# **Chunghwa Telecom Co., Ltd. and Subsidiaries**

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

REPRESENTATION LETTER

The entities that are required to be included in the consolidated financial statements of affiliates in

accordance with the "Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports

and Consolidated Financial Statements of Affiliated Enterprises" for the year ended December 31, 2018 are

all the same as those included in the consolidated financial statements of Chunghwa Telecom Co., Ltd. and

its subsidiaries prepared in conformity with the International Financial Reporting Standard 10 "Consolidated

Financial Statements". Relevant information that should be disclosed in the consolidated financial

statements of affiliates is included in the consolidated financial statements of Chunghwa Telecom Co., Ltd.

and its subsidiaries. Hence, we do not prepare a separate set of consolidated financial statements of

affiliates.

Very truly yours,

CHUNGHWA TELECOM CO., LTD.

Ву

YU CHENG Chairman

March 19, 2019

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# Deloitte.

### 勤業眾信

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#### INDEPENDENT AUDITORS' REPORT

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

#### **Opinion**

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

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

#### **Basis for Opinion**

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

#### **Key Audit Matters**

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

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

#### Revenue Recognition on Mobile Services

#### Key audit matter:

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

#### Corresponding audit procedures:

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

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

#### Revenue Recognition on Project Business

#### Key audit matter:

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

#### Corresponding audit procedures:

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

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

#### **Emphasis of Matter**

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

#### **Other Matter**

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

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

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

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

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

#### Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

- 1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- 2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- 3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- 4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- 5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- 6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

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

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

Hugheng Lin

Ching Pour Ghah

Deloitte & Touche Taipei, Taiwan Republic of China

March 19, 2019

#### Notice to Readers

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

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

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

	2010		2015	
ASSETS	Amount	%	Amount	%
CURRENT ASSETS				
Cash and cash equivalents (Notes 3 and 6)	\$ 27,644,780	6	\$ 28,824,935	7
Hedging financial assets (Notes 3, 5 and 21)	1,069	- 1	-	-
Contract assets (Notes 3, 5 and 30) Trade notes and accounts receivable, net (Notes 3, 4, 5, 10 and 30)	4,868,728 30,075,503	7	31,941,094	7
Receivables from related parties (Note 39)	24,270	-	49,367	-
Inventories (Notes 3, 4, 5, 11 and 40)	15,120,715	3	8,839,615	2
Prepayments (Notes 5, 12 and 39) Other current monetary assets (Notes 13 and 28)	1,872,984 9,504,203	2	2,188,173 5,308,060	1
Other current assets (Notes 5, 20, 32 and 40)	2,576,084	1	2,182,758	
Total current assets	91,688,336	20	79,334,002	17
NONCURRENT ASSETS	515.070			
Financial assets at fair value through profit or loss (Notes 3, 4, 5 and 7) Financial assets at fair value through other comprehensive income (Notes 3, 4, 5 and 8)	517,362 6,932,503	2	-	-
Available-for-sale financial assets (Notes 3, 5 and 9)	-	-	3,125,086	1
Financial assets carried at cost (Notes 3, 5 and 14)	2 0 4 4 000	-	2,625,785	1
Investments accounted for using equity method (Notes 3 and 16) Contract assets (Notes 3, 5 and 30)	2,944,890 2,343,958	1	2,546,374	-
Property, plant and equipment (Notes 3, 4, 17, 39 and 40)	288,914,228	61	288,707,910	64
Investment properties (Notes 3, 4 and 18)	8,287,212	2	8,047,793	2
Intangible assets (Notes 3, 4 and 19)	50,943,682 3,553,856	11 1	54,883,268	12 1
Deferred income tax assets (Notes 3 and 32) Incremental costs of obtaining contracts (Notes 3, 5 and 30)	1,335,030	-	2,730,093	-
Net defined benefit assets (Notes 3, 4 and 28)	1,164,088	-	12,979	-
Prepayments (Notes 12 and 39)	3,463,337	1	3,573,345	1
Other noncurrent assets (Notes 20 and 40)	5,180,222	1	5,536,487	1
Total noncurrent assets	375,580,368	80	371,789,120	83
TOTAL	<u>\$ 467,268,704</u>	<u>100</u>	<u>\$ 451,123,122</u>	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term loans (Note 22)	\$ 100,000	-	\$ 70,000	-
Financial liabilities at fair value through profit or loss (Notes 3, 5 and 7) Hedging derivative financial liabilities (Notes 3, 5 and 21)	1,114	-	578 850	-
Contract liabilities (Notes 3, 5, 27 and 30)	10,687,772	2	-	-
Trade notes and accounts payable (Note 24)	20,464,792	5	19,395,889	4
Payables to related parties (Note 39) Current tax liabilities (Notes 3, 5 and 32)	917,951 4,390,203	- 1	684,185 4,725,698	1
Other payables (Note 25)	23,315,383	5	25,001,401	6
Provisions (Notes 3,5 and 26)	128,200	-	188,744	-
Advance receipts (Note 3, 5 and 27) Other current liabilities (Note 5)	1,381,606	-	8,841,858 1,081,156	2
Total current liabilities	61,387,021	13	59,990,359	13
NONCURRENT LIABILITIES Contract liabilities (Notes 3, 5, 27 and 30)	2,595,149	1		
Long-term loans (Notes 23 and 40)	1,600,000	-	1,600,000	-
Deferred income tax liabilities (Notes 3, 5 and 32)	1,991,843	-	1,429,592	-
Provisions (Notes 3 and 26)	78,627 4,716,571	- 1	78,513 4,671,441	- 1
Customers' deposits (Note 39) Net defined benefit liabilities (Notes 3, 4 and 28)	3,533,936	1	2,703,569	1 1
Deferred revenue (Note 3 and 5)	-	-	3,612,391	1
Other noncurrent liabilities (Note 5)	4,793,237	1	3,457,677	1
Total noncurrent liabilities  Total liabilities	19,309,363 80,696,384	4	17,553,183	<u>4</u>
EQUITY ATTRIBUTABLE TO STOCKHOLDERS OF THE PARENT (Notes 5, 15 and 29)	60,070,364	<u>17</u>	77,543,542	<u>17</u>
Common stocks	77,574,465	17	77,574,465	17
Additional paid-in capital	171,136,764	36	169,466,883	38
Retained earnings Legal reserve	77,574,465	17	77,574,465	17
Special reserve	2,675,419	17	2,680,823	1
Unappropriated earnings	47,141,345	10	37,202,683	8
Total retained earnings Other adjustments	127,391,229 459,914		117,457,971 382,666	
Total equity attributable to stockholders of the parent	376,562,372	81	364,881,985	81
NONCONTROLLING INTERESTS (Notes 5, 15 and 29)	10,009,948	2	8,697,595	2
Total equity	386,572,320	83	373,579,580	83
TOTAL	<u>\$ 467,268,704</u>	100	\$ 451,123,122	100
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The accompanying notes are an integral part of the consolidated financial statements.

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME YEARS ENDED DECEMBER 31, 2018 and 2017

(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017		
	Amount	%	Amount	%	
REVENUES (Notes 3, 5, 30, 39 and 45)	\$ 215,483,158	100	\$ 227,514,183	100	
OPERATING COSTS (Notes 3, 5, 11, 28, 30, 31, 39 and 45)	139,545,457	65	146,837,483	65	
GROSS PROFIT	75,937,701	35	80,676,700	35	
OPERATING EXPENSES (Notes 3, 5, 28, 31, 39 and 45)					
Marketing	23,170,024	11	25,356,999	11	
General and administrative	4,589,488	2	4,626,423	2	
Research and development	3,725,249	2	3,885,920	2	
Expected credit loss	919,732		<del>_</del>		
Total operating expenses	32,404,493	<u>15</u>	33,869,342	<u>15</u>	
OTHER INCOME AND EXPENSES (Notes 18, 19, 31 and 45)	110,451		(104,381)		
INCOME FROM OPERATIONS	43,643,659	_20	46,702,977	20	
NON-OPERATING INCOME AND EXPENSES Interest income (Note 45) Other income (Notes 8, 31 and 39) Other gains and losses (Notes 31, 38 and 39) Interest expenses (Note 45)	196,889 699,823 (45,671) (17,596)	- - - -	205,448 835,465 (132,158) (21,913)	- - - -	
Share of profits of associates and joint ventures accounted for using equity method (Notes 16 and 45)	501,600		407,243		
Total non-operating income and expenses	1,335,045		1,294,085		
INCOME BEFORE INCOME TAX	44,978,704	20	47,997,062	20	
INCOME TAX EXPENSE (Notes 3, 5 and 32)	8,522,533	4	7,954,461	2	
NET INCOME	36,456,171	<u>16</u>	40,042,601 (Cor	18 ntinued)	

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME YEARS ENDED DECEMBER 31, 2018 and 2017

(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

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

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME YEARS ENDED DECEMBER 31, 2018 and 2017

(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

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

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

(Concluded)

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

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

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

## CONSOLIDATED STATEMENTS OF CASH FLOWS YEARS ENDED DECEMBER 31, 2018 and 2017

(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	\$ 44,978,704	\$ 47,997,062
Adjustments to reconcile income before income tax to net cash	Ψ,> / ο, / ο .	Ψ,>>,,00 <b>_</b>
provided by operating activities:		
Depreciation	27,481,956	28,163,584
Amortization	4,386,798	3,766,020
Amortization of incremental costs of obtaining contracts	1,941,124	-
Expected credit loss	919,732	-
Provision for doubtful accounts	-	643,010
Interest expenses	17,596	21,913
Interest income	(196,889)	(205,448)
Dividend income	(395,593)	(327,861)
Compensation cost of share-based payment transactions	17,302	21,783
Share of profits of associates and joint ventures accounted for	(504 500)	(40= 0.40)
using equity method	(501,600)	(407,243)
Loss (gain) on disposal of property, plant and equipment	(142,068)	106,692
Property, plant and equipment transferred to expenses	-	2,565
Loss on disposal of financial instruments	(5.7(2))	46
Gain on disposal of financial instruments  Loss on disposal of investments accounted for using equity	(5,763)	(2,748)
method	125	223
	365,123	52,487
Provision for inventory and obsolescence Reversal of impairment loss on investment properties	(19,133)	(10,979)
Impairment loss on intangible assets	50,750	8,622
Valuation loss (gain) on financial assets and liabilities at fair	30,730	0,022
value through profit or loss, net	20,763	(779)
Loss (gain) on foreign exchange, net	(17,223)	83,171
Changes in operating assets and liabilities:	(,)	
Decrease (increase) in:		
Financial assets held for trading	-	218
Financial assets mandatorily measured at fair value through		
profit or loss	63,117	-
Contract assets	2,750,594	-
Trade notes and accounts receivable	1,353,807	(1,191,428)
Receivables from related parties	25,097	(35,568)
Inventories	(6,778,309)	(1,469,328)
Prepayments	417,569	458,004
Other current monetary assets	(172,597)	(81,035)
Other current assets	(261,240)	(60,981)
Incremental cost of obtaining contracts	(802,011)	-
Increase (decrease) in:	2 <52 545	
Contract liabilities	2,652,747	-
Trade notes and accounts payable	1,065,054	586,940
Payables to related parties	233,766	(77,888)
Other payables	(1,088,406)	(691,001) (Continued)
		(Commued)

## CONSOLIDATED STATEMENTS OF CASH FLOWS YEARS ENDED DECEMBER 31, 2018 and 2017

(In Thousands of New Taiwan Dollars)

	2018	2017
Provisions	\$ 27,142	\$ 82,443
Advance receipts	-	(728,007)
Other operating liabilities	422,413	(76,063)
Deferred revenue	,	66,199
Net defined benefit plans	(1,535,294)	48,919
Cash generated from operations	77,275,153	76,743,544
Interest paid	(17,524)	(21,918)
Income tax paid	(10,891,279)	(5,789,762)
Net cash provided by operating activities	66,366,350	70,931,864
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets at fair value through other		
comprehensive income	(289,580)	-
Proceeds from return of financial assets at fair value through other		
comprehensive income	6,690	-
Proceeds from disposal of available-for-sale financial assets	-	1,258
Acquisition of time deposits and negotiable certificates of deposit	(0.710.051)	(6.000.044)
with maturities of more than three months	(9,719,951)	(6,230,944)
Proceeds from disposal of time deposits and negotiable certificates	5 (54 041	£ (40,000
of deposit with maturities of more than three months	5,654,941	5,649,868
Proceeds from disposal of held-to-maturity financial assets	-	2,140,000 (400,000)
Acquisition of financial assets carried at cost Proceeds from disposal of financial assets carried at cost	-	7,292
Capital reduction of financial assets carried at cost	-	12,167
Acquisition of investments accounted for using equity method	(204,900)	12,107
Proceeds from disposal of investments accounted for using equity	(204,700)	
method	3,379	_
Proceeds from capital reduction of investments accounted for using	3,317	
equity method	19,184	_
Acquisition of property, plant and equipment	(28,549,929)	(26,875,336)
Proceeds from disposal of property, plant and equipment	264,446	159,636
Acquisition of intangible assets	(498,005)	(11,304,633)
Acquisition of investment properties	(5,627)	-
Increase in other noncurrent assets	(80,640)	(788,594)
Interest received	186,617	233,439
Cash dividends received	599,621	675,321
Net cash used in investing activities	(32,613,754)	(36,720,526)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from short-term loans	360,000	6,951,500
Repayment of short-term loans	(330,000)	(7,019,500)
Increase (decrease) in customers' deposits	30,997	(110,756)
Increase (decrease) in other noncurrent liabilities	83,613	(36,271)
		(Continued)

## CONSOLIDATED STATEMENTS OF CASH FLOWS YEARS ENDED DECEMBER 31, 2018 and 2017

(In Thousands of New Taiwan Dollars)

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

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

#### 1. GENERAL

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

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

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

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

#### 2. APPROVAL OF FINANCIAL STATEMENTS

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

#### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

#### **Statement of Compliance**

The accompanying consolidated financial statements have been prepared in conformity with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), International

Financial Reporting Interpretations Committee (IFRIC) and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission (FSC) (the "Taiwan-IFRS").

#### **Basis of Preparation**

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values and net defined benefit liabilities (assets) which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

#### **Current and Noncurrent Assets and Liabilities**

Current assets include:

- a. Assets held primarily for the purpose of trading;
- b. Assets expected to be realized within twelve months after the reporting period; and
- c. Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

Current liabilities include:

- a. Liabilities held primarily for the purpose of trading;
- b. Liabilities due to be settled within twelve months after the reporting period; and
- c. Liabilities for which the Company does not have an unconditional right to defer settlement for at least twelve months after the reporting period.

Assets and liabilities that are not classified as current are classified as noncurrent.

Light Era Development Co., Ltd. (LED) engages mainly in development of property for rent and sale. The assets and liabilities of LED related to property development within its operating cycle, which is over one year, are classified as current items.

#### **Basis of Consolidation**

a. Principles for preparing consolidated financial statements

The consolidated financial statements incorporate the financial statements of Chunghwa and entities controlled by Chunghwa (its subsidiaries).

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with those used by the Company.

All inter-company transactions, balances, income and expenses are eliminated in full upon consolidation.

#### Attribution of total comprehensive income to noncontrolling interests

Total comprehensive income of subsidiaries is attributed to the stockholders of the parent and to the noncontrolling interests even if it results in the noncontrolling interests having a deficit balance.

#### Changes in the Company's ownership interests in subsidiaries

Changes in the Company's ownership interests in subsidiaries that do not result in the Company losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Company's interests and the noncontrolling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the noncontrolling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to stockholders of the parent.

#### b. The subsidiaries in the consolidated financial statements

The detail information of the subsidiaries at the end of reporting period was as follows:

			Percentage o	<u>)</u>	
Name of Investor	Name of Investee	Main Businesses and Products	2018	ber 31 2017	- Note
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd. ("SENAO")	Handset and peripherals retailer; sales of CHT mobile phone plans as an agent	28	29	a)
	Light Era Development Co., Ltd. ("LED")	Planning and development of real estate and intelligent buildings, and property management	100	100	
	Donghwa Telecom Co., Ltd. ("DHT")	International private leased circuit, IP VPN service, and IP transit services	100	100	
	Chunghwa Telecom Singapore Pte., Ltd. ("CHTS")	International private leased circuit, IP VPN service, and IP transit services	100	100	
	Chunghwa System Integration Co., Ltd. ("CHSI")	Providing system integration services and telecommunications equipment	100	100	
	Chunghwa Investment Co., Ltd. ("CHI")	Investment	89	89	
	CHIEF Telecom Inc. ("CHIEF")	Network integration, internet data center ("IDC"), communications integration and cloud application services	57	67	b)
	CHYP Multimedia Marketing & Communications Co., Ltd. ("CHYP")	Digital information supply services and advertisement services	100	100	
	Prime Asia Investments Group Ltd. (B.V.I.) ("Prime Asia")	Investment	100	100	
	Spring House Entertainment Tech. Inc. ("SHE")	Software design services, internet contents production and play, and motion picture production and distribution	56	56	
	Chunghwa Telecom Global, Inc. ("CHTG")	International private leased circuit, internet services, and transit services	100	100	
	Chunghwa Telecom Vietnam Co., Ltd. ("CHTV")	Intelligent energy saving solutions, international circuit, and information and communication technology ("ICT") services.	100	100	
	Smartfun Digital Co., Ltd. ("SFD")	Providing diversified family education digital services	65	65	
	Chunghwa Telecom Japan Co., Ltd. ("CHTJ")	International private leased circuit, IP VPN service, and IP transit services	100	100	
	Chunghwa Sochamp Technology Inc. ("CHST")	Design, development and production of Automatic License Plate Recognition software and hardware	51	51	
	Honghwa International Co., Ltd. ("HHI")	Telecommunications engineering, sales agent of mobile phone plan application and other business services	100	100	
	Chunghwa Leading Photonics Tech Co., Ltd. ("CLPT")	Production and sale of electronic components and finished products	75	75	
	Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT")	International private leased circuit, IP VPN service, ICT and cloud VAS services	100	100	c)
	,			(Con	tinue

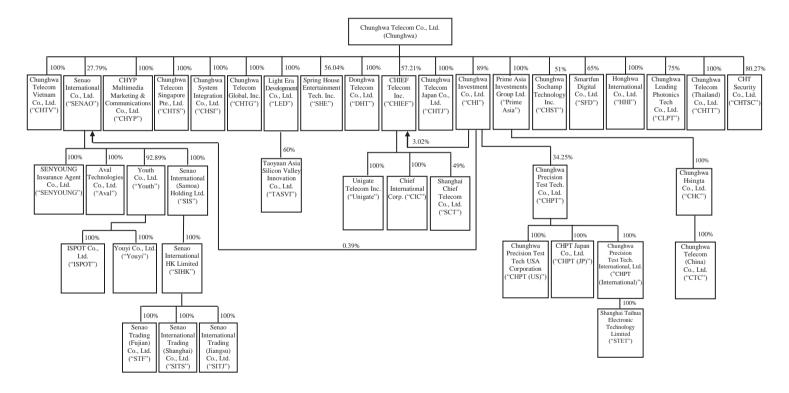
			Percentage of Ownership December 31		
Name of Investor	Name of Investee	Main Businesses and Products	2018	2017	Note
	CHT Security Co., Ltd. ("CHTSC")	Computing equipment installation, wholesale of computing and business machinery equipment and software, management consulting services, data processing services, digital information supply services and internet identify services	80	80	d)
	New Prospect Investments Holdings Ltd. (B.V.I.) ("New Prospect")	Investment	-	-	e)
Senao International Co., Ltd.	Senao International (Samoa) Holding Ltd. ("SIS")	International investment	100	100	0
	Youth Co., Ltd. ("Youth")	Sale of information and communication technologies products	93	89	f)
	Aval Technologies Co., Ltd. ("Aval")	Sale of information and communication technologies products	100	100	
	SENYOUNG Insurance Agent Co., Ltd. ("SENYOUNG")	Property and liability insurance agency	100	100	g)
Youth Co., Ltd.	ISPOT Co., Ltd. ("ISPOT")	Sale of information and communication technologies products	100	100	
	Youyi Co., Ltd. ("Youyi")	Maintenance of information and communication technologies products	100	100	
Light Era Development Co., Ltd.	Taoyuan Asia Silicon Valley Innovation Co., Ltd. ("TASVI")	Development of real estate	60	-	h)
CHIEF Telecom Inc.	Unigate Telecom Inc. ("Unigate")	Telecommunications and internet service	100	100	
	Chief International Corp. ("CIC")	Telecommunications and internet service	100	100	
	Shanghai Chief Telecom Co., Ltd. ("SCT")	Telecommunications and internet service	49	49	
Chunghwa System Integration Co., Ltd.	Concord Technology Co., Ltd. ("Concord")	Investment	-	100	i)
Chunghwa Investment Co., Ltd.	Chunghwa Precision Test Tech. Co., Ltd. ("CHPT")	Production and sale of semiconductor testing components and printed circuit board	34	38	j)
Concord Technology Co., Ltd.	Glory Network System Service (Shanghai) Co., Ltd. ("GNSS (Shanghai)")	Design, development and production of computer and internet software, installment, maintenance and consulting services of information system integration, and sales of self-production products	-	-	k)
Chunghwa Precision Test Tech. Co., Ltd.	Chunghwa Precision Test Tech. USA Corporation ("CHPT (US)")	Design and after-sale services of semiconductor testing components and printed circuit board	100	100	
	CHPT Japan Co., Ltd. ("CHPT (JP)")	Related services of electronic parts, machinery processed products and printed circuit board	100	100	
	Chunghwa Precision Test Tech. International, Ltd. ("CHPT (International)")	Wholesale and retail of electronic materials, and investment	100	100	
Senao International (Samoa) Holding Ltd.	Senao International HK Limited ("SIHK")	International investment	100	100	
Senao International	Senao Trading (Fujian) Co.,	Sale of information and communication	100	100	1)
HK Limited	Ltd. ("STF") Senao International Trading (Shanghai) Co., Ltd. ("SITS")	technologies products Sale of information and communication technologies products	100	100	
	( 5110 )			(Cont	inued)

			Percentage of		
			Decem		
Name of Investor	Name of Investee	Main Businesses and Products	2018	2017	Note
	Senao International Trading (Shanghai) Co., Ltd. ("SEITS")	Maintenance of information and communication technologies products	-	100	m)
	Senao International Trading (Jiangsu) Co., Ltd. ("SITJ")	Sale of information and communication technologies products	100	100	n)
Prime Asia Investments Group Ltd. (B.V.I.)	Chunghwa Hsingta Co., Ltd. ("CHC")	Investment	100	100	
Chunghwa Hsingta Co., Ltd. ("CHC")	Chunghwa Telecom (China) Co., Ltd. ("CTC")	Integrated information and communication solution services for enterprise clients, and intelligent energy network service	100	100	
	Jiangsu Zhenhua Information Technology Company, LLC. ("JZIT")	Providing intelligent energy saving solution and intelligent buildings services	-	75	o)
Chunghwa Precision Test Tech. International, Ltd.	Shanghai Taihua Electronic Technology Limited ("STET")	Design of printed circuit board and related consultation service	100	100	
,,	( )			(Conc	luded)

- a) SENAO transferred its treasury stock to employees in June 2018 and the Company's ownership interest in SENAO decreased to 28.18% as of December 31, 2018. As Chunghwa controls five out of nine seats of the Board of Directors of SENAO through the support of large beneficial stockholders, the accounts of SENAO are included in the consolidated financial statements.
- b) Chunghwa and CHI disposed some shares of CHIEF in June 2017 before CHIEF traded its shares on the emerging stock market according to the local requirements. The Company's equity ownership of CHIEF decreased to 70.43% as of December 31, 2017. CHIEF issued new shares in March and November 2018 as its employees exercised their options. In addition, Chunghwa and CHI disposed some shares of CHIEF in May 2018 before CHIEF traded its shares on the General Stock Market of the Taipei Exchange according to the local requirements. Furthermore, Chunghwa and CHI did not participate in the capital increase of CHIEF in June 2018. Therefore, the Company's equity ownership interest in CHIEF decreased to 60.23% as of December 31, 2018.
- c) Chunghwa invested 100% equity shares of Chunghwa Telecom (Thailand) Co., Ltd. ("CHTT") in March 2017.
- d) Chunghwa invested 80.27% equity shares of CHT Security Co., Ltd. ("CHTSC") in December 2017.
- e) New Prospect was approved to dissolve its business in April 2017. The liquidation of New Prospect was completed in May 2017.
- f) SENAO subscribed for all the shares in the capital increase of Youth in December 2018. Therefore, the Company's equity ownership interest in Youth increased from 89% to 93%.
- g) SENAO invested 100% equity shares of SENYOUNG Insurance Agent Co., Ltd. ("SENYOUNG") in November 2017.
- h) LED invested 60% equity shares of Taoyuan Asia Silicon Valley Innovation Co., Ltd. ("TASVI") in March 2018.
- i) Concord was approved to end and dissolve its business in August 2017. The liquidation of Concord was completed in January 2018.

- j) CHI did not participate in the capital increase of CHPT in September 2017 and disposed some shares of CHPT from April to August 2018. Therefore, its ownership interest in CHPT decreased to 34.25% as of December 31, 2018. However, considering the absolute and relative size of ownership interest, and the dispersion of shares owned by the other stockholders, the management concluded that the Company has a sufficiently dominant voting interest to direct the relevant activities; hence, CHPT is deemed as a subsidiary of the Company.
- k) GNSS (Shanghai) completed its liquidation in August 2017 and Concord received the proceeds from the liquidation.
- 1) STF was approved to end and dissolve its business in September 2018. The liquidation of STF is still in process.
- m) SEITS completed its liquidation in March 2018.
- n) SITJ was approved to end and dissolve its business in April 2018. The liquidation of SITJ is still in process.
- o) JZIT completed its liquidation in December 2018 and CHC received the proceeds from the liquidation.

The following diagram presents information regarding the relationship and ownership percentages between Chunghwa and its subsidiaries as of December 31, 2018:



#### **Foreign Currencies**

In preparing the financial statements of each individual entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period in which they arise.

Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined and related exchange differences are recognized in profit or loss. Conversely, when the fair value changes were recognized in other comprehensive income, related exchange difference shall be recognized in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are not retranslated.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Company's foreign operations (including of the subsidiaries and associates in other countries or currencies used different with Chunghwa) are translated into New Taiwan dollars using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income and attributed to stockholders of the parent and noncontrolling interests as appropriate.

#### **Cash Equivalents**

Cash equivalents include commercial paper, time deposits and negotiable certificates of deposit with original maturities within three months from the date of acquisition, highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

#### **Inventories**

Inventories are stated at the lower of cost or net realizable value item by item, except for those that may be appropriate to group items of similar or related inventories. Net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. The calculation of the cost of inventory is derived using the weighted-average method.

#### **Buildings and Land Consigned to Construction Contractors**

Inventories of LED are stated at the lower of cost or net realizable value item by item, except for those that may be appropriate to group as similar items or related inventories. Land acquired before construction is classified as land held for development, and then reclassified as land held under development after LED begins its construction project.

Upon the completion of the construction project, LED recognizes revenues in the amount of proceeds from customers for land and buildings and related costs when ownership is transferred to the customers. The unsold portion of the completed construction project is transferred to land and building held for sale.

#### **Investments in Associates and Joint Ventures**

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor an interest in a joint venture. A joint venture is a joint arrangement whereby the Company and other parties that have joint control of the arrangement have rights to the net assets of the arrangement.

Investments accounted for using the equity method include investments in associates and interests in joint ventures. Under the equity method, an investment in an associate or a joint venture is initially recognized at cost and adjusted thereafter to recognize the Company's share of profit or loss and other comprehensive income of the associate and joint venture as well as the distribution received. The Company also recognizes its share in changes in the associates and joint ventures.

When the Company subscribes for new shares of the associate and joint venture at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Company's proportionate interest in the associate and joint venture. The Company records such a difference as an adjustment to investments with the corresponding amount charged or credited to additional paid-in capital. When the adjustment should be debited to additional paid-in capital but the additional paid-in capital recognized from investments accounted for using equity method is insufficient, the shortage is debited to retained earnings.

Any excess of the cost of acquisition over the Company's share of the fair value of the identifiable net assets and liabilities of an associate or a joint venture at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and shall not be amortized. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition is recognized immediately in profit or loss.

When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

When the Company transacts with its associate and joint venture, profits and losses resulting from the transactions with the associate and joint venture are recognized in the Company's consolidated financial statements only to the extent of interests in the associate and joint venture that are not related to the Company.

#### **Property, Plant and Equipment**

Property, plant and equipment are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment loss.

Property, plant and equipment in the course of construction are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for their intended use.

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. Freehold land is not depreciated. The estimated useful lives, residual values and depreciation method are reviewed at the end of each year, with the effect of any changes in estimate accounted for on a prospective basis.

On derecognition of an item of property, plant and equipment, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss in the period in which the property is derecognized.

#### **Investment Properties**

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties also include land held for a currently undetermined future use.

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss. Depreciation is recognized using the straight-line method.

