listed companies was lower than the carrying amount. Therefore, the Company recognized impairment losses of \$14 million, \$4 million and nil for the years ended December 31, 2014, 2015 and 2016, respectively.



**10. HELD-TO-MATURITY FINANCIAL ASSETS**

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
Corporate bonds	\$3,871	\$1,990
Bank debentures	150	150
	<u>\$4,021</u>	<u>\$2,140</u>
Current	\$1,881	\$2,140
Noncurrent	2,140	—
	<u>\$4,021</u>	<u>\$2,140</u>

The related information of corporate bonds and bank debentures as of balance sheet dates was as follows:

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
<b><u>Corporate bonds</u></b>		
Par value	\$ 3,865	\$ 1,990
Nominal interest rate	1.18%-2.49%	1.18%-1.35%
Effective interest rate	1.15%-1.54%	1.20%-1.35%
Average remaining maturity life	1.04 years	0.34 year
<b><u>Bank debentures</u></b>		
Par value	\$ 150	\$ 150
Nominal interest rate	1.25%	1.25%
Effective interest rate	1.25%	1.25%
Average remaining maturity life	1.41 years	0.41 year

**11. TRADE NOTES AND ACCOUNTS RECEIVABLE, NET**

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
Trade notes and accounts receivable	\$28,260	\$32,795
Less: Allowance for doubtful accounts	(1,334)	(1,773)
	<u>\$26,926</u>	<u>\$31,022</u>

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 receivables 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:

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NTS</b>	<b>NTS</b>
	<b>(In Millions)</b>	
Non-overdue	\$25,708	\$29,596
Less than 30 days	733	1,050
31-60 days	346	348
61-90 days	241	286
91-120 days	193	198
121-180 days	121	119
More than 181 days	918	1,198
	<u>\$28,260</u>	<u>\$32,795</u>

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 sheets dates was as follows:

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NTS</b>	<b>NTS</b>
	<b>(In Millions)</b>	
Less than 30 days	\$128	\$256
31-60 days	16	47
61-90 days	95	9
91-120 days	58	74
121-180 days	2	1
More than 181 days	20	13
	<u>\$319</u>	<u>\$400</u>

The above aging analysis was based on days overdue.

Movements of the allowance for doubtful accounts were as follows:

	<b>Individually Assessed for Impairment</b>	<b>Collectively Assessed for Impairment</b>	<b>Total</b>
	<u>NT\$</u>	<u>NT\$</u>	<u>NT\$</u>
	(In Millions)		
Balance on January 1, 2014	\$ 221	\$ 701	\$ 922
Add: Provision for doubtful accounts	55	237	292
Deduct: Amounts written off	—	(165)	(165)
Balance on December 31, 2014	276	773	1,049
Add: Provision for doubtful accounts	88	392	480
Deduct: Amounts written off	—	(195)	(195)
Balance on December 31, 2015	364	970	1,334
Add: Provision for doubtful accounts	715	228	943
Deduct: Amounts written off	(274)	(230)	(504)
Balance on December 31, 2016	<u>\$ 805</u>	<u>\$ 968</u>	<u>\$1,773</u>

## 12. INVENTORIES

	<b>December 31</b>	
	<u>2015</u>	<u>2016</u>
	<u>NT\$</u>	<u>NT\$</u>
	(In Millions)	
Merchandise	\$5,849	\$4,136
Project in process	697	961
Work in process	100	109
Raw materials	71	143
	<u>6,717</u>	<u>5,349</u>
Land held under development	1,999	1,999
Construction in progress	64	75
	<u>\$8,780</u>	<u>\$7,423</u>

The operating costs related to inventories were \$51,341 million, \$52,666 million and \$54,183 million for the years ended December 31, 2014, 2015 and 2016, respectively.

For the years ended December 31, 2014, 2015 and 2016, the valuation loss on inventories recognized as operating costs included the amounts of \$288 million, \$198 million and \$192 million, respectively.

As of December 31, 2015 and 2016, inventories of \$2,063 million and \$2,074 million, 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, 2015 and 2016 was developed by LED for Qingshan Sec., Dayuan Dist., Taoyuan City project.

**13. PREPAYMENTS**

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
Prepaid rents	\$3,275	\$2,934
Others	3,006	3,285
	<u>\$6,281</u>	<u>\$6,219</u>
<b>Current</b>		
Prepaid rents	\$1,033	\$ 899
Others	1,636	2,079
	<u>\$2,669</u>	<u>\$2,978</u>
<b>Noncurrent</b>		
Prepaid rents	\$2,242	\$2,035
Others	1,370	1,206
	<u>\$3,612</u>	<u>\$3,241</u>

**14. OTHER CURRENT MONETARY ASSETS**

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
Time deposits and negotiable certificates of deposit with maturities of more than three months	\$2,286	\$3,568
Others	1,015	1,253
	<u>\$3,301</u>	<u>\$4,821</u>

The annual yield rates of time deposits and negotiable certificates of deposit with maturities of more than three months at the balance sheet dates were as follows:

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
Time deposits and negotiable certificates of deposit with maturities of more than three months	0.11%-3.50%	0.11%-1.95%

## 15. SUBSIDIARIES

### a. Information on significant noncontrolling interest subsidiary

The table below shows details of less than wholly owned subsidiaries of the Company that have material noncontrolling interests:

Subsidiaries	Place of Incorporation and Principal Place of Business	Proportion of Ownership Interests and Voting Rights Held by Noncontrolling Interests				
		December 31		December 31		
		2015		2016		
SENAO	Taiwan	71%		71%		
		Profit Allocated to Noncontrolling Interests Year Ended December 31			Accumulated Noncontrolling Interests December 31	
		2014	2015	2016	2015	2016
		NT\$	NT\$	NT\$	NT\$	NT\$
		(In Millions)				
SENAO		\$ 436	\$ 551	\$ 690	\$ 3,942	\$ 4,069
Individually immaterial subsidiaries with noncontrolling interests					1,123	2,203
					\$ 5,065	\$ 6,272

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 intracompany eliminations.

	December 31	
	2015	2016
	NT\$	NT\$
	(In Millions)	
Current assets	\$7,423	\$7,762
Noncurrent assets	\$2,615	\$2,535
Current liabilities	\$4,398	\$4,466
Noncurrent liabilities	\$ 138	\$ 155
Equity attributable to the parent	\$1,560	\$1,607
Noncontrolling interests	\$3,942	\$4,069

	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>NTS</b>	<b>NTS</b>	<b>NTS</b>
	<b>(In Millions)</b>		
Revenue	\$41,753	\$35,944	\$34,453
Expenses	41,146	35,171	33,476
Profit for the year	<u>\$ 607</u>	<u>\$ 773</u>	<u>\$ 977</u>
Profit attributable to the parent	\$ 171	\$ 222	\$ 287
Profit attributable to the noncontrolling interests	436	551	690
Profit for the year	<u>\$ 607</u>	<u>\$ 773</u>	<u>\$ 977</u>
Other comprehensive income attributable to the parent	\$ 8	\$ (1)	\$ (21)
Other comprehensive income attributable to the noncontrolling interests	21	(2)	(53)
Other comprehensive income for the year	<u>\$ 29</u>	<u>\$ (3)</u>	<u>\$ (74)</u>
Total comprehensive income attributable to the parent	\$ 179	\$ 222	\$ 266
Total comprehensive income attributable to the noncontrolling interests	457	548	637
Total comprehensive income for the year	<u>\$ 636</u>	<u>\$ 770</u>	<u>\$ 903</u>
Dividends paid to noncontrolling interests	<u>\$ 742</u>	<u>\$ 274</u>	<u>\$ 526</u>
Net cash inflow from operating activities	\$ 1,233	\$ 1,739	\$ 531
Net cash inflow (outflow) from investing activities	(115)	54	130
Net cash outflow from financing activities	(533)	(1,530)	(677)
Effect of exchange rate changes on cash and cash equivalents	9	11	(7)
Net cash inflow (outflow)	<u>\$ 594</u>	<u>\$ 274</u>	<u>\$ (23)</u>

b. Equity transactions with noncontrolling interests

The Company's equity ownership of CHPT decreased from 50.62% as of January 1, 2014 to 47.65% as of December 31, 2014 due to CHI did not participate the CHPT's capital increase in August and September 2014. CHI disposed of some shares of CHPT in January 2015, and the ownership interest of CHPT decreased from 47.65% to 45.68%. The Company's equity ownership of CHPT decreased to 40.79% as of December 31, 2016 due to CHI disposed of some shares of CHPT and did not participate the CHPT'S capital increase in March 2016.

SENAO participated in share subscription of Youth in December 2015 at a percentage different from its original ownership interest. Therefore, the ownership interest of Youth increased from 70% to 89.48%.

SENAO purchased its treasury stock in June and July 2015, and the Company's ownership interest of SENAO increased from 28.18% to 29.31%.

The above transactions were accounted for as equity transactions since the Company did not cease to have control over these subsidiaries.

The detailed information of the equity transactions for the years ended December 31, 2014, 2015 and 2016 was as follows:

	Year Ended December 31					
	2014	2015		2016		
	CHI Did Not Participate in the Capital Increase of CHPT NT\$	CHI Disposed Some Shares of CHPT NT\$	SENAO Purchased Its Treasury Stock NT\$	SENAO Participated in Youth's Share Subscription NT\$	CHI Did Not Participate in the Capital Increase of CHPT NT\$	CHI Disposed Some Shares of CHPT NT\$
	(In Millions)					
Cash consideration received from (paid to) Noncontrolling interests	\$ 162	\$ 45	\$ (492)	\$ —	\$ 1,175	\$ 83
The proportionate share of the carrying amount of the net assets of the subsidiary transferred (to) from noncontrolling interests	(159)	(18)	416	(0.4)	(786)	(25)
Differences arising from equity transactions	\$ 3	\$ 27	\$ (76)	\$ (0.4)	\$ 389	\$ 58
<u>Line items for equity transaction adjustments</u>						
Additional paid-in capital—difference between consideration received or paid and the carrying amount of the subsidiaries' net assets upon actual disposal or acquisition	\$ —	\$ 27	\$ —	\$ —	\$ —	\$ 58
Additional paid-in capital—arising from changes in equities of subsidiaries	\$ 3	\$ —	\$ (15)	\$ (0.4)	\$ 389	\$ —
Unappropriated earnings	\$ —	\$ —	\$ (61)	\$ —	\$ —	\$ —

c. Business combinations

1) Subsidiaries acquired

Principal Activity	Date of Acquisition	Proportion of Voting Equity Interests Acquired (%)	Consideration Transferred NT\$ (In Millions)
Youth Co., Ltd. and its subsidiaries	Sale and maintenance of information and communication technologies products	September 2, 2015	70
			\$ 135

Youth and its subsidiaries were acquired in cash in order to continue the expansion of SENAO's activities in selling telecommunications products.

2) Assets acquired and liabilities assumed at the date of acquisition

	<b>Youth and Its Subsidiaries</b>
	<b>NT\$</b>
	<b>(In Millions)</b>
<b>Current assets</b>	
Cash and cash equivalents	\$ 21
Accounts and other receivables	10
Inventories	30
Prepayments	6
Other current assets	6
<b>Noncurrent assets</b>	
Property, plant and equipment	36
Intangible assets	259
Refundable deposits	22
Deferred income tax assets	4
Other noncurrent assets	32
<b>Current liabilities</b>	
Short-term loans	(54)
Trade notes payable	(9)
Accounts and other payables	(75)
Other current liabilities	(80)
<b>Noncurrent liabilities</b>	
Long-term loans	(40)
Deferred income tax liabilities	(44)
Other noncurrent liabilities	(10)
	<u>\$ 114</u>

3) Goodwill arising on acquisition

	<b>Youth and Its Subsidiaries</b>
	<b>NT\$</b>
	<b>(In Millions)</b>
Consideration transferred	\$ 135
Add: Noncontrolling interest (30% of the recognized amounts of Youth and its subsidiaries' identifiable net assets)	34
Less: Fair value of identifiable net assets acquired	(114)
Goodwill arising on acquisition	<u>\$ 55</u>

Goodwill that arose in the acquisition of Youth and its subsidiaries mainly included the amount in relation to the benefit of expected synergies from integrating the businesses of Youth and its subsidiaries into the Company that operate sales and maintenance of Apple's products for many years. These benefits were not recognized separately from goodwill because they did not meet the recognition criteria for identifiable intangible assets.



Goodwill arising from business combinations is not deductible for tax purposes.

SENAO performed impairment test of goodwill arising from the above acquisition and concluded that no impairment loss was required to recognize for the years ended December 31, 2015 and 2016.

4) Net cash outflow on acquisition of subsidiaries

	<b>Youth and Its Subsidiaries</b>
	NTS
	(In Millions)
Consideration paid in cash	\$ 135
Less: Cash and cash equivalents acquired	(21)
	<u>\$ 114</u>

5) Impact of acquisitions on the results of the Company's financial performance

The results of the acquired subsidiaries' financial performance from the acquisition date to December 31, 2015, were as follows:

	<b>Youth and Its Subsidiaries</b>
	NTS
	(In Millions)
Revenue	<u>\$ 188</u>
Net loss	<u>\$ 18</u>

Had these business combinations been in effect at the beginning of the annual reporting period, the Company's pro-forma revenue and net income would have been \$232,187 million and \$42,774 million, respectively, for the year ended December 31, 2015. This pro-forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Company that actually would have been achieved had the acquisition been completed on January 1, 2015, nor is it intended to be a projection of future results.

In determining the pro-forma revenue and net income of the Company had Youth and its subsidiaries been acquired at the beginning of 2015, management calculated depreciation of property, plant and equipment and amortization of intangible assets acquired on the basis of the fair values arising in the initial accounting for the business combination rather than the carrying amounts recognized in the pre-acquisition financial statements.

