

中石化石油工程技術服務股份有限公司 Sinopec Oilfield Service Corporation (Stock Code A Share: 600871; H Share: 1033)

Annual Report 2018

IMPORTANT NOTE

- The Board of Directors ("the Board") and the Supervisory Committee of the Company and its directors, supervisors and senior management warrant that there are no false representations, misleading statements or material omissions in this Annual Report and individually and jointly take full responsibility for the authenticity, accuracy and completeness of the information contained in this Annual Report.
- 2. The 2018 Annual Report has been approved at the eleventh meeting of the ninth session of the Board. A total of 9 directors of the company attended the meeting. Mr. Fan Zhonghai, a director, was absent from the meeting due to other business engagements but had authorised Mr. Sun Qingde, a Director of the Company in writing to attend the meeting and to exercise his voting rights on his behalf.
- 3. The financial statements of the Company for 2018, which have been prepared in accordance with the PRC Accounting Standards for Business Enterprises ("PRC ASBE") and International Financial Reporting Standards ("IFRS") have been audited by Grant Thornton (Special General Partnership) and Grant Thornton Hong Kong Limited, respectively. Both auditors have issued unqualified opinions on the financial statements.
- 4. Mr. Liu Zhongyun, Chairman of the Board, Mr. Sun Qingde, Vice Chairman and General Manager, Mr. Li Tian, Chief Financial Officer and Mr. Pei Defang, Manager of the Asset and Accounting Department of the Company warranted the authenticity and completeness of the financial statements contained in the Annual Report.
- 5. Consideration of the proposed scheme of profit distribution or the reserve capitalization by the Board during the reporting period.
 - The net profit to equity shareholders of the Company was RMB 142,056,000 in accordance with the PRC ASBE (the net profit to equity shareholders of the Company was RMB240,188,000 in accordance with the IFRS) for the year 2018 has been audited by Grant Thornton (Special General Partnership). At the end of 2018, the undistributed profit of the Company was RMB -1,466,064,000. Due to the accumulated net profit in the Company was negative value at the end of 2018, the Board proposed not to distribute any dividend nor capitalize any reserve for the year 2018. The above proposed profit distribution scheme shall be submitted for approval at the 2018 Annual General Meeting.
- 6. Due to the uncertainty of the forward-looking statement about the future plan and development strategy in the annual report, the future plans involved in these forward-looking statements do not represent any guarantee made by the Company to the investors. Investors are advised to exercise caution when making investments.
- 7. There was no appropriation of funds by the controlling shareholder of the Company and its connected parties for non-operation purpose.
- 8. The Company did not provide external guarantees made in violation of required decision-making procedures.

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Section I Definitions

In this Annual Report, unless the context otherwise requires, the following expressions shall have the following meanings:

Company	Sinopec Oilfield Service Corporation, a joint stock limited company incorporated in the PRC whose A Shares are traded on the SSE (Stock code: 600871) and H Shares are listed on the Main Board of the Stock Exchange (Stock code: 1033)
Group	The Company and its subsidiaries
Board	the board of Directors of the Company
Articles of Association	the articles of association of the Company, as amended, modified or supplemented from time to time
CPC	China Petrochemical Corporation, a wholly State-owned company established in the PRC and the controlling shareholder of the Company
Sinopec	China Petroleum & Chemical Corporation, a joint stock limited company established in the PRC and listed on the Main Board of the Stock Exchange as well as in New York, London and Shanghai, the subsidiary of CPC.
A Shares	Outstanding shares of the Company which are listed on the SSE and par value per share is RMB 1.00.
H Shares	Overseas listed foreign Share(s) which is (are) listed on the Main Board of the Stock Exchange and par value per share is RMB1.00.
SSE	Shanghai Stock Exchange
HKSE	The Stock Exchange of Hong Kong Limited
Listing Rules	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
Model Code	Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 of the Listing Rules
CSRC	China Securities Regulatory Commission
HKSCC (Nominees) Limited	Hong Kong Securities Clearing Company (Nominees) Limited
Share Option Incentive Scheme	A Share Option Incentive Scheme of the Company
This Grant	The Company granted the total amount of incentive objects not exceeding 5,085 million stock options according to the Share Option Incentive Scheme.
CITIC Limited	China International Trust and Investment Co., Ltd.
SOSC	Sinopec Oilfield Service Co., Ltd, the subsidiary of the Company
Nanjing Weinuo	Nanjing Weinuo Oil& Gas Well Logging Engineering Co.,Ltd.
Century Bright Company	Sinopec Century Bright Capital Investment, Ltd., a company incorporated in Hong Kong with limited liability, a wholly-owned subsidiary of CPC
Non-public Placement	Non-public Placement of A shares and H shares
China Structural Reform Fund	China Structural Reform Fund Corporation Limited or its designated related party
Qi Xin Gong Ying Scheme	Qi Xin Gong Ying Scheme for the management of Sinopec Oilfield Service Corporation
Geophysical exploration, geophysical	A method and theory of exploration the underground mineral and researching the geological formations by using physics principles. Such as seismic exploration, electrical and magnetism exploration.
Drilling	The engineering of drilling formations down to a certain depth by using the mechanical equipment, and finally forming a cylindrical hole.
Completion	The last part of the drilling engineering, including connecting the drilling casing to the oil layer, selection of completion method, cementing, and perforating, etc.
Logging	The technology of acquiring parameters of various formation characteristics from downhole by using special tools or equipment and technology, and of being used to discover the oil and gas reservoir and other mineral resources.
Mud Logging	Recording and acquiring the information during the drilling process. Mud Logging is the basic technique in oil and gas exploration and production activities, and is the most timely and most direct way to find and evaluate the reservoir. It has the characters of timely and various to acquire the downhole information.
Downhole Operation service	During the oilfield exploration, in accordance with the requirement of the oilfield, using take technical measures, equipment and tools to oil or water wells for the purposed of EOR, increasing the amount of injection and production, improving oil flow conditions, improving well conditions and increasing production rate, etc.
Two dimensional geophysical	A method for seismic data gathering by using a set of sound source and one or more collection point; 2D is generally used for drawing geographical structure for a preliminary analysis.
Three dimensional geophysical	A method for seismic data gathering by using two sets of sound source and two or more collection point; 3D is generally used for acquiring sophisticated seismic data, and improving the chances of successful drilling to the oil and gas wells.
CNPC	China National Petroleum Corporation
CNOOC	China National Offshore Oil Corporation
CNSPC	SINOPEC Star Petroleum Co., Ltd
Yanchang Petroleum Group	Shaanxi Yanchang Petroleum (Group) Corp. Ltd
EPC	Engineering, Procurement and Construction; A project contract model, the main services include project design, procurement and construction
	People's Republic of China

Section II Company Profile and Principal Financial Indicators

1. Company Information

Company's Chinese Name	中石化石油工程技術服 務股份有限公司
Abbreviation of the Company's Chinese name	石化油服
Company's English name	Sinopec Oilfield Service Corporation
Abbreviation of the Company's English name	SSC
Legal representative	Liu Zhongyun

2. Contact Information

	Secretary to the board	Securities Affairs Representative		
Name	Li Honghai	Shen Zehong		
Address	Office of the board of directors, #9 Jishikou Road, Changyang District, Beijing, China.			
Telephone	86-10-59965998			
Fax	86-10-5996599	7		
Email	ir.ssc@sinoped	c.com		

3. Company profile

Registered address	22 Chaoyangmen North Street, Chaoyang District, Beijiing, the People's Republic of China
Post Code of Registered	100728
Office address	#9 Jishikou Road, Changyang District, Beijing, China.
Post Code of Office address	100728
Company Internet Website	http://ssc.sinopec.com
Email	ir.ssc@sinopec.com

4. Disclosing information and inspection place

Domestic Newspapers disclosing information China Securities, Shanghai Securities News, Securities Times
Internet website designated by CSRC to publish the Annual Report www.sse.com.cn
Internet website designated by HKSE to disclose information http://www.hkexnews.hk
Place where the Annual Report available for inspection Office of the board of director of the Company