For a transfer from the investment properties to property, plant and equipment, the deemed cost of the property, plant and equipment for subsequent accounting is its carrying amount at the commencement of owner-occupation.

For a transfer from the property, plant and equipment to investment properties, the deemed cost of the investment properties for subsequent accounting is its carrying amount at the end of owner-occupation.

On derecognition of the investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss in the period in which the property is derecognized.

#### Goodwill

Goodwill arising from the acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment loss.

For the purpose of impairment testing, goodwill is allocated to each of the Company's cash-generating units or groups of cash-generating units (referred to as "cash-generating unit") that are expected to benefit from the synergies of the business combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the unit may be impaired, by comparing its carrying amount, including the attributable goodwill, with its recoverable amount. However, if the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit shall be tested for impairment before the end of the current annual period. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

#### **Intangible Assets Other Than Goodwill**

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful life, residual value, and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. The residual value of an intangible asset with a finite useful life shall be assumed to be zero unless the Company expects to dispose of the intangible asset before the end of its economic life. Intangible assets with indefinite useful lives that are acquired separately are measured at cost less accumulated impairment loss.

Intangible assets acquired in a business combination and recognized separately from goodwill are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss in the period in which the asset is derecognized.

## Impairment of Tangible Assets, Intangible Assets (Other Than Goodwill) and Incremental Costs of Obtaining Contracts

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

Impairment loss from the assets related to incremental cost of obtaining contracts is recognized to the extent that the carrying amount of the assets exceeds the remaining amount of consideration that the Company expects to receive in exchange for related goods or services less the costs which relate directly to providing those goods or services.

When an impairment loss is subsequently reversed, the carrying amount of the asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

#### **Financial Instruments**

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

#### a. Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

#### 1) Measurement category

#### 2018

a) Financial assets at fair value through profit or loss (FVTPL)

Financial asset is classified as at FVTPL when the financial asset is mandatorily classified as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at fair value through other comprehensive income (FVOCI).

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividend earned on the financial asset. Fair value is determined in the manner described in Note 38.

#### b) Financial assets at amortized cost

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

- i. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- ii. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

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

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

#### c) Investments in equity instruments at FVOCI

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

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

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

#### 2017

a) Financial assets at fair value through profit or loss (FVTPL)

Financial assets are classified as at FVTPL when the financial asset is held for trading.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividend or interest earned on the financial asset.

#### b) Held-to-maturity financial assets

The Company invests in bank debentures and corporate bonds with specific credit ratings and the Company has positive intent and ability to hold to maturity, are classified as held-to-maturity investments.

Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest method less any impairment loss.

#### c) Available-for-sale financial assets (AFS financial assets)

AFS financial assets are non-derivatives that are either designated as AFS or are not classified as loans and receivables, held-to-maturity financial assets or financial assets at fair value through profit or loss.

The Company invests in listed stocks, emerging market stocks and non-listed stocks. Among these investments, those that have a quoted market price in an active market are classified as AFS and measured at fair value at the end of each reporting period; the others that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost less any identified impairment losses at the end of each reporting period by presenting in a separate line item as financial assets carried at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between the carrying amount and the fair value is recognized in other comprehensive income. Any impairment losses are recognized in profit or loss.

Changes in the carrying amount of AFS monetary financial assets relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and dividends on AFS equity investments are recognized in profit or loss. Other changes in the carrying amount of AFS financial assets are recognized in other comprehensive income and will be reclassified to profit or loss when the investment is disposed of or is determined to be impaired.

Dividends on AFS equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established.

#### d) Loans and receivables

Loans and receivables (including cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other financial assets and refundable deposits) are measured at amortized cost using the effective interest method, less any impairment loss, except for short-term receivables as the effect of discounting is immaterial.

#### 2) Impairment of financial assets and contract assets

#### 2018

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including accounts receivable) and contract assets.

The Company recognizes lifetime Expected Credit Loss (ECL) for accounts receivable and contract assets. For all other financial instruments, the Company recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Company recognizes an impairment loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

#### 2017

Financial assets, other than those at FVTPL, are assessed to determine whether there is objective evidence that an impairment loss has occurred at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

For financial assets carried at amortized cost, such as held-to-maturity financial assets and trade notes and accounts receivable, assets that are individually assessed and not impaired are, in addition, assessed for impairment on a collective basis.

For financial assets carried at amortized cost, the amount of the impairment loss recognized is mainly based on the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate. However, since the discounted effect of short-term receivables is immaterial, the impairment loss is recognized on the difference between carrying amount and estimated future cash flow.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

For AFS equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

When an AFS financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

In respect of AFS equity securities, impairment losses previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income.

For financial assets that are carried at cost, the amount of the impairment loss is mainly measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss is not reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade notes and accounts receivable and other receivables, where the carrying amount is reduced through the use of an allowance account. When trade notes and accounts receivable and other receivables are considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss except for uncollectible trade notes and accounts receivable and other receivables that are written off against the allowance account.

#### 3) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

#### 2018

On derecognition of a financial asset measured at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss.

On derecognition of investments in equity instruments at FVOCI in its entirety, the cumulative gain or loss is directly transferred to retained earnings, and it is not reclassified to profit or loss.

#### 2017

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income is recognized in profit or loss.

#### b. Financial liabilities

#### 1) Subsequent measurement

Except for financial liabilities at FVTPL, all the financial liabilities are subsequently measured at amortized cost using the effective interest method.

#### 2) Derecognition of financial liabilities

The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

#### c. Derivative financial instruments

The Company enters into derivative financial instruments to manage its exposure to foreign exchange rate risks, including forward exchange contracts.

Derivatives are initially measured at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship. When the fair value of derivative financial instruments is positive, the derivative is recognized as a financial asset; when the fair value of derivative financial instruments is negative, the derivative is recognized as a financial liability.

#### **Hedge Accounting**

The Company designates some derivatives instruments as cash flow hedges. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

The associated gains or losses that were recognized in other comprehensive income are reclassified from equity to profit or loss as a reclassification adjustment in the line item relating to the hedged item in the same period when the hedged item affects profit or loss. If a hedge of a forecast transaction subsequently results in the recognition of a non-financial asset or a non-financial liability, the associated gains and losses that were recognized in other comprehensive income are removed from equity and are included in the initial cost of the non-financial asset or non-financial liability.

Before 2018, hedge accounting was discontinued prospectively when the Company revoked the designated hedging relationship, or when the hedging instrument expired or was sold, terminated, or exercised, or when the hedging instrument no longer met the criteria for hedge accounting. Starting from 2018, the Company discontinues hedge accounting only when the hedging relationship ceases to meet the qualifying criteria; for instance, when the hedging instrument expires or is sold, terminated or exercised. The cumulative gain or loss on the hedging instrument that has been previously recognized in other comprehensive income from the period when the hedge was effective remains separately in equity until the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss.

#### **Provisions**

Provisions are measured at the best estimate of the expenditure required to settle the Company's obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. The provisions for warranties claims and 2017 trade-in right are made by management according to the sales agreements which represent the management's best estimate of the future outflow of economic benefits. The provisions of warranties claims and trade-in right are recognized as operating cost and the reduction of revenue, respectively, in the period in which the goods are sold.

#### **Revenue Recognition**

#### 2018

The Company identifies the performance obligations in the contract with the customers, allocates transaction price to each performance obligation and recognizes revenue when performance obligations are satisfied.

Sales of products are recognized as revenue when the Company delivers products and the customer accepts and controls the product. Except for the consumer electronic products such as mobile devices sold in channel stores which are usually in cash sale, the Company recognizes revenues for sale of other electronic devices and corresponding trade notes and accounts receivable.

Usage revenues from fixed-line services (including local, domestic long distance and international long distance telephone services), cellular services, internet and data services, and interconnection and call transfer fees from other telecommunications companies and carriers are billed in arrears and are recognized based upon seconds or minutes of traffic processed when the services are provided in accordance with contract terms. The usage revenues and corresponding trade notes and accounts receivable are recognized monthly.

Other revenues are recognized as follows: (a) one-time subscriber connection fees (on fixed-line services) are first recognized as contract liabilities and revenues are recognized subsequently over the average expected customer service periods, (b) monthly fees (on fixed-line services, mobile, internet and data services) and related receivables are accrued monthly, and (c) prepaid services (fixed-line, mobile, internet and data services) are recognized as contract liabilities upon collection considerations from customers and are recognized as revenues subsequently based upon actual usage by customers.

Where the Company enters into transactions which involve both the provision of telecommunications service bundled with products such as handsets, total consideration received from products and telecommunications service in these arrangements are allocated based on their relative stand-alone selling price. The amount of sales revenue recognized for products is not limited to the amount paid by the customer for the products. When the amount of sales revenue recognized for products exceeded the amount paid by the customer for the products, the difference is recognized as contract assets. Contract assets are reclassified to accounts receivable when the amounts become collectible from customers subsequently. When the amount of sales revenue recognized for products was less than the amount paid by the customer for the products, the difference is recognized as contract liabilities and revenues are recognized subsequently when the telecommunications service are provided.

For project business contracts, if a substantial part of the Company's promise to customers is to manage and coordinate the various tasks and assume the risks of those tasks to ensure the individual goods or services are incorporated into the combined output, they are treated as a single performance obligation since the Company provides a significant integration service. The Company recognizes revenues and corresponding accounts receivable when the project business contract is completed and accepted by customers.

For service contracts such as maintenance and warranties, customers simultaneously receive and consume the benefits provided by the Company; thus revenues and corresponding accounts receivable of service contracts are recognized over the related service period.

When another party is involved in providing goods or services to a customer, the Company is acting as a principal if it controls the specified good or service before that good or service is transferred to a customer; otherwise, the Company is acting as an agent. When the Company is acting as a principal, gross inflow of economic benefits arising from transactions is recognized as revenue. When the Company is acting as an agent, revenue is recognized in the amount of commission.

#### 2017

Revenue from the sale of goods is recognized when all the following conditions are satisfied:

- a. The Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- b. The Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- c. The amount of revenue can be measured reliably;
- d. It is probable that the economic benefits associated with the transaction will flow to the Company; and
- e. The costs incurred or to be incurred in respect of the transaction can be measured reliably.

Revenue is measured at the fair value of the consideration received or receivable and represents amounts for goods sold in the normal course of business, net of sales discounts and volume rebates. For trade notes and accounts receivable due within one year from the balance sheet date, as the nominal value of the consideration to be received approximates its fair value and transactions are frequent, fair value of the consideration is not determined by discounting all future receipts using an imputed rate of interest.

Usage revenues from fixed-line services (including local, domestic long distance and international long distance telephone services), cellular services, internet and data services, and interconnection and call transfer fees from other telecommunications companies and carriers are billed in arrears and are recognized based upon seconds or minutes of traffic processed when the services are provided in accordance with contract terms.

Other revenues are recognized as follows: (a) one-time subscriber connection fees (on fixed-line services) are deferred and recognized over the average expected customer service periods, (b) monthly fees (on fixed-line services, mobile, internet and data services) are accrued every month, and (c) prepaid services (fixed-line, mobile, internet and data services) are recognized as income based upon actual usage by customers.

Where the Company enters into transactions which involve both the provision of telecommunications service bundled with products such as handsets, total consideration received from products and telecommunications service in these arrangements are allocated and measured using units of accounting within the arrangement based on their relative fair values limited to the amount paid by the customer for the products.

Services revenue is recognized when service provided. Revenue from a contract to provide services is recognized by reference to the stage of completion of the contract.

Dividend income from investments is recognized when the stockholder's right to receive payment has been established under the premises when it is probable that the economic benefit related to the transactions will flow to the Company and that the revenue can be reasonably measured.

Interest income from a financial asset is recognized when it is probable that the economic benefits related to the transactions will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

When another party is involved in providing goods or services to a customer, the Company is acting as a principal when it has exposure to the significant risks and rewards associated with the sale of goods or the rendering of services; otherwise, the Company is acting as an agent. When the Company is acting as a principal, gross inflow of economic benefits arising from transactions is recognized as revenue. When the Company is acting as an agent, revenue is recognized in the amount of commission.

#### **Incremental costs of obtaining contracts**

Commissions and equipment subsidy related to telecommunications service as a result of obtaining contracts are recognized as an asset under the incremental costs of obtaining contracts to the extent the costs are expected to be recovered, and are amortized over the contract period. However, the Company elects not to capitalize the incremental costs of obtaining contracts if the amortization period of the assets that the Company otherwise would have recognized is expected to be one year or less.

#### Leasing

a. The Company as lessor

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease.

b. The Company as lessee

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

#### **Borrowing Costs**

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Other than stated above, all other borrowing costs are recognized in profit or loss in the period in which they are incurred.

#### **Employee Benefits**

#### a. Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

#### b. Retirement benefits

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

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost and gains or losses on settlements) and net interest on the net defined benefit liability (asset) are recognized as employee benefits expense in the period they occur. Remeasurement, comprising (a) actuarial gains and losses; and (b) the return on plan assets, excluding amounts included in net interest on the net defined benefit liability (asset), is recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liability (asset) represents the actual deficit (surplus) in the Company's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

#### c. Other long-term employee benefits

Other long-term employee benefits are accounted for in the same way as the accounting required for defined benefit plan except that remeasurement is recognized in profit or loss.

#### **Share-based Payment Arrangements - Employee Stock Options**

The fair value determined at the grant date of the employee share options is expensed on a straight-line basis over the vesting period, based on the Company's estimate of employee share options that are expected to ultimately vest, with a corresponding increase in additional paid-in capital - employee stock options. If the equity instruments granted vest immediately at the grant date, expenses are recognized in full in profit or loss.

At the end of each reporting period, the Company revises its estimate of the number of employee share options expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to additional paid-in capital - employee stock options.

#### **Income Tax**

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

#### a. Current tax

According to the Income Tax Act in the ROC, an additional tax of unappropriated earnings is provided for in the year the stockholders approve to retain the earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

#### b. Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. If the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit, the resulting deferred tax asset or liability is not recognized. In addition, a deferred tax liability is not recognized on taxable temporary difference arising from initial recognition of goodwill.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, unused loss carry forward and unused tax credits from purchases of machinery, equipment and technology and research and development expenditures to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax assets and liabilities reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

#### c. Current and deferred tax

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income, in which case, the current and deferred tax are also recognized in other comprehensive income.

Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

### 4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY AND ASSUMPTION

In the application of the Company's accounting policies, the management is required to make judgments, estimates and assumptions which are based on historical experience and other factors that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed by the management on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period. Actual results may differ from these estimates.

#### a. Revenue recognition

The Company's project agreements are mainly to provide one or more equipment or services to customers. In order to fulfill the agreements, another party may be involved in some agreements. The Company considers the following factors to determine whether the Company is a principal of the transaction: whether the Company is the primary obligation provider of the agreements, its exposures to inventory risks and the discretion in establishing prices, etc. The determination of whether the Company is a principal or an agent will affect the amount of revenue recognized by the Company. Only when the Company is acting as a principal, gross inflows of economic benefits arising from transactions is recognized as revenue.

#### b. Impairment of trade notes and accounts receivable

#### 2018

The provision for impairment of trade notes and accounts receivable is based on assumptions about risk of default and expected loss rates. The Company uses judgment in making these assumptions and in selecting the inputs to the impairment calculation, based on the Company's past experience, current market conditions as well as forward looking information at the end of each reporting period. For details of the key assumptions and inputs used, see Note 10. Where the actual future cash flows are less than expected, a material impairment loss may arise.

#### 2017

When there is objective evidence showed indications of impairment, the Company considers the estimation of future cash flows. The amount of impairment will be measured at the difference between the carrying amount and the present value of estimated future cash flows discounted by the original effective interest rates of the financial assets. However, as the impact from discounting short-term receivables is not material, the impairment of short-term receivables is measured at the difference between the carrying amount and the estimated undiscounted future cash flows. Where the actual future cash flows are lower than expected, a material impairment loss may arise.

#### c. Fair value measurements and valuation processes

For the assets and liabilities measured at fair value without quoted prices in active markets, the Company's management determines the appropriate valuation techniques for the fair value measurements and whether to engage third party qualified appraisers based on the related regulations and professional judgments.

Information about the valuation techniques and inputs used in determining the fair value of various assets and liabilities was disclosed in Note 38. If the actual changes of inputs in the future differ

from expectation, the fair value may vary accordingly. The Company updates inputs periodically to monitor the appropriateness of the fair value measurement.

#### d. Provision for inventory valuation and obsolescence

Inventories are stated at the lower of cost or net realizable value. Net realizable value is calculated as the estimated selling price less the estimated selling costs. Comparison of net realizable value and cost is determined on an item by item basis, except for those similar items which could be categorized into the same groups. The Company uses the inventory holding period and turnover as the evaluation basis for inventory obsolescence losses.

#### e. Impairment of tangible and intangible assets

When an indication of impairment is assessed with objective evidence, the Company considers whether the recoverable amount of an asset is less than its carrying amount and recognizes the impairment loss based on difference between the recoverable amount and its carrying amount. The estimate of recoverable amount would impact on the timing and the amount of impairment loss recognition.

#### f. Useful lives of property, plant and equipment

As discussed in Note 3, "Summary of Significant Accounting Policies - Property, Plant and Equipment", the Company reviews estimated useful lives of property, plant and equipment at the end of each year.

#### g. Recognition and measurement of defined benefit plans

Net defined benefit liabilities and the resulting pension expense under defined benefit pension plans are calculated using the Projected Unit Credit Method. Actuarial assumptions comprise the discount rate, employee turnover rate, average future salary increase and etc. Changes in economic circumstances and market conditions will affect these assumptions and may have a material impact on the amount of the expense and the liability.

#### h. Control over subsidiaries

As discussed in Note 3, some entities are subsidiaries of the Company although the Company only owns less than 50% ownership interests in these entities. After considering the Company's absolute size of holding in the entity and the relative size of and the dispersion of shares owned by the other stockholders, and the contractual arrangements between the Company and other investors, potential voting interests and the written agreement between stockholders, the management concluded that the Company has a sufficiently dominant voting interest to direct the relevant activities of the entity and therefore the Company has control over these entities.

#### 5. APPLICATION OF NEW AND REVISED STANDARDS AND INTERPRETATIONS

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), International Financial Reporting Interpretations Committee Interpretations (IFRIC) and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission (FSC).

Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRS, IAS, IFRIC and SIC issued by the International Accounting Standards Board and endorsed and issued into effect by the FSC (collectively, the "Taiwan-IFRSs") does not have material impacts on the Company's consolidated financial statements.

#### 1) IFRS 9 "Financial Instruments" and related amendments

IFRS 9 supersedes IAS 39 "Financial Instruments: Recognition and Measurement", with consequential amendments to IFRS 7 "Financial Instruments: Disclosures" and other standards. IFRS 9 sets out the requirements for classification, measurement and impairment of financial assets and hedge accounting. Refer to Note 3 for information relating to the relevant accounting policies.

The requirements for classification, measurement and impairment of financial assets have been applied retrospectively on January 1, 2018, and the requirements for hedge accounting have been applied prospectively. IFRS 9 is not applicable to items that have already been derecognized on or before December 31, 2017.

#### Classification, measurement and impairment of financial assets and liabilities

On the basis of the facts and circumstances that existed on January 1, 2018, the Company performed an assessment of the classifications of financial assets and liabilities and elected not to restate the comparative figures.

The following table shows the original measurement categories and carrying amounts under IAS 39 and the new measurement categories and carrying amounts under IFRS 9 for each class of the Company's financial assets and financial liabilities as of January 1, 2018.

		Measurement Category						
		IAS 39		IFRS 9	IAS	39	IFRS 9	Note
Financial Assets								
Cash and cash equivalents Equity securities	Availal	and receivable ble-for-sale ble-for-sale	FVTPL FVOCI		5	324,935 596,409 54,462	\$ 28,824,935 596,409 6,996,327	a) b) b)
Trade notes and accounts receivable, receivables from related parties, oth current monetary assets and refundable deposits		and receivable		zed cost	40,1	58,885	40,158,885	a)
Financial Liabilities								
Short-term loans, trade not and accounts payable, payables to related parties, partial other payables, customers' deposit and loan-term loans	es Amorti	zed cost	Amorti	zed cost	39,7	25,662	39,725,662	
Derivatives	Held-fo	or-trading	FVTPL	,		578	578	
		ng derivative ncial liabilities	Hedging financial liabilities		850		850	c)
	IAS 39 Carrying Amount January 1, 2018	Reclassifi- cations	Remea- surements	IFRS 9 Carrying Amount January 1, 2018	Retained Earnings Effect on January 1, 2018	Other Adjustment Effect on January 1, 2018	Noncontrolling Interests Effect on January 1, 2018	Note
Add: reclassification from available for sale (IAS	\$ -	\$ -	\$ -	\$ -	\$ -	\$	- \$ -	
39) - mandatory reclassification	<u>-</u>	596,409 596,409		596,409 596,409	6,149 6,149	(6,149		b)
Financial liabilities measured at FVTPL	(578)			(578)			(Conti	nued)

	IAS 39 Carrying Amount January 1, 2018	Reclassifi- cations	Remea- surements	IFRS 9 Carrying Amount January 1, 2018	Retained Earnings Effect on January 1, 2018	Other Adjustment Effect on January 1, 2018	Noncontrolling Interests Effect on January 1, 2018	Note
Financial assets measured at FVOCI- equity investments Add: reclassification from available for sale (IAS 39) - designated at	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
January 1, 2018		5,154,462	1,841,865	6,996,327	1,515,525	327,177	(837)	b)
		5,154,462	1,841,865	6,996,327	1,515,525	327,177	(837)	
Financial assets measured at Amortized cost Add: reclassification from loans and receivables	-	-	-	-	-	-	-	
(IAS 39)		68,983,820		68,983,820				a)
		68,983,820		68,983,820	=			
Financial liabilities measured at amortized cost Add: reclassification from amortized cost (IAS	-	-	-	-	-	-	-	
39)		(39,725,662)		(39,725,662)	=			
		(39,725,662)		(39,725,662)				
Hedging financial liabilities Add: reclassification from Hedging derivative	-	-	-	-	-	-	-	
instrument (IAS 39)		(850) (850)		(850) (850)				c)
Total	<u>\$ (578)</u>	\$ 35,008,179	\$ 1,841,865	\$ 36,849,466	\$ 1,521,674	\$ 321,028	<u>\$ (837)</u>	
							(Conclu	ided)

- a) Cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other current monetary assets and refundable deposit that were classified as loans and receivables under IAS 39 are now classified as financial assets measured at amortized cost with assessment of expected credit loss.
- b) The Company elected to reclassify equity securities originally classified as available-for-sale under IAS 39 to FVTPL and designated at FVOCI in accordance with IFRS 9. As a result, the related other equity - unrealized gain or loss on available-for-sale financial assets of \$6,149 thousand and\$556,243 thousand were reclassified to retained earnings and to other equity - unrealized gain or loss on financial assets at FVOCI, respectively.

Equity investments in non-listed stocks previously carried at cost under IAS 39 are designated as FVOCI and remeasured at fair values. As a result, financial assets at FVOCI and other equity - unrealized gain or loss on financial assets at FVOCI were increased by \$1,841,865 thousand and \$1,842,702 thousand, respectively, and noncontrolling interests was decreased by \$837 thousand. Some investments that previously classified as available-for-sale and measured at cost under IAS 39 were classified mandatorily as FVTPL under IFRS 9 as the contractual cash flows are not solely payments of principal and interest on the principal outstanding and such investments are not equity instruments.

The Company recognized impairment loss on certain investments in equity securities previously classified as available-for-sale and measured at cost and the loss was accumulated in retained earnings under IAS 39. Since those investments were designated as financial assets measured at FVOCI under IFRS 9 and no impairment assessment is required, an adjustment was made that resulted in a decrease of \$1,515,525 thousand in other equity unrealized gain or loss on financial assets at FVOCI and an increase of the \$1,515,525 thousand in retained earnings on January 1, 2018.

c) Due to the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers, all derivative and non-derivative financial assets and financial liabilities which were designated as hedging instruments are presented as hedging financial assets and hedging financial liabilities for starting from January 1, 2018.

As the Company expects there is no tax obligation upon the disposal of the available-for-sale financial assets, the deferred income tax liabilities was decreased by \$1,175 thousand, unrealized gain or loss on available-for-sale financial assets was increased by \$4,283 thousand and noncontrolling interests was decreased by of \$3,108 thousand, respectively.

#### 2) IFRS 15 "Revenue from Contracts with Customers" and related amendments

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers, and supersedes IAS 18 "Revenue", IAS 11 "Construction Contracts" and a number of revenue-related interpretations. Please refer to Note 3 for related accounting policies.

When applying IFRS 15 and related amendments, the Company allocates the transaction price to each performance obligation identified in the contract on a relative stand-alone selling price basis.

Where the Company enters into transactions which involve both the provision of telecommunications service bundled with products such as handsets, total consideration received from products and telecommunications service in these arrangements is allocated based on each performance obligation's relative stand-alone selling price. The amount of sales revenue recognized for products is no longer limited to the amount paid by the customer for the products. This does not change the total revenue recognized, but changes the timing of revenue recognition. The Company may recognize more revenue at the beginning of the contract period (i.e., at the time of sale of products), and revenue recognized for telecommunications service in the subsequent contract periods will decrease.

Incremental cost of obtaining contracts is recognized as an asset to the extent the Company expects to recover those costs. Such asset is amortized on a basis that is consistent with the transfer to the customer of the goods or services to which the asset relates. Before the application of IFRS 15, the relevant expenditures were recognized as expenses.

IFRS 15 and its related amendments require that when another party is involved in providing goods or services to a customer, the Company is a principal if it controls the specified good or service before that good or service is transferred to a customer. Before the application of IFRS 15, the Company determined whether it is a principal or an agent based on its exposure to the significant risks and rewards associated with the sale of goods or the rendering of services.

Under IFRS 15, the net effect of revenue recognizes, consideration received and receivable is recognized as a contract asset or a contract liability. Before the application of IFRS 15, receivable was recognized or advance receipts and deferred revenue was reduced when revenue was recognized for the contract under IAS 18.

Under IFRS 15, the Company recognized a trade-in liability (other current liabilities) and a right to recover a product (other current assets) when recognizing revenue for the sale with a trade-in right. Before the application of IFRS 15, trade-in right provisions and inventories were recognized when recognizing revenue.

The Company elected to retrospectively apply IFRS 15 to contracts that were not completed on January 1, 2018 and recognized the cumulative effect of the change in the retained earnings on January 1, 2018.

# Impact on items of assets, liabilities and equity

	Carrying Amounts before Retrospective Adjustments as of January 1, 2018	Adjustments Arising from Initial Application of IFRS 15	Carrying Amounts after Retrospective Adjustments as of January 1, 2018
Contract assets - current Trade notes and accounts receivable, net Inventories Prepayments- current Other current assets Contract assets - noncurrent Incremental costs of obtaining contracts	\$ 31,941,094 \$ 8,839,615 \$ 2,188,173 \$ 2,182,758 \$ -	\$ 6,065,126 (117,911) (132,086) (7,628) 132,086 3,916,924 2,474,143	\$ 6,065,126 \$ 31,823,183 \$ 8,707,529 \$ 2,180,545 \$ 2,314,844 \$ 3,916,924 \$ 2,474,143
Total effect on assets		\$ 12,330,654	
Contract liabilities - current Current tax liabilities Provisions - current Advance receipts Other current liabilities Contract liabilities - noncurrent Deferred revenue Other noncurrent liabilities  Total effect on liabilities	\$ 4,725,698 \$ 188,744 \$ 8,841,858 \$ 1,081,156 \$ - \$ 3,612,391 \$ 3,457,677	\$ 8,003,855 2,226,691 (87,572) (8,841,858) 71,690 2,626,319 (3,612,391) 1,072,427 \$ 1,459,161	\$ 8,003,855 \$ 6,952,389 \$ 101,172 \$ - \$ 1,152,846 \$ 2,626,319 \$ - \$ 4,530,104
Total effect on equity (unappropriated earnings)	<u>\$ 37,202,683</u>	<u>\$ 10,871,493</u>	<u>\$ 48,074,176</u>

The following table shows the increase (decrease) in assets, liabilities and equity resulting from the application of IFRS 15 on the balance sheet date.

	December 31, 2018
Contract assets - current	\$ 4,868,728
Trade notes and accounts receivable, net	(108,582)
Inventories	(79,801)
Prepayments - current	(12,088)
Other current assets	79,801
Contract assets - noncurrent	2,343,958
Incremental costs of obtaining contracts	1,335,030
Assets	\$ 8,427,046 (Continued)

	December 31, 2018
Contract liabilities - current	\$ 10,687,772
Current tax liabilities	1,417,946
Provisions - current	(51,675)
Advance receipts	(11,276,942)
Other current liabilities	340,019
Contract liabilities - noncurrent	2,595,149
Deferred revenue	(3,748,043)
Other noncurrent liabilities	1,173,165
Liabilities	<u>\$ 1,137,391</u>
Equity (unappropriated earnings)	\$ 7,289,655 (Concluded)

# Impact on items of statement of comprehensive income for current year

The following table shows the increase (decrease) in net income resulting from the application of IFRS 15.