## 16. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	NTS	NTS
	(In Millions)	
Investments in associates	\$2,668	\$2,383
Investments in joint ventures	227	3
	<u>\$2,895</u>	<u>\$2,386</u>

## a. Investments in associates

Investments in associates were as follows:

	<b>Carrying Amount</b>	
	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	NT\$	NT\$
	(In Millions)	
<b>Listed</b>		
Senao Networks, Inc. (“SNI”)	\$ 699	\$ 680
<b>Non-listed</b>		
ST-2 Satellite Ventures Pte. Ltd. (“STS”)	495	467
International Integrated System, Inc. (“IISI”)	297	307
Viettel-CHT Co., Ltd. (“Viettel-CHT”)	316	275
Taiwan International Standard Electronics Co., Ltd. (“TISE”)	338	142
Skysoft Co., Ltd. (“SKYSOFT”)	137	145
KingwayTek Technology Co., Ltd. (“KWT”)	82	84
So-net Entertainment Taiwan Limited (“So-net”)	106	111
Taiwan International Ports Logistics Corporation (“TIPL”)	69	57
Click Force Co., Ltd. (“CF”)	39	37
Alliance Digital Tech Co., Ltd. (“ADT”)	14	32
Dian Zuan Integrating Marketing Co., Ltd. (“DZIM”)	40	22
HopeTech Technologies Limited (“HopeTech”)	36	24
MeWorks LIMITED (HK) (“MeWorks”)	—	—
	<u>\$2,668</u>	<u>\$2,383</u>

The percentages of ownership and voting rights in associates held by the Company as of balance sheet dates were as follows:

	<b>% of Ownership and</b>	
	<b>Voting Rights</b>	
	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
Senao Networks, Inc. (“SNI”)	34	34
ST-2 Satellite Ventures Pte., Ltd. (“STS”)	38	38
International Integrated System, Inc. (“IISI”)	33	32
Viettel-CHT Co., Ltd. (“Viettel-CHT”)	30	30
Taiwan International Standard Electronics Co., Ltd. (“TISE”)	40	40
Skysoft Co., Ltd. (“SKYSOFT”)	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
Alliance Digital Tech Co., Ltd. (“ADT”)	13	14
Dian Zuan Integrating Marketing Co., Ltd. (“DZIM”)	26	26
HopeTech Technologies Limited (“HopeTech”)	45	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		
	2014	2015	2016
	NT\$	NT\$	NT\$
	(In Millions)		
The Company's share of profits	\$823	\$ 926	\$557
The Company's share of other comprehensive income (loss)	5	(19)	(47)
The Company's share of total comprehensive income	<u>\$828</u>	<u>\$ 907</u>	<u>\$510</u>

The Level 1 fair values based on the closing market prices of SNI as of the balance sheet dates were as follows:

	December 31	
	2015	2016
	NT\$	NT\$
	(In Millions)	
SNI	<u>\$3,556</u>	<u>\$2,537</u>

Chunghwa did not participate in the capital increase of KWT in August 2014 and November 2014 and the ownership interest decreased to 27% after the capital increase of KWT. Chunghwa sold its partial ownership interest in KWT in January 2015. The gain on disposal of KWT was \$7 million and the ownership interest decreased to 26% after the disposal.

Chunghwa and Taiwan International Ports Corporation, Ltd. established TIPL in October 2014. Chunghwa invested \$80 million cash and held 27% ownership interest of TIPL. TIPL engages mainly in logistics service of increasing cargo movement efficiency.

DZIM increased its capital in April 2014 and June 2014. Chunghwa participated in the capital increase of DZIM by investing \$49 million in April 2014. SENA O participated in the capital increase of DZIM by investing \$24 million in April 2014. As of December 31, 2016, the Company held 26% ownership interest of DZIM. DZIM engages mainly in information technology service and general advertisement service.

CHYP participated in the capital increase of CF by investing \$39 million and \$6 million in November 2014 and April 2015, respectively. CHYP holds 49% ownership interest of CF. CF engages mainly in advertisement services.

Chunghwa did not participate in the capital increase of ADT in April 2014 and October 2014, and the ownership interest decreased to 13% after the capital increase of ADT. Chunghwa participated in the capital increase of ADT by investing \$30 million in December 2016 at a percentage different from its original ownership interest and the ownership interest of ADT increased to 14%. Chunghwa still has one out of five seats in the Board of Directors of ADT after the capital increase. Therefore, Chunghwa remains significant influence over ADT. ADT engages mainly in the development of mobile payments and information processing service.

Sertec completed its liquidation in June 2015. CHI recognized the gain on disposal of Sertec of \$1 million and received the proceeds from disposal in July 2015.

CHI disposed all ownership interest in Panda Monium Company Ltd. in September 2015.

Prime Asia participated in the capital increase of MeWorks by investing \$10 million and held 20% ownership in May 2014. Based on the share of capital commitments, Prime Asia has two seats out of five seats in the Board of Directors; therefore it has significant influence over MeWorks. As the operation of MeWorks ceased, the Company concluded that this investment was fully impaired. The Company recognized an impairment loss of \$8 million for the year ended December 31, 2015. MeWorks engages mainly in investment business.

The Company's share of profit (loss) and other comprehensive income (loss) of associates was recognized based on the audited financial statements.

b. Investments in joint ventures

Investments in joint ventures were as follows:

	<u>Carrying Amount</u>		<u>% of Ownership and Voting Rights</u>	
	<u>December 31</u>		<u>December 31</u>	
	<u>2015</u>	<u>2016</u>	<u>2015</u>	<u>2016</u>
	<u>NT\$</u>	<u>NT\$</u>		
	<u>(In Millions)</u>			
<u>Non-listed</u>				
Huada Digital Corporation ("HDD")	\$ 207	\$ —	50	50
Chunghwa Benefit One Co., Ltd. ("CBO")	20	3	50	50
	<u>\$ 227</u>	<u>\$ 3</u>		

In March 2016, the stockholders of HDD approved that HDD should start its dissolution from March 31, 2016. Chunghwa received the proceeds from the liquidation in September 2016 and recognized the disposal loss of \$0.4 million. The liquidation of HDD was completed in March 2017.

Chunghwa invested in CBO in February 2014 at \$50 million cash to acquire 50% of its shares and the rest of 50% ownership interest was held by Benefit One Asia Pte. Ltd. ("BOA"), and each obtained half of director seats. Thus, neither Chunghwa nor BOA obtained control over CBO. CBO engages mainly in e-commerce business for employees of corporate members and personal customers. In December 2016, the stockholders of CBO approved that CBO should start its dissolution from December 31, 2016. The liquidation of CBO is still in process.

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:

	<u>Year Ended December 31</u>		
	<u>2014</u>	<u>2015</u>	<u>2016</u>
	<u>NT\$</u>	<u>NT\$</u>	<u>NT\$</u>
	<u>(In Millions)</u>		
The Company's share of loss	\$ (21)	\$ (29)	\$ (42)
The Company's share of other comprehensive income	—	—	—
The Company's share of total comprehensive loss	<u>\$ (21)</u>	<u>\$ (29)</u>	<u>\$ (42)</u>







	<b>Investment Properties</b>
	<b>NTS</b>
	<b>(In Millions)</b>
<u>Accumulated depreciation and impairment</u>	
Balance on January 1, 2015	\$ (1,262)
Depreciation expense	(18)
Disposal	—
Reclassification	(18)
Reversal of impairment loss	142
Balance on December 31, 2015	<u>\$ (1,156)</u>
<u>Cost</u>	
Balance on January 1, 2016	\$ 9,058
Additions	—
Reclassification	137
Balance on December 31, 2016	<u>\$ 9,195</u>
<u>Accumulated depreciation and impairment</u>	
Balance on January 1, 2016	\$ (1,156)
Depreciation expense	(19)
Reclassification	(53)
Reversal of impairment loss	148
Balance on December 31, 2016	<u>\$ (1,080)</u>

(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 in 2015 and 2016. Therefore, the Company recognized reversals of impairment loss of \$142 million and \$148 million for the years ended December 31, 2015 and 2016, 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.

LED disposed its investment property in October 2014. The disposal price is \$1,230 million, related cost is \$625 million (including carrying value of \$610 million and related disposal expense of \$15 million), and the disposal gain was \$605 million.



The fair values of the Company's investment properties as of December 31, 2015 and 2016 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	
	2015	2016
	NTS	NTS
	(In Millions)	
Fair value	\$ 17,694	\$ 17,778
Overall capital interest rate	1.49%-2.28%	1.46%-2.20%
Profit margin ratio	10%-20%	10%-20%
Discount rate	1.21%-1.28%	1.04%
Capitalization rate	0.44%-1.73%	0.43%-1.78%

All of the Company's investment properties are held under freehold interest.

## 19. INTANGIBLE ASSETS

	December 31	
	2015	2016
	NTS	NTS
	(In Millions)	
Carrying amount		
3G and 4G concession	\$48,601	\$45,796
Computer software	1,266	995
Goodwill	218	218
Others	362	344
	<u>\$50,447</u>	<u>\$47,353</u>

	3G and 4G	Computer	Goodwill	Others	Total
	Concession	Software			
	NTS	NTS			
	(In Millions)				
<u>Cost</u>					
Balance on January 1, 2014	\$ 49,254	\$ 2,637	\$ 181	\$ 118	\$52,190
Additions-acquired separately	—	611	—	33	644
Disposal	—	(56)	—	—	(56)
Effect of foreign exchange difference	—	—	—	—	—
Balance on December 31, 2014	<u>\$ 49,254</u>	<u>\$ 3,192</u>	<u>\$ 181</u>	<u>\$ 151</u>	<u>\$52,778</u>
<u>Accumulated amortization and impairment</u>					
Balance on January 1, 2014	\$ (6,436)	\$ (1,306)	\$ (18)	\$ (31)	\$ (7,791)
Amortization expenses	(1,668)	(543)	—	(7)	(2,218)
Disposal	—	56	—	—	56
Effect of foreign exchange difference	—	—	—	—	—
Balance on December 31, 2014	<u>\$ (8,104)</u>	<u>\$ (1,793)</u>	<u>\$ (18)</u>	<u>\$ (38)</u>	<u>\$ (9,953)</u>

(Continued)

	<u>3G and 4G Concession</u> NT\$	<u>Computer Software</u> NT\$	<u>Goodwill</u> NT\$	<u>Others</u> NT\$	<u>Total</u> NT\$
	(In Millions)				
<u>Cost</u>					
Balance on January 1, 2015	\$ 49,254	\$ 3,192	\$ 181	\$ 151	\$ 52,778
Additions-acquired separately	9,955	424	—	1	10,380
Disposal	—	(375)	—	(2)	(377)
Effect of foreign exchange difference	—	—	—	—	—
Acquisitions through business combinations	—	—	55	259	314
Others	—	8	—	—	8
Balance on December 31, 2015	<u>\$ 59,209</u>	<u>\$ 3,249</u>	<u>\$ 236</u>	<u>\$ 409</u>	<u>\$ 63,103</u>
<u>Accumulated amortization and impairment</u>					
Balance on January 1, 2015	\$ (8,104)	\$ (1,793)	\$ (18)	\$ (38)	\$ (9,953)
Amortization expenses	(2,504)	(565)	—	(11)	(3,080)
Disposal	—	375	—	2	377
Effect of foreign exchange difference	—	—	—	—	—
Others	—	—	—	—	—
Balance on December 31, 2015	<u>\$ (10,608)</u>	<u>\$ (1,983)</u>	<u>\$ (18)</u>	<u>\$ (47)</u>	<u>\$(12,656)</u>
<u>Cost</u>					
Balance on January 1, 2016	\$ 59,209	\$ 3,249	\$ 236	\$ 409	\$ 63,103
Additions-acquired separately	—	277	—	5	282
Disposal	—	(121)	—	—	(121)
Effect of foreign exchange difference	—	—	—	—	—
Others	—	3	—	—	3
Balance on December 31, 2016	<u>\$ 59,209</u>	<u>\$ 3,408</u>	<u>\$ 236</u>	<u>\$ 414</u>	<u>\$ 63,267</u>
<u>Accumulated amortization and impairment</u>					
Balance on January 1, 2016	\$ (10,608)	\$ (1,983)	\$ (18)	\$ (47)	\$(12,656)
Amortization expenses	(2,805)	(551)	—	(23)	(3,379)
Disposal	—	121	—	—	121
Impairment losses	—	—	—	—	—
Effect of foreign exchange difference	—	—	—	—	—
Balance on December 31, 2016	<u>\$ (13,413)</u>	<u>\$ (2,413)</u>	<u>\$ (18)</u>	<u>\$ (70)</u>	<u>\$(15,914)</u>

(Concluded)

For long-term business development, Chunghwa participated in mobile broadband license (4G license) in 2.5 and 2.6 GHz bands bidding process announced by NCC and obtained certain spectrums. Chunghwa paid the 4G concession fees amounting to \$9,955 million in December 2015.

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 will be fully amortized by 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.

**20. OTHER ASSETS**

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
Spare parts	\$1,876	\$1,776
Refundable deposits	2,198	2,083
Other financial assets	1,000	1,000
Others	2,848	2,288
	<u>\$7,922</u>	<u>\$7,147</u>
<b>Current</b>		
Spare parts	\$1,876	\$1,776
Others	460	346
	<u>\$2,336</u>	<u>\$2,122</u>
<b>Noncurrent</b>		
Refundable deposits	\$2,198	\$2,083
Other financial assets	1,000	1,000
Others	2,388	1,942
	<u>\$5,586</u>	<u>\$5,025</u>

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**

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
<u>Hedging derivative financial assets</u>		
Cash flow hedge—forward exchange contracts	<u>\$ 1</u>	<u>\$—</u>
<u>Hedging derivative financial liabilities</u>		
Cash flow hedge—forward exchange contracts	<u>\$—</u>	<u>\$ 1</u>

Chunghwa's hedge strategy is to enter forward exchange contracts—buy to avoid its foreign currency exposure to certain foreign currency denominated 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. For the years ended December 31, 2014, 2015 and 2016, gain (loss) arising from changes in fair value of the hedged items recognized in other comprehensive income was loss of 0.3 million, gain of \$1 million and loss of \$1 million, respectively. 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, 2015 and 2016, Chunghwa expected part of the equipment purchase transactions will not occur and reclassified the related loss of \$1 million and gain of \$1 million, respectively, arising from the forward exchange contracts of the aforementioned transactions from equity to profit or loss.

The outstanding forward exchange contracts at the balance sheet dates were as follows:

	Currency	Maturity Period	Contract Amount (Millions)
<b>December 31, 2015</b>			
Forward exchange contracts—buy	EUR/NT\$	2016.03-06	EUR9/NT\$306
<b>December 31, 2016</b>			
Forward exchange contracts—buy	EUR/NT\$	2017.03	EUR3/NT\$102

Loss (gain) 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		
	2014 NT\$	2015 NT\$	2016 NT\$
Construction in progress and advances related to acquisition of equipment	\$ 18	\$ (18)	\$ (15)

(In Millions)

## 22. SHORT-TERM LOANS

	December 31	
	2015 NT\$	2016 NT\$
Secured loans (Note 41)	\$—	\$ 20
Unsecured loans	110	118
	<u>\$110</u>	<u>\$138</u>

(In Millions)

The annual interest rates of loans were as follows:

	December 31	
	2015	2016
Secured loans	—	1.98%
Unsecured loans	1.29%-2.40%	1.95%-2.25%

**23. LONG-TERM LOANS (INCLUDING LONG-TERM LOANS—CURRENT PORTION)**

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
Secured loans (Note 41)	\$1,750	\$1,600
Less: Current portion of long-term loans	(8)	—
	<u>\$1,742</u>	<u>\$1,600</u>

The annual interest rates of loans were as follows:

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
Secured loans	1.11%-1.36%	0.91%

LED obtained a secured loan from Chang Hwa Bank in September 2010. Interest is paid monthly. \$300 million and \$1,350 million 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 million in April 2015. LED obtained another secured loan from Chang Hwa Bank in December 2012 in the amount of \$400 million which is due in December 2017; LED made early repayments of \$350 million and \$50 million in 2013 and January 2015, respectively.