5. Stock briefs

Share Type	Place of listing	Stock name	Stock Code	Stock name before altering
A Share	SSE	*ST Youfu	600871	SINOPEC SSC
H Share	HKSE	SINOPEC SSC	1033	

Section II Company Profile and Principal Financial Indicators

6. Other related information

Domestic Auditors	Name Address	Grant Thornton (Special General Partnership) 5th Floor, Scitech Place, 22 Jianguomen Wai Avenue, Chaoyang District, Beijing
	Signing accountants	Liu Zhizeng, Wang Tao
Overseas Auditors	Name	Grant Thornton Hong Kong Limited
	Address	Level 12, 28 Hennessy Road, Wan Chai, Hong Kong
	Signing accountants	Shaw Chi Kit
Sponsors performing continuous supervision duties during the reporting period	Name	China International Capital Corporation Ltd
	Address	27th and 28th Floor, China World Office 2, Jianguomenwai Avenue
		1, Beijing
	Names of Signature Sponsor	Wang Haonan、Shi Fang
	Representatives	
	Continuous Supervision Period	25 January 2018 - 31 December 2019
Name of the domestic legal advisor	Beijing Haiwen & Partners	
Address	20/F, Fortune Financial Center, 5 D	ong San Huan Central Road, Chaoyang District, Beijing
Name of the overseas legal advisor	Herbert Smith Freehills LLP	
Address	23rd Floor, Gloucester Tower, 15 Q	ueen's Road Central, Hong Kong
Share registrars and transfer office	A Share	China Securities Registration and Clearing Corporation Limited
		Shanghai Branch
	Address	36th Floor, China Insurance Building, 166 Lujiazui Eastern Road,
		Pudong New District, Shanghai
	H Share	Hong Kong Registrars Limited
	Address	Rooms 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's
		Roads East, Hong Kong

7. The financial principal information and financial indicators of the Company in the last 3 years (Extracted from the financial statements prepared in accordance with the PRC ASBE)

(1). Principal financial data

Unit: RMB'000

For the	vear	ended	31	December	2017
I OI THE	yeai	enueu	ΟI	December	2017

	For the year ended 31 December 2018	After adjusted	Before adjusted	Increase/ (Decrease) (%)	For the year ended 31 December 2016
Operating income	58,409,078	48,593,948	48,485,788	20.2	42,923,500
Operating profit ("-" for losses)	852,278	-10,202,891	-10,196,367	Not Applicable	-16,080,264
Profit before income tax ("-" for losses)	515,637	-10,350,586	-10,344,082	Not Applicable	-15,803,702
Net profit attributable to equity shareholders of the Company ("-" for losses)	142,056	-10,589,524	-10,582,541	Not Applicable	-16,114,763
Net profit deducted extraordinary gain and loss attributable to equity shareholders of the Company ("-" for losses)	37,951	-10,399,296	-10,399,296	Not Applicable	-16,173,871
Net cash inflow from operating activities ("-" for outflow)	-2,939,789	404,761	419,456	Not Applicable	-3,907,318

As at 31 December 2017

	As at 31 December 2018	After adjusted	Before adjusted	Year-on-year change (%)	As at 31 December 2016
Total equity attributable to equity shareholders of the Company	5,778,410	-2,099,946	-2,102,628	Not Applicable	8,442,868
Total assets	60,904,715	62,089,315	61,942,629	-1.9	74,493,166

(2). Principal financial indicators

For the year ended 31 December 2017

	For the year ended 31 December 2018	After adjusted	Before adjusted	Year-on-year change (%)	For the year ended 31December 2016
Basic earnings per share (RMB) ("-" for losses)	0.008	-0.749	-0.748	Not Applicable	-1.139
Diluted earnings per share (RMB) ("-" for losses)	0.008	-0.749	-0.748	Not Applicable	-1.139
Basic earnings per share deducted extraordinary gain and loss (RMB) ("-" for losses)	0.002	-0.735	-0.735	Not Applicable	-1.144
Weighted average return on net assets (%)	2.86	-335.35	-335.78	Increased by 338.21 percentage points	-97.19
Weighted average return on net assets deducted extraordinary gain and loss (%)	0.76	-329.32	-329.97	Increased by 330.08 percentage points	-97.55

Explanations of the principal financial information and financial indicators of the Company in the last 3 years.

 $\sqrt{\text{Applicable}}$ $\square \text{Not Applicable}$

By 31 December 2018, the Company completed the acquisition of 100% asset interests of Jiangsu Oilfield Service and Construction Corporation which was a business combination under the same controlling shareholder. Affected by the revised accounting standards, the above sheet presents a financial restatement of the figures of last year and the end of last year. The above mentioned "Year-on-year change (%)" corresponds to the restated figures.

8. Differences between the financial statements of the Company prepared in accordance with PRC ASBE and IFRSs

	Net profit attrib shareholders of the C	utable to equity company ("-" for loss)	Net assets attributable to equity shareholders of the Company		
	For the year ended 31 December 2018	For the year ended 31 December 2017 Restated	As at 31 December 2018	As at 31 December 2017 Restated	
	RMB'000	RMB'000	RMB'000	RMB'000	
PRC ASBE	142,056	-10,589,524	5,778,410	-2,099,946	
Adjustments under IFRS:					
Specific reserve (a)	98,132	26,409	_	_	
IFRSs	240,188	-10,563,115	5,778,410	-2,099,946,	

Explanations for the related differences

(a) Specific reserve

Under PRC GAAP, accrued production safety cost as expense in profit or loss and separately recorded as a specific reserve in shareholders' equity according to the national regulation. As using Safety Fund, if it is profit or loss related, the cost of expenditure is directly charged against the Specific reserves. While if it is capital expenditure related, the cost being used is recorded in Construction in Progress, and transferred to fixed assets when it is ready for its intended use. Meanwhile, the cost of fixed asset is offset against the specific reserves and the same amount of accumulated depreciation is recognized, then the fixed asset is no longer depreciated in its useful life. Under IFRS, these expenses are recognized in profit or loss as and when incurred. Relevant capital expenditure on production maintenance and safety facilities are recognized as property, plant and equipment and depreciated according to the relevant depreciation method.

9. Quarterly Financial Data of 2018 (Prepared in accordance with ASBE)

Unit: RMB'000

	The first quarter	The second quarter	The third quarter	The fourth quarter
	(January~March)	(April~June)	(July~September)	(October~December)
Operating income	10,267,637	13,385,365	13,528,135	21,227,941
Net profit attributable to equity shareholders of the Company ("-" for loss)	30,129	370,820	39,025	-297,918
Net profit deducted extraordinary gain and loss attributable to equity shareholders of the Company ("-" for loss)	-334,673	335,136	1,570	35,918
Net cash inflow from operating activities ("-" for outflow)	-1,864,850	-1,650,192	471,244	104,009

Explanations of the differences between the quarterly data and the data in the disclosed periodically report

10. Extraordinary gain and loss items and amounts (Extracted from the financial statements prepared in accordance with ASBE)

Unit: RMB'000

Extraordinary gain and loss item	2018	2017	2016
Disposal of non-current assets	278	-172,607	-68,312
Government grants recognised in profit or loss during the year	472,569	150,674	74,863
Gain or loss on debt restructuring	395,261	14,481	_
Net profit or loss from the beginning to the merger date of the Subsidiary of the business combination under common control	-2,385	-6,983	_
Profit or loss from contingencies irrelevant to the normal operations of the Company	-475,276	_	_
Gain and loss from external entrusted loans	_	67	27,555
Other non-operating income and expenses excluding the aforesaid items	-257,894	-162,195	25,703
Tax effect	-28,448	-13,665	-701
Total	104,105	-190,228	59,108

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11. Financial information extracted from the financial statements prepared in accordance with IFRSs

Unit: RMB'000

		As at 31 December				
	2018	2017 (Restated)	2016 (Restated)	2015	2014	
Total assets	60,904,715	62,089,315	74,794,669	85,307,777	81,295,708	
Total liabilities	55,126,305	64,190,633	66,343,412	60,670,824	62,599,570	
Equity attributable to owners of the Company	5,778,410	(2,099,946)	8,452,533	24,638,094	18,697,120	
Net assets per share attributable to owners of the Company³ (RMB)	0.30	(0.15)	0.60	1.74	1.46	
Equity ratio of owners	9.50%	(3.39%)	11.30%	28.88%	23.00%	
Return on net assets	4.16%	(503.02%)	(191.64%)	(0.05%)	12.93%	