	Year Ended December 31, 2018
Revenues Operating costs Operating expenses Income from operations Income tax expense	\$ (3,228,240) 2,455,413 (1,293,070) (4,390,583) (808,745)
Net income	\$ (3,581,838)
Decrease in net income attributable to: Stockholders of the parent Noncontrolling interests	\$ (3,581,838) 
Impact on earnings per share(NT\$): Basic earnings per share Diluted earnings per share	\$ (0.46) \$ (0.46)

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers for application starting from 2019 and the IFRSs endorsed by the FSC

New, Revised or Amen	ded Standards and Interpretations	Effective Date Announced by IASB (Note 1)
Amendments to IFRSs	Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9	Prepayment Features with Negative Compensation	January 1, 2019 (Note 2)
IFRS 16	Leases	January 1, 2019
Amendments to IAS 19	Plan Amendment, Curtailment or Settlement	January 1, 2019 (Note 3)
Amendments to IAS 28	Long-term Interests in Associates and Joint Ventures	January 1, 2019
IFRIC 23	Uncertainty over Income Tax Treatments	January 1, 2019

- Note 1: Unless stated otherwise, the above new, amended or revised standards and interpretations are effective for annual periods beginning on or after their respective effective dates.
- Note 2: The FSC permits the election for early adoption of the amendments starting from 2018.
- Note 3: The Company shall apply these amendments to pension plan amendments, curtailments or settlements occurring on or after January 1, 2019.

Except for the following items, the application of the above new, revised or amended standards and interpretations will not have material impact on the Company's consolidated financial statements.

## IFRS 16 "Leases"

IFRS 16 sets out the accounting standards for identifying leases and accounting treatments for lessors and lessees. It will supersede IAS 17, IFRIC 4 - Determining Whether an Arrangement Contains a Lease and a number of related interpretations.

Upon the initial application of IFRS 16, the Company anticipates reassessing whether a contract is, or contains, a lease in accordance with the definition of a lease under IFRS 16. Some contracts currently identified as containing a lease under IAS 17 and IFRIC 4 do not meet the definition of a lease under IFRS 16 and will be accounted for in accordance with other accounting standards because the Company does not have the right to direct the use of the identified assets. Contracts that are reassessed as leases or containing a lease will be accounted for in accordance with the transitional provisions under IFRS 16.

Upon the initial application of IFRS 16, if the Company is a lessee, it shall recognize right-of-use assets and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value will be recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Company will present the depreciation expense charged on the right-of-use asset separately from the interest expense accrued on lease liability using the effective interest method. On the consolidated statements of cash flows, cash payments for the principal portion of lease liability will be classified within financing activities; cash payments for interest portion will be classified within operating activities. Before the application of IFRS 16, payments under operating lease contracts are recognized as expenses on a straight-line basis. Prepaid lease payments for use rights of leased assets are recognized as prepaid rents. Cash flows for operating leases are classified within operating activities on the statements of cash flows.

The Company will not make any adjustments for leases in which the Company is a lessor and will account for those leases with the application of IFRS 16 starting from January 1, 2019.

The Company anticipates applying IFRS 16 retrospectively with the cumulative effect of the initial application of IFRS 16 recognized in retained earnings on January 1, 2019. Comparative financial information will not be restated.

Lease liabilities will be recognized on January 1, 2019 for leases currently classified as operating leases under IAS 17 and measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at the present value discounted using the aforementioned incremental borrowing rate as if IFRS 16 had been applied since the commencement date of leases. The Company will apply IAS 36 for assessing impairment of right-of-use assets.

#### Anticipated impacts on assets, liabilities and equity

	Carrying Amount as of December 31, 2018	Adjustments Arising from Initial Application of IFRS 16	Adjusted Carrying Amount as of January 1, 2019
Prepayments - current Property, plant and equipment Right-of-use assets Deferred income tax assets Prepayments - noncurrent	\$\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	\$ (245,215) (1,308,990) 12,163,063 25,588 (413,521)	\$ 1,627,769 \$ 287,605,238 \$ 12,163,063 \$ 3,579,444 \$ 3,049,816
Total effect on assets		<u>\$ 10,220,925</u>	
Contract liabilities - current Lease liabilities - current Other payables Other current liabilities Contract liabilities - noncurrent Deferred income tax liabilities Lease liabilities - noncurrent Other noncurrent liabilities	\$ 10,687,772 \$ - \$ 23,315,383 \$ 1,381,606 \$ 2,595,149 \$ 1,991,843 \$ - \$ 4,793,237	\$ 214,174 3,394,119 (48,712) (214,174) 3,482,907 6 6,945,938 (3,482,907)	\$ 10,901,946 \$ 3,394,119 \$ 23,266,671 \$ 1,167,432 \$ 6,078,056 \$ 1,991,849 \$ 6,945,938 \$ 1,310,330
Total effect on liabilities		\$ 10,291,351	
Unappropriated earnings Noncontrolling interests	\$ 47,141,345 \$ 10,009,948	\$ (50,823) (19,603)	\$ 47,090,522 \$ 9,990,345
Total effect on equity		\$ (70,426)	

Except for the abovementioned impact, as of the date the consolidated financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of other standards and interpretations will have on the Company's financial position and operating result, and will disclose the relevant impact when the assessment is completed.

# c. IFRSs issued by the IASB but not yet endorsed and issued into effect by the FSC

New, Revised or Amended	Standards and Interpretations	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3	Definition of a Business	January 1, 2020 (Note 2)
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between An Investor and Its	To be determined by IASB
20	Associate or Joint Venture	IASD
Amendments to IAS 1 and IAS 8	Definition of Materiality	January 1, 2020 (Note 3)

- Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.
- Note 2: The Company shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.
- Note 3: The Company shall apply these amendments prospectively in annual periods beginning on or after January 1, 2020.

As of the date the consolidated financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of above standards and interpretations will have on the Company's financial position and operating result and will disclose the relevant impact when the assessment is completed.

# 6. CASH AND CASH EQUIVALENTS

	December 31		
	2018	2017	
Cash			
Cash on hand	\$ 462,719	\$ 382,694	
Bank deposits	10,574,697	7,877,605	
•	11,037,416	8,260,299	
Cash equivalents (investments with maturities of less than three months)			
Commercial paper	6,143,672	10,178,512	
Negotiable certificates of deposit	7,600,000	7,950,000	
Time deposits	2,863,692	2,436,124	
	16,607,364	20,564,636	
	<u>\$ 27,644,780</u>	<u>\$ 28,824,935</u>	

The annual yield rates of bank deposits, commercial paper, negotiable certificates of deposit and time deposits as of balance sheet dates were as follows:

	December 31		
	2018	2017	
Bank deposits	0.00%-0.50%	0.00%-0.70%	
Commercial paper	0.47%-0.57%	0.32%-0.40%	
Negotiable certificates of deposit	0.55%-0.60%	0.40%-0.50%	
Time deposits	0.09%-4.40%	0.52%-4.40%	

# 7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2018	2017
Financial assets-noncurrent		
Mandatorily measured at FVTPL Non-derivatives		
Non-listed stocks - domestic	\$292,910	\$ -
Non-listed stocks - foreign	224,452	
	<u>\$517,362</u>	<u>\$</u>
Financial liabilities-current		
Held for trading		
Derivatives (not designated for hedge)		
Forward exchange contracts	<u>\$ 1,114</u>	<u>\$ 578</u>

Some investments previously carried at cost under IAS 39 were mandatorily reclassified as FVTPL when applying IFRS 9.

Outstanding forward exchange contracts not designated for hedge as of balance sheet dates were as follows:

	Currency	Maturity Period	Contract Amount (In Thousands)
<u>December 31, 2018</u>			
Forward exchange contracts - buy Forward exchange contracts - buy	EUR/NT\$ US\$/NT\$	2019.03-06 2019.01	EUR5,452/NT\$192,734 US\$2,020/NT\$62,252
<u>December 31, 2017</u>			
Forward exchange contracts - buy Forward exchange contracts - buy	EUR/NT\$ US\$/NT\$	2018.03-06 2018.01	EUR1,942/NT\$69,061 US\$4,190/NT\$125,481

The Company entered into the above forward exchange contracts to manage its exposure to foreign currency risk due to fluctuations in exchange rates. However, the aforementioned derivatives did not meet the criteria for hedge accounting.

# 8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - NONCURRENT - 2018

	December 31, 2018
Domestic investments	
Listed stocks	\$ 2,899,843
Non-listed stocks	3,901,053
Foreign investments	
Non-listed stocks	131,607
	\$ 6,932,503

The Company holds the above foreign and domestic stocks for medium to long-term strategic purposes and expects to profit from long-term investment. Accordingly, the management elected to designate these investments in equity instruments at FVOCI as they believe that recognizing short-term fair value fluctuations of these investments in profit or loss is not consistent with the Company's strategy of holding these investments for long-term purposes. These investments in equity instruments were classified as available-for-sale financial assets under IAS 39. Refer to Notes 5, 9 and 14 for information relating to their reclassification and comparative information for 2017.

The Company recognized dividend income of \$395,593 thousand for the year ended December 31, 2018 from those investments still held on December 31, 2018.

#### 9. AVAILABLE-FOR-SALE FINANCIAL ASSETS - NONCURRENT-2017

	December 31, 2018	December 31, 2017
Equity securities Listed stocks	<u>\$</u>	<u>\$ 3,125,086</u>

The Company evaluated and concluded that there was no indication that available-for-sale financial assets were impaired; therefore, no impairment loss was recognized for the year ended December 31, 2017.

# 10. TRADE NOTES AND ACCOUNTS RECEIVABLE, NET

	December 31		
	2018	2017	
Trade notes and accounts receivable Less: Loss allowance	\$ 32,677,558 (2,602,055)	\$ 34,058,443 (2,117,349)	
	\$ 30,075,503	\$ 31,941,094	

# Year ended December 31, 2018

The average credit terms range from 30 to 90 days.

The Company serves a large consumer base for telecommunications business; therefore, the concentration of credit risk is limited. When having transactions with customers, the Company considers the record of arrears in the past. In addition, the Company may also collect some telecommunication charges in advance to reduce the payment arrears in subsequent periods.

The Company adopted a policy of dealing with counterparties with certain credit ratings for project business and to obtain collateral where necessary to mitigate the risk of loss arising from default. Credit rating information is provided by independent rating agencies where available and, if such credit rating information is not available, the Company uses other publicly available financial information and its own historical transaction experience to rate its major customers. The Company continues to monitor the credit exposure and credit ratings of its counterparties and spread the credit risk amongst qualified counterparties.

In order to mitigate credit risk, the management of the Company has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure the recoverability of receivables. In addition, the Company reviews the recoverable amount of receivables at balance sheet dates to ensure that adequate allowance is provided for possible irrecoverable amounts. In this regard, the management believes the Company's credit risk could be reasonably reduced.

The Company applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for receivables. The expected credit losses on receivables are estimated using a provision matrix by reference to past default experience of the customers and an analysis of the customers' current financial positions, as well as the forward-looking indicators such as macroeconomic business indicator.

When there are evidences indicating that the counterparty is in evasion, bankruptcy, deregistration of its company or the accounts receivable are over two years past due and the recoverable amount cannot be reasonable estimated, the Company writes off the trade notes and accounts receivable. For accounts receivable that have been written off, the Company continues to engage in enforcement activity to attempt to recover the receivables due. Where recoveries are made, these are recognized in profit or loss.

Except for receivables arising from telecommunications business and project business, the Company's remaining accounts receivable are limited. Therefore, only Chunghwa's provision matrix arising from telecommunications business and project business is disclosed below.

#### December 31, 2018

	Not Past Due	Past Due Less than 30 Days	Pass Due 31 to 60 Days	Pass Due 61 to 90 Days	Pass Due 91 to 120 Days	Pass Due 121 to 180 Days	Pass Due over 181 Days	Total
Telecommunications business								
Expected credit loss rate (Note a)	0%-3%	3%-30%	7%-69%	19%-82%	32%-90%	61%-95%	100%	
Gross carrying amount Loss allowance (lifetime	\$ 23,307,276	\$ 454,465	\$ 94,715	\$ 48,924	\$ 37,640	\$ 36,090	\$ 418,101	\$ 24,397,211
ECL)	(79,857)	(26,872)	(24,023)	(28,432)	(28,196)	(25,618)	(418,101)	(631,099)
Amortized cost	\$ 23,227,419	<u>\$ 427,593</u>	\$ 70,692	\$ 20,492	\$ 9,444	<u>\$ 10,472</u>	\$	\$ 23,766,112
Project business								
Expected credit loss rate (Note b)	0%-5%	5%	10%	30%	50%	80%	100%	
Gross carrying amount Loss allowance (lifetime	\$ 4,066,271	\$ 88,384	\$ 92,343	\$ 8,248	\$ 12,132	\$ 6,809	\$ 1,725,168	\$ 5,999,355
ECL)	(152,624)	(8,609)	(10,142)	(2,910)	(8,492)	(5,643)	(1,725,168)	(1,913,588)
Amortized cost	\$ 3,913,647	\$ 79,775	\$ 82,201	\$ 5,338	\$ 3,640	\$ 1,166	\$ -	\$ 4,085,767

Note a: Please refer to Note 45 for the information of disaggregation of telecommunications service revenue. The expected credit loss rate applicable to different business revenue varies so as to reflect the risk level indicating by factors like historical experience.

Note b: The project business has different loss types according to the customer types. The expected credit loss rate listed above is for general customers. When customer is the government or its affiliates, it is expected that no credit loss will occur. For those who had bounced or exchanged checks as well as those accounts receivable were overdue more than six months that are classified as high risk customers, the expected credit loss of high risk customers is at least 50%, and the rate is increased when the overdue days increases.

Movements of the allowance for doubtful accounts were as follows:

	Year Ended December 31, 2018
Balance at January 1, 2018 Add: Provision of credit loss Less: Amounts written off	\$ 2,117,349 804,727 (320,021)
Balance at December 31, 2018	\$ 2,602,055

#### Year ended December 31, 2017

The average credit terms range from 30 to 90 days. In determining the recoverability of trade notes and accounts receivable, the Company considers significant change in the credit quality of the trade notes and accounts receivable from the date credit was initially granted up to the end of the reporting period. In general, with few exceptional cases, it is unlikely for the notes and accounts receivable due longer than 180 days to be collected, therefore the Company recognized 100% allowance of notes and accounts receivable overdue longer than 180 days. For the notes and accounts receivable less than 180 days, the allowance for doubtful accounts was estimated based on the Company's historical recovery experience.

The Company serves a large consumer base; therefore, the concentration of credit risk is limited.

The aging analysis for trade notes and accounts receivable as of balance sheet dates was as follows:

	December 31, 2017
Non-overdue	\$ 30,031,885
Less than 30 days	1,280,443
31-60 days	484,795
61-90 days	278,242
91-120 days	253,318
121-180 days	122,086
More than 181 days	1,607,674
	<u>\$ 34,058,443</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 sheet dates was as follows:

	December 31, 2017
Less than 30 days	\$ 328,438
31-60 days	36,253
61-90 days	7,279
91-120 days	69,486
•	(Continued)

	December 31, 2017
121-180 days More than 181 days	\$ 549 6,572
	<u>\$ 448,577</u> (Concluded)

The above aging analysis was based on days overdue.

Movements of the allowance for doubtful accounts were as follows:

	Individually Assessed for Impairment	Collectively Assessed for Impairment	Total
Balance on January 1, 2017 Add: Provision for doubtful accounts Deduct: Amounts written off	\$ 805,145 534,836 (15,202)	\$ 967,880 42,811 (218,121)	\$ 1,773,025 577,647 (233,323)
Balance on December 31, 2017	<u>\$ 1,324,779</u>	\$ 792,570	<u>\$ 2,117,349</u>

# 11. INVENTORIES

	December 31	
	2018	2017
Merchandise	\$ 6,067,750	\$ 5,133,528
Project in process	6,756,486	1,390,212
Work in process	109,191	151,804
Raw materials	111,566	88,726
	13,044,993	6,764,270
Land held under development	1,998,733	1,998,733
Construction in progress	<u>76,989</u>	76,612
	<u>\$15,120,715</u>	<u>\$ 8,839,615</u>

The operating costs related to inventories were \$48,648,763 thousand (including the provision for inventory and obsolescence of \$365,123 thousand) and \$56,342,225 thousand (including the provision for inventory and obsolescence of \$52,487 thousand) for the years ended December 31, 2018 and 2017, respectively.

As of December 31, 2018 and 2017, inventories of \$2,075,722 thousand and \$2,075,345 thousand, respectively, were expected to be recovered for a time period longer than twelve months. The aforementioned amount of inventories is related to property development owned by LED.

Land held under development and construction in progress on December 31, 2018 and 2017 was developed by LED for Qingshan Sec., Dayuan Dist., Taoyuan City project.

# 12. PREPAYMENTS

	December 31	
	2018	2017
Prepaid rents Others	\$ 2,415,083 2,921,238	\$ 2,687,513 3,074,005
	<u>\$ 5,336,321</u>	\$ 5,761,518
Current Prepaid rents Others	\$ 599,817 	\$ 812,148 
Noncurrent Prepaid rents Others	\$ 1,815,266 	\$ 1,875,365 
	<u>\$ 3,463,337</u>	\$ 3,573,345

# 13. OTHER CURRENT MONETARY ASSETS

	December 31	
	2018	2017
Time deposits and negotiable certificates of deposit with maturities of more than three months	\$ 8,156,647	\$ 4,053,637
Others	1,347,556	1,254,423
	\$ 9,504,203	\$ 5,308,060

The annual yield rates of time deposits and negotiable certificates of deposit with maturities of more than three months were as follows:

	December 31		
	2018	2017	
Time deposits and negotiable certificates of deposit with maturities of more than three months	0.03%-3.05%	0.06%-4.15%	

# 14. FINANCIAL ASSETS CARRIED AT COST- 2017

	December 31, 2017
Non-listed stocks Domestic Foreign	\$ 2,331,798 <u>293,987</u>
	<u>\$ 2,625,785</u>

Since the fair values of the above non-listed stocks investments cannot be reliably measured due to the range of reasonable fair value estimates was so significant, the above non-listed stocks investments owned by the Company were measured at costs less any impairment losses at the balance sheet dates.

The Company invested \$300,000 thousand of Taiwania Capital Buffalo Fund Co., Ltd. in December 2017 and owns 12.9% equity shares of Taiwania Capital Buffalo Fund Co., Ltd. Taiwania Capital Buffalo Fund Co., Ltd. engages mainly in investment business.

The Company disposed financial assets carried at cost with carrying amount \$4,587 thousand and recognized the disposal gain of \$2,705 thousand for the year ended December 31, 2017.

The Company evaluated and concluded that there was no indication that financial assets carried at cost were impaired; therefore, no impairment loss was recognized for the year ended December 31, 2017.

#### 15. SUBSIDIARIES

a. Information on significant noncontrolling interest subsidiary

			Proportion of Ownership Interests and Voting Rights Held by Noncontrolling Interests	
	Pı	rincipal Place	Decemb	er 31
Subsidiaries		of Business	2018	2017
SENAO		Taiwan	72%	71%
CHPT		Taiwan	66%	62%
		located to ing Interests		Noncontrolling rests
	Year Ended December 31		Decem	ber 31
	2018	2017	2018	2017
SENAO CHPT Individually immaterial subsidiaries with	\$ 281,238 \$ 456,599	\$ 578,618 \$ 439,123	\$ 4,228,240 4,044,322	\$ 4,257,408 3,555,563
noncontrolling interests			1,737,386	884,624
			\$10,009,948	\$ 8,697,595

Summarized financial information in respect of SENAO and its subsidiaries that has material noncontrolling interests is set out below. The summarized financial information below represents amounts before intercompany eliminations.

	Decem	ber 31
	2018	2017
Current assets	\$ 7,041,416	\$ 7,584,225
Noncurrent assets	2,675,748	2,686,696
Current liabilities	(3,740,162)	(4,203,944)
Noncurrent liabilities	(164,056)	(160,366)
Equity	<u>\$ 5,812,946</u>	\$ 5,906,611 (Continued)

	December 31			
	2018	2017		
Equity attributable to the parent Equity attributable to noncontrolling interests	\$ 1,584,706 4,228,240	\$ 1,649,203 4,257,408		
	\$ 5,812,946	\$ 5,906,611 (Concluded)		
	Year Ended	December 31		
	2018	2017		
Revenues and income Costs and expenses	\$ 31,533,371 31,137,428	\$ 36,034,572 35,215,871		
Profit for the year	\$ 395,943	\$ 818,701		
Profit attributable to the parent Profit attributable to noncontrolling interests	\$ 114,705 281,238	\$ 240,083 578,618		
Profit for the year	\$ 395,943	\$ 818,701		
Other comprehensive income (loss) attributable to the parent Other comprehensive loss attributable to noncontrolling	\$ (1,818)	\$ 2,656		
interests	(10,523)	(16,581)		
	\$ (12,341)	<u>\$ (13,925)</u>		
Total comprehensive income attributable to the parent Total comprehensive income attributable to noncontrolling	\$ 112,887	\$ 242,739		
interests	270,715	562,037		
	\$ 383,602	<u>\$ 804,776</u>		
Net cash flow from operating activities	\$ 696,142	\$ 1,080,947		
Net each flow from investing activities	(12,596) (490,757)	(56,640) (896,889)		
Net cash flow from financing activities Effect of exchange rate changes on cash and cash equivalents	(490,737) 516	(2,488)		
Net cash inflow	\$ 193,305	\$ 124,930		
Dividends paid to noncontrolling interests	<u>\$ 587,264</u>	<u>\$ 703,207</u>		

Summarized financial information in respect of CHPT and its subsidiaries that has material noncontrolling interests is set out below. The summarized financial information below represents amounts before intercompany eliminations.

	December 31		
	2018	2017	
Current assets Noncurrent assets Current liabilities Noncurrent liabilities	\$ 4,416,910 2,779,020 (1,044,054) (816)	\$ 4,495,601 2,167,138 (899,079) (997)	
Equity	<u>\$ 6,151,060</u>	\$ 5,762,663	
Equity attributable to CHI Equity attributable to noncontrolling interests	\$ 2,106,738 4,044,322	\$ 2,207,100 3,555,563	
	<u>\$ 6,151,060</u>	\$ 5,762,663	
	Year Ended I		
	2018	2017	
Revenues and income Costs and expenses	\$ 3,299,226 2,583,202	\$ 3,126,669 2,390,299	
Profit for the year	\$ 716,024	\$ 736,370	
Profit attributable to CHI Profit attributable to noncontrolling interests	\$ 259,425 456,599	\$ 297,247 439,123	
Profit for the year	\$ 716,024	\$ 736,370	
Other comprehensive loss attributable to CHI Other comprehensive loss attributable to noncontrolling	\$ 218	\$ (1,179)	
interests	45	(1,904)	
	<u>\$ 263</u>	<u>\$ (3,083)</u>	
Total comprehensive income attributable to CHI	\$ 259,643	\$ 296,068	
Total comprehensive income attributable to noncontrolling interests	456,644	437,219	
	\$ 716,287	\$ 733,287	
Net cash flow from operating activities Net cash flow from investing activities Net cash flow from financing activities Effect of exchange rate changes on cash and cash equivalents	\$ 861,558 (733,108) (327,890) 	\$ 1,051,989 (639,158) 2,305,741 (3,640)	
Net cash inflow (outflow)	<u>\$ (198,103)</u>	\$ 2,714,932	
Dividends paid to noncontrolling interests	\$ 209,711	<u>\$ 145,849</u>	

# b. Equity transactions with noncontrolling interests

SENAO subscribed for all the shares in the capital increase of Youth in December 2018. Therefore, the Company's equity ownership interest in Youth increased from 89% to 93%.

SENAO transferred its treasury stock to employees in June and November 2017, and June 2018. The Company's ownership interest in SENAO decreased to 28.93% and 28.18% as of December 31, 2017 and 2018, respectively. See Note 34(b) for details.

CHI did not participate in the capital increase of CHPT in September 2017 and disposed some shares of CHPT from April to August 2018. Therefore, the Company's ownership interest in CHPT decreased to 34.25% as of December 31, 2018. See Note 34(e) for details.

CHIEF issued new shares in March and November 2018 as its employees exercised their options. In addition, Chunghwa and CHI disposed some shares of CHIEF in May 2018 before CHIEF traded its shares on the General Stock Market of the Taipei Exchange according to the local requirements. Furthermore, Chunghwa and CHI did not participate in the capital increase of CHIEF in June 2018. Therefore, the Company's equity ownership interest in CHIEF decreased to 60.23% as of December 31, 2018. See Note 34(c)(d) for details.

Chunghwa and CHI disposed some shares of CHIEF in June 2017 before CHIEF traded its shares on the emerging stock market according to the local requirements. The Company's ownership interest in CHIEF decreased to 70.43% as of December 31, 2017.

The above transactions were accounted for as equity transactions since the Company did not cease to have control over these subsidiaries.

Information of the Company's equity transactions with noncontrolling interests for the years ended December 31, 2018 and 2017 was as follows:

			Year Ended De	cember 31, 2018		
	SENAO Not Proportionately Participating in the Capital Increase of Youth	SENAO Transferred its Treasury Stock	CHI Disposed Some Shares of CHPT	Chunghwa and CHI Did Not Participate in the Capital Increase of CHIEF	Chunghwa and CHI Disposed Some Shares of CHIEF	Share-based Payment of CHIEF
Cash consideration received from noncontrolling interests The proportionate share of the carrying amount of the net assets of the	\$ -	\$ 327,122	\$ 1,041,689	\$ 1,476,680	\$ 132,711	\$ 35,337
subsidiary transferred to noncontrolling interests	(68)	(272,188)	(330,100)	(699,899)	(18,253)	(24,561)
Differences arising from equity transactions	<u>\$ (68)</u>	\$ 54,934	<u>\$ 711,589</u>	<u>\$ 776,781</u>	<u>\$ 114,458</u>	\$ 10,776
Line items for equity transaction adjustments						
Additional paid-in capital-difference between consideration received or paid and the carrying amount of the subsidiaries' net assets upon actual disposal or			<b>* 544.50</b>			
acquisition Additional paid-in capital - arising from changes in	<u>\$</u>	<u>\$ -</u>	\$ 711,589	<u>\$ -</u>	<u>\$ 114,458</u>	<u>\$ -</u>
equities of subsidiaries	<u>\$ (68)</u>	\$ 54,934	<u>\$ -</u>	\$ 776,781	\$ -	\$ 10,776

	Year Ended December 31, 2017			
	CHI Did Not Participate in the Capital Increase of CHPT	Chunghwa and CHI Disposed Some Shares of CHIEF	SENAO Transferred its Treasury Stock	
Cash consideration received from noncontrolling interests  The proportionate share of the carrying amount of the net assets of the subsidiary transferred to noncontrolling	\$ 2,552,053	\$ 105,931	\$ 164,200	
interests	(1,750,326)	(29,217)	(137,300)	
Differences arising from equity transactions	<u>\$ 801,727</u>	\$ 76,714	\$ 26,900	
Line items for equity transaction adjustments				
Additional paid-in capital - difference between consideration received or paid and the carrying amount of the subsidiaries' net assets upon actual				
disposal or acquisition Additional paid-in capital - arising from	<u>\$</u>	<u>\$ 76,393</u>	<u>\$</u>	
changes in equities of subsidiaries	\$ 801,727	<u>\$ 321</u>	\$ 26,900	

# 16. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

	December 31			1
		2018		2017
Investments in associates	\$	<u>2,944,890</u>	<u>\$</u>	<u>2,546,374</u>
a. Investments in associates				
Investments in associates were as follows:				
		Carrying		
		Decen	iber 3	
		2018		2017
<u>Listed</u>				
Senao Networks, Inc. ("SNI")	\$	919,841	\$	862,116
Non-listed				
ST-2 Satellite Ventures Pte., Ltd. ("STS")		496,033		472,505
International Integrated System, Inc. ("IISI")		310,842		296,333
Viettel-CHT Co., Ltd. ("Viettel-CHT")		286,510		256,323
Taiwan International Standard Electronics Co., Ltd. ("TISE")		216,439		136,885
				(Continued)

	Carrying Amount December 31			
	2018		iber 5	2017
Chunghwa PChome Fund I Co., Ltd. ("CPFI") KKBOX Taiwan Co., Ltd. ("KKBOXTW", previously known	\$	198,974	\$	-
as Skysoft Co., Ltd.)		147,360		139,741
KingwayTek Technology Co., Ltd. ("KWT")		134,925		128,269
So-net Entertainment Taiwan Limited ("So-net")		119,956		104,171
Taiwan International Ports Logistics Corporation ("TIPL")		49,650		49,631
Click Force Co., Ltd. ("CF")		37,876		38,175
UUPON Inc. ("UUPON", previously known as Dian Zuan				
Integrating Marketing Co., Ltd.)		16,647		25,006
Alliance Digital Tech Co., Ltd. ("ADT")		5,080		14,488
Cornerstone Ventures Co., Ltd. ("CVC")		4,757		-
HopeTech Technologies Limited ("HopeTech")		-		22,731
MeWorks LIMITED (HK) ("MeWorks")				<u>-</u>
	\$	<u>2,944,890</u>	<u>\$</u>	2,546,374 (Concluded)

The percentages of ownership and voting rights in associates held by the Company as of balance sheet dates were as follows:

% of Ownership and	Voting
Dights	

_	Rights		
_	Decem	nber 31	
	2018	2017	
Senao Networks, Inc. ("SNI")	34	34	
ST-2 Satellite Ventures Pte., Ltd. ("STS")	38	38	
International Integrated System, Inc. ("IISI")	32	32	
Viettel-CHT Co., Ltd. ("Viettel-CHT")	30	30	
Taiwan International Standard Electronics Co., Ltd. ("TISE")	40	40	
Chunghwa PChome Fund I Co., Ltd. ("CPFI")	50	-	
KKBOX Taiwan Co., Ltd. ("KKBOXTW")	30	30	
KingwayTek Technology Co., Ltd. ("KWT")	26	26	
So-net Entertainment Taiwan Limited ("So-net")	30	30	
Taiwan International Ports Logistics Corporation ("TIPL")	27	27	
Click Force Co., Ltd. ("CF")	49	49	
UUpon Inc. ("UUPON")	22	22	
Alliance Digital Tech Co., Ltd. ("ADT")	14	14	
Cornerstone Ventures Co., Ltd. ("CVC")	49	-	
HopeTech Technologies Limited ("HopeTech")	-	45	
MeWorks LIMITED (HK) ("MeWorks")	20	20	

None of the above associates is considered individually material to the Company. Summarized financial information of associates that are not individually material was as follows:

	Year Ended December 31				
	2018	2017			
The Company's share of profits The Company's share of other comprehensive income (loss)	\$ 501,600 5,025	\$ 408,022 (4,449)			
The Company's share of total comprehensive income	\$ 506,625	\$ 403,573			

The Level 1 fair values based on the closing market prices of SNI as of the balance sheet dates were as follows:

	Decem	ber 31
	2018	2017
SNI	<u>\$ 1,447,350</u>	\$ 2,130,406

The Company invested 50% equity shares of Chunghwa PChome Fund I Co., Ltd. ("CPFI") in October 2018. The Company has only two out of five seats of the Board of Directors of CPFI, and has no control but significant influence over CPFI. Therefore, the Company recognized CPFI as investment in associate. CPFI engages mainly in investment business.