CHPT entered into a secured loan contract of \$348 million with Bank of Taiwan in April 2014, interest is paid monthly, amortization of principal began in May 2016, and the loan is due in April 2029. CHPT made early repayments of \$148 million, \$50 million and \$150 million from September to December 2014, in November 2015 and from March to April 2016, respectively.

**24. TRADE NOTES AND ACCOUNTS PAYABLE**

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
Trade notes and accounts payable	<u>\$16,301</u>	<u>\$18,810</u>

Trade notes and accounts payable were attributable to operating activities and the trading conditions were agreed separately.

## 25. OTHER PAYABLES

	December 31	
	2015	2016
	NT\$	NT\$
	(In Millions)	
Accrued salary and compensation	\$10,430	\$ 9,770
Payables to contractors	1,452	2,396
Accrued compensation to employees and remuneration to directors and supervisors	2,190	2,015
Payables to equipment suppliers	1,541	1,623
Amounts collected for others	1,406	1,407
Accrued franchise fees	1,401	1,326
Accrued maintenance costs	998	1,062
Others	6,069	6,819
	<u>\$25,487</u>	<u>\$26,418</u>

## 26. PROVISIONS

	December 31	
	2015	2016
	NT\$	NT\$
	(In Millions)	
Warranties	\$213	\$111
Employee benefits	30	38
Trade-in right	—	31
Others	5	5
	<u>\$248</u>	<u>\$185</u>
Current	\$190	\$119
Noncurrent	58	66
	<u>\$248</u>	<u>\$185</u>

	<u>Warranties</u>	<u>Employee</u>	<u>Trade-in</u>	<u>Others</u>	<u>Total</u>
	NT\$	Benefits	rights	NT\$	NT\$
	(In Millions)				
Balance on January 1, 2014	\$ 201	\$ 47	\$ —	\$ 4	\$ 252
Additional provisions recognized	192	8	—	1	201
Used during the year	(174)	—	—	—	(174)
Reversed during the year	(7)	—	—	—	(7)
Balance on December 31, 2014	<u>\$ 212</u>	<u>\$ 55</u>	<u>\$ —</u>	<u>\$ 5</u>	<u>\$ 272</u>

(Continued)

	<u>Warranties</u> NTS	<u>Employee</u> <u>Benefits</u> NTS	<u>Trade-in</u> <u>rights</u> NTS	<u>Others</u> NTS	<u>Total</u> NTS
	(In Millions)				
Balance on January 1, 2015	\$ 212	\$ 55	\$ —	\$ 5	\$ 272
Additional provisions recognized	100	12	—	—	112
Used during the year	(99)	(37)	—	—	(136)
Balance on December 31, 2015	<u>\$ 213</u>	<u>\$ 30</u>	<u>\$ —</u>	<u>\$ 5</u>	<u>\$ 248</u>
Balance on January 1, 2016	\$ 213	\$ 30	\$ —	\$ 5	\$ 248
Additional provisions recognized	81	9	31	—	121
Used during the year	(183)	(1)	—	—	(184)
Balance on December 31, 2016	<u>\$ 111</u>	<u>\$ 38</u>	<u>\$ 31</u>	<u>\$ 5</u>	<u>\$ 185</u>

(Concluded)

- 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 is based on the management's judgments to estimate the trade-in right of products exercised by customers in the future. The provision is recognized as a reduction of revenue in the period in which the goods are sold.

## 27. ADVANCE RECEIPTS

Advance receipts are mainly from advance telecommunication charges. In accordance with NCC's regulation named "Mandatory and Prohibitory Provisions To Be Included In Standard Contracts for Telecommunication Goods (Services) Coupons", the Company entered into a contract with Bank of Taiwan to provide a performance guarantee for advance receipts from selling prepaid cards amounting to \$779 million as of December 31, 2016.

## 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 SENA, 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 of 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:

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
Present value of funded defined benefit obligation	\$ 30,882	\$ 34,572
Fair value of plan assets	(23,794)	(33,954)
Funded status—deficit	<u>\$ 7,088</u>	<u>\$ 618</u>
Net defined benefit liabilities	\$ 7,099	\$ 1,537
Net defined benefit assets	(11)	(919)
	<u>\$ 7,088</u>	<u>\$ 618</u>



Movements in the defined benefit obligation and the fair value of plan assets were as follows:

	<b>Present Value of Funded Defined Benefit Obligation</b>	<b>Fair Value of Plan Assets</b>	<b>Net Defined Benefit Liabilities (Assets)</b>
	<u>NT\$</u>	<u>NT\$</u> (In Millions)	<u>NT\$</u>
Balance on January 1, 2014	\$ 25,457	\$ 19,982	\$ 5,475
Service cost			
Current service cost	2,920	—	2,920
Loss on settlements	76	—	76
Interest expense/interest income	509	415	94
Amounts recognized in profit or loss	<u>3,505</u>	<u>415</u>	<u>3,090</u>
Remeasurement on the net defined benefit liability			
Return on plan assets (excluding amounts included in net interest)	—	52	(52)
Actuarial losses recognized from changes in demographic assumptions	4	—	4
Actuarial gains recognized from changes in financial assumptions	(5)	—	(5)
Actuarial losses recognized from experience adjustments	545	—	545
Amounts recognized in other comprehensive income	<u>544</u>	<u>52</u>	<u>492</u>
Contributions from employer	—	2,486	(2,486)
Benefits paid	(454)	(454)	—
Settlements	(993)	(985)	(8)
Benefits paid directly by the Company	(101)	—	(101)
Balance on December 31, 2014	<u>27,958</u>	<u>21,496</u>	<u>6,462</u>
Current service cost	2,884	—	2,884
Interest expense/interest income	546	444	102
Amounts recognized in profit or loss	<u>3,430</u>	<u>444</u>	<u>2,986</u>
Remeasurement on the net defined benefit liability			
Return on plan assets (excluding amounts included in net interest)	—	136	(136)
Actuarial losses recognized from changes in demographic assumptions	11	—	11
Actuarial gains recognized from changes in financial assumptions	(1)	—	(1)
Actuarial losses recognized from experience adjustments	357	—	357
Amounts recognized in other comprehensive income	<u>367</u>	<u>136</u>	<u>231</u>
Contributions from employer	—	2,435	(2,435)
Benefits paid	(717)	(717)	—
Benefits paid directly by the Company	(156)	—	(156)
Balance on December 31, 2015	<u>30,882</u>	<u>23,794</u>	<u>7,088</u>

(Continued)

	Present Value of Funded Defined Benefit Obligation NTS	Fair Value of Plan Assets NTS (In Millions)	Net Defined Benefit Liabilities (Assets) NTS
Current service cost	\$ 2,866	\$ —	\$ 2,866
Interest expense/interest income	600	573	27
Amounts recognized in profit or loss	<u>3,466</u>	<u>573</u>	<u>2,893</u>
Remeasurement on the net defined benefit liability			
Return on plan assets (excluding amounts included in net interest)	—	(352)	352
Actuarial gains recognized from changes in demographic assumptions	(124)	—	(124)
Actuarial losses recognized from changes in financial assumptions	1,715	—	1,715
Actuarial losses recognized from experience adjustments	<u>100</u>	<u>—</u>	<u>100</u>
Amounts recognized in other comprehensive income	<u>1,691</u>	<u>(352)</u>	<u>2,043</u>
Contributions from employer	—	11,235	(11,235)
Benefits paid	(1,296)	(1,296)	—
Benefits paid directly by the Company	<u>(171)</u>	<u>—</u>	<u>(171)</u>
Balance on December 31, 2016	<u>\$ 34,572</u>	<u>\$ 33,954</u>	<u>\$ 618</u>

(Concluded)

Relevant pension costs recognized in profit and loss for defined benefit plans were as follows:

	Year Ended December 31		
	2014 NTS	2015 NTS	2016 NTS
		(In Millions)	
Operating costs	\$1,849	\$ 1,794	\$1,732
Marketing expenses	888	856	838
General and administrative expenses	169	162	155
Research and development expenses	106	102	97
	<u>\$3,012</u>	<u>\$ 2,914</u>	<u>\$2,822</u>

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:

	<u>Measurement Date</u>	
	<u>December 31</u>	
	<u>2015</u>	<u>2016</u>
Discount rates	2.00%	1.50%
Expected rates of salary increase	1.00%-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:

	<u>December 31</u>	
	<u>2015</u>	<u>2016</u>
	<u>NT\$</u>	<u>NT\$</u>
	<u>(In Millions)</u>	
Discount rates		
0.5% increase	<u>\$ (977)</u>	<u>\$(1,219)</u>
0.5% decrease	<u>\$ 1,261</u>	<u>\$ 1,298</u>
Expected rates of salary increase		
0.5% increase	<u>\$ 1,332</u>	<u>\$ 1,379</u>
0.5% decrease	<u>\$(1,052)</u>	<u>\$(1,306)</u>

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.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation liability recognized in the consolidated balance sheets.

There is no change in the methods and assumptions used in preparing the sensitivity analysis from the previous period.

	<u>December 31</u>	
	<u>2015</u>	<u>2016</u>
	NTS	NTS
	(In Millions)	
The expected contributions to the plan for the next year	\$ 11,302	\$ 2,724
The average duration of the defined benefit obligation	6-15 years	7-14 years

The Company's maturity analysis of the undiscounted benefit payments as of December 31, 2016 was as follows:

<u>Year</u>	<u>Amount</u>
	NTS
	(In Millions)
2017	\$ 1,677
2018	3,617
2019	6,228
2020	8,605
2021 and thereafter	46,986
	<u>\$ 67,113</u>

## 29. EQUITY

### a. Share capital

#### 1) Common stocks

	<u>December 31</u>	
	<u>2015</u>	<u>2016</u>
	NTS	NTS
	(In Millions)	
Number of authorized shares	12,000	12,000
Authorized shares	\$120,000	\$120,000
Number of issued and paid shares	7,757	7,757
Issued and outstanding shares	\$ 77,574	\$ 77,574

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, 2016, the outstanding ADSs were 351 million common stocks, which equaled 35 million units and represented 4.52% 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, 2014, 2015 and 2016 were as follows:

	Share Premium NTS	Movements of Additional Paid-in Capital Arising from Changes in Equities of Subsidiaries NTS	Difference between Consideration Received and Carrying Amount of the Subsidiaries' Net Assets upon Disposal NTS (In Millions)	Donated Capital NTS	Stockholders' Contribution Due to Privatization NTS	Total NTS
Balance on January 1, 2014	\$142,622	\$ 11	\$ —	\$ 13	\$ 20,648	\$163,294
Cash distributed from additional paid-in capital	(16,577)	—	—	—	—	(16,577)
Change in additional paid-in capital from share subscription not based on original ownership of a subsidiary	—	3	—	—	—	3
Employee stock bonus issued by a subsidiary	—	—	—	—	—	—
Balance on December 31, 2014	<u>\$126,045</u>	<u>\$ 14</u>	<u>\$ —</u>	<u>\$ 13</u>	<u>\$ 20,648</u>	<u>\$146,720</u>
Balance on January 1, 2015	<u>\$126,045</u>	<u>\$ 14</u>	<u>\$ —</u>	<u>\$ 13</u>	<u>\$ 20,648</u>	<u>\$146,720</u>
Partial disposal of interests in subsidiaries	—	—	27	—	—	27
Other changes in additional paid-in capital in subsidiaries	—	1	—	—	—	1
Subsidiary purchased its treasury stock	—	(15)	—	—	—	(15)
Balance on December 31, 2015	<u>\$126,045</u>	<u>\$ —</u>	<u>\$ 27</u>	<u>\$ 13</u>	<u>\$ 20,648</u>	<u>\$146,733</u>
Balance on January 1, 2016	<u>\$126,045</u>	<u>\$ —</u>	<u>\$ 27</u>	<u>\$ 13</u>	<u>\$ 20,648</u>	<u>\$146,733</u>
Partial disposal of interests in subsidiaries	—	—	58	—	—	58
Change in additional paid-in capital for not participating in the capital increase of a subsidiary	—	389	—	—	—	389
Share-based payment transactions of subsidiaries	—	—	—	—	—	—
Balance on December 31, 2016	<u>\$126,045</u>	<u>\$ 389</u>	<u>\$ 85</u>	<u>\$ 13</u>	<u>\$ 20,648</u>	<u>\$147,180</u>

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.

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. Additional paid-in capital from movements of investments in associates and joint ventures accounted for using equity method may not be used for any purpose.

c. Retained earnings and dividends policy

In accordance with the amendments to the Company Act of the ROC in May 2015, the recipients of dividends and bonuses are limited to stockholders and do not include employees. To comply with the above amendments to the Company Act of the ROC, amendments to the policy on dividend distribution and the addition of the policy on distribution of employees' and directors' compensation in Chunghwa's Articles of Incorporation were approved by the stockholders in their meeting on June 24, 2016.

In accordance with the Chunghwa's amended 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.

For the information on remuneration for the employees and directors based on the Chunghwa's pre-amended and amended Articles of Incorporation, please refer to Note 31.g. Employee benefit expenses.

Special reserve was appropriated in accordance with the relevant laws and regulations or as requested by local authority. Pursuant to existing regulations, Chunghwa is required to set aside additional special reserve equivalent to debit balances under stockholder's equity. For subsequent decrease in the deduction amount to stockholder's equity, the decreased amount could be reversed from the special reserve to retained earnings.

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.

Except for non-ROC resident stockholders, all stockholders receiving the dividends are entitled to a tax credit equal to their proportionate share of the income tax paid by the Company.