For the year ended 31 December

	2018	2017 (Restated)	2016	2015	2014
Revenue ¹	58,409,078	48,593,948	42,923,500	60,349,334	78,993,315
Profit/(Loss) before income tax ¹	613,769	(10,324,177)	(15,887,181)	469,719	3,320,072
Income tax expense 1	373,581	239,034	311,196	481,421	900,930
Profit/(Loss) attributable to owners of the Company					
Including: continuing operations ²	240,188	(10,563,115)	(16,198,242)	(11,543)	2,416,928
discontinued operations ²	_	_	_	_	(1,159,620)
Basic and diluted earnings/(loss) per share(RMB)					
Including: continuing operations ²	0.013	(0.747)	(1.145)	(0.001)	0.159
discontinued operations ²	_	_	_	_	(0.076)

Notes:

- 1. Information of 2014 included continuing operation only, after 2015 the company operates only continuing business.
- 2. In the consolidated statement of comprehensive income, the Oilfield Business was classified as "continuing operations" and the Fibre Business was classified as "discontinued operations".
- 3. The per share information was calculated on the base of the number of shares at the end of each reporting year.

1. The Company's main business, business model and industry situation in the reporting period.

With more than 50 years of business operation and rich experience in project execution, the Company is the leading, integrated, and professional oilfield service provider in China and a leader in providing integrated and full industrial-chain services covering the whole life cycle of oil and gas field exploration. By the end of 2018, the Company provided oilfield services in 76 basins and 561 blocks in more than 20 provinces in China, while its overseas business keeps growing with 370 projects execute in 37 countries and regions.

The Company has five major business sectors—geophysics, drilling, logging & mud logging, downhole operation service and engineering construction, covering the full industrial-chain from exploration, drilling, completion, oil and gas production, collection and transportation, and well abandonment.

The Company has a technological R&D supporting system covering the full industrial-chain from oil and gas exploration to production. With a large pool of experts and engineers, three research institutes, three design companies and a large number of research offices, the Company is able to provide integrated services in high-acid oil & gas, tight oil & gas, and heavy oil reservoirs. The Company was awarded National Prize for Progress in Science and Technology and the Golden Prize of National High-Quality Project for the Sichuan-Eastern China Natural Gas Transmission Pipeline project. The Company has shale gas oilfield supporting technologies featuring five technological series of drilling, logging, fracturing and testing, equipment manufacturing, and engineering and construction at shallow shale gas reservoirs above 3,500 meters with most key and core technologies localized, making the Company a national leader in this respect.

Committed to the vision of "market is the root, service is the soul, profit is the basis and pursue win-win cooperation", the Company will vigorously promote its specialized, market-oriented, distinctive, high-end and international business. It will expand its business from onshore to offshore fields, from domestic to international markets, from conventional to unconventional fields, and from single engineering service to integrated reservoir services in order to realize its corporate vision—a world-class integrated oilfield service provider.

During the reporting period, the main business of the Company has not changed substantially.

2. Substantial changes to the Company's major assets in the reporting period

On 31 December 2018, under ASBE, the total assets of the Company was RMB 60,904,715,000, a year-on-year decrease of 1.9%, of which RMB 22,499,285,000 was overseas assets, accounting for 36.9% of the total assets; The net assets attributable to the shareholders of the Company was RMB 5,778,410,000, an increase of RMB 7,878,356,000 from the end of the previous year, mainly due to the completion of the non-public placement of A shares and H shares in January 2018, a total of RMB 7.64 billion, and business accumulation in 2018; The debt-to-asset-ratio of the Company was 90.5%, a year-on-year decrease of 12.9 percentage points.

3. Analysis on core competitiveness in the reporting period

The Company has the service ability to cover the full industrial-chain of oilfield service. As of the end of 2018, there were 1,799 professional crews. It can provide the full range of services from exploration, development and production for oilfields and bring value to oil companies.

The Company is the biggest provider of petroleum engineering services and integrated oilfield technical services in China, with over 50 years of experiences for oilfield service and strong execution capabilities. Its representative projects include Puguang gas field, Fuling shale gas, Yuanba gas field, Tahe oilfield. etc.

The Company has advanced exploration and development technologies as well as strong R&D abilities. It has a number of advanced technologies with proprietary intellectual property rights, such as shale gas, highly acidic oil and gas reservoirs, and ultra-deep well drilling, etc. which can bring sustainable high added-value to its services.

The Company has the experienced management as well as highly efficient and well-organized operation team.

The Company has a stable and growing client base. It has the solid client base such as Sinopec Group in China, and the growing number of clients overseas.

Section IV Chairman's Statement



Dear Shareholders,

On behalf of the Board of Directors of SSC, I would like to express my sincere gratitude to our shareholders and people from all walks of life for your interest and support to SSC.

2018 was a critical year for the Company in terms of deepening reforms, and also a year of decisive victory as the Company achieved a turnaround in profits. In this year, the Company focused on the core goal of turning losses into profits, and formulated and implemented ten measures to turn profitable and overcome difficulties, fully expanded its market reach, continued to deepen reforms, vigorously reduced costs and increased efficiency, promoted the upgrade of R&D, sparing no effort to realize a turnaround from loss to profit and overcome difficulties. As all these measures began to prove effective, and the workload and revenue have increased significantly year-on-year, managing to reverse the operating losses since the market was in decline. In 2018, the Company's consolidated revenue under ASBE was RMB58.41 billion, a year-onyear increase of 20.2%, the net profit attributable to the shareholders of the Company was RMB140 million, and the operating results realized a turnaround. Under the influence of gradual recovery from the unfavorable factors of the sluggish market in the past three years, since the accumulated undistributed profit of Parent Company was negative at the end of 2018, the Board of Directors would like to propose not to pay cash dividend and not to transfer the capital reserve to share capital for Year 2018. The above proposed profit distribution scheme will be submitted to the annual general meeting for approval.

In 2018, the international oil price generally remained volatile with an upward trend. The Company actively seized the favorable opportunity of the time when China increased oil and gas exploration and development, proactively participated in the "Belt and Road Initiative", and vigorously explored three major markets at home and abroad. The total amount of newly signed contract in the year was RMB62.77 billion, representing a year-on-year increase of 18.0%; the completed contract amount was RMB58.42 billion, representing a year-on-year increase of 29.2%. In the domestic Sinopec market, we made great efforts to ensure the construction of the key projects such as Fuling Phase II, Shunbei Block, Weirong Shale Gas, Ordos-Anping-Cangzhou Gas Pipeline and Wen-23 Natural Gas Storage. The total amount

of newly signed contracts was RMB37.1 billion, representing a year-onyear increase of 22.3%; and we realized revenue of RMB37.22 billion, representing a year-on-year increase of 31.2%. In the domestic non-Sinopec market, the Company vigorously expanded the markets of CNPC, CNOOC, China Geological Survey, etc. The total amount of newly signed contracts in the year was RMB11.7 billion, a year-on-year increase of 10.3%; the realized revenue was RMB 8.05 billion, a year-on-year increase of 11.2%. In the overseas market, the Company renewed a five-year contract on four drilling rigs services with Saudi Arabian Oil Company (Saudi Aramco) with a contract value of US\$270 million, signed a five-year contract with oneyear extension option on 20 drilling rigs services with Kuwait Oil Company (KOC) with a contract value of US\$ 1.06 billion, and completed the contract transformation of the Mexico EBANO comprehensive project. The total amount of newly signed (renewed) contract in the year was US\$ 2.21 billion, a year-on-year increase of 16.3%, and the realized revenue was RMB13.14 billion, a year-on-year increase of 1.2%.