The Company invested 49% equity shares of Cornerstone Ventures Co., Ltd. ("CVC") in October 2018. The Company has only two out of five seats of the Board of Directors of CVC, and has no control but significant influence over CVC. Therefore, the Company recognized CVC as investment in associate. CVC engages mainly in investment business.

HopeTech returned the proceeds of \$19,184 thousand as a result of capital reduction in January 2018. The Company received \$3,379 thousand by disposing all shares of HopeTech in June 2018 and recognized disposal loss of \$125 thousand. HopeTech engages mainly in sale of information and communication technologies products.

The Company did not participate in the capital increase of UUPON in April 2017 and the ownership interest of UUPON decreased to 22%. UUPON engages mainly in information technology service and general advertisement service.

The Company owns 14% equity shares of ADT. As the Company remains the seat in the Board of Directors of ADT and considers the relative size of ownership interest and the dispersion of shares owned by the other stockholders, the Company remains significant influence over ADT. In June 2018, the stockholders of ADT approved to dissolve. ADT engages mainly in the development of mobile payments and information processing service.

The Company's share of profit and other comprehensive income (loss) of associates was recognized based on the audited financial statements.

#### b. Investments in joint ventures

In December 2016, the stockholders of CBO approved that CBO should start its dissolution from December 31, 2016. CBO completed its liquidation in December 2017.

In March 2016, the stockholders of HDD approved that HDD should start its dissolution from March 31, 2016. HDD completed its liquidation in March 2017.

None of the above joint ventures is considered individually material to the Company. Summarized financial information of joint ventures that was not material to the Company was as follows:

	Year Ended December 31					
	20	18	2017			
The Company's share of loss The Company's share of other comprehensive income	\$	<u>-</u>	\$	(779) <u>-</u>		
The Company's share of total comprehensive loss	<u>\$</u>		\$	<u>(779</u> )		

The Company's share of loss of joint ventures was recorded based on the audited financial statements.

# 17. PROPERTY, PLANT AND EQUIPMENT

	Land	Land Improvements	Buildings	Computer Equipment	Telecommuni- cations Equipment	Transportation Equipment	Miscellaneous Equipment	Construction in Progress and Equipment to be Accepted	Total
Cost									
Balance on January 1, 2017 Additions Disposal	\$ 103,872,069 - (157,928)	\$ 1,580,893 (4,701)	\$ 67,737,813 29,582 (108,349)	\$ 14,294,817 77,643 (974,218)	\$ 715,692,476 193,286 (13,739,288)	\$ 3,866,401 1,048 (61,988)	\$ 8,942,936 193,238 (401,624)	\$ 20,140,722 25,574,267	\$ 936,128,127 26,069,064 (15,448,096)
Effect of foreign exchange differences Others	365,049	18,707	5,035,004	(424) 763,979	(172,350) 20,080,311	(101) 	(3,467) 783,792	35 (27,188,210)	(176,307) (112,356)
Balance on December 31, 2017	\$ 104,079,190	\$ 1,594,899	\$ 72,694,050	\$ 14,161,797	\$ 722,054,435	\$ 3,834,372	\$ 9,514,875	\$ 18,526,814	\$ 946,460,432
Accumulated depreciation and impairment									
Balance on January 1, 2017 Depreciation expenses Disposal Effect of foreign exchange	\$ - - -	\$ (1,248,614) (49,673) 4,688	\$ (25,591,288) (1,402,180) 47,462	\$ (11,581,679) (1,192,426) 966,979	\$ (596,497,180) (24,492,377) 13,711,970	\$ (3,237,064) (329,590) 61,957	\$ (6,802,542) (676,507) 388,712	\$ - - -	\$ (644,958,367) (28,142,753) 15,181,768
differences Others		1,072	147,312	218 19,061	45,272 77,401	(8,916)	1,354 (116,028)		46,928 119,902
Balance on December 31, 2017	<u>s</u>	<u>\$ (1,292,527</u> )	<u>\$ (26,798,694</u> )	<u>\$ (11,787,847</u> )	<u>\$ (607,154,914</u> )	<u>\$ (3,513,529</u> )	<u>\$ (7,205,011</u> )	<u>s</u>	<u>\$ (657,752,522</u> )
Balance on January 1, 2017, net Balance on December 31,	\$ 103,872,069	\$ 332,279	<u>\$ 42,146,525</u>	\$ 2,713,138	<u>\$ 119,195,296</u>	<u>\$ 629,337</u>	\$ 2,140,394	<u>\$ 20,140,722</u>	<u>\$ 291,169,760</u>
2017, net	\$ 104,079,190	\$ 302,372	\$ 45,895,356	\$ 2,373,950	\$ 114,899,521	\$ 320,843	\$ 2,309,864	<u>\$ 18,526,814</u>	\$ 288,707,910
Cost									
Balance on January 1, 2018 Additions Disposal	\$ 104,079,190 - (71,333)	\$ 1,594,899 - (337)	\$ 72,694,050 20,723 (23)	\$ 14,161,797 52,269 (643,192)	\$ 722,054,435 158,930 (31,983,801)	\$ 3,834,372 270 (29,250)	\$ 9,514,875 334,443 (622,940)	\$ 18,526,814 27,412,805	\$ 946,460,432 27,979,440 (33,350,876)
Effect of foreign exchange differences Others	(35,805)	5,761	196,260	(119 ) 687,730	60,483 25,458,071	69 77,073	(343 ) 647,554	117 (27,294,970)	60,207 (258,326)
Balance on December 31, 2018	<u>\$ 103,972,052</u>	<u>\$ 1,600,323</u>	<u>\$ 72,911,010</u>	<u>\$ 14,258,485</u>	<u>\$ 715,748,118</u>	<u>\$ 3,882,534</u>	<u>\$ 9,873,589</u>	<u>\$ 18,644,766</u>	<u>\$ 940,890,877</u>
Accumulated depreciation and impairment									
Balance on January 1, 2018 Depreciation expenses Disposal Effect of foreign exchange	\$ - - -	\$ (1,292,527) (45,731) 337	\$ (26,798,694) (1,356,765) 23	\$ (11,787,847) (982,728) 632,457	\$ (607,154,914) (24,235,603) 31,951,706	\$ (3,513,529) (161,660) 29,186	\$ (7,205,011) (678,692) 614,789	\$ - - -	\$ (657,752,522) (27,461,179) 33,228,498
differences Others		217	28,453	57 (5,246)	(20,354) 33,391	(40) (5,096)	191 (23,019)		(20,146) 28,700
Balance on December 31, 2018	<u>s</u> -	<u>\$ (1,337,704</u> )	<u>\$ (28,126,983</u> )	<u>\$ (12,143,307</u> )	<u>\$ (599,425,774</u> )	<u>\$ (3,651,139</u> )	<u>\$ (7,291,742</u> )	<u>s -</u>	<u>\$ (651,976,649</u> )
Balance on January 1, 2018, net	\$ 104,079,190	\$ 302,372	\$ 45,895,356	\$ 2,373,950	\$ 114,899,521	\$ 320,843	\$ 2,309,864	\$ 18,526,814	\$ 288,707,910
Balance on December 31, 2018, net	\$ 103,972,052	\$ 262,619	<u>\$ 44,784,027</u>	\$ 2,115,178	\$ 116,322,344	\$ 231,395	\$ 2,581,847	<u>\$ 18,644,766</u>	\$ 288,914,228

There was no indication that property, plant and equipment was impaired so the Company did not recognize any impairment loss for the years ended December 31, 2018 and 2017.

Depreciation expense is computed using the straight-line method over the following estimated service lives:

Land improvements	8-30 years
Buildings Main buildings	35-60 years
Other building facilities Computer equipment	3-20 years 2-8 years
Telecommunications equipment Telecommunication circuits	2-30 years
Telecommunication machinery and antennas equipment Transportation equipment	2-30 years 3-10 years
Miscellaneous equipment Leasehold improvements	1-6 years
Mechanical and air conditioner equipment Others	3-16 years 1-10 years
Others	1 To years
INVESTMENT PROPERTIES	
<u>Cost</u>	
Balance on January 1, 2017 Reclassification	\$ 9,194,652 (59,835)
Balance on December 31, 2017	\$ 9,134,817
Accumulated depreciation and impairment	<del>¥ 2,120.,011</del>
	¢ (1 000 110)
Balance on January 1, 2017 Depreciation expense	\$ (1,080,119) (20,831)
Reclassification Reversal of impairment loss	2,947 10,979
Balance on December 31, 2017	<u>\$ (1,087,024)</u>
Balance on January 1, 2017, net	\$ 8,114,533
Balance on December 31, 2017, net	\$ 8,047,793
Cost	
Balance on January 1, 2018 Addition	\$ 9,134,817 5,627
Reclassification	252,008
Balance on December 31, 2018	\$ 9,392,452
Accumulated depreciation and impairment	
Balance on January 1, 2018	\$ (1,087,024)
Depreciation expense Reclassification	(20,777) (16,572)
Reversal of impairment loss	19,133
Balance on December 31, 2018	\$ (1,105,240) (Continued)

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Balance on January 1, 2018, net	<u>\$ 8,047,793</u>
Balance on December 31, 2018, net	<u>\$ 8,287,212</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. Therefore, the Company recognized reversal of impairment losses of \$19,133 thousand and \$10,979 thousand for the years ended December 31, 2018 and 2017, respectively, and the amounts were recognized only to the extent of impairment losses that had been recognized in prior years. The reversal of impairment loss was included in other income and expenses in the statements of comprehensive income.

The fair values of the Company's investment properties as of December 31, 2018 and 2017 were determined by Level 3 fair value measurements inputs based on the appraisal reports conducted by independent appraisers. Those appraisal reports are based on the comparison approach, income approach or cost approach. Key assumptions and the fair values were as follows:

	December 31		
	2018	2017	
Fair value	\$ 18,514,801	\$ 17,728,012	
Overall capital interest rate	1.02%-4.04%	1.46%-2.20%	
Profit margin ratio	12%-20%	12%-20%	
Discount rate	-	1.04%	
Capitalization rate	0.79%-1.75%	0.47%-1.69%	

All of the Company's investment properties are held under freehold interest.

# 19. INTANGIBLE ASSETS

	3G and 4G Concession			Others	Total	
Cost						
Balance on January 1, 2017 Additions-acquired separately Disposal Effect of foreign exchange	\$ 59,209,000 10,935,000	\$ 3,408,092 365,655 (461,850)	\$ 236,200	\$ 414,231 3,978 (18)	\$ 63,267,523 11,304,633 (461,868)	
difference		(287)		<u>(41</u> )	(328)	
Balance on December 31, 2017	<u>\$ 70,144,000</u>	\$ 3,311,610	\$ 236,200	\$ 418,150	\$ 74,109,960 (Continued)	

	3G and 4G Concession	Computer Software	Goodwill	Others	Total
Accumulated amortization and impairment					
Balance on January 1, 2017 Amortization expenses Disposal Impairment losses Effect of foreign exchange difference	\$(13,412,712) (3,261,853)	\$ (2,413,337) (480,496) 461,804	\$ (18,055) - (8,622)	\$ (69,995) (23,671) 18 -	\$(15,914,099) (3,766,020) 461,822 (8,622)
	Φ(1.6.674.565)				
Balance on December 31, 2017	<u>\$(16,674,565</u> )	<u>\$ (2,431,797)</u>	<u>\$ (26,677)</u>	<u>\$ (93,653)</u>	<u>\$(19,226,692</u> )
Balance on January 1, 2017, net Balance on December 31, 2017,	<u>\$ 45,796,288</u>	<u>\$ 994,755</u>	<u>\$ 218,145</u>	<u>\$ 344,236</u>	<u>\$ 47,353,424</u>
net	<u>\$ 53,469,435</u>	<u>\$ 879,813</u>	<u>\$ 209,523</u>	<u>\$ 324,497</u>	<u>\$ 54,883,268</u>
Cost					
Balance on January 1, 2018 Additions-acquired separately Disposal Effect of foreign exchange	\$ 70,144,000 - -	\$ 3,311,610 484,864 (370,657)	\$ 236,200	\$ 418,150 13,141 (58,008)	\$ 74,109,960 498,005 (428,665)
difference		<u>152</u>		(80)	72
Balance on December 31, 2018	<u>\$ 70,144,000</u>	\$ 3,425,969	\$ 236,200	\$ 373,203	<u>\$ 74,179,372</u>
Accumulated amortization and impairment					
Balance on January 1, 2018 Amortization expenses Disposal Impairment losses Effect of foreign exchange difference	\$(16,674,565) (3,957,909) - -	\$ (2,431,797) (405,898) 370,657 - (132)	\$ (26,677) - - - -	\$ (93,653) (22,991) 58,008 (50,750)	\$(19,226,692) (4,386,798) 428,665 (50,750) (115)
Balance on December 31, 2018	<u>\$(20,632,474)</u>	<u>\$ (2,467,170)</u>	<u>\$ (26,677)</u>	<u>\$ (109,369)</u>	<u>\$(23,235,690)</u>
Balance on January 1, 2018, net Balance on December 31, 2018,	<u>\$ 53,469,435</u>	\$ 879,813	\$ 209,523	\$ 324,497	<u>\$ 54,883,268</u>
net	<u>\$ 49,511,526</u>	\$ 958,799	<u>\$ 209,523</u>	<u>\$ 263,834</u>	\$ 50,943,682 (Concluded)

For long-term business development, Chunghwa submitted an application to NCC for 4G mobile broadband license in 1.8 and 2.1 GHz frequency bands and obtained certain spectrums. Chunghwa paid the 4G concession fee amounting to \$10,935,000 thousand in November 2017.

The concessions are granted and issued by the NCC. The concession fees are amortized using the straight-line method from the date operations commence through the date the license expires. The carrying amount of 3G concession fee was fully amortized in December 2018, and 4G concession fees will be fully amortized by December 2030 and December 2033.

The computer software is amortized using the straight-line method over the estimated useful lives of 1 to 10 years. Other intangible assets are amortized using the straight-line method over the estimated useful lives of 3 to 20 years. Goodwill is not amortized.

SENAO evaluated and determined that the recoverable amount of certain licensed contract was nil and recognized the impairment loss of \$50,750 thousand for the year ended December 31, 2018. The recoverable amount was based on the value in use.

SENAO evaluated the goodwill that arose in the acquisition of Youth and its subsidiaries at the end of each year. SENAO determined the smallest identifiable group of assets that generates cash inflows as single cash generating units by business type, and evaluated the recoverable amount of those cash generating units by their value in use. The management of SENAO estimated the cash flow projections based on the financial budgets for the following five years. Discount rates were 13.7% and 14.8% as of December 31 2018 and 2017, respectively and were used to calculate the recoverable amount of related cash generating units by discounting aforementioned cash flows.

There was no impairment loss recognized for the Company for the year ended December 31, 2018. SENAO concluded the recoverable amount of the goodwill was lower than the carrying value and recognized impairment loss of \$8,622 thousand for the year ended December 31, 2017.

The aforementioned impairment loss was included in other income and expenses in the statements of comprehensive income.

#### 20. OTHER ASSETS

	Decem	December 31			
	2018	2017			
Spare parts Refundable deposits Other financial assets Others	\$ 2,422,060 1,992,206 1,000,000 	\$ 2,058,769 1,860,364 1,000,000 2,800,112			
	\$ 7,756,306	\$ 7,719,245			
Current Spare parts Others	\$ 2,422,060 154,024 \$ 2,576,084	\$ 2,058,769 123,989 \$ 2,182,758			
Noncurrent Refundable deposits Other financial assets Others	\$ 1,992,206 1,000,000 2,188,016 \$ 5,180,222	\$ 1,860,364 1,000,000 2,676,123 \$ 5,536,487			

Other financial assets - noncurrent was Piping Fund. As part of the government's effort to upgrade the existing telecommunications infrastructure, Chunghwa and other public utility companies were required by the ROC government to contribute to a Piping Fund administered by the Taipei City Government. This fund was used to finance various telecommunications infrastructure projects. Net assets of this fund will be returned proportionately after the project is completed.

#### 21. HEDGING DERIVATIVE FINANCIAL INSTRUMENTS

#### 2018

Chunghwa's hedge strategy is to enter forward exchange contracts - buy to avoid its foreign currency exposure to certain foreign currency denominated equipment payments in the following six months. In addition, Chunghwa's management considers the market condition to determine the hedge ratio and enters into forward exchange contracts with the banks to avoid the foreign currency risk.

Chunghwa signed equipment purchase contracts with suppliers and entered into forward exchange contracts to avoid foreign currency risk exposure to Euro-denominated purchase commitments. Those forward exchange contracts were designated as cash flow hedges. When forecast purchases actually take place, basis adjustments are made to the initial carrying amounts of hedged items.

For the hedges of highly probable forecast sales and purchases, as the critical terms (i.e. the notional amount, life and underlying) of the forward foreign exchange contracts and their corresponding hedged items are the same, the Company performs a qualitative assessment of effectiveness and it is expected that the value of the forward contracts and the value of the corresponding hedged items will systematically change in opposite direction in response to movements in the underlying exchange rates.

The main source of hedge ineffectiveness in these hedging relationships is the effect of credit risks of the Company and the counterparty on the fair value of the forward exchange contracts. Such credit risks do not impact the fair value of the hedged item attributable to changes in foreign exchange rates. No other sources of ineffectiveness emerged from these hedging relationships.

The following tables summarized the information relating to the hedges for foreign currency risk.

#### December 31, 2018

Hedging Instruments	Currency	Notional Amount (In Thousands)	Maturity		orward Rate	Line Item in Balance Sheet		Carryina Asset	g Amour Liab		Change in Fair Values of Hedging Instruments Used for Calculating Hedge Ineffectiveness
Cash flow hedge Forecast purchases - forward exchange contracts	EUR/NT\$	EUR 4,911/ NT\$ 171,797	2019.03	\$	34.98	Hedging financial assets (liabilities	\$	1,069	\$	-	\$ 1,919
		]	Change in Value of Hedged Item Used for		Accumulated Gain or Loss on Hedging Instruments in Other Equity				ruments		
	Hedged :	Items	Calculating Hedge Ineffectiveness		edge		ntinuin Iedges	g		Hedge counting no nger Applied	
Cash flow hedg Forecast equi		rchases			\$ (	1,919)	\$	1,069		;	\$ -

# <u>2018</u>

		Comprehensive Income							
						Reclassification from Equity to Profit or Loss and the Adjusted Line Item			
Hedge Transaction	Gair Rec	edging n or Loss cognized n OCI	Amount Hedg Ineffective Recognize Profit or	e eness ed in	Line Item in Which Hedge Ineffectiveness is Included	Recl P/I	amount assified to and the usted Line Item	Futu Flows Exp	o Hedged ure Cash no Longer sected to Occur
Cash flow hedge Forecast equipment purchases	\$	1,919	\$	-	-	pro equ	(4,030) ruction in gress and ipment to accepted	\$ Other g losse	(297) gains and es

#### 2017

The hedging policy of 2017 for foreign currency risk was the same as that in 2018. The hedging instrument was showed as follows:

	December 31, 2017
Hedging derivative financial Assets	
Cash flow hedge - forward exchange contracts	<u>\$</u>
Hedging derivative financial Liabilities	
Cash flow hedge - forward exchange contracts	<u>\$ 850</u>

For the year ended December 31, 2017, losses arising from changes in fair value of the hedged items recognized in other comprehensive income were \$263 thousand. Upon the completion of the purchase transaction, the amount deferred and recognized in equity initially will be reclassified into equipment as its carrying value.

As of December 31, 2017, Chunghwa expected part of the equipment purchase transactions would not occur and reclassified the related gain of \$1,748 thousand from equity to profit or loss which arising from the forward exchange contracts of the aforementioned transactions for the year ended December 31, 2017.

The outstanding forward exchange contracts at the balance sheet dates were as follows:

	Currency	Maturity Period	Contract Amount (Thousands)
<u>December 31, 2017</u>			
Forward exchange contracts - buy	EUR/NT\$	2018.03-06	EUR3,963/NT\$141,605

Loss arising from the hedging derivative financial instruments that have been reclassified from equity to initial cost of the property, plant and equipment were as follows:

Year Ended December 31, 2017 \$ (2,411)

Construction in progress and equipment to be accepted

# 22. SHORT-TERM LOANS

	Decem	December 31			
	2018	2017			
Unsecured loans	<u>\$ 100,000</u>	<u>\$ 70,000</u>			

The annual interest rates of loans were as follows:

	Decem	ıber 31	
	2018	2017	
Unsecured loans	1.35%-2.35%	2.15%-2.19%	

# 23. LONG-TERM LOANS (INCLUDING LONG-TERM LOANS - CURRENT PORTION)

	December 31		
	2018		
Secured loans (Note 40)	\$ 1,600,000	\$ 1,600,000	

The annual interest rates of loans were as follows:

	Decen	December 31		
	2018	2017		
Secured loans	0.92%	0.91%		

LED obtained a secured loan from Chang Hwa Bank in September 2010. Interest is paid monthly. \$300,000 thousand and \$1,350,000 thousand were originally due in December 2014 and September 2015, respectively. In October 2014, the bank borrowing mentioned above was extended to September 2018 for one time repayment. LED made an early repayment of \$50,000 thousand in April 2015. LED entered into a contract with Chang Hwa Bank to renew the contract upon the maturity of the aforementioned contract in December 2017 and the due date of the renew contract is September 2021.

## 24. TRADE NOTES AND ACCOUNTS PAYABLE

	December 31		
	2018	2017	
Trade notes and accounts payable	<u>\$ 20,464,792</u>	\$ 19,395,889	

Trade notes and accounts payable were attributable to operating activities and the trading conditions were agreed separately.

# 25. OTHER PAYABLES

		Decem	iber 3	31
	'	2018		2017
Accrued salary and compensation	\$	9,040,692	\$	9,748,433
Accrued compensation to employees and remuneration to				
directors and supervisors		1,738,716		1,948,821
Payables to contractors		1,709,778		2,057,651
Payables to equipment suppliers		1,459,246		1,689,685
Amounts collected for others		1,226,031		1,202,933
Accrued franchise fees		1,151,084		1,248,010
				(Continued)

	December 31			
	2018	2017		
Accrued maintenance costs Others	\$ 1,049,849 5,939,987	\$ 1,081,473 6,024,395		
	<u>\$ 23,315,383</u>	\$ 25,001,401 (Concluded)		

# 26. PROVISIONS

			December 31			
			201	.8	2017	
Warranties Employee benefits Trade-in right Others			51	,664 \$ ,393 - ,770 _	3 131,789 43,429 87,572 4,467	
			\$ 206	<u>\$,827</u>	267,257	
Current Noncurrent			78	,200 \$ ,627 <u>\$ ,827 \$ </u>	78,513	
	Warranties	Employee Benefits	Trade-in Right	Others	Total	
Balance on January 1, 2017 Additional provisions recognized Used / forfeited during the year	\$110,975 78,952 (58,138)	\$ 38,014 7,187 (1,772)	\$ 31,378 69,308 (13,114)	\$ 4,447 50 (30)	\$184,814 155,497 <u>(73,054)</u>	
Balance on December 31, 2017	<u>\$131,789</u>	\$ 43,429	\$ 87,572	\$ 4,467	\$267,257	
Balance on January 1, 2018 Effect of retrospective application	\$131,789	\$ 43,429	\$ 87,572	\$ 4,467	\$267,257	
of IFRS 15 Balance on January 1, 2018 as			(87,572)		(87,572)	
adjusted	131,789	43,429	-	4,467	179,685	
Additional provisions recognized Used / forfeited during the year	163,901 (164,026)	9,180 (1,216)	<del></del>	19,403 (100)	192,484 (165,342)	
Balance on December 31, 2018	<u>\$131,664</u>	<u>\$ 51,393</u>	<u>\$</u>	\$ 23,770	\$206,827	

a. The provision for warranties claims represents the present value of the management's best estimate of the future outflow of economic benefits that will be required under the Company's obligation for warranties in sales agreements. The estimate has been made based on the historical warranty experience.

b. The provision for employee benefits represents vested long-term service compensation accrued.

c. The provision for trade-in right in 2017 was based on the management's judgments to estimate the trade-in right of products exercised by customers in the future. The provision was recognized as a reduction of revenue in the period in which the goods are sold.

#### 27. ADVANCE RECEIPTS

#### 2017

Advance receipts are mainly from advance telecommunication charges. For the obligations to transfer goods or services to customers for which the Company has received consideration from, they were retrospectively reclassified as contract liabilities starting from 2018.

#### 28. RETIREMENT BENEFIT PLANS

#### a. Defined contribution plans

The pension plan under the Labor Pension Act of ROC (the "LPA") is considered as a defined contribution plan. Based on the LPA, Chunghwa and its domestic subsidiaries make monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages. Its foreign subsidiaries would make monthly contributions based on the local pension requirements.

## b. Defined benefit plans

Chunghwa completed its privatization plans on August 12, 2005. Chunghwa is required to pay all accrued pension obligations including service clearance payment, lump sum payment under civil service plan, additional separation payments, etc. upon the completion of the privatization in accordance with the Statute Governing Privatization of Stated-owned Enterprises. After paying all pension obligations for privatization, the plan assets of Chunghwa should be transferred to the Fund for Privatization of Government-owned Enterprises (the "Privatization Fund") under the Executive Yuan. On August 7, 2006, Chunghwa transferred the remaining balance of fund to the Privatization Fund. However, according to the instructions of MOTC, Chunghwa was requested to administer the distributions to employees for pension obligations including service clearance payment, lump sum payment under civil service plan, additional separation payments, etc. upon the completion of the privatization and recognized in other current monetary assets.

Chunghwa and its subsidiaries SENAO, CHIEF, CHSI, and SHE with the pension mechanism under the Labor Standards Law are considered as defined benefit plans. These pension plans provide benefits based on an employee's length of service and average six-month salary prior to retirement. Chunghwa and its subsidiaries contribute an amount no more than 15% of salaries paid each month to their respective pension funds (the Funds), which are administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the names of the Committees in the Bank of Taiwan. The plan assets are held in a commingled fund which is operated and managed by the government's designated authorities; as such, the Company does not have any right to intervene in the investments of the funds. According to the Article 56 of the Labor Standards Law in the ROC revised in February 2015, entities are required to contribute the difference in one appropriation to the Funds before the end of next March when the balance of the Funds is insufficient to pay employees who will meet the retirement eligibility criteria within next year.