The appropriations of the 2014 and 2015 earnings of Chunghwa approved by the stockholders in their meetings on June 26, 2015 and June 24, 2016 were as follows:

	Appropriation of Earnings		Dividends Per Share	
	For Fiscal Year 2014	For Fiscal Year 2015	For Fiscal Year 2014	For Fiscal Year 2015
	NT\$	NT\$	NT\$	NT\$
	(In Millions)			
Legal reserve	\$ 681	\$ —		
Special reserve	(144)	—		
Cash dividends	37,673	42,551	\$ 4.86	\$ 5.49

The appropriations of earnings for 2016 had been proposed by Chunghwa's Board of Directors on March 7, 2017. The appropriations and dividends per share were as follows:

	<b>For Fiscal Year 2016</b>	
	<b>Appropriation of Earnings</b>	<b>Dividends Per Share</b>
	<b>NT\$ (In Millions)</b>	<b>NT\$</b>
Special reserve	\$ 5	
Cash dividends	38,337	\$ 4.94

The appropriations of earnings for 2016 are subject to the resolution of the stockholders' meeting planned to be held on June 23, 2017.

d. Other equity items

- 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 (loss) on available-for-sale financial assets

	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>		
Beginning balance	\$(150)	\$ 740	\$ 91
Unrealized gain (loss) on available-for-sale financial assets	926	(670)	(721)
Income tax relating to unrealized gain or loss on available-for-sale financial assets	3	(2)	2
Amount reclassified from equity to profit or loss on disposal of available-for-sale financial assets	(39)	—	—
Amount reclassified from equity to profit or loss on impairment of available-for-sale financial assets	—	23	577
Ending balance	<u>\$ 740</u>	<u>\$ 91</u>	<u>\$ (51)</u>

Unrealized gain (loss) on available-for-sale financial assets were accumulated gains and losses on the available-for-sale financial assets measured at fair value, which were recognized in other comprehensive income and were included in the calculation of the related disposal gain and loss or impairment loss of such financial assets upon reclassified to profits or losses.

## e. Noncontrolling interests

	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>		
Beginning balance	\$4,846	\$4,924	\$5,065
Attributable to noncontrolling interests			
Net income of the year	597	813	1,141
Exchange differences arising from the translation of the foreign operations	24	(3)	(41)
Unrealized gain (loss) on available-for-sale financial assets	(9)	2	—
Income tax relating to unrealized loss on available-for-sale financial assets	—	—	—
Remeasurements of defined benefit pension plans	(3)	(3)	(18)
Income tax relating to remeasurements of defined benefit pension plans	1	1	3
Share of other comprehensive income of associates accounted for using equity method	5	2	(1)
Cash dividends distributed by subsidiaries	(797)	(350)	(710)
Change in additional paid-in capital for not participating in the capital increase of a subsidiary	—	—	786
Partial disposal of interests in subsidiaries	—	18	25
Other changes in additional paid-in capital in subsidiaries	—	2	—
Employee stock bonus issued by a subsidiary	5	—	—
Share-based payment transactions of subsidiaries	93	36	17
Subsidiary purchased its treasury stock	—	(416)	—
<b>Net increase in noncontrolling interests</b>	<b>162</b>	<b>39</b>	<b>5</b>
Ending balance	<u>\$4,924</u>	<u>\$5,065</u>	<u>\$6,272</u>

**30. REVENUE**

The main source of revenue of the Company includes various telecommunications services in various different streams, and the related information was as discussed in Note 43.



**31. NET INCOME AND OTHER COMPREHENSIVE INCOME (LOSS)**

## a. Other income and expenses

	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>
	(In Millions)		
Impairment loss on property, plant and equipment	\$—	\$(138)	\$(596)
Gain (loss) on disposal of property, plant and equipment	26	(109)	(48)
Reversal of impairment loss on investment properties	—	142	148
Impairment loss on intangible assets	—	—	—
Loss on disposal of intangible assets	—	—	—
Gain on disposal of investment properties	605	—	—
	<u>\$631</u>	<u>\$(105)</u>	<u>\$(496)</u>

## b. Other income

	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>
	(In Millions)		
Dividend income	\$ 78	\$218	\$ 391
Income from Piping Fund	200	202	202
Rental income	45	38	41
Others	264	192	438
	<u>\$587</u>	<u>\$650</u>	<u>\$1,072</u>

## c. Other gains and losses

	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>
	(In Millions)		
Net foreign currency exchange gains	\$201	\$ 63	\$181
Gain (loss) on disposal of financial instruments	46	—	—
Gain (loss) on disposal of investments accounted for using equity method	(7)	4	(2)
Valuation gain (loss) on financial assets and liabilities at fair value through profit or loss, net	1	—	(1)
Impairment loss on investments accounted for using equity method	—	(8)	—

(Continued)

	Year Ended December 31		
	2014	2015	2016
	NT\$	NT\$	NT\$
	(In Millions)		
Impairment loss on available-for-sale financial assets	\$ (23)	\$ (107)	\$(577)
Others	(94)	(180)	(49)
	<u>\$124</u>	<u>\$ (228)</u>	<u>\$(448)</u>

(Concluded)

- d. Impairment loss (reversal of impairment loss) on financial instruments

	Year Ended December 31		
	2014	2015	2016
	NT\$	NT\$	NT\$
	(In Millions)		
Notes and accounts receivable	\$292	\$480	\$943
Other receivables	\$ 34	\$ 39	\$ (2)
Available-for-sale financial assets	<u>\$ 23</u>	<u>\$107</u>	<u>\$577</u>

- e. Impairment loss (reversal of impairment loss) on non-financial assets

	Year Ended December 31		
	2014	2015	2016
	NT\$	NT\$	NT\$
	(In Millions)		
Inventories	\$288	\$ 198	\$ 192
Property, plant and equipment	\$—	\$ 138	\$ 596
Investments accounted for using equity method	\$—	\$ 8	\$ —
Investment properties	\$—	\$(142)	\$(148)
Intangible assets	\$—	\$ —	\$ —

- f. Depreciation and amortization expenses

	Year Ended December 31		
	2014	2015	2016
	NT\$	NT\$	NT\$
	(In Millions)		
Property, plant and equipment	\$31,880	\$30,350	\$29,087
Investment properties	16	18	19
Intangible assets	2,218	3,080	3,379
Total depreciation and amortization expenses	<u>\$34,114</u>	<u>\$33,448</u>	<u>\$32,485</u>

(Continued)

	Year Ended December 31		
	2014	2015	2016
	NTS	NTS	NTS
	(In Millions)		
<b>Depreciation expenses summarized by functions</b>			
Operating costs	\$29,682	\$28,292	\$27,214
Operating expenses	2,214	2,076	1,892
	<u>\$31,896</u>	<u>\$30,368</u>	<u>\$29,106</u>
<b>Amortization expenses summarized by functions</b>			
Operating costs	\$ 1,915	\$ 2,742	\$ 3,042
Marketing expenses	161	178	173
General and administrative expenses	97	116	126
Research and development expenses	45	44	38
	<u>\$ 2,218</u>	<u>\$ 3,080</u>	<u>\$ 3,379</u>

(Concluded)

## g. Employee benefit expenses

	Year Ended December 31		
	2014	2015	2016
	NTS	NTS	NTS
	(In Millions)		
<b>Post-employment benefit</b>			
Defined contribution plans	\$ 441	\$ 489	\$ 544
Defined benefit plans	3,012	2,914	2,822
	<u>3,453</u>	<u>3,403</u>	<u>3,366</u>
<b>Share-based payment</b>			
Equity-settled share-based payment	93	36	17
<b>Other employee benefit</b>			
Salaries	24,857	25,526	25,985
Insurance	2,565	2,643	2,652
Others	15,659	15,717	15,730
	<u>43,081</u>	<u>43,886</u>	<u>44,367</u>
Total employee benefit expenses	<u>\$46,627</u>	<u>\$47,325</u>	<u>\$47,750</u>
<b>Summary by functions</b>			
Operating costs	\$26,362	\$25,320	\$25,190
Operating expenses	20,265	22,005	22,560
	<u>\$46,627</u>	<u>\$47,325</u>	<u>\$47,750</u>

The bonus to employees and the remuneration to directors as of December 31, 2014 were accrued based on past experiences and the probable amount to be paid in accordance with Chunghwa's Articles of Incorporation and Implementation Guidance for the Employee's Bonus Distribution of Chunghwa Telecom Co., Ltd. According to the Company Act as amended in May 2015 and the amendments to the Chunghwa's Articles of Incorporation approved by the Chunghwa's stockholders in their meeting on June 24, 2016, 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. Chunghwa accrued employees' compensation and remuneration to directors according to the aforementioned policy for the years ended December 31, 2015 and 2016. As of December 31, 2016, the payables of the employees' compensation and of the remuneration to directors were \$1,702 million and \$42 million, respectively. Such amounts have been approved by the Chunghwa's Board of Directors on March 7, 2017 and will be reported to the stockholders in their meeting planned to be held on June 23, 2017.

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 appropriations of the 2014 bonuses to employees and remuneration to directors of Chunghwa were approved by the stockholders in their meeting on June 26, 2015. The appropriations of the 2015 employees' compensation and remuneration to directors of Chunghwa were approved by the Board of Directors on March 11, 2016 and reported to the stockholders in their meeting after the amendments to Chunghwa's Articles of Incorporation was approved by the Chunghwa's stockholders in their meeting on June 24, 2016. The related information was as follows:

	<u>2014</u>	<u>2015</u>
	<u>Cash</u>	<u>Cash</u>
	NT\$	NT\$
	(In Millions)	
Bonus or compensation distributed to the employees	\$1,510	\$1,928
Remuneration paid to the directors	39	45

There was no difference between the initial accrual amounts and the amounts paid of the aforementioned compensation or bonus to employees and the remuneration to directors.

h. Components of others comprehensive income—unrealized gain (loss)

	<u>Year Ended December 31</u>		
	<u>2014</u>	<u>2015</u>	<u>2016</u>
	NT\$	NT\$	NT\$
	(In Millions)		
Unrealized gain (loss) on available-for-sale financial assets			
Arising during the year	\$925	\$(671)	\$(721)
Reclassification adjustments			
Upon disposal	(47)	—	—
Upon impairment	—	26	577
	<u>\$878</u>	<u>\$(645)</u>	<u>\$(144)</u>
Cash flow hedges			
Gain (loss) arising during the year	\$ (18)	\$ 18	\$ 15
Reclassification adjustments included in profit or loss	—	1	(1)
Adjusted against the carrying amount of hedged items	18	(18)	(15)
	<u>\$—</u>	<u>\$ 1</u>	<u>\$(1)</u>

## 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		
	2014	2015	2016
	NT\$	NT\$	NT\$
	(In Millions)		
<b>Current tax</b>			
Current tax expenses recognized for the year	\$7,516	\$8,570	\$6,736
Tax on unappropriated earnings	1,626	821	(346)
Income tax adjustments on prior years	4	(83)	(22)
Others	41	15	15
	<u>9,187</u>	<u>9,323</u>	<u>6,383</u>
<b>Deferred tax</b>			
Deferred tax expense recognized for the year	(202)	(222)	1,404
<b>Income tax recognized in profit or loss</b>	<u>\$8,985</u>	<u>\$9,101</u>	<u>\$7,787</u>

Reconciliation of accounting profit and income tax expense was as follows:

	Year Ended December 31		
	2014	2015	2016
	NT\$	NT\$	NT\$
	(In Millions)		
<b>Income before income tax</b>	<u>\$46,552</u>	<u>\$51,953</u>	<u>\$49,413</u>
Income tax expense calculated at the statutory rate (17%)	\$ 7,914	\$ 8,832	\$ 8,400
Nondeductible revenues and expenses in determining taxable income	47	28	5
Imputed income on tax	1	—	—
Unrecognized deductible temporary differences	(66)	11	(9)
Unrecognized loss carryforwards	161	83	12
Tax-exempt income	(399)	(183)	(25)
Income tax on unappropriated earnings	1,626	821	(346)
Investment credits	(314)	(329)	(234)
Effect of different tax rates of group entities operating in other jurisdictions	(25)	(94)	(8)
Adjustments of tax expense on prior years	4	(83)	(22)
Others	36	15	14
<b>Income tax expense recognized in profit or loss</b>	<u>\$ 8,985</u>	<u>\$ 9,101</u>	<u>\$ 7,787</u>

The applicable tax rate used above is the corporate tax rate of 17% payable by the entities subject to the Income Tax Act of the Republic of China, while the applicable tax rate used by subsidiaries in China is 25%. 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 expense (benefit) recognized in other comprehensive income

	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>		
<b>Deferred tax expense (benefit)</b>			
Unrealized gain or loss on available-for-sale financial assets	\$ (3)	\$ 2	\$ (2)
Remeasurement on defined benefit plan	(84)	(39)	(347)
<b>Total income tax benefit recognized in other comprehensive income</b>	<b><u>\$(87)</u></b>	<b><u>\$(37)</u></b>	<b><u>\$(349)</u></b>

- c. Current tax assets and liabilities

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
<b>Current tax assets</b>		
Tax refund receivable (included in other current assets—other)	\$ 8	\$ 5
<b>Current tax liabilities</b>		
Income tax payable	\$9,171	\$6,522

- 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, 2014

<b>Deferred Income Tax Assets</b>	<b>December 31, 2013</b>	<b>Recognized in Profit or Loss</b>	<b>Recognized in Other Comprehensive Income</b>	<b>December 31, 2014</b>
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>			
<b>Temporary differences</b>				
Defined benefit obligation	\$ 928	\$ 84	\$ 84	\$ 1,096
Share of profit of associates and joint ventures accounted for using equity method	175	102	—	277
Allowance for doubtful receivables over quota	2	112	—	114

(Continued)

<u>Deferred Income Tax Assets</u>	<u>December 31, 2013</u>	<u>Recognized in Profit or Loss</u>	<u>Recognized in Other Comprehensive Income</u>	<u>December 31, 2014</u>
	NTS	NTS	NTS	NTS
	(In Millions)			
Impairment loss on property, plant and equipment	\$ 59	\$ (27)	\$ —	\$ 32
Deferred revenue	187	(31)	—	156
Valuation loss on inventory	56	(15)	—	41
Accrued award credits liabilities	21	7	—	28
Estimated warranty liabilities	24	(5)	—	19
Unrealized foreign exchange loss, net	11	(11)	—	—
Others	16	18	—	34
	<u>1,479</u>	<u>234</u>	<u>84</u>	<u>1,797</u>
Loss carryforwards	27	2	—	29
	<u>\$ 1,506</u>	<u>\$ 236</u>	<u>\$ 84</u>	<u>\$ 1,826</u>

(Concluded)

<u>Deferred Income Tax Liabilities</u>	<u>December 31, 2013</u>	<u>Recognized in Profit or Loss</u>	<u>Recognized in Other Comprehensive Income</u>	<u>December 31, 2014</u>
	NTS	NTS	NTS	NTS
	(In Millions)			
Temporary differences				
Land value incremental tax	\$ (95)	\$ —	\$ —	\$ (95)
Deferred revenue for award credits	—	(5)	—	(5)
Unrealized foreign exchange gain, net	—	(29)	—	(29)
Valuation gain or loss on financial instruments, net	(6)	—	3	(3)
Others	—	—	—	—
	<u>\$ (101)</u>	<u>\$ (34)</u>	<u>\$ 3</u>	<u>\$ (132)</u>