In 2018, the Company continued to intensify reforms, optimized structural adjustment, promoted institutional innovation, and inspired all-round innovative vitality. The Company optimized and streamlined the organization structuring, accelerated the downsizing of the supporting business, and steadily diverted surplus personnel. The departments in the headquarters were reduced from 17 to 12, with personnel quota reduced by 20.3%. The operating units were downsized by 5%, and the auxiliary units were reduced by 40%. The Company was market-oriented, efficiency-centered, and contribution-based, comprehensively deepened the implementation of performance appraisal, strengthened the performance-based payroll system, allowed greater personal income differentiation, and stimulated the enthusiasm and vitality of all employees to create revenue and results.

In 2018, the Company has stayed true to the mission, made every effort to strengthen cost management, reducing the annual cost of RMB3.2 billion. The Company focused on strengthening the target cost management of all employees, intensified project management and assessment and improved the profitability of projects, with the gross margin of projects increased by 7.3% year-on-year, and the operating cost per RMB100 revenue decreased by RMB14.1 year-on-year. At the same time, the Company successfully completed private placement, raising net proceeds of RMB7.64 billion, which timely replenished the Company's cash flow, and the asset-liability ratio decreased by 12.9 percentage points from the beginning of the year.

In 2018, the Company used the science and technology as a development driver and supporter, continued to accelerate technological innovation, and actively promoted the upgrade of R&D. The Company applied for 562 patents and obtained 465 patents throughout the year. Moreover, the Company integrated a series of engineering technologies including supporting exploration and development technology of shale oil and gas, ultra-deep wells and tight oil and gas, and created a series of hightech indicators. The Shunbei Eagle-1 Well reached the drilling depth of 8,588 meters, setting another record as the deepest onshore well drilled in Asia once again. The research and development of equipment, tools, instruments and additives gained some achievements, and the test results of the jointly developed 185-degree high-temperature MWD and drilling rotary steering system were successful. We continued to maintain our unique advantages and market competitiveness in engineering technology fields such as shale gas, tight oil and gas, and ultra-deep oil and gas reservoirs.

In 2018, all directors of the Board worked diligently and conscientiously, paid more attention to industry trends, put much emphasis on risk management and control, adopting prudent and scientific decision-making approach to ensure the sustainable and healthy development of the Company's various businesses. The Company successfully completed the reelection of the Board of Directors in accordance with laws and regulations and the Articles of Association. In 2018, it is my honor to join the Board of Directors of the Company and be elected as the Company's chairman. I am deeply grateful to the shareholders for their trust and support. I will work with other directors to contribute to the Company's development and prosperity.

Looking forward to 2019, the Company will meet opportunities and challenges in its development. On the one hand, international oil prices will continue to fluctuate in a wide range. On the other hand, the demand for oil and gas resources in China's economic and social development is still rising. The three major oil companies in China will continue to increase the capital expenditures for upstream exploration and development in order to ensure national energy security. The domestic oil service market has huge growth potential. With the deepening of the construction of the "Belt and Road" and international capacity cooperation, the Company's overseas business will also face new opportunities.

The year of 2019 is the key year for the Company to consolidate its foundation for turning losses into gains and to promote its all-round sustainable development. The Company will continue to vigorously promote the ten measures to turn losses into profits, focus on five aspects of stabilizing growth, adjusting restructuring, improving quality, intensifying reform, and strengthening foundation, further improve the market-oriented operating mechanism, downsize the management, streamline organization structuring, optimize team structure, strengthen the management of lossmaking enterprises, continuously reduce the operating cost per RMB100 revenue, improve labor productivity, increase the contribution of scientific and technological progress, increase the market share, comprehensively complete annual business indicators, firmly move toward the mid-to-high end of the industry, and significantly improve the Company's development and profitability under the low oil price scenario. In particular, the Company is confident to make greater progress in exploring external markets, extending the industry chain, innovating business models, and expanding value-added space.

The Board of Directors and I believe that through the joint efforts of the Board, Supervisory Committee, the management and all the staff, coupled with the support of our shareholders and the wider community, the Company in 2019 will have a sustainable and healthy development, create greater value for shareholders and society, and take a new step towards building a world-class integrated oil service company.

Liu Zhongyun

Chairman

Beijing, China

25 March 2019

Section V Report of the Board of Directors

1. Discussion and analysis of operation by the management

Financial figures, except where specifically noted, contained herein have been extracted from the consolidated financial statements prepared in accordance with the ASBE.

Market Review

In 2018, the world economy maintained moderate growth. Chinese economy continued to grow steadily, and its gross domestic product (GDP) grew by 6.6% year-on-year. Domestic oil and gas consumption continued to grow rapidly, and the international oil prices showed recovery amid volatile markets. The annual average Europe Brent Spot Price was 71.3 dollars per barrel, representing a year-on-year increase of 31.8%. The rise in international crude oil prices encouraged domestic and foreign oil companies to increase capital expenditure for upstream exploration and development. For example, in 2018, Sinopec Group, the Company's largest customer, spent RMB 42.2 billion on upstream exploration and development, a year-on-year increase of 34.8%. As a result, the operating environment of the oilfield service industry has further improved, the oilfield service workload has increased significantly year-on-year, and the oilfield service market has continued to recover.

Operation review

In 2018, the Company's consolidated revenue was RMB 58,409,078,000, representing an increase of 20.2%, and net profit attributable to shareholders of the Company amounted to RMB 142,056,000, representing a significant increase of RMB10,731,580,000. In 2018, the Company seized the favourable opportunity when oil companies increased investment in upstream exploration and development, strengthened market analysis and judgment, continued to increase incentives, and fully explored the market. The total amount of the newly signed contracts totalled RMB 62.77 billion, representing a year-on-year increase of 18.0%. The Company organized the production and operation in a scientific way according to features of the oil service industry. The completed contract amount was RMB 58.42 billion, representing a year-on-year increase of 29.2%, and the workload in the main profession increases significantly year-on-year. The Company deepened internal reforms, continued to promote streamlining the organization structuring, accelerated the professional development of auxiliary businesses, and strengthened cost control by tapping potential and increasing efficiency. In doing so, the Company saw its economic benefits gradually improved, achieved a gross profit margin of 8.2% for the main business, an increase of 14.2 percentage points year-on-year, and the net profit attributable to shareholders of the Company turned around in the year.

1. Geophysical services

In 2018, the Company's operation revenue from the principal business of geophysical service was RMB5,131,649,000, an increase of 28.9% than the same period of the previous year, for which the figure was RMB3,980,069,000. The completed 2D seismic accumulated for 30,279 kilometers in the year, an increase of 36.7% than the previous year; while the 3D seismic accumulated for 13,441 square kilometers, a decrease of 1.8% than the previous year. The Company improved the quality of seismic data continuously, with 2D and 3D records reaching quality rate of 100%. The Company's single-point high-density seismic acquisition technology has been promoted and applied in mature oil fields in Eastern oilfield, showing a good market prospect. The Company fully explored the domestic external markets and international markets, gradually expanded the market scale of the China Geological Survey, and continued to maintain its position as the largest international geophysical contractor in Algeria.

2. Drilling service

In 2018, the Company's operation revenue from the principal business of drilling service was RMB29,883,121,000, an increase of 20.9% than the same period of the previous year, for which the figure was RMB24,718,771,000. Its completed drilling footage reached 8,690 kilometers, representing a year-on-year increase of 18.1%. The Company provided high-quality and effective services for the exploration and development of Sinopec Group and fully supported the capacity building at Fuling Shale Gas Phase II, Shunbei ultra-deep oil and gas field, tight gas fields in North China, middle and shallow strata of the western Sichuan Basin, Puguang gas field, Weirong shale gas field and mature oil fields in Eastern oilfield, and the Phase I of the Wen-23 Gas Storage entered the final stage. The shale gas supporting technology helped expand the markets of CNPC, CNOOC, China Geological Survey, and Guizhou shale gas, etc., having 49 drilling crews in the shale gas market of CNPC. The 14 offshore drilling platforms were all in operation for service. The Company remained as the largest onshore drilling contractor of Saudi Aramco, KOC and Corporacion Estatal Petrolera Ecuatoriana.