The amounts included in the consolidated balance sheets arising from the Company's obligation in respect of its defined benefit plans were as follows:

	December 31		
	2018	2017	
Present value of funded defined benefit obligation Fair value of plan assets	\$ 41,396,992 (39,027,144)	\$ 37,662,966 (34,972,376)	
Funded status - deficit	\$ 2,369,848	\$ 2,690,590	
Net defined benefit liabilities Net defined benefit assets	\$ 3,533,936 (1,164,088)	\$ 2,703,569 (12,979)	
	\$ 2,369,848	\$ 2,690,590	

Movements in the defined benefit obligation and the fair value of plan assets were as follows:

	Present Value of Funded Defined Benefit Obligation	Fair Value of Plan Assets	Net Defined Benefit Liabilities (Assets)
Balance on January 1, 2017	\$ 34,572,194	\$ 33,954,016	\$ 618,178
Current service cost	2,918,166	-	2,918,166
Interest expense/interest income	506,261	519,049	(12,788)
Amounts recognized in profit or loss	3,424,427	519,049	2,905,378
Remeasurement on the net defined benefit liability			
Return on plan assets (excluding			
amounts included in net interest)	_	(192,650)	192,650
Actuarial losses recognized from		( - , )	, , , , , ,
changes in demographic assumptions	14,424	_	14,424
Actuarial losses recognized from	,		,
experience adjustments	1,816,419	-	1,816,419
Amounts recognized in other			
comprehensive income	1,830,843	(192,650)	2,023,493
Contributions from employer		2,635,225	(2,635,225)
Benefits paid	(1,943,264)	(1,943,264)	-
Benefits paid directly by the Company	(221,234)	-	(221,234)
Balance on December 31, 2017	37,662,966	34,972,376	2,690,590
Current service cost	3,024,370	-	3,024,370
Interest expense/interest income	549,662	544,077	5,585
Amounts recognized in profit or loss	3,574,032	544,077	3,029,955
Remeasurement on the net defined benefit liability			
Return on plan assets (excluding			
amounts included in net interest)	-	875,203	(875,203)
Actuarial losses recognized from		•	, , ,
changes in demographic assumptions	3,446	-	3,446 (Continued)

	Present Value of Funded Defined Benefit Obligation	Fair Value of Plan Assets	Net Defined Benefit Liabilities (Assets)
Actuarial losses recognized from			
changes in financial assumptions	\$ 1,273,122	\$ -	\$ 1,273,122
Actuarial losses recognized from			
experience adjustments	813,187		813,187
Amounts recognized in other			
comprehensive income	2,089,755	875,203	1,214,552
Contributions from employer	-	4,373,688	(4,373,688)
Benefits paid	(1,738,200)	(1,738,200)	-
Benefits paid directly by the Company	(191,561)		(191,561)
Balance on December 31, 2018	\$ 41,396,992	\$ 39,027,144	\$ 2,369,848 (Concluded)

Relevant pension costs recognized in profit and loss for defined benefit plans were as follows:

	Year Ended December 31			
	2018	2017		
Operating costs	\$ 1,795,526	\$ 1,733,951		
Marketing expenses	885,684	847,318		
General and administrative expenses	164,252	155,707		
Research and development expenses	107,494	96,953		
	<u>\$ 2,952,956</u>	\$ 2,833,929		

The Company is exposed to following risks for the defined benefits plans under the Labor Standards Law:

#### a. Investment risk

Under the Labor Standards Law, the rate of return on assets shall not be lower than the average interest rate on a two-year time deposit published by the local banks and the government is responsible for any shortfall in the event that the rate of return is less than the required rate of return. The plan assets are held in a commingled fund mainly invested in foreign and domestic equity and debt securities and bank deposits which is operated and managed by the government's designated authorities; as such, the Company does not have any right to intervene in the investments of the funds.

#### b. Interest rate risk

The decline in government bond interest rate will increase the present value of the obligation on the defined benefit plan, while the return on plan assets will increase. The net effect on the present value of the obligation on defined benefit plan is partially offset by the return on plan assets.

# c. Salary risk

The calculation of the present value of defined benefit obligation is referred to the plan participants' future salary. Hence, the increase in plan participants' salary will increase the present value of the defined benefit obligation.

The most recent actuarial valuation of plan assets and the present value of the defined benefit obligation were carried out by the independent actuary.

The principal assumptions used for the purpose of the actuarial valuations were as follows:

	Measurement Date December 31			
	2018	2017		
Discount rates	1.00%	1.50%		
Expected rates of salary increase	1.20%-2.00%	1.20%-2.00%		

If reasonably possible changes of the respective significant actuarial assumptions occur at the end of reporting periods, while holding all other assumptions constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	December 31				
	2018	2017			
Discount rates					
0.5% increase	\$ (1,258,429)	\$ (1,231,822)			
0.5% decrease	\$ 1,338,402	\$ 1,309,513			
Expected rates of salary increase					
0.5% increase	\$ 1,429,623	\$ 1,397,699			
0.5% decrease	\$ (1,355,931)	\$ (1,325,710)			

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated. There is no change in the methods and assumptions used in preparing the sensitivity analysis from the previous period.

	Decem	December 31			
	2018	2017			
The expected contributions to the plan for the next year The average duration of the defined benefit obligation	\$ 2,236,871 6.5-12.1 years	\$ 4,392,763 6.8-12.5 years			

As of December 31, 2018, the Company's maturity analysis of the undiscounted benefit payments was as follows:

Year	Amount
2019 2020 2021 2022 2023 and thereafter	\$ 2,736,416 6,088,812 10,453,881 12,566,099 46,894,025
	<u>\$ 78,739,233</u>

# 29. EQUITY

#### a. Share capital

#### 1) Common stocks

	December 31			
	2018	2017		
Number of authorized shares (thousand)	12,000,000	12,000,000		
Authorized shares	<u>\$ 120,000,000</u>	<u>\$ 120,000,000</u>		
Number of issued and paid shares (thousand)	7,757,447	7,757,447		
Issued shares	<u>\$ 77,574,465</u>	\$ 77,574,465		

The issued common stocks of a par value at \$10 per share entitled the right to vote and receive dividends.

# 2) Global depositary receipts

The MOTC and some stockholders sold some common stocks of Chunghwa in an international offering of securities in the form of American Depositary Shares ("ADS") (one ADS represents 10 common stocks) in July 2003, August 2005, and September 2006. The ADSs were traded on the New York Stock Exchange since July 17, 2003. As of December 31, 2018, the outstanding ADSs were 234,273 thousand common stocks, which equaled 23,427 thousand units and represented 3.02% of Chunghwa's total outstanding common stocks.

The ADS holders generally have the same rights and obligations as other common stockholders, subject to the provision of relevant laws. The exercise of such rights and obligations shall comply with the related regulations and deposit agreement, which stipulate, among other things, that ADS holders are entitled to, through deposit agents:

- a) Exercise their voting rights,
- b) Sell their ADSs, and
- c) Receive dividends declared and subscribe to the issuance of new shares.

# b. Additional paid-in capital

The adjustments of additional paid-in capital for the years ended December 31, 2018 and 2017 were as follows:

	Share Premium	Movements of Additional Paid-in Capital for Associates and Joint Ventures Accounted for Using Equity Method	Movements of Additional Paid-in Capital Arising from Changes in Equities of Subsidiaries	Difference between Consideration Received and Carrying Amount of the Subsidiaries' Net Assets upon Disposal	Donated Capital	Stockholders' Contribution due to Privatization	Total
Balance on January 1, 2017 Unclaimed dividend Change in additional paid-in capital from investments in associates and joint ventures accounted for using equity	\$ 147,329,386	\$ 76,972 -	\$ 390,030	\$ 84,850	\$ 13,170 3,023	\$ 20,648,078	\$ 168,542,486 3,023
method Partial disposal of interests in	=	13,965	=	-	-	-	13,965
subsidiaries Change in additional paid-in capital for not proportionately participating in the capital increase of	-	-	-	76,714	-	-	76,714
subsidiaries	-	-	801,727	-	-	=	(Continued)

	Share Premium	Movements of Additional Paid-in Capital for Associates and Joint Ventures Accounted for Using Equity Method	Movements of Additional Paid-in Capital Arising from Changes in Equities of Subsidiaries	Difference between Consideration Received and Carrying Amount of the Subsidiaries' Net Assets upon Disposal	Donated Capital	Stockholders' Contribution due to Privatization	Total
Other changes in additional	•						
paid-in capital of subsidiaries Share-based payment	\$ -	\$ -	\$ 84	\$ -	\$ -	\$ -	\$ 84
transactions of subsidiaries	-	-	1,984	-	-	-	1,984
Treasury stock transfer of subsidiaries			26,900				26,900
Balance on December 31, 2017	147,329,386	90,937	1,220,725	161,564	16,193	20,648,078	169,466,883
Unclaimed dividend Change in additional paid-in capital from investments in associates and joint ventures accounted for using equity	-	-	-	-	2,455	-	2,455
method Partial disposal of interests in	=	(1,044)	=	=	=	=	(1,044)
subsidiaries Change in additional paid-in capital for not proportionately participating in the capital increase of	-	-	-	826,047	-	-	826,047
subsidiaries	-	-	776,713	-	-	-	776,713
Share-based payment transactions of subsidiaries Treasury stock transfer of	-	-	10,776	-	-	-	10,776
subsidiaries		<u>=</u>	54,934	<del>_</del>			54,934
Balance on December 31, 2018	<u>\$ 147,329,386</u>	\$ 89,893	\$ 2,063,148	<u>\$ 987,611</u>	<u>\$ 18,648</u>	<u>\$ 20,648,078</u> (	\$ <u>171,136,764</u> Concluded)

Additional paid-in capital from share premium, donated capital and the difference between consideration received and the carrying amount of the subsidiaries' net assets upon disposal may be utilized to offset deficits. Furthermore, when Chunghwa has no deficit, it may be distributed in cash or capitalized, which however is limited to a certain percentage of Chunghwa's paid-in capital except the additional paid-in capital arising from unclaimed dividend can only be utilized to offset deficits.

The additional paid-in capital from movements of paid-in capital arising from changes in equities of subsidiaries may only be utilized to offset deficits.

Among additional paid-in capital from movements of investments in associates and joint ventures accounted for using equity method, the portion arising from the difference between consideration received and the carrying amount of the subsidiaries' net assets upon disposal may be utilized to offset deficits; furthermore, when the Company has no deficit, it may be distributed in cash or capitalized. However, other additional paid-in capital recognized in proportion of share ownership may only be utilized to offset deficits.

#### c. Retained earnings and dividends policy

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

Chunghwa should appropriate or reverse a special reserve in accordance with Rule No. 1010012865 and Rule No. 1010047490 issued by the FSC and the directive entitled "Questions and Answers on Special Reserves Appropriated Following the Adoption of Taiwan-IFRSs". Distributions can be made out of any subsequent reversal of the debit to other equity items.

The appropriation for legal reserve shall be made until the accumulated reserve equals the aggregate par value of the outstanding capital stock of Chunghwa. This reserve can only be used to offset a deficit, or when the legal reserve has exceeded 25% of Chunghwa's paid-in capital, the excess may be transferred to capital or distributed in cash.

The appropriations of the 2017 and 2016 earnings of Chunghwa approved by the stockholders in their meetings on June 15, 2018 and June 23, 2017 were as follows:

					Di	vidends		Share
	Appropriation of Earnings				(N'	<b>T</b> \$)		
	For Fiscal		For Fiscal For Fiscal		For	<b>Fiscal</b>	For	<b>Fiscal</b>
	Ye	ear 2017	7	Year 2016	Yea	r 2017	Yea	r 2016
Provision for (reversal of) special								
reserve	\$	(5,404)	\$	5,404				
Cash dividends	37	,204,714		38,336,525	\$	4.796	\$	4.9419

The appropriations of earnings for 2018 had been proposed by Chunghwa's Board of Directors on March 19, 2019. The appropriations and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT\$)	
Cash dividends	\$34,745,603	\$	4.479

The appropriations of earnings for 2018 are subject to the resolution of the stockholders' meeting planned to be held on June 21, 2019. Information of the appropriation of the Chunghwa's earnings proposed by the Board of Directors and approved by the stockholders is available on the Market Observation Post System website.

# d. Other adjustments

# 1) Exchange differences arising from the translation of the foreign operations

The exchange differences arising from the translation of the foreign operations from their functional currency to New Taiwan dollars were recognized as exchange differences arising from the translation of the foreign operations in other comprehensive income.

#### 2) Unrealized gain or loss on available-for-sale financial assets

Balance on January 1, 2017	\$ (50,885)
Unrealized gain or loss on available-for-sale financial	606.070
assets	606,878
Income tax relating to unrealized gain or loss on	
available- for-sale financial assets	2,154
Amount reclassified from equity to profit or loss on	
disposal of available-for-sale financial assets	(38)
Balance on December 31, 2017 under IAS 39	558,109
Effect of retrospective application of IFRS 9	(558,109)
Balance on January 1, 2018 under IFRS 9	\$ -

# 3) Unrealized gain or loss on financial assets at FVOCI

	Year Ended December 31, 2018
Balance on January 1, 2018 under IAS 39 Effect of retrospective application of IFRS 9 Balance on January 1, 2018 under IFRS 9 Unrealized gain or loss for the year	\$ - <u>883,420</u> 883,420
Equity instruments	_(345,148)
Balance on December 31, 2018	<u>\$ 538,272</u>

# e. Noncontrolling interests

	Year Ended December 31	
	2018	2017
Beginning balance	\$ 8,697,595	\$ 6,495,922
Effect of retrospective application	(3,945)	-
Beginning balance as adjusted	8,693,650	6,495,922
Shares attributed to noncontrolling interests	, ,	
Net income for the year	954,549	1,168,696
Exchange differences arising from the translation of the net		
investment in foreign operations	(3,177)	(11,557)
Unrealized gain or loss on financial assets at FVOCI	(1,182)	_
Unrealized loss on available-for-sale financial assets	-	(1,566)
Income tax relating to unrealized gain and loss on		
available-for-sale financial assets	-	266
Remeasurements of defined benefit pension plans	(9,306)	(8,053)
Income tax relating to remeasurements of defined benefit		
pension plans	3,396	1,369
Share of other comprehensive loss of associates accounted		
for using equity method	696	(2,445)
Cash dividends distributed by subsidiaries	(958,446)	(942,482)
Changes in additional paid-in capital from investments in		
associates and joint ventures accounted for using equity		
method	191	1,762
Partial disposal of interests in subsidiaries	348,353	29,217
Change in additional paid-in capital for not proportionately		
participating in the capital increase of subsidiaries	699,967	1,750,326
Other changes in additional paid-in capital of subsidiaries	-	41
Share-based payment transactions of subsidiaries	41,863	19,799
Net increase in noncontrolling interests	239,394	196,300
Ending balance	<u>\$10,009,948</u>	\$ 8,697,595

# **30. REVENUES**

<u>2018</u>

	Year Ended December 31, 2018
Revenue from contracts with customers Other revenues	<u>\$ 214,460,894</u>
Rental income	640,312
Other	381,952
	1,022,264
	<u>\$215,483,158</u>

The information of performance obligations in customer contracts, please refer to Note 3 Summary of Significant Accounting Policies for details.

# a. Disaggregation of revenue

# <u>2018</u>

	Domestic Fixed Communi- cations Business	Mobile Communi- cations Business	Internet Business	International Fixed Communi- cations Business	Others	Total
Main Products and Service Revenues						
Mobile services revenue	\$ -	\$ 63,905,960	\$ -	\$ -	\$ -	\$ 63,905,960
Sales of products	1,731,152	35,701,599	3,993	251,437	3,600,582	41,288,763
Local telephone and domestic long						
distance telephone services	29,995,695					29,995,695
revenue	29,993,093	-	-	-	-	29,993,093
Broadband access and domestic leased line services revenue	22,453,133	_	_	_	_	22,453,133
Data Communications internet	22, 100,100					22, 100,100
services revenue	-	-	21,137,189	-	-	21,137,189
International network and leased						
telephone services revenue	-	-	-	8,724,302	-	8,724,302
Others	11,922,601	1,269,587	8,509,272	4,448,211	806,181	26,955,852
	\$ 66,102,581	\$100,877,146	\$ 29,650,454	\$ 13,423,950	\$ 4,406,763	\$214,460,894

### b. Contract balances

	December 31, 2018
Trade notes and accounts receivable (Note 10)	<u>\$30,075,503</u>
Contract assets Products and service bundling Other Less: Loss allowance	\$ 7,122,875 108,581 (18,770)
	\$ 7,212,686 (Continued)

	December 31, 2018
Current	\$ 4,868,728
Noncurrent	2,343,958
	<u>\$ 7,212,686</u>
Contract liabilities	
Telecommunications business	\$ 8,193,215
Project business	4,508,200
Products and service bundling	105,559
Other	475,947
	<u>\$13,282,921</u>
Current	\$10,687,772
Noncurrent	2,595,149
	<u>\$13,282,921</u> (Concluded)

The changes in the contract asset and the contract liability balances primarily result from the timing difference between the satisfaction of performance obligations and the payments collected from customers. Significant changes of contract assets and liabilities recognized resulting from product and service bundling were as follows:

	Year Ended December 31, 2018
Contract assets	
Net increase of customer contracts	\$ 4,125,505
Reclassified to trade receivables	(7,531,886)
	<u>\$ (3,406,381)</u>
Contract liabilities	
Net increase of customer contracts	\$ 16,243
Recognized as revenues	(194,384)
	<u>\$ (178,141)</u>

The Company applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for receivables. Contract assets will be reclassified to trade receivables when the corresponding invoice is billed to the client. Contract assets have substantially the same risk characteristics as the trade receivables of the same types of contracts. Therefore, the Company concluded that the expected loss rates for trade receivables can be applied to the contract assets.

Revenue recognized for the period that was included in the contract liability at the beginning of the period was as follows:

	Year Ended December 31, 2018
Telecommunications business Project business Others	\$ 7,156,712 626,860 324,892
	<u>\$ 8,108,464</u>

### c. Incremental costs of obtaining contracts

December 31, 2018

Noncurrent

Incremental costs of obtaining contracts

\$ 1,335,030

The Company considered the past experience and the default clauses in the telecommunications service contract and believes the commissions and equipment subsidy paid for obtaining contracts are expected to be recoverable; therefore, incremental costs of obtaining contracts are recognized as an asset. Amortization expense of incremental costs of obtaining contracts for the year ended December 31, 2018 was \$1,941,124 thousand.

### d. Remaining Performance Obligations

As of December 31, 2018, the aggregate amount of transaction price allocated to performance obligations for non-cancellable telecommunications service contracts that are unsatisfied is \$38,909,171 thousand. The Company expects to recognize revenue when service is provided over contract terms in the next 36 months, \$24,388,492 thousand, \$11,581,144 thousand and \$2,939,535 thousand for 2019, 2020 and 2021, respectively. The variable consideration collected from customers on nonrecurring basis resulting from exceeded usage from monthly fee and revenue recognized for contracts that the Company has a right to consideration from customers in the amount corresponding directly with the value to the customers of the Company's performance completed to date have been excluded from the disclosure of remaining performance obligations.

As of December 31, 2018, the aggregate amount of transaction price allocated to performance obligations for non-cancellable project business contracts that are unsatisfied is \$20,989,579 thousand. The Company recognizes revenues when the project business contract is completed and accepted by customers. The Company expects to recognize such revenue for \$3,656,313 thousand, \$12,892,600 thousand and \$4,440,666 thousand in 2019, 2020 and 2021, respectively. Project business contracts whose expected duration are less than a year have been excluded from the aforementioned disclosure.

## <u>2017</u>

The main source of revenue of the Company includes various telecommunications services in different streams. The information of disaggregation of revenue please refer to Note 45.

# 31. NET INCOME AND OTHER COMPREHENSIVE INCOME (LOSS)

## a. Net income

# 1) Other income and expenses

		Year Ended I	December 31
		2018	2017
		2010	2017
	Gain or loss on disposal of property, plant and equipment	\$ 142,068	\$ (106,692)
	Reversal of impairment loss on investment properties	19,133	10,979
	Loss on disposal of intangible assets	19,133	(46)
	Impairment loss on intangible assets	(50,750)	(8,622)
	impairment loss on intaligible assets	(30,730)	(0,022)
		¢ 110.451	¢ (104 201)
		<u>\$ 110,451</u>	<u>\$ (104,381</u> )
2)	Otherineens		
2)	Other income		
		<b>V E</b> 1 1 <b>E</b>	. 1 21
		Year Ended I	
		2018	2017
	5	A 20 7 702	ф. <b>22</b> П 0 с4
	Dividend income	\$ 395,593	\$ 327,861
	Rental income	70,142	60,516
	Others	234,088	447,088
		h 500 000	<b>.</b>
		\$ 699,823	<u>\$ 835,465</u>
3)	Other gains and losses		
		Year Ended I	
		2018	2017
	Net foreign currency exchange gain (loss)	\$ 37,348	\$ (87,330)
	Gain on disposal of financial instruments	5,763	2,748
	Loss on disposal of investments accounted for using		/
	equity method	(125)	(223)
	Valuation gain (loss) on financial assets and liabilities at		
	fair value through profit or loss, net	(20,763)	779
	Others	<u>(67,894</u> )	(48,132)
		<u>\$ (45,671</u> )	<u>\$ (132,158</u> )
4)	Impairment loss (reversal of impairment loss)		
		Year Ended I	
		2018	2017
	Contract Assets	\$ 18,770	\$ -
	Trade notes and accounts receivable	\$ 804,727	\$ 577,647
	Other receivables	\$ 96,235	\$ 65,363
	Inventories	\$ 365,123	<u>\$ 52,487</u>
	Investment properties	<u>\$ (19,133)</u>	<u>\$ (10,979</u> )
	Intangible assets	<u>\$ 50,750</u>	<u>\$ 8,622</u>

## 5) Depreciation and amortization expenses

	Year Ended December 31	
	2018	2017
Property, plant and equipment	\$ 27,461,179	\$ 28,142,753
Investment properties	20,777	20,831
Intangible assets	4,386,798	3,766,020
Incremental costs of obtaining contracts	1,941,124	
Total depreciation and amortization expenses	<u>\$ 33,809,878</u>	\$ 31,929,604
Depreciation expenses summarized by functions		
Operating costs	\$ 25,996,087	\$ 26,401,822
Operating expenses	1,485,869	1,761,762
	<u>\$ 27,481,956</u>	\$ 28,163,584
Amortization expenses summarized by functions		
Operating costs	\$ 6,085,039	\$ 3,473,233
Marketing expenses	113,253	153,458
General and administrative expenses	93,239	104,205
Research and development expenses	36,391	35,124
	\$ 6,327,922	\$ 3,766,020

### 6) Employee benefit expenses

	<b>Year Ended December 31</b>	
	2018	2017
Post-employment benefit		
Defined contribution plans	\$ 639,670	\$ 593,714
Defined benefit plans	2,952,956	2,833,929
_	3,592,626	3,427,643
Share-based payment		
Equity-settled share-based payment	17,302	21,783
Other employee benefit		
Salaries	26,203,747	25,759,742
Insurance	2,739,782	2,748,020
Others	14,470,194	15,449,368
	43,413,723	43,957,130
Total employee benefit expenses	<u>\$ 47,023,651</u>	<u>\$ 47,406,556</u>
Summary by functions		
Operating costs	\$ 24,366,935	\$ 24,725,143
Operating expenses	22,656,716	22,681,413
	<u>\$ 47,023,651</u>	<u>\$ 47,406,556</u>

Chunghwa distributes employees' compensation at the rates from 1.7% to 4.3% and remuneration to directors not higher than 0.17%, respectively, of pre-tax income. As of December 31, 2018, the payables of the employees' compensation and the remuneration to directors were \$1,404,264 thousand and \$38,216 thousand, respectively. Such amounts have

been approved by the Chunghwa's Board of Directors on March 19, 2019 and will be reported to the stockholders in their meeting planned to be held on June 21, 2019.

If there is a change in the proposed amounts after the annual financial statements are authorized for issue, the differences are recorded as a change in accounting estimate.

The compensation to the employees and remuneration to the directors of 2017 and 2016 approved by the Board of Directors on March 13, 2018 and March 7, 2017, respectively, were as follows:

	2017	2016	
	Cash	Cash	
Compensation distributed to the employees	\$ 1,596,012	\$ 1,702,164	
Remuneration paid to the directors	40,750	42,087	

There was no difference between the initial accrual amounts and the amounts proposed in the Board of Directors in 2018 and 2017 of the aforementioned compensation to employees and the remuneration to directors.

Information of the appropriation of Chunghwa's employees compensation and remuneration to directors and those approved by the Board of Directors is available on the Market Observation Post System website.

### b. Reclassification adjustments of other comprehensive income (loss)

	Year Ended December 31, 2017
Unrealized gain (loss) on available-for-sale financial assets Arising during the year Reclassification adjustments	\$ 605,317
Upon disposal	(43)
	\$ 605,274
Cash flow hedges Gain arising during the year Reclassification adjustments included in profit or loss Adjusted against the carrying amount of hedged items	\$ 3,896 (1,748) (2,411)
	<u>\$ (263)</u>

### 32. INCOME TAX

### a. Income tax recognized in profit or loss

The major components of income tax expense were as follows:

	<b>Year Ended December 31</b>			
	2018	2017		
Current tax				
Current tax expenses recognized for the year	\$ 8,271,026	\$ 7,993,159		
Income tax on unappropriated earnings	47,528	48,170		
Income tax adjustments on prior years	6,782	(1,997)		
Others	7,368	11,210		
	8,332,704	8,050,542		
Deferred tax				
Deferred tax expenses recognized for the year	208,252	(101,663)		
Income tax adjustments on prior years	19,229	5,582		
Change in tax rate	(37,652)			
	189,829	(96,081)		
Income tax expense recognized in profit or loss	\$ 8,522,533	<u>\$ 7,954,461</u>		

Reconciliation of accounting profit and income tax expense was as follows:

	<b>Year Ended December 31</b>			
	2018	2017		
Income before income tax	<u>\$ 44,978,704</u>	<u>\$ 47,997,062</u>		
Income tax expense calculated at the statutory rate (20% and				
17% in 2018 and 2017, respectively)	\$ 8,995,741	\$ 8,159,501		
Nondeductible income and expenses in determining taxable				
income	226,727	34,300		
Unrecognized deductible temporary differences	755	(856)		
Unrecognized loss carryforwards	21,240	9,859		
Tax-exempt income	(578,412)	(87,476)		
Additional income tax under Alternative Minimum Tax Act	45,827	-		
Income tax on unappropriated earnings	47,528	48,170		
Investment credits	(204,223)	(211,740)		
Change in tax rate	(37,652)	-		
Effect of different tax rates of group entities operating in other				
jurisdictions	(14,967)	(2,110)		
Income tax adjustments on prior years	26,011	3,585		
Others	(6,042)	1,228		
Income tax expense recognized in profit or loss	\$ 8,522,533	<u>\$ 7,954,461</u>		

In 2017, the applicable corporate income tax rate used by the Company is 17%.

Income Tax Act in the ROC was amended in February 2018 and the corporate income tax rate is adjusted from 17% to 20%. Such amendment is effective from 2018. In addition, the rate of the corporate surtax applicable to 2018 unappropriated earnings is reduced from 10% to 5%. The applicable tax rate used by subsidiaries in China is 25%, and tax rates used by other entities in the Company operating in other jurisdictions are based on the tax laws in those jurisdictions.