For the year ended December 31, 2015

Deferred Income Tax Assets	December 31, 2014	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	From Business Combination	December 31, 2015
	NT\$	NT\$	NT\$ (In Millions)	NT\$	NT\$
<b>Temporary differences</b>					
Defined benefit obligation	\$ 1,096	\$ 71	\$ 39	\$ —	\$ 1,206
Share of the profit of associates and joint ventures accounted for using equity method	277	48	—	—	325
Allowance for doubtful receivables over quota	114	55	—	—	169
Impairment loss on property, plant and equipment	32	12	—	—	44
Deferred revenue	156	(20)	—	—	136
Valuation loss on inventory	41	(8)	—	—	33
Accrued award credits liabilities	28	(6)	—	—	22
Estimated warranty liabilities	19	(1)	—	—	18
Property, plant and equipment	—	—	—	2	2
Unrealized foreign exchange loss, net	—	18	—	—	18
Others	34	6	—	—	40
	1,797	175	39	2	2,013
Loss carryforwards	29	17	—	2	48
	\$ 1,826	\$ 192	\$ 39	\$ 4	\$ 2,061

Deferred Income Tax Liabilities	December 31, 2014	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	From Business Combination	December 31, 2015
	NT\$	NT\$	NT\$ (In Millions)	NT\$	NT\$
<b>Temporary differences</b>					
Defined benefit obligation	\$ —	\$ (1)	\$ —	\$ —	\$ (1)
Land value incremental tax	(95)	—	—	—	(95)
Deferred revenue for award credits	(5)	3	—	—	(2)
Intangible assets	—	1	—	(44)	(43)
Unrealized foreign exchange gain, net	(29)	28	—	—	(1)
Valuation gain or loss on financial instruments, net	(3)	—	(2)	—	(5)
Others	—	(1)	—	—	(1)
	\$ (132)	\$ 30	\$ (2)	\$ (44)	\$ (148)



For the year ended December 31, 2016

Deferred Income Tax Assets	December 31, 2015 NTS	Recognized in Profit or Loss NTS	Recognized in Other Comprehensive Income NTS	December 31, 2016 NTS
	(In Millions)			
Temporary differences				
Defined benefit obligation	\$ 1,206	\$ (179)	\$ 347	\$ 1,374
Share of profits of associates and joint ventures accounted for using equity method	325	5	—	330
Allowance for doubtful receivables over quota	169	61	—	230
Impairment loss on property, plant and equipment	44	78	—	122
Deferred revenue	136	(19)	—	117
Valuation loss on inventory	33	(13)	—	20
Accrued award credits liabilities	22	(2)	—	20
Estimated warranty liabilities	18	1	—	19
Property, plant and equipment	2	—	—	2
Unrealized foreign exchange loss, net	18	(18)	—	—
Others	40	(6)	—	34
	2,013	(92)	347	2,268
Loss carryforwards	48	6	—	54
	\$ 2,061	\$ (86)	\$ 347	\$ 2,322

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<u>Deferred Income Tax Liabilities</u>	<u>December 31,</u> <u>2015</u> <u>NTS</u>	<u>Recognized in</u> <u>Profit or Loss</u> <u>NTS</u>	<u>Recognized in</u> <u>Other</u> <u>Comprehensive</u> <u>Income</u> <u>NTS</u>	<u>December 31,</u> <u>2016</u> <u>NTS</u>
(In Millions)				
Temporary differences				
Defined benefit obligation	\$ (1)	\$ (1,268)	\$ —	\$ (1,269)
Land value incremental tax	(95)	—	—	(95)
Deferred revenue for award credits	(2)	(44)	—	(46)
Intangible assets	(43)	3	—	(40)
Unrealized foreign exchange gain, net	(1)	(9)	—	(10)
Valuation gain or loss on financial instruments, net	(5)	—	2	(3)
Others	(1)	—	—	(1)
	<u>\$ (148)</u>	<u>\$ (1,318)</u>	<u>\$ 2</u>	<u>\$ (1,464)</u>

e. Items for which no deferred income tax assets have been recognized

	<u>December 31</u>	
	<u>2015</u> <u>NTS</u>	<u>2016</u> <u>NTS</u>
(In Millions)		
Loss carryforwards		
Expire in 2017	\$ 67	\$ 67
Expire in 2018	126	126
Expire in 2019	156	138
Expire in 2020	80	42
Expire in 2021	—	13
Expire in 2022	2	1
Expire in 2023	1	1
Expire in 2024	—	—
Expire in 2025	15	14
Expire in 2026	—	—
	<u>\$447</u>	<u>\$402</u>
Deductible temporary differences	<u>\$ 12</u>	<u>\$ 3</u>

## f. Information about unused loss carryforwards

As of December 31, 2016, unused loss carryforwards was as follows:

<u>Remaining Creditable Amount</u>	<u>Expiry Year</u>
NT\$ (In Millions)	
\$ 67	2017
126	2018
138	2019
50	2020
23	2021
2	2022
3	2023
4	2024
32	2025
11	2026
<u>\$ 456</u>	

## g. The related information under the Integrated Income Tax System was as follows:

Undistributed earnings information

All Chunghwa's earnings generated prior to June 30, 1988 have been appropriated.

Imputation credit account

	<u>December 31</u>	
	<u>2015</u>	<u>2016</u>
	NT\$	NT\$
	(In Millions)	
Balance of Imputation Credit Account ("ICA")	<u>\$7,516</u>	<u>\$7,691</u>

The creditable ratios for distribution of earnings of 2015 and 2016 were 20.48% and 20.48% (estimated ratio), respectively. Effective from January 1, 2015, the creditable ratio for individual stockholders residing in the Republic of China is half of the original creditable ratio according to the revised Article 66-6 of the Income Tax Act of the ROC.

The actual imputation credits allocated to stockholders of the Chunghwa was based on the balance of the Imputation Credit Accounts (ICA) as of the date of dividend distribution. Therefore, the estimated creditable ratio for the 2016 earnings may differ from the actual creditable ratio to be used in allocating imputation credits to the stockholders.

## h. Income tax examinations

Income tax returns of Chunghwa have been examined by the tax authorities through 2014 (except 2013). Income tax returns of SENAO have been examined by the tax authorities through 2013. Income tax returns of Youth, SHE and CEI have been examined by the tax authorities through 2014. Income tax returns of LED (except 2014), CHIEF, HHI, CHI, CHSI, CHYP, CHPT, SFD, ISPOT, Youyi, Aval, Unigate and CHST have been examined by the tax authorities through 2015. Income tax returns of CEI's 2015 current final reports on total business income to liquidation date and on income earned from liquidation have been examined by the tax authorities.

### 33. 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		
	2014	2015	2016
	NT\$	NT\$	NT\$
	(In Millions)		
Net income used to compute the basic earnings per share			
Net income attributable to the parent	\$36,970	\$42,039	\$40,485
Assumed conversion of all dilutive potential common stocks			
Employee stock options, employee bonus and compensation of subsidiaries	—	(1)	(1)
Net income used to compute the diluted earnings per share	<u>\$36,970</u>	<u>\$42,038</u>	<u>\$40,484</u>

#### Weighted Average Number of Common Stocks

	(Millions Shares)		
	Year Ended December 31		
	2014	2015	2016
Weighted average number of common stocks used to compute the basic earnings per share	7,757	7,757	7,757
Assumed conversion of all dilutive potential common stocks			
Employee bonus or employee compensation	13	19	12
Weighted average number of common stocks used to compute the diluted earnings per share	<u>7,770</u>	<u>7,776</u>	<u>7,769</u>

Because Chunghwa may settle the employee bonus or 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	Grant Date	Stock Options Units (In Thousands)	Exercise Price NT\$
2012.05.28	2013.05.07	10,000	\$76.10 (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 TWSE 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.

Stock options granted on May 7, 2013 applied IFRS 2. The recognized compensation costs were \$93 million, \$35 million and \$13 million for the years ended December 31, 2014, 2015 and 2016, respectively.

SENAO modified the plan terms of the outstanding stock options in July 2014, the exercise price changed from \$89.40 to \$84.30 per share. The modification did not cause any incremental fair value granted.

SENAO modified the plan terms of the outstanding stock options in August 2015, the exercise price changed from \$84.30 to \$81.40 per share. The modification did not cause any incremental fair value granted.

SENAO modified the plan terms of the outstanding stock options in July 2016, the exercise price changed from \$81.40 to \$76.10 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, 2014, 2015 and 2016 was as follows:

	Year Ended December 31, 2014	
	Granted on May 7, 2013	
	Number of Options (In Thousands)	Weighted- average Exercise Price NT\$
<u>Employee stock options</u>		
Options outstanding at beginning of the year	9,872	\$ 89.40
Options exercised	—	—
Options forfeited	(845)	—
Options outstanding at end of the year	<u>9,027</u>	<u>84.30</u>
Options exercisable at end of the year	—	—

	Year Ended December 31, 2015	
	Granted on May 7, 2013	
	Number of Options (In Thousands)	Weighted- average Exercise Price NT\$
<u>Employee stock options</u>		
Options outstanding at beginning of the year	9,027	\$ 84.30
Options exercised	—	—
Options forfeited	(1,240)	—
Options outstanding at end of the year	<u>7,787</u>	81.40
Options exercisable at end of the year	<u>4,049</u>	81.40

	Year Ended December 31, 2016	
	Granted on May 7, 2013	
	Number of Options (In Thousands)	Weighted- average Exercise Price NT\$
<u>Employee stock options</u>		
Options outstanding at beginning of the year	7,787	\$ 81.40
Options exercised	—	—
Options forfeited	(1,200)	—
Options outstanding at end of the year	<u>6,587</u>	76.10
Options exercisable at end of the year	<u>4,947</u>	76.10

As of December 31, 2015 information about employee stock options outstanding was as follows:

Options Outstanding				Options Exercisable	
Range of Exercise Price	Number of Options (In Thousands)	Weighted- average Remaining Contractual Life (Years)	Weighted- average Exercise Price NT\$	Number of Options (In Thousands)	Weighted- average Exercise Price NT\$
\$81.40	7,787	3.35	\$81.40	4,049	\$81.40

As of December 31, 2016 information about employee stock options outstanding was as follows:

Options Outstanding			Options Exercisable		
Range of Exercise Price	Number of Options	Weighted-average Remaining Contractual Life	Weighted-average Exercise Price	Number of Options	Weighted-average Exercise Price
NT\$	(In Thousands)	(Years)	NT\$	(In Thousands)	NT\$
\$76.10	6,587	2.35	\$76.10	4,947	\$76.10

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. CHIEF share-based compensation plan (“CHIEF Plan”) described as follows:

Effective Date	Grant Date	Stock Options Units	Exercise Price
			NT\$
2015.10.22	2015.10.22	2,000	\$ 34.40 (Original price \$43.00)

Each option is eligible to subscribe for one thousand common stocks when exercisable. Under the terms of the CHIEF Plan, the options are granted at an exercise price equal to \$43.00. 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.

Stock options granted on October 22, 2015 applied IFRS 2. The recognized compensation cost were \$1 million and \$4 million for the years ended December 31, 2015 and 2016, respectively.

CHIEF modified the plan terms of the outstanding stock options in July 2016, the exercise price changed from \$43.00 to \$34.40 per share. The modification did not cause any incremental fair value granted.

Information about CHIEF's outstanding stock options for the years ended December 31, 2015 and 2016 was as follows:

	For the year ended December 31			
	2015		2016	
	Granted on October 22, 2015		Granted on October 22, 2015	
	Number of Options	Weighted Average Exercise Price (NT\$)	Number of Options	Weighted Average Exercise Price (NT\$)
<u>Employee stock options</u>				
Options outstanding at beginning of the year	—	\$ —	2,000	\$ 43.00
Options granted	2,000	43.00	—	—
Options forfeited	—	—	(52)	—
Options outstanding at end of the year	2,000	43.00	1,948	34.40
Option exercisable at end of the year	—	—	—	—

As of December 31, 2015, information about employee stock options outstanding was as follows:

Options Outstanding				Options Exercisable	
Range of Exercise Price	Number of Options	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
NT\$		(Years)	NT\$		NT\$
\$43.00	2,000	4.81	\$43.00	—	\$—

As of December 31, 2016, information about employee stock options outstanding was as follows:

Options Outstanding				Options Exercisable	
Range of Exercise Price	Number of Options	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
NT\$		(Years)	NT\$		NT\$
\$34.40	1,948	3.81	\$34.40	—	\$—



CHIEF used the fair value method to evaluate the options using the binomial option pricing model and the related assumptions and the fair value of the options were as follows:

	<b>Stock Options Granted on October 22, 2015</b>
Grant-date share price (NT\$)	\$ 39.55
Exercise price (NT\$)	\$ 43.00
Dividends yield	—
Risk-free interest rate	0.86%
Expected life	5 years
Expected volatility	21.02%
Weighted average fair value of grants (NT\$)	\$ 4,863

Expected volatility was based on the average annualized historical share price volatility of CHIEF's comparable companies before the grant date.

c. New shares reserved for subscription by employees under cash injection of CHPT

On December 8, 2015, the Board of Directors of CHPT approved the cash injection to issue 2,787 thousand shares and simultaneously reserved 418 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 in accordance with IFRS 2. The recognized compensation cost was \$0.016 million for the year ended December 31, 2016.

CHPT used the fair value method to evaluate the options granted to employees on March 10, 2016 using the Black-Scholes model and the related assumptions and the fair value of the options were as follows:

	<b>Stock Options Granted on March 10, 2016</b>
Grant-date share price (NT\$)	\$ 302.46
Exercise price (NT\$)	\$ 360.00
Dividends yield	—
Risk-free interest rate	0.37%
Expected life	12 days
Expected volatility	37.43%
Weighted average fair value of grants (NT\$)	\$ 0.04

Expected volatility was based on the average annualized historical share price volatility of CHPT's comparable companies before the grant date.