3. Logging/Mud logging service

In 2018, the Company's operation revenue from the principal business of logging/mud logging service was RMB 2,006,180,000, an increase of 10.8% than the same period of the previous year, for which the figure was RMB1,810,868,000. Its completed logging projects have accumulated for 243,090,000 standard meters, an increase of 17.5% than the previous year. Its completed mud logging projects have accumulated for 7,470 kilometers, an increase of 12.2% than the previous year. In 2018, the Company steadily improved its service capacity and market competitiveness in logging/mud logging service, providing high-quality and effective guarantee for the Sinopec Group's capacity building of Weirong shale gas field, the production increase task of oil and gas fields in Northwest China and Sichuan and witnessing the scale of domestic and foreign markets, including CNPC's southwest shale gas, China Geological Survey, and local coal bed methane, expanding significantly.

4. Downhole operation service

In 2018, the Company's operation revenue from the principal business of downhole operation was RMB 5,644,308,000, an increase of 34.7% than the same period of the previous year, for which the figure was RMB4,189,002,000. It completed downhole operation for 5,954 wells, an increase of 15.7% than the previous year. In 2018, the Company firmly grasped the favorable window of opportunity presented by the market recovery for its downhole operation business, to ensure the Sinopec Group's focus of the oil and gas exploration and development in "North China, Northwest China, Sichuan and Chongqing", continued to promote the increase in reserves and production of shale gas in the Sichuan and Chongqing area, Ordos tight oil and gas, and Shunbei super deep oil and gas reserves, etc., and strived to push forward the stabilization and increase in production of offshore oil and gas fields, marginal reserves in eastern old oil fields and acidic gas field. The Company cooperated with Sinopec Group to develop marginal reserves and achieved remarkable results, and contracted 12 difficult-to-produce marginal blocks with the cumulative increase in crude oil production of about 30,000 tonnes throughout the year. The Company continued to expand the domestic external market and international markets with superior technology and equipment, constantly strengthened the support capabilities of its professional teams in coiled tubing and high-pressure operations and other services, and continuously improved the high-end business service capabilities.

5. Engineering and construction service

In 2018, the Company's operation revenue inform the principal business of engineering and construction service was RMB 13,132,857,000, an increase of 10.8% than the same period of the previous year, for which the figure was RMB 11,851,717,000. In 2018, the cumulative value of newly signed contracts was RMB 18.07 billion, a decrease of 3.5% than the same period of the previous year and the completed contracts valued RMB 14.50 billion, an increase of 21.9% than the same period of the previous year. The Company fully promoted the construction of key projects such as the gas pipeline project from Qianjiang to Shaoguan and the first phase of Ordos-Anping-Cangzhou Gas Pipeline Project Phase I, a national key project, has been officially put into operation. The Company vigorously developed markets and won bids for 6 tenders of the 7 phases of the Rizhao-Puyang-Luoyang Crude Oil Pipeline Project, with a contract value of RMB450 million. The Company also actively expanded new markets and new fields and successively won the bids for the Gulei Refinery and Chemical and Guizhou Coal Chemical projects with a total contract value of RMB1.35 billion in addition to 4 bids for offshore wind power projects. The Company also actively expanded the local gas pipeline and municipal road and bridge markets, with the total amount of newly signed contracts for gas pipelines of RMB1.79 billion in the year.

6. International business

In 2018, the Company's operation revenue from the principal business of international business service was RMB 13,111,312,000, an increase of 1.4% than the same period of the previous year, for which the figure was RMB 12,936,519,000. The revenue contributed by the international business accounted for 22.9% of the whole revenue, with a year-on-year decrease of 4.3 percentage points. The Company has been firmly committed to its internationalization strategy and established 5 large-scale markets in the Middle East, Africa, America, Central Asia, and the Southeast Asia over many years of development. In 2018, the value of newly signed contracts in overseas markets was US\$2.21 billion, representing a year-on-year increase of 16.3% and the completed contract value was US\$1.88 billion, representing a year-on-year decrease of 6.7%. The Company continued to expand the Middle East market and renewed a five-year contract on four drilling rigs services with Saudi Arabian Oil Company with a contract value of US\$270 million. In addition, SSC signed a five-year contract with one-year extension option on 20 drilling rigs services with Kuwait Oil Company (KOC) with a contract value of US\$ 1.06 billion. In the Mexican market, the Company successfully completed the contract transformation of the EBANO oilfield comprehensive service project, and made breakthroughs in the development of new markets such as Chad and Ukraine.

7. Research and development

In 2018, the Company implemented in-depth innovation-driven strategies, continuously strengthened its technological research, and improved its exploration and production capabilities. It has applied for 562 patents at home and abroad and was granted 465 patents. "A multi-directional drilling and workover Jack-up platform" won the 2018 National Outstanding Patent Award. In 2018, the Company used science and technology to improve the quality, service speed, efficiency and production of the oil service business, integrated a series of engineering technologies such as supportive shale oil and gas exploration, ultra-deep wells, tight oil and gas development, and optimized the plan design and construction process, improving the main technical indicators. Shunbei Peng No.1 well has a drilling depth of 8,588 meters, continuously breaking the records for the deepest onshore well drilled in Asia, and marking that the Company has mastered the world-class advanced ultra-deep well drilling technology. The single-point high-density and high-precision seismic exploration technology has been industrialized in the Eastern China, Sichuan, and Zhunzhong areas, and the first domestic self-scanning high-efficiency acquisition research has been successful. By applying technologies such as "low temperature multi-effect evaporation", the Company has built the first water resources utilization and treatment station for high-sulfur gas field mining in China. The Company has successfully completed the domestic ERP project, effectively improving the level of Group management and control.

8. Internal reform and management

In 2018, the Company continued to deepen internal reforms, and its various reform measures achieved good results. The Company continued to streamline its business, and its organizational structure has become more sophisticated, reducing 5 departments of the Company and reducing 4 professional business units. The Company continued to promote the professional development of auxiliary business, comprehensively promoted the contracting operation of auxiliary business, and strived to reduce the losses on auxiliary business, making the main business better and bigger. The Company optimized the allocation of internal equipment and resources, improved the sharing mechanism, stepped up efforts in equipment coordination and adjustment and improved the efficiency of generating revenue from assets. The Company vigorously tapped potential and increased efficiency, and reduced a total cost of RMB3.2 billion for the whole year. The Company actively promoted the extension of the industry chain, and the business structure adjustment achieved initial results. In terms of the upward extension of the industry chain, the Company completed the contract transformation of the EBANO comprehensive project in Mexico and continued to promote the cooperation with Sinopec Group to develop difficult-to-produce reserves. In terms of the downward extension of the industry chain, the Company has sold the skid-mounted automated measurement system for drilling fluid parameters to the CNOOC market. The Company accelerated the development of technical services and emerging businesses. Sinopec Zhongyuan Petroleum Engineering Corporation, a wholly-owned subsidiary of the Company, obtained the qualification of global logging project contractor of Total, and realized the healthy development of special businesses such as energy conservation and environmental protection, tractor logging and coiled tubing.

9. Capital Expenditures

In 2018, the Company actually had a capital expenditure of RMB1.52 billion. In 2018, the Company insisted on optimizing investment, making good use of incremental assets, and revitalizing inventory assets. It spent funds on strictly selected investment targets. The investment is mainly made for the transformation of 9 drilling rigs and workover rigs in the international market, electric transformation of 7 drilling rigs, the purchase of 8 sets of network power devices for drilling rigs, 11 sets of top-drive guiding devices and 1 set of rotary steering system, the update and reconstruction of the No. 3 platform and the discovery of some equipment and facilities of No. 2 geophysical ship, and the ERP information system construction and other investment projects.