# b. Income tax benefit recognized in other comprehensive income

	<b>Year Ended December 31</b>			
	2018	2017		
Deferred tax				
Remeasurement on defined benefit plan	\$ (242,911)	\$ (343,994)		
Change in tax rate	(207,255)	-		
Unrealized gain or loss on available-for-sale financial				
assets		(2,420)		
Total income tax benefit recognized in other comprehensive				
income	<u>\$ (450,166)</u>	<u>\$ (346,414</u> )		

### c. Current tax assets and liabilities

	December 31			
	2018	2017		
Current tax assets  Tax refund receivable (included in other current assets - other)	<u>\$ 466</u>	\$ 1,67 <u>0</u>		
Current tax liabilities Income tax payable	<u>\$ 4,390,203</u>	<u>\$ 4,725,698</u>		

### d. Deferred income tax assets and liabilities

The movements of deferred income tax assets and liabilities were as follows:

# For the year ended December 31, 2018

	January 1, 2018	Effect of Retrospective Application (Note 5)	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2018
Deferred income tax assets					
Temporary differences					
Defined benefit obligation Allowance for doubtful receivables	\$ 1,723,130	\$ -	\$ 133,748	\$ 450,179	\$ 2,307,057
over quota	289,043	-	146,402	-	435,445
Share of profit or loss of associates and joint ventures accounted for					
using equity method	330,705	-	58,674	-	389,379
Deferred revenue	105,742	-	5,187	-	110,929
Impairment loss on property, plant					
and equipment	112,323	-	(18,867)	-	93,456
Valuation loss on inventory	22,905	-	64,569	-	87,474
Estimated warranty liabilities	22,389	-	3,600	-	25,989
Accrued award credits liabilities	15,387	-	(1,475)	-	13,912
Trade-in right	14,887	-	(4,552)	-	10,335
Property, plant and equipment	1,762	-	236	-	1,998
Unrealized foreign exchange loss, net	16,663	-	(16,233)	-	430
Others	29,547	-	6,963	-	36,510
	2,684,483		378,252	450,179	3,512,914
Loss carryforwards	45,610		(4,668)		40,942
	\$ 2,730,093	\$ -	<u>\$ 373,584</u>	\$ 450,179	\$ 3,553,856 (Continued)

	January 1, 2018	Effect of Retrospective Application (Note 5)	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	December 31, 2018
Deferred income tax liabilities					
Temporary differences					
Defined benefit obligation	\$ 1,265,380	\$ -	\$ 567,276	\$ 13	\$ 1,832,669
Land value incremental tax	94,986	-	-	· -	94,986
Intangible assets	38,111	-	(6,083)	-	32,028
Deferred revenue for award credits	28,810	-	1,880	-	30,690
Unrealized foreign exchange gain, net	134	-	465	-	599
Valuation gain or loss on financial					
instruments, net	1,175	(1,175)	53	-	53
Others	996		(178)		818
	<u>\$ 1,429,592</u>	<u>\$ (1,175)</u>	<u>\$ 563,413</u>	<u>\$ 13</u>	<u>\$ 1,991,843</u> (Concluded)

# For the year ended December 31, 2017

	Jan	uary 1, 2017	ognized in fit or Loss	Com	ognized in Other prehensive Income	De	cember 31, 2017
Deferred income tax assets							
Temporary differences							
Defined benefit obligation Allowance for doubtful	\$	1,373,755	\$ 5,397	\$	343,978	\$	1,723,130
receivables over quota Share of profits of associates and joint ventures accounted for using equity		230,017	59,026		-		289,043
method		329,775	930				330,705
Deferred revenue		117,193	(11,451)		-		105,742
Impairment loss on property,		117,193	(11,431)		-		103,742
plant and equipment		122,805	(10,482)				112,323
Valuation loss on inventory		20,616	2,289		_		22,905
Estimated warranty		20,010	2,209		_		22,903
liabilities		18,544	3,845		_		22,389
Accrued award credits		10,544	3,043		_		22,309
liabilities		19,926	(4,539)				15,387
Trade-in right		19,920	14,887		_		14,887
Property, plant and		_	14,007		-		14,007
equipment		1,850	(88)				1,762
Unrealized foreign exchange		1,030	(66)		-		1,702
loss, net		120	16,543		_		16,663
Others		33,775	(4,228)		_		29,547
Oulers	_	2,268,376	 72,129	-	343,978	_	2,684,483
Loss carryforwards		53,850	(8,240)		343,770		45,610
Loss carry for wards	_	33,630	 (0,240)			_	43,010
	\$	2,322,226	\$ 63,889	\$	343,978	\$	2,730,093
Deferred income tax liabilities							
Temporary differences							
Defined benefit obligation	\$	1,268,319	\$ (2,923)	\$	(16)	\$	1,265,380
Land value incremental tax		94,986	-		-		94,986
Intangible assets		40,742	(2,631)		-		38,111 (Continued)

	Janua	ary 1, 2017	ognized in fit or Loss	Com	ognized in Other prehensive ncome	Dec	ember 31, 2017
Deferred revenue for award credits Unrealized foreign exchange	\$	45,690	\$ (16,880)	\$	-	\$	28,810
gain, net Valuation gain or loss on		9,545	(9,411)		-		134
financial instruments, net Others		3,632 1,306	 (37) (310)		(2,420)		1,175 996
	<u>\$</u>	1,464,220	\$ (32,192)	<u>\$</u>	(2,436)	<u>\$</u> ((	1,429,592 Concluded)

e. Deductible temporary differences and unused loss carryforwards for which no deferred tax assets have been recognized in the consolidated balance sheets

	December 31			
	2018	2017		
Loss carryforwards Expire in 2019	\$ 135,872	\$ 137,604		
Expire in 2020	41,390	41,758		
Expire in 2021	11,836	9,347		
Expire in 2022	10,264	10,957		
Expire in 2023	8,459	21		
Expire in 2024	1,631	20		
Expire in 2025	15,438	13,122		
Expire in 2026	8,423	23		
Expire in 2027	2,585	2,575		
Expire in 2028	614	<u>-</u> _		
	<u>\$ 236,512</u>	<u>\$ 215,427</u>		
Deductible temporary differences	\$ 1,369	<u>\$ 2,543</u>		

f. Information about unused loss carryforwards

As of December 31, 2018, information about loss carryforwards was as follows:

Remaining Creditable Amount	Expiry Year
\$ 135,872	2019
41,390	2020
21,543	2021
11,460	2022
9,131	2023
1,814	2024
32,695	2025
11,636	2026
3,621	2027
8,292	2028
<u>\$ 277,454</u>	

#### g. Income tax examinations

Income tax returns of Chunghwa have been examined by the tax authorities through 2015. Income tax returns of SENAO, Aval, CHSI, CHI, CHPT, HHI, SHE, LED, CHIEF, Unigate, CLPT and CHST have been examined by the tax authorities through 2016. Income tax returns of SFD, CHYP, ISPOT, Youth and Youyi have been examined by the tax authorities through 2017.

### 33. EARNINGS PER SHARE ("EPS")

Net income and weighted average number of common stocks used in the calculation of earnings per share were as follows:

#### **Net Income**

	<b>Year Ended December 31</b>			
	2018	2017		
Net income used to compute the basic earnings per share Net income attributable to the parent Assumed conversion of all dilutive potential common stocks Employee stock options and employee compensation of	\$ 35,501,622	\$ 38,873,905		
subsidiaries	(6,333)	(459)		
Net income used to compute the diluted earnings per share	<u>\$ 35,495,289</u>	\$ 38,873,446		

### Weighted Average Number of Common Stocks

(Thousand Shares)

	Year Ended December 31	
	2018	2017
Weighted average number of common stocks used to compute the		
basic earnings per share	7,757,447	7,757,447
Assumed conversion of all dilutive potential common stocks		
Employee compensation	9,062	10,486
Weighted average number of common stocks used to compute the		
diluted earnings per share	<u>7,766,509</u>	<u>7,767,933</u>

Because Chunghwa may settle the employee compensation in shares or cash, Chunghwa shall presume that it will be settled in shares and takes those shares into consideration when calculating the weighted average number of outstanding shares used in the calculation of diluted EPS if the shares have a dilutive effect. The dilutive effect of the shares needs to be considered until the approval of the number of shares to be distributed to employees as compensation in the following year.

#### 34. SHARE-BASED PAYMENT ARRANGEMENT

a. SENAO share-based compensation plan ("SENAO Plan") described as follows:

Effective Date for Plan Registration	Resolution Date by SENAO's Board of Directors	Stock Options Units (Thousand)	Exercise Price (NT\$)
2012.05.28	2013.04.29	10,000	\$66.20
			(Original price \$93.00)

Each option is eligible to subscribe for one common share when exercisable. Under the terms of the SENAO Plan, the options are granted at an exercise price equal to the closing price of the SENAO's common stocks listed on the TSE on the higher of closing price or par value. The SENAO Plan have exercise price adjustment formula upon the changes in common stocks equity (including cash capital increase, new share issue through capitalization of earnings and additional paid-in capital, merger, spin off and new share issue for Global Depositary Shares, and so on) or distribution of cash dividends. The options of SENAO Plan are valid for six years and the graded vesting schedule for which 50% of option granted will vest two years after the grant date and another two tranches of 25%, each will vest three and four years after the grant date respectively.

The compensation cost of stock options granted on May 7, 2013 was \$3,991 thousand for the year ended December 31, 2017. No compensation cost was recognized for the year ended December 31, 2018.

SENAO modified the plan terms of the outstanding stock options in July 2018 and the exercise price changed from \$70.70 to \$66.20 per share. The modification did not cause any incremental fair value granted.

SENAO modified the plan terms of the outstanding stock options in July 2017 and the exercise price changed from \$76.10 to \$70.70 per share. The modification did not cause any incremental fair value granted.

Information about SENAO's outstanding stock options for the years ended December 31, 2018 and 2017 was as follows:

_	Year Ended December 31			
	2018		2017	
_	Granted on M	lay 7, 2013	Granted on May 7, 2013	
	Number of Options (Thousand)	Weighted Average Exercise Price (NT\$)	Number of Options (Thousand)	Weighted Average Exercise Price (NT\$)
Employee stock options				
Options outstanding at beginning of the year Options forfeited	5,926 (608)	\$ 70.70 -	6,587 (661)	\$ 76.10 -
Options outstanding at end of the year	5,318	66.20	5,926	70.70
Options exercisable at end of the year	<u>5,318</u>	66.20	5,926	70.70

As of December 31, 2018, information about employee stock options outstanding was as follows:

	Options Outstanding		Options E	Exercisable	
Range of Exercise Price (NT\$)	Number of Options (Thousand)	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT\$)	Number of Options (Thousand)	Weighted Average Exercise Price (NT\$)
\$ 66.20	5,318	0.35	\$ 66.20	5,318	\$ 66.20

As of December 31, 2017, information about employee stock options outstanding was as follows:

Options Outstanding			Options E	Exercisable	
Range of Exercise Price (NT\$)	Number of Options (Thousand)	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT\$)	Number of Options (Thousand)	Weighted Average Exercise Price (NT\$)
\$ 70.70	5,926	1.35	\$ 70.70	5,926	\$ 70.70

SENAO used the fair value method to evaluate the options using the Black-Scholes model and the related assumptions and the fair value of the options were as follows:

	Stock Options Granted on May 7, 2013
Grant-date share price (NT\$)	\$93.00
Exercise price (NT\$)	\$93.00
Dividends yield	-
Risk-free interest rate	0.91%
Expected life	4.375 years
Expected volatility	36.22%
Weighted average fair value of grants (NT\$)	\$28.72

Expected volatility was based on the historical share price volatility of SENAO over the period equal to the expected life of SENAO Plan.

#### b. SENAO transferred the treasury stock

The Board of Directors of SENAO resolved to transfer treasury stock 6,658 thousand shares to specific employees in April 2018. The aforementioned treasury stock transferred to employees were measured at the fair value on the grant date. The compensation cost of \$15,564 thousand was recognized for the year ended December 31, 2018.

The Board of Directors of SENAO resolved to transfer treasury stock to specific employees in May and November 2017. The aforementioned treasury stock transferred to employees were measured at the fair value of the grant date. SENAO totally transferred 3,342 thousand shares of treasury stock and the compensation cost of \$8,698 thousand was recognized for the year ended December 31, 2017.

SENAO used the fair value method to evaluate share-based payment transaction using the Black-Scholes model and the related assumptions and the fair value of the option were as follows:

	Stock Options Granted on May 7, 2018	Stock Options Granted on November 17, 2017	Stock Options Granted on May 23, 2017
Grant-date share price (NT\$)	\$51.60	\$51.00	\$53.60
Exercise price (NT\$)	\$49.28	\$49.28	\$49.28
Dividends yield	-	-	_
Risk-free interest rate	0.59%	0.59%	0.59%
Expected life	18 days	14 days	9 days
Expected volatility	8.78%	9.94%	12.35%
Weighted average fair value of grants			
(NT\$)	\$2.34	\$1.75	\$4.33

Expected volatility was based on the historical share price volatility of SENAO over three months before the grant date.

#### c. CHIEF share-based compensation plan ("CHIEF Plan") described as follows:

Effective Date for Plan Registration	Resolution Date by CHIEF's Board of Directors	Stock Options Units	Exercise Price (NT\$)
2017.12.18	2017.12.19	950.00	\$140.60
			(Original price \$147.00)
	2018.10.31	50.00	\$147.00
2015.11.17	2015.10.22	2,000.00	\$ 34.40
			(Original price \$ 43.00)

Each option is eligible to subscribe for one thousand common stocks when exercisable. The options are granted to specific employees that meet the vesting conditions. The CHIEF Plan has exercise price adjustment formula upon the changes in common stocks or distribution of cash dividends. The options of CHIEF Plan are valid for five years and the graded vesting schedule will vest two years after the grant date.

The compensation cost for stock options granted on October 31, 2018 was \$92 thousand for the year ended December 31, 2018.

The compensation costs for stock options granted on December 19, 2017 were \$596 thousand and \$96 thousand for the years ended December 31, 2018 and 2017, respectively.

The compensation costs for stock options granted on October 22, 2015 were \$1,050 thousand and \$3,177 thousand for the years ended December 31, 2018 and 2017, respectively.

CHIEF modified the plan terms of stock options granted on December 19, 2017 in June and August 2018 and the exercise price changed from \$147.00 to \$144.10 and \$144.10 to \$140.60 per share, respectively. The modification did not cause any incremental fair value granted.

Information about CHIEF's outstanding stock options for the years ended December 31, 2018 and 2017 was as follows:

	Year Ended December 31, 2018					
	Granted on 20	October 31,	Granted on 19, 2	December	Granted on	October 22,
	Number of Options	Weighted Average Exercise Price (NT\$)	Number of Options	Weighted Average Exercise Price (NT\$)	Number of Options	Weighted Average Exercise Price (NT\$)
Employee stock options						
Options outstanding at beginning of the year Options granted	50.00	\$ - 147.00	950.00	\$ 147.00 -	1,936.00	\$ 34.40
Options exercised Options forfeited		-	25.00	-	(1,027.25) (26.00)	34.40
Options outstanding at end of the year	50.00	147.00	925.00	140.60	882.75	34.40
Options exercisable at end of the year	<del>_</del>	-	<del>-</del>	-	416.50	34.40
		Yea	ar Ended De	ecember 3	1, 2017	
	Grant	ed on Dec	ember 19,			
		2017		Granted	l on Octobe	er 22, 2015
	Opt	ber of cions usand)	Weighted Average Exercise Price (NT\$)	Numk Opti (Thou	oer of ions	Weighted Average Exercise Price (NT\$)
Employee stock options						
Options outstanding at beginnin of the year Options granted Options forfeited		- 50.00 <u>-</u>	\$ - 147.00 -		2.00)	\$ 34.40
Options outstanding at end of the year		50.00	147.00	<u>1,93</u>	<u>86.00</u>	34.40
Options exercisable at end of the year	e 	<u> </u>	-	96	5 <u>8.00</u>	34.40

As of December 31, 2018, information about employee stock options outstanding was as follows:

		Granted on O	ctober 31, 2018		
	Options O	utstanding		Options E	Exercisable
Range of Exercise Price (NT\$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT\$)	Number of Options	Weighted Average Exercise Price (NT\$)
\$147.00	50.00	4.83	\$147.00	-	\$ -

Granted on December 19, 2017

	Options O	utstanding		Options E	exercisable
Range of Exercise Price (NT\$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT\$)	Number of Options	Weighted Average Exercise Price (NT\$)
\$140.60	925.00	3.96	\$140.60	-	\$ -
	0-4		ctober 22, 2015	O4'	S
	Options O			Options E	xercisable
Range of Exercise Price (NT\$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT\$)	Number of Options	Weighted Average Exercise Price (NT\$)
\$ 34.40	882.75	1.81	\$ 34.40	416.50	\$ 34.40

As of December 31, 2017, information about employee stock options outstanding was as follows:

Options Outstanding				Options E	Exercisable
Range of Exercise Price (NT\$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT\$)	Number of Options	Weighted Average Exercise Price (NT\$)
\$147.00	950.00	4.96	\$147.00	-	\$ -
	Ontions		ctober 22, 2015	Ontional	Swamai aa bla
	Options O	utstanding		Options E	Exercisable
Range of Exercise Price (NT\$)	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price (NT\$)	Number of Options	Weighted Average Exercise Price (NT\$)
\$ 34.40	1 936 00	2.81	\$ 34 40	968 00	\$ 34 40

CHIEF used the fair value method to evaluate the options using the Black-Scholes model and binomial option pricing model and the related assumptions and the fair value of the options were as follows:

	Stock Options Granted on October 31, 2018	Stock Options Granted on December 19, 2017	Stock Options Granted on October 22, 2015
Grant-date share price (NT\$)	\$166.00	\$95.92	\$39.55
Exercise price (NT\$)	\$147.00	\$147.00	\$43.00
Dividends yield	-	-	-
•			(Continued)

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	Stock Options Granted on October 31, 2018	Stock Options Granted on December 19, 2017	Stock Options Granted on October 22, 2015
Risk-free interest rate	0.72%	0.62%	0.86%
Expected life	5 years	5 years	5 years
Expected volatility Weighted average fair value of grants	16.60%	17.35%	21.02%
(NT\$)	\$33,540	\$2,318	\$4,863 (Concluded)

Expected volatility was based on the average annualized historical share price volatility of CHIEF's comparable companies before the grant date.

#### d. New shares reserved for subscription by employees under cash injection of CHIEF

In March 2018, the Board of Directors of CHIEF approved the cash injection to issue 7,842 thousand shares and simultaneously reserved 1,176 thousand shares for subscription by employees according to the Company Act of the ROC. Furthermore, when the employees subscribed some shares or discarded their rights to subscribe shares, the Board of Directors of CHIEF authorized the chairman of the Board of Directors to contact specific people or group to subscribe.

The aforementioned options granted to employees are accounted for and measured at fair value of the grant date. No compensation cost was recognized for the year ended December 31, 2018.

CHIEF used the fair value method to evaluate the options granted to employees on May 22, 2018 using the Black-Scholes model and the related assumptions and the fair value of the options were as follows:

	Stock Options Granted on May 22, 2018
Grant-date share price (NT\$)	\$156.41
Exercise price (NT\$)	\$170.00
Dividends yield	-
Risk-free interest rate	0.34%
Expected life	7 days
Expected volatility	14.33%
Weighted average fair value of grants (NT\$)	\$ -

Expected volatility was based on the average annualized historical share price volatility of CHIEF's comparable companies before the grant date.

#### e. New shares reserved for subscription by employees under cash injection of CHPT

On February 8, 2017, the Board of Directors of CHPT approved the cash injection to issue 2,000 thousand shares and simultaneously reserved 300 thousand shares for subscription by employees according to the Company Act of the ROC. Furthermore, when the employees subscribed some shares or discarded their rights to subscribe shares, the Board of Directors of CHPT authorized the chairman of the Board of Directors to contact specific people or group to subscribe.

The aforementioned options granted to employees are accounted for and measured at fair value. The recognized compensation cost was \$5,821 thousand for the year ended December 31, 2017.

CHPT used the fair value method to evaluate the options granted to employees on September 18, 2017 using the Black-Scholes model and the related assumptions and the fair value of the options were as follows:

	Stock Options Granted on September 18, 2017
Grant-date share price (NT\$)	\$1,295.00
Exercise price (NT\$)	\$1,267.33
Dividends yield	-
Risk-free interest rate	0.35%
Expected life	4 days
Expected volatility	28.30%
Weighted average fair value of grants (NT\$)	\$31.60

Expected volatility was based on the historical share price volatility of CHPT over the period equal to the expected life.

### 35. NON-CASH TRANSACTIONS

For the years ended December 31, 2018 and 2017, the Company entered into the following non-cash investing activities:

	Year Ended December 31		
	2018	2017	
Increase in property, plant and equipment Changes in other payables	\$ 27,979,440 570,489	\$ 26,069,064 <u>806,272</u>	
	<u>\$ 28,549,929</u>	\$ 26,875,336	

#### 36. OPERATING LEASE ARRANGEMENTS

### a. The Company as lessee

Except for the ST-2 satellite referred in Note 39 to the consolidated financial statements, the Company entered into several lease agreements for base stations located all over in Taiwan. The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	December 31			
	2018	2017		
Within one year Longer than one year but within five years Longer than five years	\$ 3,439,259 6,375,101 743,494	\$ 2,918,651 5,796,026 778,808		
	\$ 10,557,854	\$ 9,493,485		

#### b. The Company as lessor

The Company leases out some land and buildings. The future aggregate minimum lease collection under non-cancellable operating leases are as follows:

	December 31			
	2018	2017		
Within one year Longer than one year but within five years Longer than five years	\$ 343,981 580,451 205,747	\$ 353,023 658,768 242,799		
	<u>\$ 1,130,179</u>	\$ 1,254,590		

#### 37. CAPITAL MANAGEMENT

The Company manages its capital to ensure that entities in the Company will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of the debt and equity balance.

The capital structure of the Company consists of debt of the Company and the equity attributable to the parent.

Some consolidated entities are required to maintain minimum paid-in capital amount as prescribed by the applicable laws.

The management reviews the capital structure of the Company as needed. As part of this review, the management considers the cost of capital and the risks associated with each class of capital.

According to the management's suggestion, the Company maintains a balanced capital structure through paying cash dividends, increasing its share capital, purchasing outstanding shares, and proceeds from new debt or repayment of debt.

#### 38. FINANCIAL INSTRUMENTS

### **Fair Value Information**

The fair value measurement guidance establishes a framework for measuring fair value and expands disclosure about fair value measurements. The standard describes a fair value hierarchy based on three levels of inputs that may be used to measure fair value. These levels are:

Level 1 fair value measurements: These measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 fair value measurements: These measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3 fair value measurements: These measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

a. Financial instruments that are not measured at fair value but for which fair value is disclosed

The Company considers that the carrying amounts of financial assets and liabilities not measured at fair value approximate their fair values or the fair values cannot be reliable estimated, no financial instruments need to be disclosed on balance sheet date.

b. Financial instruments that are measured at fair value on a recurring basis

### December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL Non-listed stocks	<u>\$</u>	<u>\$</u>	<u>\$ 517,362</u>	\$ 517,362
Hedging financial assets	<u>\$</u>	\$ 1,069	<u>\$</u>	\$ 1,069
Financial assets at FVOCI Equity investment	<u>\$ 2,899,843</u>	<u>\$</u>	<u>\$ 4,032,660</u>	\$ 6,932,503
Financial liabilities at FVTPL Derivatives	<u>\$</u>	<u>\$ 1,114</u>	<u>\$</u>	<u>\$ 1,114</u>
<u>December 31, 2017</u>				
	Level 1	Level 2	Level 3	Total
Available-for-sale financial				
assets Equity investments	\$ 3,125,086	<u>\$</u>	<u>\$</u> _	\$ 3,125,086
Equity investments  Financial liabilities at  FVTPL	\$ 3,125,086	<del></del>	<del></del>	
Equity investments Financial liabilities at	\$ 3,125,086 \$ -	<u>\$</u> - <u>\$</u> 578	<u>\$</u>	\$ 3,125,086 \$ 578

There were no transfers between Levels 1 and 2 for the years ended December 31, 2018 and 2017.

The reconciliations for financial assets measured at Level 3 are listed below:

Financial Assets	Fair throu	sured at Value gh Profit Loss	Measured at Fair Value through Other Comprehensive Income Total		otal	
Balance at January 1, 2018 (IAS 39) The effect on retrospective adjustment of	\$	-	\$	-	\$	-
applying IFRS 9		542,521	3,9	25,129	4,4	67,650
Balance at January 1, 2018 (IFRS 9)		542,521	3,9	25,129	4,4	67,650
Acquisition		-	2	89,580	2	89,580
					(C	ontinued)

Financial Assets  Recognized in profit or loss under "Other gains and losses"  Recognized in other comprehensive income under "Unrealized gain or loss on investments in equity instruments at fair value through other comprehensive		easured at air Value ough Profit or Loss	Fair throug Compr	ured at Value h Other ehensive ome	Total	
		(25,159)	\$	-	\$	(25,159)
income"  Proceed from return of investees		-	(1	75,359) (6,690)		(175,359) (6,690)
Balance at December 31, 2018 Unrealized loss in 2018	<u>\$</u>	517,362 (25,159)	\$ 4,0	32,660	\$	4,550,022
5 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m	Ψ	(20,10)				(Concluded)

The fair values of financial assets and financial liabilities of Level 2 are determined as follows:

- 1) The fair values of financial assets and financial liabilities with standard terms and conditions and traded in active markets are determined with reference to quoted market prices.
- 2) For derivatives, fair values are estimated using discounted cash flow model. Future cash flows are estimated based on observable inputs including forward exchange rates at the end of the reporting periods and the forward and spot exchange rates stated in the contracts, discounted at a rate that reflects the credit risk of various counterparties.

The fair values of non-listed domestic and foreign equity investments were Level 3 financial assets, and determined using the market approach by reference the Price-to-Book ratios (P/B ratios) of peer companies that traded in active market or using assets approach. The significant unobservable inputs used were listed in the table below. A decrease in discount for the lack of marketability or noncontrolling interests discount would result in increases in the fair values.

	December 31, 2018
Discount for lack of marketability Noncontrolling interests discount	12.73%-20.00% 24.41%-25.00%

If the inputs to the valuation model were changed to reflect reasonably possible alternative assumptions while all the other variables were held constant, the fair values of equity investments would increase as below table. When related discounts increase, the fair value of equity investments would be the negative amount of the same amount.

	December 31, 2018
Discount for lack of marketability 5% decrease	\$ 268,085
Noncontrolling interests discount 5% decrease	\$ 36,527

#### **Categories of Financial Instruments**

	December 31			31
		2018		2017
Financial assets				
Measured at FVTPL				
Mandatorily measured at FVTPL	\$	517,362	\$	-
Hedging financial assets		1,069		-
Loans and receivables (Note a)		-		68,983,820
Available-for-sale financial assets (Note b)		-		5,750,871
Financial assets at amortized cost (Note a)		70,240,962		-
Financial assets at FVOCI		6,932,503		-
Financial liabilities				
Measured at FVTPL				
Held for trading		1,114		578
Hedging financial liabilities		-		850
Measured at amortized cost (Note c)		40,335,289		39,725,662

Note a: The balances included cash and cash equivalents, trade notes and accounts receivable, receivables from related parties, other current monetary assets and refundable deposits (classified as other noncurrent assets) which were loans and receivables. Such amounts are reclassified as financial assets at amortized cost upon the application of IFRS 9 starting from 2018.

Note b: The balances included financial assets carried at cost which were classified as available-for-sale financial assets.

Note c: The balances included short-term loans, trade notes and accounts payable, payables to related parties, partial other payables, customers' deposits and long-term loans which were financial liabilities carried at amortized cost.

### **Financial Risk Management Objectives**

The main financial instruments of the Company include equity investments, trade notes and accounts receivable, trade notes and accounts payable as well as loans. The Company's Finance Department provides services to its business units, co-ordinates access to domestic and international capital markets, monitors and manages the financial risks relating to the operations of the Company through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk, and liquidity risk.

The Company seeks to minimize the effects of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives is governed by the Company's policies approved by the Board of Directors. Those derivatives are used to hedge the risks of exchange rate fluctuation arising from operating or investment activities. Compliance with policies and risk exposure limits is reviewed by the Company's Finance Department on a continuous basis. The Company does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

Chunghwa reports the significant risk exposures and related action plans timely and actively to the audit committee and if needed to the Board of Directors.

#### a. Market risk

The Company is exposed to market risks of changes in foreign currency exchange rates and interest rates. The Company uses forward exchange contracts to hedge the exchange rate risk arising from assets and liabilities denominated in foreign currencies.

There were no changes to the Company's exposure to market risks or the manner in which these risks are managed and measured.

#### 1) Foreign currency risk

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities at the balance sheet dates were as follows:

	Decem	iber 31
	2018	2017
Assets		
USD	\$ 5,903,025	\$ 5,584,064
EUR	34,059	28,492
SGD	123,916	62,909
JPY	16,689	36,248
RMB	2,082	2,986
Liabilities		
USD	6,998,564	4,963,953
EUR	1,216,812	1,322,803
SGD	50,921	96,442
JPY	13,968	11,934
RMB	· -	25

The carrying amounts of the Company's derivatives with exchange rate risk exposures at the balance sheet dates were as follows:

	December 31		
	2018	2017	
Assets			
USD	\$ -	\$ -	
EUR	1,069	-	
Liabilities			
USD	217	484	
EUR	897	944	

### Foreign currency sensitivity analysis

The Company is mainly exposed to the fluctuations of the currencies USD, EUR, SGD, JPY and RMB listed above.

The following table details the Company's sensitivity to a 5% increase and decrease in the functional currency against the relevant foreign currencies. 5% is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible changes in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and forward exchange contracts. A positive number below indicates an increase in pre-tax profit or equity where the functional currency weakens 5% against the relevant currency.

	Year Ended December 31	
	2018	2017
Profit or loss		
Monetary assets and liabilities (a)		
USD	\$ (54,777)	\$ 31,006
EUR	(59,138)	(64,716)
SGD	3,650	(1,677)
JPY	136	1,216
RMB	104	148
Derivatives (b)		
USD	3,102	6,235
EUR	9,595	3,454
Equity		
Derivatives (c)		
EUR	8,644	7,048

- a) This is mainly attributable to the exposure to foreign currency denominated receivables and payables of the Company outstanding at the balance sheet dates.
- b) This is mainly attributable to the forward exchange contracts.
- c) This is mainly attributable to the changes in the fair value of derivatives that are designated as cash flow hedges.

For a 5% strengthening of the functional currency against the relevant currencies, it would have equal but opposite effect on the pre-tax profit or equity for the amounts shown above.