### 35. NON-CASH TRANSACTIONS

For the years ended December 31, 2014, 2015 and 2016, the Company entered into the following non-cash investing activities:

	Year Ended December 31		
	2014	2015	2016
	NT\$	NT\$	NT\$
	(In Millions)		
Increase in property, plant and equipment	\$32,084	\$24,451	\$24,591
Other payables	475	633	(1,074)
	<u>\$32,559</u>	<u>\$25,084</u>	<u>\$23,517</u>

### 36. OPERATING LEASE ARRANGEMENTS

a. The Company as lessee

Except for the ST-2 satellite referred in Note 40 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	
	2015	2016
	NT\$	NT\$
	(In Millions)	
Within one year	\$3,173	\$2,811
Longer than one year but within five years	5,614	5,450
Longer than five years	1,186	960
	<u>\$9,973</u>	<u>\$9,221</u>

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	
	2015	2016
	NT\$	NT\$
	(In Millions)	
Within one year	\$ 399	\$ 427
Longer than one year but within five years	527	600
Longer than five years	374	321
	<u>\$1,300</u>	<u>\$1,348</u>

### 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 treasury stock, and proceeds from new debt or repayment of debt.

### 38. FINANCIAL INSTRUMENTS

#### Categories of Financial Instruments

	December 31	
	2015	2016
	NTS	NTS
	(In Millions)	
<u>Financial assets</u>		
Measured at FVTPL		
Held for trading	\$ —	\$ —
Hedging derivative financial assets	1	—
Held-to-maturity financial assets	4,021	2,140
Loans and receivables (Note a)	63,738	70,040
Available-for-sale financial assets	5,511	4,764
<u>Financial liabilities</u>		
Measured at FVTPL		
Held for trading	—	1
Hedging derivative financial liabilities	—	1
Measured at amortized cost (Note b)	36,365	40,553

Note a: The balances included cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other current monetary assets, other financial assets and refundable deposits (classified as other noncurrent assets) which were loans and receivables. Please refer to Notes 7, 11, 14, 20 and 40.

Note b: 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. Please refer to Notes 22, 23, 24, 25 and 40.

## Financial Risk Management Objectives

The main financial instruments of the Company include equity and debt investments, accounts receivable, accounts payable and 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 to the Board of Directors if needed.

### 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	
	2015	2016
	NT\$	NT\$
	(In Millions)	
<b>Assets</b>		
USD	\$4,596	\$5,327
EUR	47	14
SGD	110	106
RMB	41	30
JPY	245	13
<b>Liabilities</b>		
USD	4,172	4,238
EUR	1,293	968
SGD	3	1
RMB	—	—
JPY	14	10

The carrying amounts of the Company's derivatives with exchange rate risk exposures at the balance sheet dates were as follows:

	<b>December 31</b>	
	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>	
<b>Assets</b>		
USD	\$—	\$—
EUR	1	—
<b>Liabilities</b>		
USD	—	—
EUR	—	2

#### Foreign currency sensitivity analysis

The Company is mainly exposed to the fluctuations of the currencies 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.

	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>
	<b>(In Millions)</b>		
<b>Profit or loss</b>			
Monetary assets and liabilities (a)			
USD	\$ (3)	\$ 21	\$ 54
EUR	(38)	(62)	(48)
SGD	4	5	5
RMB	6	2	1
JPY	—	12	—
Derivatives (b)			
USD	11	1	3
EUR	—	33	8
<b>Equity</b>			
Derivatives (c)			
EUR	(5)	15	5

- 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 the 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:

	December 31	
	2015	2016
	NT\$	NT\$
	(In Millions)	
<b>Fair value interest rate risk</b>		
Financial assets	\$26,238	\$28,303
Financial liabilities	110	—
<b>Cash flow interest rate risk</b>		
Financial assets	6,461	6,582
Financial liabilities	1,750	1,738

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 million, \$12 million and \$12 million for the years ended December 31, 2014, 2015 and 2016, 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 listed equity investments. 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 of listed equity securities had been 5% higher/lower, other comprehensive income would have increased/decreased by \$196 million, \$162 million and \$126 million as a result of the changes in fair value of available-for-sale assets for the years ended December 31, 2014, 2015 and 2016, respectively.

## 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 NT\$	1-3 Months NT\$	3 Months to 1 Year NT\$	1-5 Years NT\$	More than 5 Year NT\$	Total NT\$
<b>December 31, 2015</b>							
Non-derivative financial liabilities							
Non-interest bearing	—	\$ 40,209	\$ —	\$ 2,190	\$ 4,726	\$ —	\$47,125
Floating interest rate instruments	1.13	—	—	8	1,646	96	1,750
Fixed interest rate instruments	1.82	50	—	60	—	—	110
		<u>\$ 40,259</u>	<u>\$ —</u>	<u>\$ 2,258</u>	<u>\$ 6,372</u>	<u>\$ 96</u>	<u>\$48,985</u>
<b>December 31, 2016</b>							
Non-derivative financial liabilities							
Non-interest bearing	—	\$ 43,975	\$ —	\$ 2,015	\$ 4,610	\$ —	\$50,600
Floating interest rate instruments	1.00	—	38	100	1,600	—	1,738
		<u>\$ 43,975</u>	<u>\$ 38</u>	<u>\$ 2,115</u>	<u>\$ 6,210</u>	<u>\$ —</u>	<u>\$52,338</u>

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.

	<u>Less Than 1 Month</u> NTS	<u>1-3 Months</u> NTS	<u>3 Months to 1 Year</u> NTS	<u>1-5 Years</u> NTS	<u>Total</u> NTS
	(In Millions)				
<u>December 31, 2015</u>					
<u>Gross settled</u>					
<u>Forward exchange contracts</u>					
Inflows	\$ 26	\$ 474	\$ 492	\$ —	\$992
Outflows	26	476	489	—	991
	<u>\$ —</u>	<u>\$ (2)</u>	<u>\$ 3</u>	<u>\$ —</u>	<u>\$ 1</u>
<u>December 31, 2016</u>					
<u>Gross settled</u>					
<u>Forward exchange contracts</u>					
Inflows	\$ 55	\$ 267	\$ —	\$ —	\$322
Outflows	55	269	—	—	324
	<u>\$ —</u>	<u>\$ (2)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (2)</u>

2) Financing facilities

	<u>December 31</u>	
	<u>2015</u> NTS	<u>2016</u> NTS
	(In Millions)	
<u>Unsecured bank loan facility</u>		
Amount used	\$ 110	\$ 118
Amount unused	41,278	46,219
	<u>\$41,388</u>	<u>\$46,337</u>
<u>Secured bank loan facility</u>		
Amount used	\$ 1,750	\$ 1,620
Amount unused	200	200
	<u>\$ 1,950</u>	<u>\$ 1,820</u>



### 39. 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

Except for what disclosed in the following table, 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 reliably estimated:

December 31, 2015

	Carrying Amount	Fair Value		
		Level 1	Level 2	Level 3
Held-to-maturity financial assets				
Corporate bonds	\$ 3,871	\$ —	\$3,891	\$ —
Bank debentures	150	—	150	—
	<u>\$ 4,021</u>	<u>\$ —</u>	<u>\$4,041</u>	<u>\$ —</u>

December 31, 2016

	Carrying Amount	Fair Value		
		Level 1	Level 2	Level 3
Held-to-maturity financial assets				
Corporate bonds	\$ 1,990	\$ —	\$1,996	\$ —
Bank debentures	150	—	150	—
	<u>\$ 2,140</u>	<u>\$ —</u>	<u>\$2,146</u>	<u>\$ —</u>

The Level 2 fair values are estimated using discounted cash flow models. The models use market-based observable inputs including duration, yield rate and credit rating.

## b. Financial instruments measured at fair value on a recurring basis

December 31, 2015

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Derivatives	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Hedging derivative financial assets	<u>\$ —</u>	<u>\$ 1</u>	<u>\$ —</u>	<u>\$ 1</u>
Available-for-sale financial assets				
Listed securities				
Equity investments	<u>\$3,243</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$3,243</u>

December 31, 2016

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Derivative	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Available-for-sale financial assets				
Listed securities				
Equity investments	<u>\$2,521</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$2,521</u>
Financial liabilities at FVTPL				
Derivative	<u>\$ —</u>	<u>\$ 1</u>	<u>\$ —</u>	<u>\$ 1</u>
Hedging derivative financial liabilities	<u>\$ —</u>	<u>\$ 1</u>	<u>\$ —</u>	<u>\$ 1</u>

There were no transfers between Levels 1 and 2 for the years ended December 31, 2015 and 2016. There were no Level 3 investments measured at fair value on a recurring basis.

The fair values of financial assets and financial liabilities 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 foreign exchange rates at the end of the reporting periods, and forward and spot exchange rates stated in the contracts, discounted at a rate that reflects the credit risk of various counterparties.

#### 40. 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 provided 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
Skysoft Co., Ltd.	Associate
KingwayTek Technology Co., Ltd.	Associate
Dian Zuan Integrating Marketing Co., Ltd.	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
HopeTech Technologies Limited	Associate
EnGenius Tech. Co., Ltd.	Associate
ST-2 Satellite Ventures Pte., Ltd.	Associate
Viettel-CHT Co., Ltd.	Associate
Xiamen Sertec Business Technology Co., Ltd.	Associate
Click Force Co., Ltd.	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

- 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

	<b>Revenues</b>		
	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	NTS	NTS	NTS
	(In Millions)		
Associates	\$ 329	\$ 333	\$ 292
Joint ventures	7	9	7
Others	97	81	49
	<u>\$ 433</u>	<u>\$ 423</u>	<u>\$ 348</u>

	<b>Operating Costs and Expenses</b>		
	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	NTS	NTS	NTS
	(In Millions)		
Associates	\$ 1,663	\$ 1,451	\$ 1,405
Joint ventures	34	17	17
Others	69	62	74
	<u>\$ 1,766</u>	<u>\$ 1,530</u>	<u>\$ 1,496</u>

2) Non-operating transactions

	<b>Non-operating Income and Expenses</b>		
	<b>Year Ended December 31</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
	NTS	NTS	NTS
	(In Millions)		
Associates	\$ 34	\$ 36	\$ 37
Others	—	—	—
	<u>\$ 34</u>	<u>\$ 36</u>	<u>\$ 37</u>

## 3) Receivables

	December 31	
	2015	2016
	NTS	NTS
	(In Millions)	
Associates	\$ 29	\$ 9
Joint ventures	1	—
Others	12	5
	<u>\$ 42</u>	<u>\$ 14</u>

## 4) Payables

	December 31	
	2015	2016
	NTS	NTS
	(In Millions)	
Associates	\$ 602	\$ 757
Joint ventures	5	1
Others	4	4
	<u>\$ 611</u>	<u>\$ 762</u>

## 5) Customers' deposits

	December 31	
	2015	2016
	NTS	NTS
	(In Millions)	
Associates	\$ 11	\$ 10
Joint ventures	—	1
	<u>\$ 11</u>	<u>\$ 11</u>

## 6) Acquisition of property, plant and equipment

	Year Ended December 31		
	2014	2015	2016
	NTS	NTS	NTS
	(In Millions)		
Associates	\$ 521	\$ 314	\$ 313
Joint ventures	—	11	7
	<u>\$ 521</u>	<u>\$ 325</u>	<u>\$ 320</u>

## 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 is for 15 years which should start from the official operation of ST-2 satellite and the total contract value is approximately \$6,000 million (SG\$261 million), including a prepayment of \$3,068 million, 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, 2014 was \$416 million, which consisted of an offsetting credit of the prepayment of \$199 million and an additional accrual of \$217 million. The total rental expense for the year ended December 31, 2015 was \$404 million, which consisted of an offsetting credit of the prepayment of \$204 million and an additional accrual of \$200 million. The total rental expense for the year ended December 31, 2016 was \$394 million, which consisted of an offsetting credit of the prepayment of \$204 million and an additional accrual of \$190 million. The prepaid rents (classified as prepayments) as of December 31, 2015 and 2016, were as follows:

	December 31	
	2015	2016
	NTS	NTS
	(In Millions)	
Prepaid rents—current	\$ 204	\$ 204
Prepaid rents—noncurrent	1,959	1,755
	<u>\$ 2,163</u>	<u>\$ 1,959</u>

## c. Compensation of key management personnel

The compensation of directors and other key management personnel for the years ended December 31, 2014, 2015 and 2016 were as follows:

	Year Ended December 31		
	2014	2015	2016
	NTS	NTS	NTS
	(In Millions)		
Short-term employee benefits	\$ 222	\$ 212	\$ 251
Share-based payment	10	3	2
Post-employment benefits	8	9	8
	<u>\$ 240</u>	<u>\$ 224</u>	<u>\$ 261</u>

The compensation of directors and other key management personnel was mainly determined by the compensation committee having regard to the performance of individual and market trends.

**41. PLEDGED ASSETS**

The following assets are pledged as collaterals for bank loans and custom duties of the imported materials.

	<b>December 31</b>	
	<u>2015</u>	<u>2016</u>
	NT\$	NT\$
	(In Millions)	
Property, plant and equipment	\$3,101	\$2,580
Land held under development (included in inventories)	1,999	1,999
Restricted assets (included in other assets—others)	2	21
	<u>\$5,102</u>	<u>\$4,600</u>

**42. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS**

The Company's remaining commitments under non-cancelable contracts with various parties, excluding those disclosed in other notes, were as follows:

- a. Acquisitions of land and buildings of \$873 million as of December 31, 2016.
- b. Acquisitions of telecommunications equipment of \$12,293 million as of December 31, 2016.
- c. Unused letters of credit amounting to \$50 million as of December 31, 2016.
- d. A commitment to contribute \$2,000 million to a Piping Fund administered by the Taipei City Government, of which \$1,000 million 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 million upon notification from the Taipei City Government.

**43. 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; and (e) the methods used to provide the services to the customers are the same.