2. Statement of main business during the reporting period

(1). Main business analysis

A. The analysis table of changes related to the income statement and cash flow statement

	2018	2017	The rate of change
	RMB'000	RMB'000	(%)
Operating revenue	58,409,078	48,593,948	20.2
Operating cost	53,320,296	51,091,147	4.4
Selling and distribution expenses	64,249	59,615	7.8
General and administrative expenses	3,239,084	3,619,364	-10.5
Financial expenses	441,190	580,051	-23.9
Net cash inflow from operating activities	-2,939,789	404,761	Not Applicable
Net cash inflow from investing activities	-1,174,471	-1,011,944	Not Applicable
Net cash inflow from financing activities	3,618,785	748,034	383.8
Research and development expenditures	928,586	517,599	79.4

B. Income and cost analysis

a. Statement of operation by industry and products

Industry	Operating income for 2018	Operating cost for 2018	Gross profit margin	Increase or decrease in operating income as compared with last year	Increase or decrease in operating cost as compared with last year	Gross profit margin compared with last year
	RMB'000	RMB'000	(%)	(%)	(%)	
Geophysical	5,131,649	4,737,771	7.7	28.9	26.2	Increased by 2.1 Percentage points
Drilling	29,883,121	27,302,161	8.6	20.9	3.0	Increased by 15.8 Percentage points
Logging/Mud logging	2,006,180	1,967,854	1.9	10.8	-4.7	Increased by 15.9 Percentage points
Downhole Operation	5,644,308	5,103,037	9.6	34.7	12.9	Increased by 17.5 Percentage points
Engineering and construction	13,132,857	11,959,947	8.9	10.8	-4.3	Increased by 14.4 Percentage points
Other	1,499,026	1,545,115	-3.1	30.8	29.8	Increased by 0.8 Percentage points
Total	57,297,141	52,615,885	8.2	20.1	4.1	Increased by 14.2 Percentage points

b. Operating income by regions

Region	Operating income for 2018	Operating cost for 2018	Gross profit margin	Increase or decrease in operating income as compared with last year	Increase or decrease in operating cost as compared with last year	Gross profit margin compared with last year
	RMB'000	RMB'000	(%)	(%)	(%)	
Mainland China	44,185,829	41,177,951	6.8	27.4	5.9	Increased by 17.5 Percentage points
Hong Kong, Macau, Taiwan, and overseas	13,111,312	11,437,934	12.8	1.4	-5.3	Increased by 6.1 Percentage points

c. Cost analysis

Unit: RMB'000

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Product	Item of costs structure	Amount in 2018	Percentage of amount in 2018 in total cost	Amount in 2017	Percentage of amount in 2017 in total costs	Year-on-year change
		RMB'000	(%)	RMB'000	(%)	(%)
Geophysical Service	Raw materials	425,544	9.0	337,687	9.0	26.0
	Fuel and power	207,802	4.4	146,894	3.9	41.5
	Employees costs	1,394,043	29.4	1,314,818	35.0	6.0
	Depreciation and amortization	451,288	9.5	527,920	14.1	-14.5
	Subcontracting costs and outsourcing services expenditures	293,042	6.2	222,568	5.9	31.7
	Others	1,966,052	41.5	1,205,662	32.1	63.1
	Sub-total	4,737,771	100.0	3,755,549	100.0	26.2
Drilling Service	Raw materials	6,079,005	22.3	5,068,908	19.1	19.9
	Fuel and power	1,517,043	5.6	1,220,724	4.6	24.3
	Employees costs	7,375,133	27.0	7,344,133	27.7	0.4
	Depreciation and amortization	2,871,376	10.5	3,656,427	13.8	-21.5
	Subcontracting costs and outsourcing services expenditures	2,273,461	8.3	1,919,371	7.2	18.4
	Others	7,186,143	26.3	7,296,965	27.6	-1.5
	Sub-total	27,302,161	100.0	26,506,528	100.0	3.0
Logging/Mud logging Service	Raw materials	465,533	23.7	513,291	24.9	-9.3
	Fuel and power	25,468	1.3	23,999	1.2	6.1
	Employees costs	1,129,146	57.4	1,156,215	56.0	-2.3
	Depreciation and amortization	203,998	10.4	242,115	11.7	-15.7
	Subcontracting costs and outsourcing services expenditures	87,138	4.4	84,396	4.1	3.2
	Others	56,571	2.8	44,052	2.1	28.4
	Sub-total	1,967,854	100.0	2,064,068	100.0	-4.7
Downhole operation Service	Raw materials	1,482,137	29.0	1,270,507	28.1	16.7
	Fuel and power	255,298	5.0	203,958	4.5	25.2
	Employees costs	1,247,105	24.4	1,120,241	24.8	11.3
	Depreciation and amortization	517,635	10.1	556,018	12.3	-6.9
	Subcontracting costs and outsourcing services expenditures	909,173	17.8	732,327	16.2	24.1
	Others	691,689	13.7	638,553	14.1	8.3
	Sub-total	5,103,037	100.0	4,521,604	100.0	12.9
Engineering and Construction Service	Raw materials	2,599,671	21.7	2,125,633	17.2	22.3
	Fuel and power	138,947	1.2	131,536	1.1	5.6
	Employees costs	2,164,998	18.1	2,159,598	17.4	0.3
	Depreciation and amortization	204,568	1.7	229,116	1.8	-10.7
	Subcontracting costs and outsourcing services expenditures	1,355,304	11.3	1,253,098	10.1	8.2
	Others	5,496,459	46.0	6,493,711	52.4	-15.4
	Sub-total	11,959,947	100.0	12,392,692	100.0	-3.5

Section V Report of the Board of Directors

d. Information about major customer and major suppliers

During the reporting period, the aggregate operating revenue from the top five largest customers was RMB 47,381,157,000 accounting for 81.1% of the Company's total operating revenue in 2018. Among the operating revenue form the top five largest customers, sales amount of related parties was RMB 36,885,294,000 accounting for 63.1% of the Company's total operating revenue in 2018.

The operating revenue of the top five customers in 2018:

	Amount	Percentage to operating income
Name of customer	(RMB'000)	(%)
CPC and its subsidiaries	36,885,294	63.1
China National Petroleum Corporation	4,027,689	6.9
SAUDI ARABIAN OIL COMPANY	3,179,949	5.4
KUWAIT OIL COMPANY	2,145,864	3.7
China National Offshore Oil Corporation	1,142,361	2.0
Total	47,381,157	81.1

During the reporting period, the aggregate purchase amount from the top five largest suppliers was RMB 11,574,866,000 accounting for 34.1% of the Company's total purchase amounts. Among the purchase amount form the top five largest suppliers, purchase amount of related parties was RMB 11,129,935,000 accounting for 32.8% of the Company's total purchase amount in 2018. Purchase amount from the largest supplier accounted for 28.9% of the total purchase amount of the Company. The largest supplier was China Petrochemical Corporation and its subsidiaries.

During the reporting period, except the disclosure information about the connected transactions with controlling shareholders and its subsidiaries in the part of "Information on connected transactions" in "Significant Events", the company's directors, supervisors and its close contacts or any other shareholders holding over 5% of the company's shares are not found having any equity of the above main customers and suppliers.

C. Expense

	2018	2017	Year-on-year change	
Item	RMB'000	RMB'000	(%)	Reason for change
General and administrative expenses	3,239,084	3,619,364	-10.5	Mainly caused by the decrease of integrated service fee
Selling and distribution expenses	64,249	59,615	7.8	Mainly caused by the increase of market development
Financial cost	441,190	580,051	-23.9	Mainly caused by the increase of net exchange gain
Impairment losses	_	2,735,857	Not Applicable	Mainly caused by reduction of overcapacity and team, and the surplus equipment of provision for impairment of assets in 2017.
Income tax expenses	373,581	239,034	56.3	Mainly caused by increase of the profit in 2018

D. Statement of research and development expenditure

	Unit: RMB'000
Expenditure research and development expenditure for 2018	928,586
Capitalized research and development expenditure for 2018	19,105
Total research and development expenditure for 2018	947,691
Percentage of total research and development expenditure in operating income (%)	1.6
Number of research and development Personnel	3,002
Percentage of R&D personnel number in the total personnel number of the company (%)	4.0
The proportion of R&D investment of capital (%)	2.0

In 2018, the Company's research and development expenditure was RMB 947,691,000, representing an increase of 83.1 percent as compared with RMB 517,599,000 in last year. It was mainly caused by the year-on-year increase of R&D expenditure.