#### 2) Interest rate risk

The carrying amounts of the Company's exposures to interest rates on financial assets and financial liabilities at the balance sheet dates were as follows:

	Year Ended December 31		
	2018	2017	
Fair value interest rate risk Financial assets Cash flow interest rate risk	\$ 25,821,638	\$ 25,911,422	
Financial assets Financial liabilities	9,160,863 1,700,000	6,714,639 1,670,000	

### Interest rate sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to interest rates for non-derivative instruments at the end of the reporting period. A 25 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 25 basis points higher/lower and all other variables were held constant, the Company's pre-tax income would increase/decrease by \$18,652 thousand and \$12,612 thousand for the years ended December 31, 2018 and 2017, respectively. This is mainly attributable to the Company's exposure to floating interest rates on its financial assets and short-term and long-term loan.

### 3) Other price risk

The Company is exposed to equity price risks arising from holding other company's equity. Equity investments are held for strategic rather than trading purposes. The management managed the risk through holding various risk portfolios. Further, the Company assigned finance and investment departments to monitor the price risk.

### Equity price sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to equity price risks at the end of the reporting period.

If equity prices had been 5% higher/lower, pre-tax profit and pre-tax other comprehensive income for the year ended December 31, 2018 would have increased/decreased by \$25,868 thousand and \$346,625 thousand as a result of the changes in fair value of financial assets at FVTPL and financial assets at FVTOCI, respectively. If equity prices had been 5% higher/lower, other comprehensive income would have increased/decreased by \$156,254 thousand as a result of the changes in fair value of available-for-sale financial assets for the year ended December 31, 2017.

#### b. Credit risk

Credit risk refers to the risk that a counterparty would default on its contractual obligations resulting in financial loss to the Company. The maximum credit exposure of the aforementioned financial instruments is equal to their carrying amounts recognized in consolidated balance sheet as of the balance sheet date.

The Company has large trade receivables outstanding with its customers. A substantial majority of the Company's outstanding trade receivables are not covered by collateral or credit insurance. The Company has implemented ongoing measures including enhancing credit assessments and strengthening overall risk management to reduce its credit risk. While the Company has procedures to monitor and limit exposure to credit risk on trade receivables, there can be no assurance such procedures will effectively limit its credit risk and avoid losses. This risk is heightened during periods when economic conditions worsen.

As the Company serves a large number of unrelated consumers, the concentration of credit risk was limited.

#### c. Liquidity risk

The Company manages and maintains sufficient cash and cash equivalent position to support the operations and reduce the impact on fluctuation of cash flow.

### 1) Liquidity and interest risk tables

The following tables detailed the Company's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables had been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Company is required to pay.

	Weighted Average Effective Interest Rate (%)	Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	Add More than 5 Years	Total
December 31, 2018							
Non-derivative financial liabilities Non-interest bearing Floating interest rate instruments	0.98	\$ 41,808,326 <u>\$ 41,808,326</u>	\$ - 	\$ 2,889,800 100,000 \$ 2,989,800	\$ 4,716,571 1,600,000 \$ 6,316,571	\$ - - \$ -	\$ 49,414,697 1,700,000 \$ 51,114,697
December 31, 2017							
Non-derivative financial liabilities Non-interest bearing Floating interest rate instruments	0.97	\$ 41,884,644 50,000 \$ 41,934,644	\$ - - <u>\$</u>	\$ 3,196,831 20,000 \$ 3,216,831	\$ 4,671,441 1,600,000 \$ 6,271,441	\$ - - - \$ -	\$ 49,752,916 

The following table detailed the Company's liquidity analysis for its derivative financial instruments. The table had been drawn up based on the undiscounted gross inflows and outflows on those derivatives that require gross settlement.

	Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	Total
<u>December 31, 2018</u>					
Gross settled					
Forward exchange contracts Inflow Outflow	\$ 62,035 62,252 \$ (217)	\$ 238,302 238,459 \$ (157)	\$ 126,401 126,072 \$ 329	\$ - - \$ -	\$ 426,738 426,783 \$ (45)
<u>December 31, 2017</u>					
Gross settled					
Forward exchange contracts Inflows Outflows	\$ 124,997	\$ 173,068 174,021 \$ (953)	\$ 36,654 36,645 \$ 9	\$ - 	\$ 334,719 336,147 \$ (1,428)

# 2) Financing facilities

	December 31		
	2018	2017	
Unsecured bank loan facility			
Amount used	\$ 132,445	φ 00.000	
Amount used	' '	\$ 90,000	
Amount unused	46,328,280	45,748,967	
	<u>\$ 46,460,725</u>	\$ 45,838,967	
Secured bank loan facility			
Amount used	\$ 1,600,000	\$ 1,600,000	
Amount unused	1,340,000	1,910,000	
Amount unused	1,540,000	1,710,000	
	<u>\$ 2,940,000</u>	\$ 3,510,000	

### 39. RELATED PARTIES TRANSACTIONS

The ROC Government, one of Chunghwa's customers, has significant equity interest in Chunghwa. Chunghwa provides fixed-line services, wireless services, internet and data and other services to the various departments and institutions of the ROC Government in the normal course of business and at arm's-length prices. The transactions with the ROC government bodies have not been disclosed because the transactions are not individually or collectively significant. However, the related revenues and operating costs have been appropriately recorded.

a. The Company engages in business transactions with the following related parties:

Company	Relationship
Taiwan International Standard Electronics Co., Ltd.	Associate
So-net Entertainment Taiwan Limited	Associate
KKBOX Taiwan Co., Ltd.	Associate
KingwayTek Technology Co., Ltd.	Associate
UUPON Inc.	Associate
Taiwan International Ports Logistics Corporation	Associate
Huada Digital Corporation	Joint venture
Chunghwa Benefit One Co., Ltd.	Joint venture
International Integrated System, Inc.	Associate
Senao Networks, Inc.	Associate
EnGenius Tech. Co., Ltd.	Subsidiary of the Company's associate, Senao Networks, Inc.
HopeTech Technologies Limited	Associate
ST-2 Satellite Ventures Pte., Ltd.	Associate
Viettel-CHT Co., Ltd.	Associate
Click Force Co., Ltd.	Associate
Alliance Digital Tech Co., Ltd.	Associate
MeWorks LIMITED (HK)	Associate
Chunghwa PChome Fund I Co., Ltd. ("CPFI")	Associate
Cornerstone Ventures Co., Ltd. ("CVC")	Associate
Other related parties	
Chunghwa Telecom Foundation	A nonprofit organization of which the funds donated by Chunghwa exceeds one third of its total funds
Senao Technical and Cultural Foundation	A nonprofit organization of which the funds donated by SENAO exceeds one third of its total funds
Sochamp Technology Co., Ltd.	Investor of significant influence over CHST
E-Life Mall Co., Ltd.	One of the directors of E-Life Mall and a director of SENAO are members of an immediate family
Engenius Technologies Co., Ltd.	Chairman of Engenius Technologies Co., Ltd. is a member of SENAO's management
United Daily News Co., Ltd.	Investor of significant influence over SFD
Shenzhen Century Communication Co., Ltd.	Investor of significant influence over SCT
Taoyuan Aerotropolis Co., Ltd.	Investor of significant influence over TASUI

b. Balances and transactions between Chunghwa and its subsidiaries, which are related parties of Chunghwa, have been eliminated on consolidation and are not disclosed in this note. Terms of the foregoing transactions with related parties were not significantly different from transactions with non-related parties. When no similar transactions with non-related parties can be referenced, terms were determined in accordance with mutual agreements. Details of transactions between the Company and other related parties are disclosed below:

### 1) Operating transactions

			enues	
		<b>Year Ended December 31</b>		
		2018	2017	
	Associates Joint ventures	\$ 344,043	\$ 344,305 563	
	Others	94,227	64,951	
		<u>\$ 438,270</u>	<u>\$ 409,819</u>	
			sts and Expenses	
			December 31	
		2018	2017	
	Associates Joint ventures	\$ 1,304,008	\$ 1,196,636 2,247	
	Others	75,345	71,596	
		<u>\$ 1,379,353</u>	<u>\$ 1,270,479</u>	
2)	Non-operating transactions			
			ng Income and	
		Exp	enses	
			December 31	
		2018	2017	
	Associates	\$ 31,255	\$ 31,554	
(	Others	32	32	
		\$ 31,287	<u>\$ 31,586</u>	
3)	Receivables			
		Decer	nber 31	
		2018	2017	
	Associates	\$ 10,785	\$ 43,302	
(	Others	<u>13,485</u>	6,065	
		Φ 24.270	Φ 40.267	

\$ 24,270

\$ 49,367

## 4) Payables

	December 31		
	201	18 2017	
Associates Others		4,177 \$ 679,845 3,774 4,340	
	<u>\$ 91</u>	<u>7,951</u> <u>\$ 684,185</u>	

### 5) Customers' deposits

	Dec	December 31			
	2018	2017			
Associates	\$ 5,925	\$ 5,700			

### 6) Acquisition of property, plant and equipment

	Year Ended December 31				
		2018		2017	
Associates Joint ventures	\$	311,519	\$	389,924 46	
	<u>\$</u>	311,519	\$	389,970	

#### 7) Prepayments

Chunghwa entered into a contract with ST-2 Satellite Ventures Pte., Ltd. on March 12, 2010 to lease capacity on the ST-2 satellite. This lease term is for 15 years which should start from the official operation of ST-2 satellite and the total contract value is approximately \$6,000,000 thousand (SG\$260,723 thousand), including a prepayment of \$3,067,711 thousand, and the rest of amount should be paid annually when ST-2 satellite starts its official operation. ST-2 satellite was launched in May 2011, and began its official operation in August 2011. The total rental expense for the year ended December 31, 2018 was \$394,289 thousand, which consisted of an offsetting credit of the prepayment of \$204,398 thousand and an additional accrual of \$189,891 thousand. The total rental expense for the year ended December 31, 2017 was \$391,691 thousand, which consisted of an offsetting credit of the prepayment of \$204,398 thousand and an additional accrual of \$187,293 thousand. The prepaid rents (classified as prepayments) as of December 31, 2018 and 2017, were as follows:

	December 31			
	2018	2017		
Prepaid rents - current Prepaid rents - noncurrent	\$ 204,398 	\$ 204,398 		
	<u>\$ 1,550,021</u>	\$ 1,754,419		

### c. Compensation of key management personnel

The compensation of directors and key management personnel was as follows:

	Year Ended December 31			
	2018	2017		
Short-term employee benefits Post-employment benefits Share-based payment	\$ 281,981 9,971 9,484	\$ 253,254 9,171 2,162		
	<u>\$ 301,436</u>	<u>\$ 264,587</u>		

The compensation of directors and key management personnel was mainly determined by the compensation committee having regard to the performance of individual and market trends.

#### 40. PLEDGED ASSETS

The following assets are pledged as collaterals for bank loans and custom duties of the imported materials.

	December 31		
	2018	2017	
Property, plant and equipment Land held under development (included in inventories) Restricted assets (included in other assets - others)	\$ 2,520,838 1,998,733 	\$ 2,550,352 1,998,733 	
	\$ 4,522,071	\$ 4,551,58 <u>5</u>	

#### 41. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

The Company's significant contingent liabilities and recognized commitments, excluding those disclosed in other notes, were as follows:

- a. As of December 31, 2018, acquisitions of land and buildings of \$173,701 thousand.
- b. As of December 31, 2018, acquisitions of telecommunications equipment of \$15,760,185 thousand.
- c. As of December 31, 2018, unused letters of credit amounting to \$50,000 thousand.
- d. A commitment to contribute \$2,000,000 thousand to a Piping Fund administered by the Taipei City Government, of which \$1,000,000 thousand was contributed by Chunghwa on August 15, 1996 (classified as other monetary assets noncurrent). If the fund is not sufficient, Chunghwa will contribute the remaining \$1,000,000 thousand upon notification from the Taipei City Government.
- e. CHPT signed the contract for its headquarters construction amounted to \$1,613,800 thousand in July, 2017. The payment of \$399,794 thousand has been made as of December 31, 2018.

## 42. SIGNIFICANT SUBSEQUENT EVENTS

The participation of establishing Next Commercial Bank Co., Ltd. ("NCB") was approved by Chunghwa's Board of Directors in January 2019. The Company expects to invest \$4,500,000 thousand at most in NCB's common stock and the Company's equity ownership interest in NCB will be no more than 45%. The establishment of NCB is subject to the approval of FSC.

### 43. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The following information summarizes the disclosure of the currency which is other than functional currency of Chunghwa and its subsidiaries. The following exchange rates are the exchange rates used to translate to the presentation currency in the consolidated financial statements, which is NTD:

	<b>December 31, 2018</b>				
	Foreign Currencies (Thousands)		Exchange Rate	New Taiwan Dollars (Thousands)	
Assets denominated in foreign currencies					
Monetary items					
Cash					
USD	\$	27,035	30.72	\$ 830,385	
EUR		957	35.20	33,676	
SGD		5,461	22.48	122,762	
JPY		58,563	0.278	16,280	
RMB		466	4.472	2,082	
Accounts receivable					
USD		165,152	30.72	5,072,640	
EUR		11	35.20	383	
SGD		51	22.48	1,154	
JPY		1,471	0.278	409	
Non-monetary items					
Investments accounted for using equity method					
SGD		22,066	22.48	496,033	
VND	238	8,757,968	0.0012	286,510	
Liabilities denominated in foreign currencies					
Monetary items					
Accounts payable					
USD		227,855	30.72	6,998,564	
EUR		34,569	35.20	1,216,812	
SGD		2,265	22.48	50,921	
JPY		50,243	0.278	13,968	

	<b>December 31, 2017</b>				
	Foreign Currencies (Thousands)		Exchange Rate	New Taiwan Dollars (Thousands)	
Assets denominated in foreign currencies					
Monetary items					
Cash					
USD	\$	20,224	29.76	\$	601,877
EUR		757	35.57		26,941
SGD		2,752	22.26		61,270
JPY		97,684	0.264		25,789
RMB		197	4.565		898
Accounts receivable					
USD		167,412	29.76		4,982,187
EUR		44	35.57		1,551
SGD		74	22.26		1,639
JPY		39,616	0.264		10,459
RMB		457	4.565		2,088
Non-monetary items					
Investments accounted for using equity					
method					
USD		762	29.76		22,731
SGD		21,227	22.26		472,505
VND	21	5,397,479	0.00119		256,323
<u>Liabilities denominated in foreign currencies</u>					
Monetary items					
Accounts payable					
USD		166,800	29.76		4,963,953
EUR		37,189	35.57		1,322,803
SGD		4,333	22.26		96,442
JPY		45,203	0.264		11,934
RMB		5	4.565		25

The unrealized foreign exchange losses were \$7,872 thousand and \$67,954 thousand for the years ended December 31, 2018 and 2017, respectively. Due to the various foreign currency transactions and the functional currency of each individual entity of the Company, foreign exchange gains and losses cannot be disclosed by the respective significant foreign currency.

### 44. ADDITIONAL DISCLOSURES

Following are the additional disclosures required by the FSC for the Company:

- a. Financing provided: None.
- b. Endorsement/guarantee provided: Please see Table 1.
- c. Marketable securities held (excluding investments in subsidiaries, associates and joint ventures): Please see Table 2.

- d. Marketable securities acquired and disposed of at costs or prices at least \$300 million or 20% of the paid-in capital: Please see Table 3.
- e. Acquisition of individual real estate at costs of at least \$300 million or 20% of the paid-in capital: Please see Table 4.
- f. Disposal of individual real estate at prices of at least \$300 million or 20% of the paid-in capital: None.
- g. Total purchases from or sales to related parties amounting to at least \$100 million or 20% of the paid-in capital: Please see Table 5.
- h. Receivables from related parties amounting to \$100 million or 20% of the paid-in capital: Please see Table 6.
- i. Names, locations, and other information of investees on which the Company exercises significant influence (excluding investment in Mainland China): Please see Table 7.
- j. Derivative instruments transactions: Please see Notes 7, 21 and 38.
- k. Investment in Mainland China: Please see Table 8.
- 1. Intercompany relationships and significant intercompany transaction: Please see Table 9.

### 45. SEGMENT INFORMATION

The Company has the following reportable segments that provide different products or services. The reportable segments are managed separately because each segment represents a strategic business unit that serves different markets. Segment information is provided to CEO who allocates resources and assesses segment performance. The Company's measure of segment performance is mainly based on revenues and income before income tax. The Company's reportable segments are as follows:

- a. Domestic fixed communications business the provision of local telephone services, domestic long distance telephone services, broadband access, and related services;
- b. Mobile communications business the provision of mobile services, sales of mobile handsets and data cards, and related services;
- c. Internet business the provision of HiNet services and related services;
- d. International fixed communications business the provision of international long distance telephone services and related services:
- e. Others the provision of non-telecom services and the corporate related items not allocated to reportable segments.

Some operating segments have been aggregated into a single operating segment taking into account the following factors: (a) similar economic characteristics such as long-term gross profit margins; (b) the nature of the telecommunications products and services are similar; (c) the nature of production processes of the telecommunications products and services are similar; (d) the type or class of customer for the telecommunications products and services are similar; and (e) the methods used to provide the services to the customers are similar.

There was no material differences between the accounting policies of the operating segments and the accounting policies described in Note 3.

# **Segment Revenues and Operating Results**

Analysis by reportable segment of revenues and operating results of continuing operations was as follows:

	Domestic Fixed Communi- cations Business	Mobile Communi- cations Business	Internet Business	International Fixed Communi- cations Business	Others	Total
Year ended December 31, 2018						
Revenues From external customers Intersegment revenues Segment revenues Intersegment elimination	\$ 66,753,094 	\$ 100,937,021 	\$ 29,813,239 4,038,032 <u>\$ 33,851,271</u>	\$ 13,434,422 2,234,202 <u>\$ 15,668,624</u>	\$ 4,545,382 5,007,565 \$ 9,552,947	\$ 215,483,158
Consolidated revenues						\$215,483,158
Segments operating costs and expenses	\$ 59,430,120	\$ 73,901,350	\$ 13,765,723	\$ 13,279,413	\$ 11,573,344	\$171,949,950
Segment income (loss) before income tax	<u>\$ 18,243,503</u>	\$ 15,327,824	\$ 11,943,594	\$ 1,023,831	<u>\$ (1,560,048)</u>	<u>\$ 44,978,704</u>
Year ended December 31, 2017						
Revenues From external customers Intersegment revenues Segment revenues Intersegment elimination	\$ 71,136,604 22,514,866 \$ 93,651,470	\$ 109,376,248 2,030,565 <u>\$ 111,406,813</u>	\$ 28,917,514 4,208,685 \$ 33,126,199	\$ 13,552,343 2,375,280 \$ 15,927,623	\$ 4,531,474 4,600,296 \$ 9,131,770	\$ 227,514,183
Consolidated revenues						\$227,514,183
Segments operating costs and expenses	\$ 62,795,150	\$ 80,274,903	\$ 13,288,122	\$ 13,385,017	\$ 10,963,633	\$180,706,825
Segment income (loss) before income tax	<u>\$ 24,888,058</u>	\$ 12,433,249	\$ 11,118,327	\$ 1,028,983	<u>\$ (1,471,555)</u>	\$ 47,997,062

## **Other Segment Information**

Other information reviewed by the chief operating decision maker or regularly provided to the chief operating decision maker was as follows:

	Domestic Fixed Communi- cations Business	Mobile Communi- cations Business	Internet Business	International Fixed Communi- cations Business	Others	Total
Year ended December 31, 2018						
Share of profits of associates and joint ventures accounted for using equity method Interest revenue Interest expenses Depreciation and amortization Capital expenditure Reversal of impairment loss on investment properties  Year ended December 31, 2017	\$ 17,535 \$ - \$ 15,027,196 \$ 12,692,526 \$ 19,133	\$ 12,159 \$ 181 \$ 13,788,352 \$ 10,663,759 \$	\$ 19,123 \$ 191 \$ 3,120,942 \$ 2,729,512	\$ 27,903 \$ - \$ 1,424,530 \$ 1,347,874	\$ 501,600 \$ 120,169 \$ 17,224 \$ 448,858 \$ 1,116,258	\$ 501,600 \$ 196,889 \$ 17,596 \$ 33,809,878 \$ 28,549,929 \$ 19,133
Share of profits of associates and joint ventures accounted for using equity method Interest revenue Interest expenses Depreciation and amortization Capital expenditure Reversal of impairment loss on investment properties	\$ 21,282 \$ - \$ 15,614,052 \$ 11,647,266 \$ 10,979	\$ 14.791 \$ 5,406 \$ 11,000,948 \$ 9,742,113	\$ 8.619 \$ 95 \$ 3,385,312 \$ 2,778,821	\$ 15,510 \$ - \$ 1,476,658 \$ 1,580,156	\$ 407,243 \$ 145,246 \$ 16,312 \$ 452,634 \$ 1,126,980	\$ 407,243 \$ 205,448 \$ 21,913 \$ 31,929,604 \$ 26,875,336 \$ 10,979

#### **Main Products and Service Revenues**

	Year Ended December 31			ember 31
		2018		2017
Mobile services revenue	\$	63,905,960	\$	75,822,863
Sales of products		41,288,763		37,649,313
Local telephone and domestic long distance telephone services				
revenue		29,995,695		32,247,482
Broadband access and domestic leased line services revenue		22,453,133		22,949,982
Data Communications internet services revenue		21,137,189		21,142,705
International network and leased telephone services revenue		8,724,302		9,328,298
Others	_	27,978,116		28,373,540
	\$	215,483,158	\$	227,514,183

### **Geographic Information**

The users of the Company's services are mainly from Taiwan, ROC. The revenues it derived outside Taiwan are mainly revenues from international long distance telephone and leased line services. The geographic information for revenues was as follows:

	Year Ended December 31			
	2018	2017		
Taiwan, ROC Overseas	\$ 205,695,525 9,787,633	\$ 217,567,991 9,946,192		
	<u>\$ 215,483,158</u>	\$ 227,514,183		

The Company has long-lived assets in U.S., Singapore, Hong Kong, China, Vietnam, Japan and Thailand and except for \$4,324,172 thousand and \$4,444,991 thousand at December 31, 2018 and 2017, respectively, in the aforementioned areas, the other long-lived assets are located in Taiwan, ROC.

### **Major Customers**

For the years ended December 31, 2018 and 2017, the Company did not have any single customer whose revenue exceeded 10% of the total revenues.

## ENDORSEMENTS/GUARANTEES PROVIDED YEAR ENDED DECEMBER 31, 2018

(Amounts in Thousands of New Taiwan Dollars)

No. Endorsement/ (Note 1) Guarantee Provide	Guarantee r Name		Limits on Endorsement/ Guarantee Amount Provided to Each Guaranteed Party	Maximum Balance for the Period	Ending Balance	Actual Borrowing Amount	Amount of Endorsement/ Guarantee Collateralized by Properties	Net Equity Per Latest	Maximum Endorsement/ Guarantee Amount Allowable	Cuorentee	Endorsement/ Guarantee Given by Subsidiaries on Behalf of Parent	Endorsement/ Guarantee Given on Behalf of Companies in Mainland China	Note
1 Senao International Co., Ltd.	Youth Co., Ltd. ISPOT Co., Ltd.	b b	\$ 580,807 580,807	\$ 200,000 150,000	\$ -	\$ -	\$ -	-	\$ 2,904,039 2,904,039	Yes Yes	No No	No	Notes 3, 4 and 5 Notes 3, 4 and 6
	Aval Technologies Co., Ltd.	b	580,807	300,000	300,000	300,000	-	5.17	2,904,039	Yes	No	No	Notes 3 and 4

Note 1: Significant transactions between the Company and its subsidiaries or among subsidiaries are numbered as follows:

- a. "0" for the Company.
- b. Subsidiaries are numbered from "1".

Note 2: Relationships between the endorsement/guarantee provider and the guaranteed party:

- a. A company with which it does business.
- b. A company in which the Company directly and indirectly holds more than 50 percent of the voting shares.
- c. A company that directly and indirectly holds more than 50 percent of the voting shares in the Company.
- d. Companies in which the Company holds, directly or indirectly, 90% or more of the voting shares.
- e. The Company fulfills its contractual obligations by providing mutual endorsements/guarantees for another company in the same industry or for joint builders for purposes of undertaking a construction project.
- f. All capital contributing shareholders make endorsements/ guarantees for their jointly invested company in proportion to their shareholding percentages.
- g. Companies in the same industry provide among themselves joint and several security for a performance guarantee of a sales contract for pre-construction homes pursuant to the Consumer Protection Act for each other.
- Note 3: The limits on endorsement or guarantee amount provided to each guaranteed party is up to 10% of the net assets value of the latest financial statements of Senao International Co., Ltd.
- Note 4: The total amount of endorsement or guarantee that the Company is allowed to provide is up to 50% of the net assets value of the latest financial statements of Senao International Co., Ltd.
- Note 5: Senao International Co., Ltd. dissolved the endorsement or guarantee to Youth Co., Ltd. in August 2018.
- Note 6: Senao International Co., Ltd. retrieved the guarantee letter and dissolved the endorsement or guarantee to ISPOT Co., Ltd. in August 2018.

# MARKETABLE SECURITIES HELD DECEMBER 31, 2018

(Amounts in Thousands of New Taiwan Dollars)

					December	31, 2018		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares (Thousands/ Thousand Units)	Carrying Value (Note 1)	Percentage of Ownership	Fair Value	Note
Chunghwa Telecom Co., Ltd.	Stocks		Ti I I I I I I I I I I I I I I I I I I I	150.005	A 2 405 620	10	A 2 405 620	
	Taipei Financial Center Corp.	-	Financial assets at FVOCI	172,927	\$ 3,485,638	12	\$ 3,485,638	-
	Innovation Works Development Fund, L.P.	-	Financial assets at FVTPL	-	224,452	4	224,452	-
	Industrial Bank of Taiwan II Venture Capital Co., Ltd. (IBT II)	-	Financial assets at FVOCI	5,252	21,930	17	21,930	-
	Global Mobile Corp.	-	Financial assets at FVOCI	7,617	-	3	-	-
	Innovation Works Limited	-	Financial assets at FVOCI	1,000	2,850	2	2,850	-
	RPTI Intergroup International Ltd.	-	Financial assets at FVOCI	4,765	-	10	-	-
	Taiwan mobile payment Co., Ltd.	-	Financial assets at FVOCI	1,200	4,837	2	4,837	-
	Taiwania Capital Buffalo Fund Co., Ltd.	-	Financial assets at FVTPL	300,000	292,910	13	292,910	-
	China Airlines Ltd.	-	Financial assets at FVOCI	263,622	2,899,843	5	2,899,843	Note 2
	4 Gamers Entertainment Inc.	-	Financial assets at FVOCI	136	117,955	19.9	117,955	-
Senao International Co., Ltd.	Stocks N.T.U. Innovation Incubation Corporation	-	Financial assets at FVOCI	1,200	9,768	9	9,768	-
CHIEF Telecom Inc.	Stocks 3 Link Information Service Co., Ltd.	-	Financial assets at FVOCI	374	930	10	930	-
Chunghwa Investment Co., Ltd.	Stocks Tatung Technology Inc. iSing99 Inc.		Financial assets at FVOCI Financial assets at FVOCI	4,571 10,000	117,360 52,574	11 7	117,360 52,574	-
Chun chura Hain eta Ca. I (1)	Powertec Energy Corp.	-	Financial assets at FVOCI	20,000	208,016	2	208,016	-
Chunghwa Hsingta Co., Ltd.	Stocks Cotech Engineering Fuzhou Corp.	-	Financial assets at FVOCI	-	10,802	5	10,802	-

Note 1: Showed at carrying amounts with fair value adjustments.

Note 2: Fair value was based on the closing price on December 28, 2018.

MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL YEAR ENDED DECEMBER 31, 2018 (Amounts in Thousands of New Taiwan Dollars)

				Beginnin	g Balance	Acqui	isition		Disp	osal		Ending	Balance
Company Name	Marketable Securities Type and Name Financial Statement Account	Counter-party	Nature of Relationship	Shares (Thousands/ Thousand Units)	Amount	Shares (Thousands/ Thousand Units)	Amount	Shares (Thousands/ Thousand Units)	Amount	Carrying Value	Gain on Disposal	Shares (Thousands/ Thousand Units)	Amount
	Stocks Chunghwa Precision Test Tech. Co., Ltd. Investments accounted for using equity method	-	Subsidiary	12,558	\$ 2,207,100 (Note 1)	-	\$ -		\$ 1,041,689	\$ 240,953 (Note 1)	\$ 800,736 (Note 2)	11,230	\$ 2,106,738 (Note 1)

Note 1: Including share of profit and other comprehensive income of associates accounted for using equity method.

Note 2: Differences arising from equity transactions are included in additional paid-in capital.