There was no material differences between the accounting policies of the operating segments and the accounting policies described in Note 3.

a. Segment information

Analysis by reportable segment of revenue and operating results of continuing operations was as follows:

	<b>Domestic Fixed Communi- cations Business</b>	<b>Mobile Communi- cations Business</b>	<b>Internet Business</b>	<b>International Fixed Communi- cations Business</b>	<b>Others</b>	<b>Total</b>
	<u>NTS</u>	<u>NTS</u>	<u>NTS</u>	<u>NTS</u>	<u>NTS</u>	<u>NTS</u>
(In Millions)						
<b><u>Year ended December 31, 2014</u></b>						
Revenues						
From external customers	\$ 72,062	\$110,665	\$25,997	\$ 15,314	\$ 2,571	\$226,609
Intersegment revenues	<u>19,728</u>	<u>5,324</u>	<u>4,705</u>	<u>2,256</u>	<u>2,422</u>	<u>34,435</u>
Segment revenues	<u>\$ 91,790</u>	<u>\$115,989</u>	<u>\$30,702</u>	<u>\$ 17,570</u>	<u>\$ 4,993</u>	<u>261,044</u>
Intersegment elimination						(34,435)
Consolidated revenues						<u>\$226,609</u>
Segment income before income tax	<u>\$ 19,535</u>	<u>\$ 19,322</u>	<u>\$ 9,547</u>	<u>\$ 191</u>	<u>\$(2,043)</u>	<u>\$ 46,552</u>
<b><u>Year ended December 31, 2015</u></b>						
Revenues						
From external customers	\$ 72,535	\$114,877	\$25,777	\$ 15,460	\$ 3,146	\$231,795
Intersegment revenues	<u>21,401</u>	<u>3,475</u>	<u>4,701</u>	<u>2,120</u>	<u>3,214</u>	<u>34,911</u>
Segment revenues	<u>\$ 93,936</u>	<u>\$118,352</u>	<u>\$30,478</u>	<u>\$ 17,580</u>	<u>\$ 6,360</u>	<u>266,706</u>
Intersegment elimination						(34,911)
Consolidated revenues						<u>\$231,795</u>
Segment income before income tax	<u>\$ 23,231</u>	<u>\$ 19,394</u>	<u>\$ 9,918</u>	<u>\$ 1,120</u>	<u>\$(1,710)</u>	<u>\$ 51,953</u>
<b><u>Year ended December 31, 2016</u></b>						
Revenues						
From external customers	\$ 72,784	\$110,801	\$28,100	\$ 14,434	\$ 3,872	\$229,991
Intersegment revenues	<u>22,669</u>	<u>2,530</u>	<u>4,734</u>	<u>2,680</u>	<u>4,122</u>	<u>36,735</u>
Segment revenues	<u>\$ 95,453</u>	<u>\$113,331</u>	<u>\$32,834</u>	<u>\$ 17,114</u>	<u>\$ 7,994</u>	<u>266,726</u>
Intersegment elimination						(36,735)
Consolidated revenues						<u>\$229,991</u>
Segment income before income tax	<u>\$ 25,658</u>	<u>\$ 13,926</u>	<u>\$10,729</u>	<u>\$ 1,098</u>	<u>\$(1,998)</u>	<u>\$ 49,413</u>



## b. Other segment information

Other information reviewed by the chief operating decision maker or regularly provided to the chief operating decision maker was as follows:

For the year ended December 31, 2014

	<b>Domestic Fixed Communi- cations Business</b>	<b>Mobile Communi- cations Business</b>	<b>Internet Business</b>	<b>International Fixed Communi- cations Business</b>	<b>Others</b>	<b>Total</b>
	NTS	NTS	NTS	NTS	NTS	NTS
	(In Millions)					
Share of the profit of associates and joint ventures accounted for using equity method	\$ —	\$ —	\$ —	\$ —	\$ 802	\$ 802
Interest income	\$ 24	\$ 12	\$ 10	\$ 2	\$ 240	\$ 288
Interest expenses	\$ —	\$ 13	\$ 1	\$ —	\$ 32	\$ 46
Operating costs and expenses	\$ 66,465	\$ 81,400	\$11,975	\$ 14,500	\$8,103	\$182,443
Depreciation and amortization	\$ 18,540	\$ 9,909	\$ 3,422	\$ 1,819	\$ 424	\$ 34,114
Capital expenditure	\$ 16,165	\$ 9,619	\$ 4,425	\$ 1,458	\$ 892	\$ 32,559
Impairment loss on property, plant and equipment	\$ —	\$ —	\$ 0.1	\$ —	\$ —	\$ 0.1

For the year ended December 31, 2015

	<b>Domestic Fixed Communi- cations Business</b>	<b>Mobile Communi- cations Business</b>	<b>Internet Business</b>	<b>International Fixed Communi- cations Business</b>	<b>Others</b>	<b>Total</b>
	NTS	NTS	NTS	NTS	NTS	NTS
	(In Millions)					
Share of the profit of associates and joint ventures accounted for using equity method	\$ —	\$ —	\$ —	\$ —	\$ 897	\$ 897
Interest income	\$ 19	\$ 19	\$ 11	\$ 2	\$ 255	\$ 306
Interest expenses	\$ —	\$ 10	\$ —	\$ —	\$ 23	\$ 33
Operating costs and expenses	\$ 64,960	\$ 81,213	\$12,062	\$ 14,411	\$8,683	\$181,329
Depreciation and amortization	\$ 17,487	\$ 10,444	\$ 3,611	\$ 1,536	\$ 370	\$ 33,448
Capital expenditure	\$ 10,196	\$ 8,596	\$ 4,795	\$ 968	\$ 529	\$ 25,084
Impairment loss on property, plant and equipment	\$ 22	\$ 116	\$ —	\$ —	\$ —	\$ 138
Reversal of impairment loss on investment properties	\$ 142	\$ —	\$ —	\$ —	\$ —	\$ 142

For the year ended December 31, 2016

	Domestic Fixed Communi- cations Business NTS	Mobile Communi- cations Business NTS	Internet Business NTS	International Fixed Communi- cations Business NTS	Others NTS	Total NTS
	(In Millions)					
Share of the profit of associates and joint ventures accounted for using equity method	\$ —	\$ —	\$ —	\$ —	\$ 515	\$ 515
Interest income	\$ 15	\$ 11	\$ 7	\$ 6	\$ 150	\$ 189
Interest expenses	\$ —	\$ 2	\$ —	\$ —	\$ 18	\$ 20
Operating costs and expenses	\$ 64,230	\$ 79,593	\$ 13,160	\$ 14,313	\$ 10,094	\$ 181,390
Depreciation and amortization	\$ 16,414	\$ 10,620	\$ 3,626	\$ 1,451	\$ 374	\$ 32,485
Capital expenditure	\$ 9,846	\$ 8,981	\$ 2,718	\$ 1,136	\$ 836	\$ 23,517
Impairment loss on property, plant and equipment	\$ —	\$ 596	\$ —	\$ —	\$ —	\$ 596
Reversal of impairment loss on investment properties	\$ 148	\$ —	\$ —	\$ —	\$ —	\$ 148

c. Main products and service revenues

The following is an analysis of the Company's revenue from its major products and services.

	Year Ended December 31		
	2014 NTS	2015 NTS	2016 NTS
	(In Millions)		
Mobile services revenue	\$ 77,469	\$ 80,867	\$ 78,788
Local telephone and domestic long distance telephone services revenue	38,905	36,690	34,531
Sales of product	34,795	36,509	35,377
Broadband access and domestic leased line services revenue	23,681	23,711	23,315
Internet services revenue	17,241	17,455	20,906
International network and leased telephone services revenue	11,951	11,319	10,634
Others	22,567	25,244	26,440
	<u>\$226,609</u>	<u>\$231,795</u>	<u>\$229,991</u>

d. 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		
	2014 NTS	2015 NTS	2016 NTS
	(In Millions)		
Taiwan, ROC	\$216,173	\$220,917	\$218,933
Overseas	10,436	10,878	11,058
	<u>\$226,609</u>	<u>\$231,795</u>	<u>\$229,991</u>

The Company has long-lived assets in U.S., Singapore, Hong Kong, China, Vietnam, and Japan and except for \$4,041 million and \$3,947 million as of December 31, 2015 and 2016, respectively, in the aforementioned areas, the other long-lived assets are located in Taiwan, ROC.

e. Major customers

For the years ended December 31, 2014, 2015 and 2016, the Company did not have any single customer whose revenue exceeded 10% of the total revenues.

**Exhibit 1.2****Articles of Incorporation of Chunghwa Telecom Co., Ltd.**

1. All of 26 articles adopted by Promoters Meeting on June 11, 1996.
2. Article 15 amended by the Annual General Meeting on December 26, 1997.
3. Articles 2 and 22 amended by the Annual General Meeting on November 25, 1998.
4. Paragraph 1 of Article 21, amended by the Extraordinary General Meeting on July 13, 1999.
5. Articles 2, 3, 6, 7, 10, 12, 13, 19, 21, and 22 amended, and Articles 6-1 and 7-1 added by the Annual General Meeting on June 4, 2001.
6. Articles 2, 7, 8, 9, 10, 19, 21, and 22 amended and Article 5 deleted by the Annual General Meeting on June 21, 2002.
7. Article 2 amended by the Annual General Meeting on June 17, 2003.
8. Articles 2 and 22 amended by the Annual General Meeting on June 25, 2004.
9. Articles 2, 3, 6, 10, 11, 12, 14, 17, 19, 20, 22, 23, and 25 amended, and Articles 12-1, 18-1, and 18-2 added by Annual General Meeting on May 30, 2006.
10. Articles 2, 12-1, 14, 22, and 23 amended, and Article 18-1 deleted by the Annual General Meeting on June 15, 2007.
11. Articles 2, 6, and 14 amended by the Annual General Meeting on June 19, 2008.
12. Articles 2, 6, 12 and 13 amended, and Article 6-1 deleted by the Annual General Meeting on June 19, 2009.
13. Article 2 amended by the Annual General Meeting on June 18, 2010.
14. The title of Chapter IV and Articles 12, 12-1, 14, 19, 20, and 22 amended by the Annual General Meeting on June 22, 2012.
15. The title of Chapter IV, Articles 2, 12, 13, 18-2, 21 and 22 amended; Articles 17 and 18 deleted, and Article 13-1 added by the Annual General Meeting on June 25, 2013.
16. Articles 2 and 15 amended by the Annual General Meeting on June 24, 2014.
17. Articles 1, 2 and 7-1 amended by the Annual General Meeting on June 26, 2015.
18. Articles 2 and 22 amended, and Article 22-1 added by the Annual General Meeting on June 24, 2016.

**Chapter I - General Provisions**

Article 1 - The Company is promoted by the Ministry of Transportation and Communications (“MOTC”) and others and organized under the Telecommunication Law and the provisions of the Company Law pertaining to companies limited by shares and is named “Chunghwa Telecom Co., Ltd.”

The English name of the Company is “Chunghwa Telecom Co., Ltd.”

Article 2 - The scope of business of the Company shall be as follows:

- (1) Telecommunications Enterprise of Type 1 (G901011);
- (2) Telecommunications Enterprise of Type 2 (G902011);
- (3) Installation of the Computer Equipment Business (E605010);
- (4) Telecommunication Equipment Wholesale Business (F113070);
- (5) Telecommunication Equipment Retail Business (F213060);
- (6) Telecommunication Engineering Business (E701010);
- (7) Installation of the Radio-Frequency Equipment whose operation is controlled by the Telecommunication Business (E701030);
- (8) Information Software Service Business (I301010);

- (9) Rental Business (JE01010);
- (10) Other Wholesale Businesses [telephone card and IC card] (F199990);
- (11) Management and Consulting Service Business (I103060);
- (12) Other Corporation Service Businesses [telephone card, IC card, the research and development of the telecommunication facilities and devices, accepting payment on behalf of businesses and institutions, telecommunication equipment inspection services, and agency sale of entry tickets and travel fares] (IZ99990);
- (13) Other Retail Businesses [telephone card and IC card] (F299990);
- (14) Online Certification Service Businesses (IZ13010);
- (15) Supply of Electronic Information Service Businesses (I301030);
- (16) Information Process Service Business (I301020);
- (17) Telecommunication Account Application Agency Businesses (IE01010);
- (18) Residential and Commercial Building Development, Rental and Sales Businesses (H701010);
- (19) Development of Special District/Zone Businesses (H701040);
- (20) Real Estate Rental Businesses (H703100);
- (21) Community Common Cable Television Equipment Businesses (J502020);
- (22) Exhibition Service Businesses (JB01010);
- (23) Parking Lot Operation Businesses (G202010);
- (24) Environmental Assessment Service Businesses (J101050);
- (25) Computer and Accessories Manufacturing Service (CC01110);
- (26) Information Storage and Process Equipment Manufacturing Businesses (CC01120);
- (27) Other Electrical and Electronic Machinery & Equipment Manufacturing Businesses [IC or Optical Card Scanners] (CC01990);
- (28) Radio-Frequency Equipment Import Business (F401021);
- (29) General Hotel Business (J901020);
- (30) Computer and Administrative Device Wholesale Businesses (F113050);
- (31) Information Software Wholesale Businesses (F118010);
- (32) Computer and Administrative Device Retail Businesses (F213030);
- (33) Information Software Rental Businesses (F218010);
- (34) Energy Service Business (IG03010);
- (35) Engineering Consulting Business (I101061);
- (36) Refrigeration and Air-Conditioning Consulting Business (E602011);
- (37) Automatic Control Equipment Engineering Business (E603050);
- (38) Lighting Equipment Installation Business (E603090);
- (39) Non-store Retailer Business (F399040);
- (40) Power Equipment Installation and Maintenance Business (E601010) ;
- (41) Electrical Appliance Installation Business (E601020) ;
- (42) Instrument Installation Engineering Business (EZ05010) ;
- (43) Television Program Production Business (J503021) ;

- (44) Broadcasting and Television Program Launch Business (J503031) ;
- (45) Broadcasting and Television Advertising Business (J503041) ;
- (46) Production, Licensed Recording and Supply of Videotape Program Business (J503051) ;
- (47) The Third Party Payment Business (I301040);
- (48) Water Pipe Construction Business (E501011);
- (49) Machinery and Equipment Manufacturing (CB01010);
- (50) Except the permitted business, the Company may engage in other businesses not prohibited or restricted by laws and regulations (ZZ99999).

The Company may handle endorsement and guaranty affairs in accordance with the Operation Procedures for the Endorsement and Guaranty of the Company if there is any business needs.

Article 3 - In the event that the Company invests in another business as a limited-liability shareholder, the total investment amount may not exceed the total paid-in capital of the Company. Investment not related to telecommunications may not exceed 20% of the total paid-in capital of the Company.

Article 4 - The head office of the Company is located in Taipei City and the Company may establish branch office(s) and liaison office (s) at appropriate locations within or outside the territory of the Republic of China.

Article 5 - (Deleted)

## Chapter II - Shares

Article 6 - The registered capital of the Company shall be One Hundred Twenty Billion New Taiwan Dollars (NT\$120,000,000,000), divided into Twelve Billion (12,000,000,000) common shares with a par value of Ten New Taiwan Dollars (NT\$10) per share. All the shares shall be issued in increments.

Two Hundred Million shares shall be set aside from the aforementioned common shares for the use as Stock Warrants, Preferred Shares with Warrants, and Bonds with Warrants.

For issuance of Stock Warrants where the price is less than the closing price of the Company shares on the date of issuance, or where the price of the treasury stocks to be transferred to the employees is less than the average price of the repurchased shares, shareholders representing the majority of the issued shares shall be present and approval by at least 2/3 of the presenting shareholders shall be required.

Article 6-1 -(Deleted)

Article 7 - The share certificates of the Company shall bear the shareholders' names, be signed or sealed by the Chairman and at least two other directors, be serially numbered, affixed with the corporate seal of the Company, and legalized by the Ministry of Economic Affairs ("MOEA") (hereinafter referred to as the "Competent Authority") or its certified issuance registration agency before they are issued in accordance with the relevant laws.