E. Changes in cash flow statement items

Unit: RMB'000

Item	2018	2017	Increased/ decreased by	Change	Reason for change
				(%)	
Net cash inflow from operating activities ("-" for outflow)	-2,939,789	404,761	Outflow increased by 3,344,550	Outflow increased by 826.3%	Increase of account payable this year
Net cash inflow from investing activities ("-" for outflow)	-1,174,471	-1,011,944	Outflow increased by 162,527	Outflow increased by 16.1%	Increase of investment on fixed assets this year
Net cash inflow from financing activities	3,618,785	748,034	Inflow increased by 2,870,751	Inflow increased by 383.8%	Received the proceeds of RMB7.64 billion from non-public placement.

(2). Explanations of significant changes in profit led by the Non-core business

 \square Applicable $\sqrt{\text{Not Applicable}}$

(3). Statement of assets and liabilities analysis

A. Assets and liabilities

	Amount at 31 December, 2018	Percentage of amount at 31 December, 2018 in total assets	Amount at 31 December, 2017	Percentage of amount at 31 December, 2017 in total assets	Changes from the end of the preceding year to the end of this year
Item	RMB'000	(%)	RMB'000	(%)	(%)
Cash at bank and on hand	2,203,441	3.6	2,547,975	4.1	-13.5
Notes receivables and Accounts receivable	16,111,200	26.5	18,191,357	29.3	-11.4
Inventories	1,411,638	2.3	1,362,582	2.2	3.6
Contract assets	8,871,704	14.6	6,472,907	10.4	37.1
Other current assets	1,218,035	2.0	885,473	1.4	37.6
Long-term equity investments	232,823	0.4	207,046	0.3	12.4
Fixed assets	23,842,767	39.1	25,662,256	41.3	-7.1
Construction in progress	365,414	0.6	237,638	0.4	53.8
Intangible assets	237,275	0.4	283,161	0.5	-16.2
Long-term deferred and prepaid expenses	3,681,168	6.0	3,080,301	5.0	19.5
Short-term borrowings	17,606,082	28.9	17,510,830	28.2	0.5
Notes Payable and Accounts Payable	27,059,504	44.4	29,546,017	47.6	-8.4
Contract liabilities	4,390,293	7.2	8,561,811	13.8	-48.7
Other payables	2,186,009	3.6	6,431,966	10.4	-66.0
Non-current liabilities due within one year	156,559	0.3	28,844	0.0	442.8
Long-term borrowings	536,291	0.9	455,826	0.7	17.7
Deferred income	139,594	0.2	136,312	0.2	2.4

B. Limitation of main assets by the end of the reporting period

 $\sqrt{\text{Applicable}}$ $\square \text{Not Applicable}$

On 31 December 2018, the Company's funds with restricted use such as margin deposit, etc. was RMB 29,861,000 (On 31 December 2017: RMB14,538,000).

C. Note:

- 1. Contract assets increased by RMB 2,398,797,000 compared with that of the previous year, mainly due to the settlement progress of the newly started projects in this year lagged behind the construction progress confirmed by the owners.
- 2. Other current assets increased by RMB 332,562,000 compared with that of the previous year, mainly caused by increase of the VAT to be deduct.
- 3. Construction in progress increased by RMB 127,776,000 compared with that of the previous year, mainly because some of the new projects in 2018 have not completed.
- 4. Contract liabilities decreased by RMB 4,171,518,000 compared with that of the previous year, mainly because with the completion of some projects in 2018, part of contract liabilities were converted into operating revenue.
- 5. Other payable decreased by RMB 4,245,957,000 compared with that of the previous year, mainly due to repayment of other payables in 2018.
- 6. Non-current liabilities due within one year increased by RMB 127,715,000 compared with that of the previous year, mainly due to the reclassification of payables of financial leasing

(4). Analysis of the industry operation information

A. Market of crude oil and natural gas

In 2018, the international crude oil price fluctuated sharply. In the first half of the year, oil prices surged and fell rapidly after October. However, the average annual price still maintained a high growth rate. The average annual price of Brent crude oil in North Sea was 71.3 USD/bbl, increased by 31.8% compared with 54.1 USD/bbl in 2017.

In 2018, the decline in China's crude oil output was initially contained. According to the National Bureau of Statistics, China's crude oil output in 2018 was about 189 million tonnes, down 1.3% year-on-year. The decline was 2.7 percentage points lower than the previous year; China's oil consumption continued to remain at a low rate of growth, the apparent consumption of oil was about 625 million tonnes, a year-on-year increase of 7.0%.

In 2018, in China's energy structure, the process of low-carbonization accelerated, and with the increase of corporate environmental protection pressure, domestic demand for natural gas consumption increased rapidly. According to the National Development and Reform Commission data, domestic natural gas production in 2018 was 161 billion cubic meters, up 7.5% year-on-year; the apparent consumption of natural gas was about 280.3 billion cubic meters, an increase of 18.1% year-on-year, and the growth rate increased by 2.8 percentage points year-on-year; The domestic natural gas demand gap increased, and natural gas imports reached a record high. The annual import of natural gas was 90.39 million tonnes, a year-on-year increase of 31.9%.

B. The expenditure in exploration and exploitation of domestic and overseas companies

Affected by the overall rise in international crude oil prices, China's three major oil companies increased their investment in upstream exploration and development in 2018, and increased the capacity of crude oil and natural gas support. For example, the capital expenditures for upstream exploration and development of Sinopec increased by 34.8% compared with 2017 respectively. And affected by the increase in capital expenditures of domestic and foreign oil companies, the company's workload in 2018 has increased significantly, of which the drilling business workload increased by 18.1%.

C. Business information in oilfield service industry

Affected by domestic and foreign oil companies increasing upstream capital expenditures for exploration and development, the operating environment of the global oilfield service industry continued to improve in 2018, and the operating results of oil service companies continued to improve. For example, Schlumberger and Halliburton's operating income in 2018 was USD32.815 billion USD and USD23.995 billion, up 7.80% and 16.37% year-on-year respectively; Net profit in 2018 was USD2.138 billion and USD1.656 billion, while in 2017 Schlumberger and Shalliburton had net losses of USD1.505 billion and USD463 million respectively.

(5). Analysis of investments

A. Significant equity investment

During the reporting period, no significant equity investment items of the Company occurred.

B. Significant non-equity investment

 $\label{eq:def:During the reporting period, no significant non-equity investment items of the Company occurred.$

C. Information of financial assets measured at fair value

(6). Sales of major assets and equity

During the reporting period, no sales of major assets and equity of the Company occurred.

(7). Information on the Company's subsidiaries and shareholding companies

Name of company	Registered capital	Shareholding percentage	Amount of total assets	Amount of total liabilities	Amount of total net assets	Amount of net profit	Main Business
		%	RMB'000	RMB'000	RMB'000	RMB'000	
SOSC	RMB 4,000,000,000	100	60,846,036	59,455,629	1,390,407	111,970	Petroleum engineering technical service
Sinopec Shengli Oil Engineering Company Limited *	RMB 700,000,000	100	11,592,147	11,790,571	-198,424	-5,345	Petroleum engineering technical service
Sinopec Zhongyuan Oil Engineering Company Limited *	RMB 450,000,000	100	10,862,363	10,909,592	-47,229	2,156	Petroleum engineering technical service
Sinopec Jianghan Oil Engineering Company Limited *	RMB 250,000,000	100	4,326,904	3,259,188	1,067,716	102,175	Petroleum engineering technical service
Sinopec East China Oil Engineering Company Limited *	RMB 860,000,000	100	3,405,519	3,507,142	-101,623	-210,105	Petroleum engineering technical service
Sinopec North China Oil Engineering Company Limited *	RMB 890,000,000	100	4,022,107	2,012,311	2,009,796	25,199	Petroleum engineering technical service
Sinopec Southwest Oil Engineering Company Limited *	RMB 300,000,000	100	5,114,732	1,787,447	3,327,285	107,540	Petroleum engineering technical service
Sinopec Oil Engineering Geophysical Company Limited *	RMB 300,000,000	100	3,150,986	2,920,577	230,409	137,721	Geophysical exploration
Sinopec Oil Engineering and Construction Corporation *	RMB 500,000,000	100	23,416,550	23,363,888	52,662	-44,925	Engineering and Construction
Sinopec Shanghai Offshore Oil Engineering Company Limited *	RMB 2,000,000,000	100	5,262,615	1,591,034	3,671,581	-94,372	Offshore oil engineering technical service
Sinopec International Petroleum Service Corporation *	RMB 700,000,000	100	4,209,393	3,186,635	1,022,758	72,289	Petroleum engineering technical service