ACQUISITION OF INDIVIDUAL REAL ESTATE AT COSTS OF AT LEAST \$300 MILLION OR 20% OF THE PAID-IN CAPITAL YEAR ENDED DECEMBER 31, 2018 (Amounts in Thousands of New Taiwan Dollars)

Buyer	Duonautri	Event Date	Transaction	Payment Status	Counterparty	Relationship	Information on Pr	evious Title Trans	fer If Counterparty	is a Related Party	Duising Deference	Purpose of	Other Terms
Buyer	Property	Event Date	Amount	rayment status	Counterparty	Keiationship	Property Owner	Relationship	Transaction Date	Amount	Fricing Keierence	Acquisition	Other Terms
Chunghwa Precision Test Tech. Co., Ltd.	Headquarters	2017.7.29- 2018.12.22	\$ 539,695	Monthly settlement based on the construction progress and acceptance	Fu Tsu Construction Co., Ltd.	-	Not applicable	Not applicable	Not applicable	Not applicable	Bidding, price comparison and price negotiation	Manufacturing purpose	None

## $TOTAL\ PURCHASES\ FROM\ OR\ SALES\ TO\ RELATED\ PARTIES\ AMOUNTING\ TO\ AT\ LEAST\ NT\$100\ MILLION\ OR\ 20\%\ OF\ THE\ PAID-IN\ CAPITAL\ YEAR\ ENDED\ DECEMBER\ 31,2018$

(Amounts in Thousands of New Taiwan Dollars)

Company Name	Related Party	N-4 6 D-1-4		Transaction	Details		Abnormal	Transaction	Notes / Accounts or Receiva	
Company Name	Related Party	Nature of Relationship	Purchase/Sales (Note 1)	Amount (Notes 2 and 5)	% to Tota	l Payment Terms	Units Price	Payment Terms	Ending Balance (Notes 3 and 5)	% to Total
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	Subsidiary	Sales Purchase	\$ 2,090,888 1,440,824	1	30 days 30-90 days	\$ -	-	\$ 249,014 (916,854)	1 (5)
	CHIEF Telecom Inc.	Subsidiary	Sales Purchase	332,872 286,267	-	30 days 60 days		-	38,387 (37,417)	-
	Chunghwa System Integration Co., Ltd.	Subsidiary	Purchase	1,008,233	1	30 days	-	_	(629,455)	(3)
	CHYP Multimedia Marketing & Communications Co., Ltd	Subsidiary	Purchase	136,855	-	30 days	-	-	(25,116)	-
	Honghwa International Co., Ltd.	Subsidiary	Purchase	5,422,154	5	30-60 days	-	-	(1,059,239)	(6)
	Donghwa Telecom Co., Ltd.	Subsidiary	Sales Purchase	211,604 531,116	-	30 days 90 days	-	-	118,861 (189,148)	(1)
	Chunghwa Telecom Global, Inc.	Subsidiary	Purchase	337,300	-	90 days	-	-	(43,990)	-
	Chunghwa Telecom Singapore Pte., Ltd.	Subsidiary	Sales	150,673	-	30 days	-	-	102,253	-
		,	Purchase	189,339	-	90 days	-	-	(76,002)	-
	CHT Security Co., Ltd.	Subsidiary	Purchase	323,704	-	30 days	-	-	(97,675)	(1)
	ST-2 Satellite Ventures Pte. Ltd.	Associate	Purchase	394,289	-	30 days	-	-	(47,729)	-
	Taiwan International Standard Electronics Co., Ltd.	Associate	Purchase	677,295	1	30-90 days	-	-	(595,028)	(3)
	So-net Entertainment Taiwan Limited	Associate	Sales	158,158	-	60 days	-	-	7	-
	International Integrated System, Inc.	Associate	Purchase	160,307	-	30 days	-	-	(105,834)	(1)
Senao International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales Purchase	6,570,414 1,904,795	21	30-90 days 30 days	-	-	924,130 (214,199)	51 (8)
	Senao Networks, Inc.	Associate	Sales	114,267	_	30 days	_	_	5,407	-
	Youth Co., Ltd.	Subsidiary	Sales	125,862	-	90 days	-	-	41,157	2
	Aval Technologies Co., Ltd.	Subsidiary	Purchase	297,248	1	30 days	-	-	(533)	-
CHIEF Telecom Inc.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	286,267	13	60 days	-	-	37,417	18
			Purchase	332,191	25	30 days	-	-	(38,387)	(31)
Chunghwa System Integration Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	1,733,260	87	30 days	-	-	628,180	85
CHYP Multimedia Marketing & Communication Co., Ltd	s Chunghwa Telecom Co., Ltd.	Parent company	Sales	136,855	31	30 days	-	-	22,871	33
Honghwa International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	5,422,154	96	30-60 days	-	-	1,059,239	99
Donghwa Telecom Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	531,116	44	90 days	-	-	189,148	98
			Purchase	211,604	18	30 days	-	-	(118,861)	(83)
Chunghwa Telecom Global, Inc.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	337,300	56	90 days	-	-	43,990	70
Chunghwa Telecom Singapore Pte., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales Purchase	189,339 150,673	15 13	90 days 30 days		-	76,002 (102,253)	21 (37)
CHT Security Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	Sales	345,563	91	30 days	_	_	97,677	70

Note 1: Purchase included acquisition of services costs.

Note 2: The differences were because Chunghwa Telecom Co., Ltd. and subsidiaries classified the amount as incremental costs of obtaining contracts inventories, property, plant and equipment, intangible assets, and operating expenses.

Note 3: Notes and accounts receivable did not include the amounts collected for others and other receivables.

Note 4: Transaction terms with the related parties were determined in accordance with mutual agreements when there were no similar transactions with third parties. Other transactions with related parties were not significantly different from those with third parties.

Note 5: All inter-company transactions, balances, income and expenses are eliminated upon consolidation.

## RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL DECEMBER 31, 2018

(Amounts in Thousands of New Taiwan Dollars)

					Ove	rdue	Amounts	
Company Name	Related Party	Nature of Relationship	Ending Balance	Turnover Rate (Note 1)	Amounts	Action Taken	Received in Subsequent Period	Allowance for Bad Debts
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	Subsidiary	\$ 446,718 (Note 2)	11.28	\$ -	-	\$ 431,727	\$ -
	Donghwa Telecom Co., Ltd.	Subsidiary	118,861 (Note 2)	2.14	-	-	45,483	-
	Chunghwa Telecom Singapore Pte., Ltd.	Subsidiary	102,253 (Note 2)	1.40	-	-	102,253	-
Senao International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	1,210,922 (Note 2)	6.15	-	-	545,921	-
Chunghwa System Integration Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	628,180 (Note 2)	2.94	-	-	478,332	-
Honghwa International Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	1,059,239 (Note 2)	5.23	-	-	634,207	-
Donghwa Telecom Co., Ltd.	Chunghwa Telecom Co., Ltd.	Parent company	189,148 (Note 2)	5.37	-	-	68,792	-

Note 1: Payments and receipts collected in trust for others are excluded from the accounts receivable for calculating the turnover rate.

Note 2: The amount was eliminated upon consolidation.

# NAMES, LOCATIONS, AND OTHER INFORMATION OF INVESTEES IN WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INVESTMENT IN MAINLAND CHINA) YEAR ENDED DECEMBER 31, 2018 (Amounts in Thousands of New Taiwan Dollars)

				Original Inves	tment Amount	Balano	e as of December 3	31, 2018	Net Income	Recognized	
Investor Company	Investee Company	Location	Main Businesses and Products	December 31,	December 31,	Shares	Percentage of	Carrying Value	(Loss) of the	Gain (Loss)	Note
				2018	2017	(Thousands)	Ownership (%)	(Note 3)	Investee	(Notes 1, 2 and 3)	)
Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	Taiwan	Handset and peripherals retailer; sales of CHT mobile phone plans as an agent	\$ 1,065,813	\$ 1,065,813	71,773	28	\$ 1,607,436	\$ 403,281	\$ 107,306	Subsidiary (Note 7)
	Light Era Development Co., Ltd.	Taiwan	Planning and development of real estate and intelligent buildings, and property	3,000,000	3,000,000	300,000	100	3,853,824	8,051	8,051	Subsidiary (Note 7)
	Donghwa Telecom Co., Ltd.	Hong Kong	management International private leased circuit, IP VPN service, and IP transit services	1,567,453	1,567,453	402,590	100	1,619,155	45,204	45,204	Subsidiary (Note 7)
	Chunghwa Telecom Singapore Pte.,	Singapore	International private leased circuit, IP VPN service, and IP transit services	574,112	574,112	26,383	100	915,532	141,993	141,993	Subsidiary (Note 7)
	Chunghwa System Integration Co., Ltd.	Taiwan	Providing system integration services and telecommunications equipment	838,506	838,506	60,000	100	738,139	16,226	21,487	Subsidiary (Note 7)
	CHIEF Telecom Inc.	Taiwan	Network integration, internet data center ("IDC"), communications integration and cloud application services	459,652	468,326	39,426	57	1,694,950	484,604	298,169	Subsidiary (Note 7)
	Chunghwa Investment Co., Ltd. Prime Asia Investments Group Ltd. (B.V.L.)	Taiwan British Virgin Islands	Investment Investment	639,559 385,274	639,559 385,274	68,085 1	89 100	3,152,229 192,841	201,712 (1,911)	176,542 (1,911)	Subsidiary (Note 7) Subsidiary (Note 7)
	Honghwa International Co., Ltd.	Taiwan	Telecommunication engineering, sales agent of mobile phone plan application and other business services	180,000	180,000	18,000	100	465,889	221,203	211,985	Subsidiary (Note 7)
	CHYP Multimedia Marketing & Communications Co., Ltd.	Taiwan	Digital information supply services and advertisement services	150,000	150,000	15,000	100	197,996	25,318	25,318	Subsidiary (Note 7)
	Chunghwa Telecom Vietnam Co., Ltd.	Vietnam	Intelligent energy saving solutions, international circuit, and information and communication technology ("ICT") services.	148,275	148,275	-	100	106,091	(1,471)	(1,471)	Subsidiary (Note 7)
	Chunghwa Telecom Global, Inc.	United States	International private leased circuit, internet services, and transit services	70,429	70,429	6,000	100	288,207	58,899	61,154	Subsidiary (Note 7)
	CHT Security Co., Ltd.	Taiwan	Computing equipment installation, wholesale of computing and business machinery equipment and software, management consulting services, data processing services, digital information supply services and internet identify services	240,000	240,000	24,000	80	237,927	4,633	(2,078)	Subsidiary (Note 7)
	Chunghwa Telecom (Thailand) Co., Ltd.	Thailand	International private leased circuit, IP VPN service, ICT and cloud VAS services	100,000	100,000	1,000	100	94,931	(2,669)	(2,669)	Subsidiary (Note 7)
	Spring House Entertainment Tech. Inc.	Taiwan	Software design services, internet contents production and play, and motion picture production and distribution	62,209	62,209	10,277	56	98,298	7,906	4,431	Subsidiary (Note 7)
	Chunghwa leading Photonics Tech Co., Ltd.	Taiwan	Production and sale of electronic components and finished products	70,500	70,500	7,050	75	98,763	24,908	24,514	Subsidiary (Note 7)
	Smartfun Digital Co., Ltd.	Taiwan	Providing diversified family education digital services	65,000	65,000	6,500	65	72,031	9,931	8,215	Subsidiary (Note 7)
	Chunghwa Telecom Japan Co., Ltd.	Japan	International private leased circuit, IP VPN service, and IP transit services	17,291	17,291	1	100	62,626	11,103	11,103	Subsidiary (Note 7)
	Chunghwa Sochamp Technology Inc.	Taiwan	Design, development and production of Automatic License Plate Recognition software and hardware	20,400	20,400	2,040	51	(6,233)	5,169	3,964	Subsidiary (Note 7)
	International Integrated System, Inc.	Taiwan	IT solution provider, IT application consultation, system integration and package solution	283,500	283,500	22,498	32	310,842	76,335	23,307	Associate
	Viettel-CHT Co., Ltd.	Vietnam	IDC services	288,327	288,327	-	30	286,510	215,549	64,681	Associate

					tment Amount		ce as of December 3		Net Income	Recognized	
Investor Company	Investee Company	Location	Main Businesses and Products	December 31,	December 31,	Shares	Percentage of	Carrying Value	(Loss) of the	Gain (Loss)	Note
				2018	2017	(Thousands)	Ownership (%)	(Note 3)	Investee	(Notes 1, 2 and 3)	
	Taiwan International Standard Electronics Co., Ltd.	Taiwan	Manufacturing, selling, designing, and maintaining of telecommunications systems	\$ 164,000	\$ 164,000	1,760	40	\$ 216,439	\$ 195,155	\$ 133,299	Associate
	KKBOX Taiwan Co., Ltd.	Taiwan	and equipment Providing of music on-line, software, electronic information, and advertisement	67,025	67,025	4,438	30	147,360	22,268	7,269	Associate
	So-net Entertainment Taiwan Limited KingwayTek Technology Co., Ltd.	Taiwan Taiwan	services Online service and sale of computer hardware Publishing books, data processing and	120,008 69,013	120,008 69,013	9,429 6,993	30 26	119,956 134,925	51,233 38,427	15,717 7,427	Associate Associate
	Taiwan International Ports Logistics	Taiwan	software services Import and export storage, logistic warehouse,	80,000	80,000	8,000	27	49,650	10	19	Associate
	Corporation UUPON Inc.	Taiwan	and ocean shipping service Information technology service and general	97,598	97,598	5,400	15	11,432	(38,469)	(5,786)	Associate
	Alliance Digital Tech Co., Ltd.	Taiwan	advertisement service Development of mobile payments and	60,000	60,000	6,000	14	5,080	(65,337)	(9,408)	Associate
	Chunghwa PChome Fund I Co., Ltd.	Taiwan	information processing service Investment, venture capital, investment advisor, management consultant and other	200,000	-	20,000	50	198,974	(2,052)	(1,026)	Associate
	Cornerstone Ventures Co., Ltd.	Taiwan	consultancy service Investment, venture capital, investment advisor, management consultant and other consultancy service	4,900	-	490	49	4,757	(291)	(143)	Associate
Senao International Co., Ltd.	Senao Networks, Inc.	Taiwan	Telecommunication facilities manufactures and sales	202,758	202,758	16,579	34	919,841	465,415	156,130	Associate
	Senao International (Samoa) Holding Ltd.	Samoa Islands	International investment	2,416,645	2,416,645	81,175	100	470,230	(30,654)	(30,654)	Subsidiary (Note 7)
	UUPON Inc.	Taiwan	Information technology service and general advertisement service	24,000	24,000	2,400	7	5,215	(38,469)	(2,574)	Associate
	Youth Co., Ltd.	Taiwan	Sale of information and communication technologies products	364,950	335,450	8,462	93	206,539	(17,744)	(62,586)	Subsidiary (Note 7)
	Aval Technologies Co., Ltd.	Taiwan	Sale of information and communication technologies products	60,000	60,000	6,510	100	69,934	4,103	4,103	Subsidiary (Note 7)
	SENYOUNG Insurance Agent Co., Ltd.	Taiwan	Property and liability insurance agency	59,000	10,000	5,900	100	50,684	(7,832)	(7,832)	Subsidiary (Note 7)
Light Era Development Co., Ltd.	Taoyuan Asia Silicon Valley Innovation Co., Ltd.	Taiwan	Development of real estate	7,500	-	750	60	5,048	(4,086)	(2,452)	Subsidiary (Note 7)
CHIEF Telecom Inc.	Unigate Telecom Inc. Chief International Corp.	Taiwan Samoa Islands	Telecommunications and internet service Telecommunications and internet service	2,000 6,068	2,000 6,068	200 200	100 100	887 64,344	(116) 11,409	(116) 11,409	Subsidiary (Note 7) Subsidiary (Note 7)
Chunghwa System Integrated Co., Ltd.	Concord Technology Co., Ltd.	Brunei	Investment	-	47,321	-	-	-	-	-	Subsidiary (Notes 4 and 7)
Chunghwa Telecom Singapore Pte., Ltd.	ST-2 Satellite Ventures Pte., Ltd.	Singapore	Operation of ST-2 telecommunications satellite	409,061	409,061	18,102	38	496,033	292,852	111,077	Associate
Chunghwa Investment Co., Ltd	. Chunghwa Precision Test Tech. Co., Ltd.	Taiwan	Production and sale of semiconductor testing components and printed circuit board	178,608	199,736	11,230	34	2,106,738	716,024	259,425	Subsidiary (Note 7)
	CHIEF Telecom Inc.	Taiwan	Network integration, internet data center ("IDC"), communications integration and	19,064	19,422	2,078	3	86,051	484,604	15,873	Associate (Note 7)
	Senao International Co., Ltd.	Taiwan	cloud application services Selling and maintaining mobile phones and its peripheral products	49,731	49,731	1,001	-	43,275	403,281	1,503	Associate (Note 7)
Chunghwa Precision Test Tech. Co., Ltd.	. Chunghwa Precision Test Tech USA Corporation	United States	Design and after-sale services of semiconductor testing components and printed circuit board	12,636	12,636	400	100	24,881	1,599	1,599	Subsidiary (Note 7)
	CHPT Japan Co., Ltd.	Japan	Printed circuit board Related services of electronic parts, machinery processed products and printed circuit board	2,008	2,008	1	100	2,361	123	123	Subsidiary (Note 7)

				Original Inves	tment Amount	Balano	e as of December 3	1, 2018	Net Income	Recognized	
Investor Company	Investee Company	Location	Main Businesses and Products	December 31,	December 31,	Shares	Percentage of	Carrying Value	(Loss) of the	Gain (Loss)	Note
				2018	2017	(Thousands)	Ownership (%)	(Note 3)	Investee	(Notes 1, 2 and 3	)
	Chunghwa Precision Test Tech. International, Ltd.	Samoa Islands	Wholesale and retail of electronic materials, and investment	\$ 54,450	\$ 54,450	1,700	100	\$ 43,030	\$ (3,503)	\$ (3,503)	Subsidiary (Note 7)
Prime Asia Investments Group, Ltd. (B.V.I.)	Chunghwa Hsingta Co., Ltd. MeWorks Limited (HK)	Hong Kong Hong Kong	Investment Investment	375,274 10,000	375,274 10,000	1 -	100 20	195,368 -	(1,911)	(1,911)	Subsidiary (Note 7) Associate
	Senao International HK Limited HopeTech Technologies Limited	Hong Kong Hong Kong	International investment Information technology and telecommunications products sales	2,393,646	2,393,646 21,177	80,440	100	431,552	(30,705) (330)	(30,705) (149)	Subsidiary (Note 7) Associate (Note 5)
Youth Co., Ltd.	ISPOT Co., Ltd.	Taiwan	Sale of information and communication technologies products	53,021	53,021	-	100	9,384	(4,979)	(9,830)	Subsidiary (Note 7)
	Youyi Co., Ltd.	Taiwan	Maintenance of information and communication technologies products	21,354	21,354	-	100	17,065	1,642	1,321	Subsidiary (Note 7)
CHYP Multimedia Marketing & Communications Co., Ltd	Click Force Marketing Company	Taiwan	Advertisement services	44,607	44,607	1,078	49	37,876	7,929	1,760	Associate

Note 1: The amounts were based on audited financial statements.

Note 2: Recognized gain (loss) of investees includes amortization of differences between the investment cost and net value and elimination of unrealized transactions.

Note 3: Recognized gain (loss) and carrying value of the investees did not include the adjustment of the difference between the accounting treatment on standalone basis and consolidated basis as a result of the application of IFRS 15.

Note 4: Concord Technology Co., Ltd. was approved to end and dissolve its business in August 2017. The liquidation of Concord was completed in January 2018.

Note 5: Senao International (Samoa) Holding Ltd disposed all shares of HopeTech Technologies Limited in June 2018.

Note 6: Investment in mainland China is included in Table 8.

Note 7: The amount was eliminated upon consolidation.

(Concluded)

#### INVESTMENT IN MAINLAND CHINA YEAR ENDED DECEMBER 31, 2018

(Amounts in Thousands of New Taiwan Dollars)

				Accumulated	Investme	ent Flows	Accumulated					Accumulated	
Investee	Main Businesses and Products	Total Amount of Paid-in Capital	Investment Type (Note 1)	Outflow of Investment from Taiwan as of January 1, 2018	Outflow	Inflow	Outflow of Investment from Taiwan as of December 31, 2018	Net Income (Loss) of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Loss) (Note 2)	Carrying Value as of December 31, 2018	Inward Remittance of Earnings as of December 31, 2018	Note
Senao Trading (Fujian) Co., Ltd.	Sale of information and communication technologies products	\$ 1,073,170	2	\$ 1,073,170	\$ -	\$ -	\$ 1,073,170	\$ 6,382	100	\$ 6,382	\$ 194,021	\$ -	Notes 7 and 11
Senao International Trading (Shanghai) Co., Ltd.	Sale of information and communication technologies products	955,838	2	955,838	-	-	955,838	(34,866)	100	(34,866)	79,437	-	Note 11
Senao International Trading (Shanghai) Co., Ltd. (Note 12)	Maintenance of information and communication technologies products	87,540	2	87,540	-	-	87,540	(968)	100	(968)	-	-	Notes 8 and 11
Senao International Trading (Jiangsu) Co., Ltd.	Sale of information and communication technologies products	263,736	2	263,736	-	-	263,736	124	100	124	87,218	-	Notes 9 and 11
Chunghwa Telecom (China) Co., Ltd.	Integrated information and communication solution services for enterprise clients, and intelligent energy network service	177,176	2	177,176	-	-	177,176	(971)	100	(971)	53,150	-	Note 11
Jiangsu Zhenghua Information Technology Company, LLC	Providing intelligent energy saving solution and intelligent buildings services	189,410	2	142,057	-	-	142,057	(465)	75	(349)	-	-	Notes 10 and 11
Shanghai Taihua Electronic Technology Limited	Design of printed circuit board and related consultation service	51,233	2	51,233	-	-	51,233	(3,526)	100	(3,526)	39,893	-	Note 11
Shanghai Chief Telecom Co., Ltd.	Telecommunications and internet service	10,150	1	4,973	-	-	4,973	4,211	49	2,063	7,942	-	Note 11

Investee	Accumulated Investment in Mainland China as of December 31, 2018	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on Investment Stipulated by Investment Commission, MOEA
SENAO and its subsidiaries (Note 3)	\$ 2,380,284	\$ 2,380,284	\$ 3,494,200
Chunghwa Telecom (China) Co., Ltd. (Note 4)	177,176	177,176	231,943,392
Jiangsu Zhenghua Information Technology Company, LLC (Note 4)	142,057	142,057	231,943,392
Shanghai Taihua Electronic Technology Limited (Note 5)	51,233	97,965	3,690,636
Shanghai Chief Telecom Co., Ltd. (Note 6)	4,973	4,973	1,709,614

- Note 1: Investments are divided into three categories as follows:
  - a. Direct investment.
  - b. Investments through a holding company registered in a third region.
  - c. Others.
- Note 2: The amounts were calculated based on the investee's audited financial statements.
- Note 3: Senao International Co., Ltd. and its subsidiaries were calculated based on the consolidated net assets value of Senao International Co., Ltd.
- Note 4: Chunghwa Telecom (China) Co., Ltd. and Jiangsu Zhenghua Information Technology Company, LLC were calculated based on the consolidated net assets value of Chunghwa Telecom Co., Ltd.
- Note 5: Shanghai Taihua Electronic Technology Limited was calculated based on the consolidated net assets value of Chunghwa Precision Test Tech. Co., Ltd.
- Note 6: Shanghai Chief Telecom Co., Ltd. was calculated based on the consolidated net assets value of CHIEF Telecom Inc.
- Note 7: Senao Trading (Fujian) Co., Ltd. was approved to end its business and dissolve in September 2018. The liquidation of Senao Trading (Fujian) Co., Ltd. is still in process.
- Note 8: The liquidation of Senao International Trading (Shanghai) Co., Ltd. was completed in March 2018.
- Note 9: Senao International Trading (Jiangsu) Co., Ltd. was approved to end its business and dissolve in April 2018. The liquidation of Senao International Trading (Jiangsu) Co., Ltd. is still in process.
- Note 10: The liquidation of Jiangsu Zhenhua Information Technology Company, LLC. was completed in December 2018.
- Note 11: The amount was eliminated upon consolidation.
- Note 12: The English name is the same as the above entity; however the Chinese name included in the respective Articles of Incorporations is different from the above entity.

(Concluded)

# INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT TRANSACTIONS YEAR ENDED DECEMBER 31, 2018

(Amounts in Thousands of New Taiwan Dollars)

				Nature of	Tran	saction Details		
Year	No. (Note 1)	Company Name	Related Party	Relationship (Note 2)	Financial Statement Account	Amount (Note 5)	Payment Terms (Note 3)	% to Total Sales or Assets (Note 4)
2018	0	Chunghwa Telecom Co., Ltd.	Senao International Co., Ltd.	a	Accounts receivable	\$ 249,014		_
2016	U	Chunghwa Telecolli Co., Ltd.	Senao international Co., Ltd.	a	Accounts receivable Accrued custodial receipts	197,704	_	-
					Inventories	40,424		_
					Accounts payable	916,854	_	_
					Amounts collected for others	294,299	_	_
					Revenues	2,090,888	_	1
					Operating costs and expenses	1,400,400	_	1
			CHIEF Telecom Inc.	a	Accounts receivable	38,387		_
			CITED Telecom me.	u	Accounts payable	37,417	_	_
					Revenues	332,872	_	_
					Operating costs and expenses	286,267	_	_
			CHYP Multimedia Marketing &	a	Accounts payable	25,116	_	_
			Communications Co., Ltd.	u	Amounts collected for others	53,308	_	_
			Communications Co., Etc.		Revenues	30,883	_	_
					Operating costs and expenses	136,855	_	_
			Chunghwa System Integration Co., Ltd.	a	Accounts receivable	38,684	_	_
			Changhwa System megranon co., Eta.	u	Accounts payable	629,455	_	_
					Revenues	18,179	_	_
					Operating costs and expenses	782,061	_	_
					Inventories	226,172	_	_
					Prepayments	115,066	_	_
					Property, plant and equipment	508,653	_	_
					Intangible assets	143,192	_	_
			Chunghwa Telecom Global Inc.	a	Accounts receivable	16,581	_	_
			g		Accounts payable	43,990	_	_
					Revenues	63,123	_	_
					Operating costs and expenses	337,300	_	_
			Donghwa Telecom Co., Ltd.	a	Accounts receivable	118,861	_	_
					Accounts payable	189,148	_	_
					Revenues	211,604	_	_
					Operating costs and expenses	531,116	_	_
			Spring House Entertainment Tech. Inc.	a	Amounts collected for others	10,060	_	_
			Chunghwa Telecom Japan Co., Ltd.	a	Accounts receivable	17,461	_	_
			2Sima reference, 2.di		Accounts payable	15,881	_	_
					Revenues	15,763	_	_
					Operating costs and expenses	92,099	_	_
			Light Era Development Co., Ltd.	a	Operating costs and expenses	45,120	_	_

Year	No. (Note 1) Company Name	Related Party	Nature of Relationship (Note 2)	Transaction Details			
				Financial Statement Account	Amount (Note 5)	Payment Terms (Note 3)	% to Total Sales or Assets (Note 4)
		Chunghwa Telecom Singapore Pte., Ltd.	a	Accounts receivable	\$ 102,253	-	-
				Accounts payable	76,002	-	-
				Revenues	150,673	-	-
				Operating costs and expenses	189,339	-	-
		Chunghwa Sochamp Technology Inc.	a	Accounts payable	59,582	-	-
				Operating costs and expenses	42,329	-	-
				Inventories	10,816	-	-
		Honghwa International Co., Ltd.	a	Accounts receivable	10,305	-	-
				Accounts payable	1,059,239	-	-
				Revenues	40,590	-	-
				Operating costs and expenses	5,422,154	-	3
				Inventories	30,749	-	-
				Property, plant and equipment	100,483	-	-
		Smartfun Digital Co., Ltd.	a	Accounts payable	10,613	-	-
				Operating costs and expenses	17,640	-	-
		Chunghwa Telecom (Thailand) Co., Ltd.	a	Operating costs and expenses	25,253	-	-
		CHT Security Co., Ltd.	a	Accounts payable	97,675	-	-
				Revenues	29,174	-	-
				Operating costs and expenses	323,704	-	-
				Property, plant and equipment	13,143	-	-
		Aval Technologies Co., Ltd.	a	Operating costs and expenses	47,025	-	-
		-		Customers' deposits	10,999	-	-
	1 Light Era Development Co., Ltd.	CHIEF Telecom Inc.	c	Revenues	95,190	-	-
	2 Chunghwa Telecom Singapore Pte., Ltd.	Donghwa Telecom Co., Ltd.	c	Prepayments	18,231	-	-

Note 1: Significant transactions between the Company and its subsidiaries or among subsidiaries are numbered as follows:

- a. "0" for the Company.
- b. Subsidiaries are numbered from "1".

Note 2: Related party transactions are divided into three categories as follows:

- a. The Company to subsidiaries.
- b. Subsidiaries to the Company.
- c. Subsidiaries to subsidiaries.
- Note 3: Transaction terms with the related parties were determined in accordance with mutual agreements when there were no similar transactions with third parties. Other transactions with related parties were not significantly different from those with third parties.
- Note 4: For assets and liabilities, amount is shown as a percentage to consolidated total assets as of December 31, 2018, while revenues, costs and expenses are shown as a percentage to consolidated revenues for the year ended December 31, 2018.
- Note 5: The amount was eliminated upon consolidation.

(Concluded)