When issuing new shares, the Company may print a share certificate in respect of the full number of shares to be issued at that time, and shall arrange for the certificate to be kept by a centralized securities custodian institution, in which case the preceding requirement for serial numbering of share certificates shall not apply.

Shares issued by the Company may also be exempt from printing of share certificates, and the Company shall arrange for such shares to be recorded by a centralized securities custodian institution, in which case the preceding 2 paragraphs shall not apply.

Any affair with regard to the shares of the Company shall be handled in accordance with the Guidelines for Handling Stock Affairs by a Public Issuing Company.

Article 7-1 -The stocks issued by the Company, upon the request of the centralized securities custodian institution, may be merged in exchange for the security with large par value.

### Chapter III - Shareholders' Meeting

Article 8 - Shareholders' meetings shall be of two types: annual general meeting and extraordinary general meeting. Except as otherwise provided in the Company Law, shareholders' meetings shall be convened by the Board of Directors.

The annual general meeting shall be convened at least once every year and shall be convened within six (6) months after the close of each fiscal year except as otherwise approved by the Competent Authority for good cause shown.

The extraordinary general meeting shall be convened at such time as may be deemed necessary pursuant to relevant laws and regulations.

Article 9 - Where a shareholders' meeting is convened by the Board of Directors, the chairman of the Company shall act as the chairman of the shareholders' meeting. In the event that the chairman is to be on leave of absence or cannot attend the meeting for any cause whatsoever, the vice-chairman, or where the chairman and the vice-chairman are both to be on leave of absence or cannot attend the meeting for any cause whatsoever, one of the directors appointed by the chairman, or, where there is no appointment, a director elected among all the directors, may act on behalf of the chairman.

Where a shareholders' meeting is convened by a person with authority other than the Board of Directors, such convener shall act as the chairman of the shareholders' meeting. Where there are two (2) or more conveners, the chairman of the meeting shall be elected amongst such conveners.

Article 10 - Unless otherwise specified by the law, each shareholder of the Company shall be entitled to one vote for each share held.

Article 11 - (Deleted)

### Chapter IV – Directors and Audit Committee

Article 12 - The Company shall have seven (7) to fifteen (15) directors to form the Board of Directors, one-fifth (1/5) of whom shall be expert representatives.

The Board of Directors shall have one (1) chairman elected by and from among the directors with the concurrence of a general majority of the directors present at a meeting attended by at least two-thirds (2/3) of the directors and shall have one (1) vice-chairman elected in the same way.

The Board of Directors may establish various functional committees according to the laws and regulations or business needs.

The Company shall establish an audit committee starting from the 7<sup>th</sup> Board of Directors. The provisions related to supervisors under the Company Act, Securities and Exchange Act and other laws shall apply mutatis mutandis to the audit committee.

Article 12-1- In accordance with Articles 181-2 and 183 of the Securities and Exchange Act, the Company shall, beginning in the fifth commencement, establish at least three (3) independent directors to be included in the number of directors designated in the preceding Article.

The elections for directors of the Company shall proceed with the candidate nomination system; the shareholders shall elect the directors from among the nominees listed in the roster of candidates.

Elections for independent and non-independent directors shall proceed concurrently, and the number of elected directors shall be calculated separately.

The professional qualifications, restrictions on shareholding and concurrent post, affirmation of independence, nomination and election processes, exercise of authority and other requirements of independent directors shall be determined and executed in accordance with the Securities and Exchange Law and related regulations.

Article 13- The tenure of office of the directors will be three (3) years and they will be eligible for re-election.

In the event that the representative of a government or corporate body is elected as the director, the government or corporate body may reappoint such representative at any time to supplement the original tenure.

Article 13-1- The remuneration and compensation of the directors shall be determined by the Board of Directors based on the participation and the contribution of each director in the business operation of the Company and referencing the regular standards of other corporations in the similar industry.

Article 14 - The following items shall be decided by the Board of Directors:

- (1) Increase or reduction of capital of the Company.
- (2) Regulations with regard to the organization of the Company.
- (3) Establishment, amendment, and abolishment of the branch offices within or outside the territory of the Republic of China.
- (4) Examination of annual business budgets and final closing report.
- (5) Distribution of earnings or off-set of deficit.
- (6) The amount and term of domestic and foreign loan.
- (7) The amount of Investment.
- (8) Issuance of corporate bonds.
- (9) Policies regarding personnel matters, material purchase, accounting, and internal control.
- (10) Amendment and modifications of regulations of organization of the Board of Directors and the functional committee.
- (11) Amendment and modification of regulations with regard to the scope of duties of independent directors.
- (12) Appointment and removal of the president, executive vice presidents, presidents of branch offices, president of Telecommunication Laboratories, and president of Telecommunication Training Institute.
- (13) Appointment and removal of the chiefs of finance, accounting and internal audit.
- (14) The remuneration standard for employees.
- (15) Policies regarding recommendation of chairman and president to subsidiaries.
- (16) Other duties and powers granted by the law or by shareholders' meeting.

Article 15 - The Board of Directors' meeting shall be convened at least one time a quarter. The special Board of Directors' meeting shall be convened at such time as may be deemed necessary. Both meetings shall be convened by the chairman of the Company and such chairman shall act as the chairman of the meeting. In the event that the chairman cannot attend the meeting for any cause whatsoever, the vice-chairman, or where the chairman and the vice-chairman are both to be on leave of absence or cannot attend the meeting for any cause whatsoever, one of the directors appointed by the chairman, or, where there is no appointment, a director elected among all the directors, may act on behalf of the chairman.

Article 16 - All directors shall attend every Board of Directors' meeting; in case any of the directors cannot attend the meeting for any cause whatsoever, he/she may designate the other directors to act on his/her behalf and such agent shall present the proxy setting forth the vested power of the purpose of the meeting each time. However, each agent shall only accept one appointment from the directors.

Except as otherwise provided in the relevant laws or this Articles of Incorporation, any resolution of a Board of Directors' meeting shall be adopted at a meeting which at least general majority of the directors attend and at which meeting a general majority of the directors present vote in favor of such resolution.

Minutes of meetings shall be prepared for all resolutions adopted at a Board of Directors' meeting.

Article 17 - (deleted).

Article 18 - (deleted).

Article 18-1- (deleted).

Article 18-2- The Company may purchase liability insurance policies for directors during the term of their offices and within the scope of damages results from the performances of their official duties in order to reduce and disperse the risks for the Company and shareholders due to the fault, mistake, violation of duty, and inaccurate or misleading statements on part of the directors during the performance of their duties.

#### **Chapter V - Managerial Officers**

Article 19 - The Company shall have one (1) chief executive officer, to be served as a concurrent post by the chairman or by the president, to lead the managers in proposing and making significant policy decisions regarding to the Company and all affiliates of the Company.

The Company shall have one (1) president, several executive vice presidents and presidents of branch offices, and one (1) president for each of Telecommunication Laboratories and Telecommunication Training Institute.

The president shall be a director with professional knowledge in telecommunication business.

Article 20 - The president shall, in accordance with the decision made by the Board of Directors and with instruction from the chief executive officer, take charge of the affairs of the Company, and shall have the authority to sign on behalf of the Company; the executive vice presidents, presidents of branch offices, president of Telecommunication Laboratories, and president of Telecommunication Training Institute shall assist the president in all affairs, and shall have the power to sign on behalf of the Company within the scope set by rules decided by the president or authorized in writing by the president.

The division of powers and duties between the Board of Directors and the president shall be determined in accordance with the Powers and Duties Chart.

#### **Chapter VI - Accounting**

Article 21 - The fiscal year of the Company shall be from January 1 to December 31 of each year.

At the end of each fiscal year, the Board of Directors shall prepare the following statements and reports, and shall submit the same to the annual general meeting for adoption according to the relevant legal procedures.

- (1) Report of Operations;
- (2) Financial statements;
- (3) Resolution governing the distribution of earnings or the making-up of losses.

Article 22 - In annual profit-making year, the Company should distribute 1.7%—4.3% of profit as employees' compensation, and not more than 0.17% of profit should be distributed as Directors' compensation, however, that if the Company has any accumulated losses, an amount to offset should be reserved in advance.

The Company should by a resolution adopted by a majority vote at a meeting of the Board of Directors attended by two-thirds of the total number of directors, have the profit distributable as employees' compensation in the preceding paragraph distributed in the form of share or in cash; and report at the General Meeting of shareholders.

The provisions in the two preceding Paragraphs have retrospective effect and should apply to the determination of compensation to employees and Directors for the fiscal year of 2015.

Article 22-1- After the Company has paid all taxes due at the end of each fiscal year, the Company shall make up its accumulated losses and set aside ten percent (10 %) earning as a statutory revenue reserve before distribution of earnings, except when the accumulated amount of such legal reserve equals to the Company's total authorized capital. The Company may also set aside or reverse special reserve(s) according to the business needs or laws and regulations. A minimum of fifty percent (50%) of the total amount of the remaining amount, along with the accumulated retained earnings from the previous year, shall be distributed to shareholders. Cash dividends shall not be less than fifty percent (50%) of the total dividends, but when the cash dividends fall below NT\$0.1 per share, dividends may be distributed in the form of shares.



The percentage of distribution stipulated in the preceding paragraph shall take actual profitability of the year, capital budgeting, and status of finance into consideration, and shall be executed following a resolution of shareholders' meeting.

Dividends and bonuses shall not be distributed where the Company has no earning.

Where the Company has no loss, it may distribute the capital reserve derived from the income of issuance of new shares at a premium, in whole or in part, by issuing new shares or by cash to shareholders in proportion to the number of their existing shares being held by each of them.

Article 23 - In the event that the Company issues new shares, excluding ad hoc ratification by the central competent authority, the Company shall reserve ten percent (10%) to fifteen percent (15%) of the total newly issued shares for preemptive subscription by employees of the Company.

#### **Chapter VII - Supplementary Provisions**

Article 24 - The regulations with regard to the organization of the Board of Directors and the Company shall be separately adopted.

Article 25 - Matters not specified herein shall be resolved in accordance with the Company Law.

Article 26 - This Articles of Incorporation was adopted on June 11, 1996.

## Exhibit 8.1

## LIST OF SUBSIDIARIES

(as of March 31, 2017)

NAME OF ENTITY	JURISDICTION OF INCORPORATION
CHIEF Telecom Inc.	Taiwan, ROC
Chunghwa International Yellow Pages Co., Ltd.	Taiwan, ROC
Chunghwa Investment Co., Ltd.	Taiwan, ROC
Chunghwa Precision Test Tech. Co., Ltd.	Taiwan, ROC
Chunghwa System Integration Co., Ltd.	Taiwan, ROC
Light Era Development Co., Ltd.	Taiwan, ROC
Senao International Co., Ltd.	Taiwan, ROC
Spring House Entertainment Tech. Inc.	Taiwan, ROC
Unigate Telecom Inc.	Taiwan, ROC
Honghwa International Co., Ltd. (formerly known as Honghwa Human Resources Co., Ltd.)	Taiwan, ROC
New Prospect Investments Holdings Ltd.	British Virgin Islands
Prime Asia Investments Group Ltd.	British Virgin Islands
Concord Technology Co., Ltd.	Brunei
Donghwa Telecom Co., Ltd.	Hong Kong
Senao International HK Limited	Hong Kong
Chunghwa Hsingta Co., Ltd.	Hong Kong
Chunghwa Telecom Japan Co., Ltd.	Japan
CHPT Japan Co., Ltd.	Japan
Chief International Corp.	Samoa Islands
Senao International (Samoa) Holding Ltd.	Samoa Islands
Chunghwa Precision Test Tech. International, Ltd.	Samoa Islands
Glory Network System Service (Shanghai) Co., Ltd.	People's Republic of China
Chunghwa Telecom (China), Co., Ltd.	People's Republic of China

NAME OF ENTITY	JURISDICTION OF INCORPORATION
Chunghwa Telecom Singapore Pte., Ltd.	Singapore
Chunghwa Telecom Global, Inc.	United States of America
Chunghwa Precision Test Tech. USA Corporation	United States of America
Chunghwa Telecom Vietnam Co., Ltd.	Vietnam
Chunghwa Sochamp Technology Inc.	Taiwan, ROC
Smartfun Digital Co., Ltd.	Taiwan, ROC
Senao Trading (Fujian) Co., Ltd.	People's Republic of China
Senao International Trading (Shanghai) Co., Ltd.	People's Republic of China
Senao International Trading (Shanghai) Co., Ltd.	People's Republic of China
Senao International Trading (Jiangsu) Co., Ltd.	People's Republic of China
Jiangsu Zhenhua Information Technology Company, LLC.	People's Republic of China
Shanghai Taihua Electronic Technology Limited	People's Republic of China
Youth Co., Ltd.	Taiwan, R.O.C.
Aval Technologies Co., Ltd.	Taiwan, R.O.C.
ISPOT Co., Ltd.	Taiwan, R.O.C.
Youyi Co., Ltd.	Taiwan, R.O.C.
Shanghai Chief Telecom Co., Ltd.	People's Republic of China
Chunghwa Leading Photonics Tech Co., Ltd.	Taiwan, R.O.C.
Chunghwa Telecom (Thailand) Co., Ltd.	Thailand

**Exhibit 12.1****Certification by the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Yu Cheng, certify that:

1. I have reviewed this annual report on Form 20-F of Chunghwa Telecom Co., Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 25, 2017

By:           /s/ YU CHENG          

Name: **Yu Cheng**

Title: **Chairman and Chief Executive Officer**

## Exhibit 12.2

**Certification by the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Bo-Yung Chen, certify that:

1. I have reviewed this annual report on Form 20-F of Chunghwa Telecom Co., Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 25, 2017

By:           /s/ BO-YUNG CHEN          

**Name: Bo-Yung Chen**

**Title: Chief Financial Officer**

**Exhibit 13.1****Certification by the Chief Executive Officer****Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report on Form 20-F of Chunghwa Telecom Co., Ltd. (the “Company”) for the year ended December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Yu Cheng, Chairman and Chief Executive Officer of the company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the company.

Date: April 25, 2017

By: /s/ YU CHENG  
Name: **Yu Cheng**  
Title: **Chairman and Chief Executive Officer**

## Exhibit 13.2

**Certification by the Chief Financial Officer****Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report on Form 20-F of Chunghwa Telecom Co., Ltd. (the “Company”) for the year ended December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Bo-Yung Chen, Chief Financial Officer of the company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the company.

Date: April 25, 2017

By:           /s/ BO-YUNG CHEN            
**Name: Bo-Yung Chen**  
**Title: Chief Financial Officer**