Name of company	Revenue	Operating profit
	RMB'000	
SOSC	58,409,078	822,192
Sinopec Shengli Oil Engineering Company Limited*	12,667,081	9,968
Sinopec Zhongyuan Oil Engineering Company Limited *	10,299,101	147,700
Sinopec Jianghan Oil Engineering Company Limited *	4,385,909	132,130
Sinopec East China Oil Engineering Company Limited *	2,333,747	-227,526
Sinopec North China Oil Engineering Company Limited*	3,932,707	75,316
Sinopec Southwest Oil Engineering Company Limited *	4,074,502	107,565
Sinopec Oil Engineering Geophysical Company Limited *	4,988,015	164,846
Sinopec Oil Engineering and Construction Corporation *	13,695,400	382,784
Sinopec Shanghai Offshore Oil Engineering Company Limited *	1,278,415	-105,400
Sinopec International Petroleum Service Corporation *	1,349,463	115,172

 $^{^{\}star}$ Note: The Company holds shares through SOSC.

Section V Report of the Board of Directors

Explanation for the operating situation of Jianghan Oil Engineering Company Limited

In 2018, the net profit of Sinopec Jianghan Oil Engineering Company Limited was RMB 102 million, an increase of RMB 663 million from the previous year. The main reasons were: 1) In 2017, there were RMB 267 million of provision for impairment of surplus equipment assets; 2) Affected by the rebound in international crude oil prices and the increase in workload, the income in 2018 increased by 27.3% compared with RMB 3.446 billion of last year, which brought the dilution on the fixed cost and made it turn loss into profit this year.

Explanation for the operating situation of Sinopec East China Oil Engineering Company Limited

In 2018, the net loss of Sinopec East China Oil Engineering Company Limited was RMB 210 million, reducing losses by RMB 732 million comparing with the previous year. The main reasons were: 1) In 2017, the provision for impairment of surplus equipment assets was RMB 152 million; 2) Affected by the rebound in international crude oil prices and the increase in workload, the income in 2018 increased by 11.9% from the previous year's RMB 2.085 billion, and the year-on-year loss was reduced. However, the gap between the total income and the historical best level was still large, and the dilution effect of fixed cost was limited, resulting in current operating losses.

Explanation for the operating situation of Sinopec Oil Engineering Geophysical Company Limited

In 2018, the net profit of Sinopec Oil Engineering Geophysical Company Limited was RMB 138 million, increased by RMB 590 million from the previous year. Mainly due to the rebound in international crude oil prices and the increase in workload, the income in 2018 increased by 28.3% compared with RMB 3.886 billion of last year, which brought the dilution on the fixed cost and made it turn loss into profit this year.

Explanation for the operating situation of Sinopec Southwest Oil Engineering Company Limited

In 2018, the net profit of Sinopec Southwest Oil Engineering Company Limited was RMB 108 million, increased by RMB 346 million. The main reasons were: 1) In 2017, there were RMB 182 million of provision for impairment of surplus equipment assets; 2) Affected by the rebound in international crude oil prices and the increase in workload in 2018, the income increased by 10.5% compared with RMB 3.688 billion of last year, which brought the dilution on the fixed cost and made it turn loss into profit this year.

3. Discussion and analysis on the Company's business in the future

(1). Competitive Structure and Development Trend

Looking forward to 2019, the world economy will continue to maintain moderate growth, and China's economy will continue to develop steadily. International oil prices will continue to fluctuate in a wide range. The total capital expenditure of global oil and gas exploration and development will continue to grow. Especially driven by the national strategy of energy security, the three major oil companies in China are expected to continue to increase investment in upstream exploration and development. At the same time, with the rapid growth of China's natural gas demand and the vigorous promotion of the construction of natural gas production, supply and storage systems, investment into China's natural gas field will be further increased. As a result of the aforementioned conditions, the oilfield service industry will continue to recover and grow, and the operating environment will continue to improve.

(2). Business Plan in 2019

In 2019, the Company will seize the favorable opportunities brought by the continuously increasing demand of oilfield service market, and leverage its comprehensive oil and gas service capabilities and unique technological advantages to support the exploration and development of Sinopec Group and expand external markets in order to achieve profit growth and improve efficiency. It plans to secure RMB61.7 billion worth newly-signed contracts for the year, in which RMB34.9 billion will be from Sinopec's internal market, RMB 11.8 billion from domestic external market, and RMB 15.0 billion from overseas market. The Company will continue to deepen reforms, optimize its organizational structure, team structure and business structure, and enhance its competitiveness. It will continue to promote the upward and downward extension of the industry chain, expand the cooperative development of difficult-to-produce reserves and comprehensive reservoir services, accelerate the breakthrough in technologies such as drilling rotary steering system, high-temperature and high-pressure MWD, and high-end logging/mud logging instruments, so as to cultivate high-end products and develop emerging industries. It will pay close attention to cost control, vigorously tap potential and increase efficiency, continue to strengthen scientific and technological research, promote oilfield service business to speed up efficiency, enhance the ability to innovate and to improve efficiency, striving to achieve better business performance to lay a decisive foundation for the Company's overall sustainable development. The Company puts emphasis on the following aspects:

A. Geophysical service

In 2019, the Company will increase the introduction and promotion of some technologies such as single-point high-density seismic acquisition, vibroseis acquisition in large desert areas, high-precision seismic acquisition in shallow seas, and downhole optical fiber sensing, and give full scope to the advantages of technology in promoting the oil and gas exploration. Moreover, SSC will continue to efficiently serve Sinopec Group in its exploration tasks, comprehensively carry out oil exploration in Tarim Basin, Faulted basin in East China and Junggar Basin, and natural gas exploration in Sichuan Basin and Ordos Basin. In addition, SSC will continue to foster integrated service capabilities of acquisition, processing and interpretation, deepen strategic cooperation with key customers such as China Geological Survey and China Academy of Geological Sciences, so as to better manage foreign projects such as those in Algeria, Nigeria, Central Africa and Mexico, timely commence the Saudi S84 project and operate it efficiently. Furthermore, the Company plans to complete annual acquisition of 2D seismic data reaching 21,000 kilometers, which is a 30.6% decrease from 2018, and 3D seismic data of 17,310 sq. kilometer, which is a 28.8% increase from 2018.

B. Drilling Service

In 2019, the Company will closely focus on the development requirements of "maintaining stable production of crude oil and achieving rapid growth in natural gas" of Sinopec Group, strengthen service concepts, improve service quality and efficiency, consolidate and improve internal market share, and efficiently serve the construction projects of key production capacity in areas including Weirong, western Sichuan, Dongsheng and Haiyu and effectively promote the development of projects including Shunbei ultra-deep oil and gas fields, Southwest natural gas, and Ordos tight oil and gas. It will also pool superior resources to go all out to explore the Chinese oil market, and take the Xinjiang, Sichuan and Chongqing, and Northern Shaanxi markets of CNPC as key domestic external markets, to facilitate further development of the offshore oil drilling platforms and ship markets of CNOOC, and to further consolidate its position in traditional markets such as Yanchang Oilfield and China Geological Survey, continuously expanding the scope of market services with quality services. It will make further use of the advantages of the Company's technology integration, expand the domestic shale gas market, and explore a low-cost cooperation model for geothermal and coalbed methane markets. The Company plans to complete drilling footage of 9,200 kilometers in 2019, which is a 5.9% increase from the actual footage completed in 2018.

C. Logging/Mud logging service

In 2019, the Company will continue to focus on exploration and development demands, and consolidate and expand its share in Sinopec Group's internal market while actively increasing income from external market. For Sinopec Group's internal market, the Company will ensure the implementation of key district projects including Shunbei and Sichuan. For external market, it will continue to optimize the layout, and put emphasis on market expansion in Weiyuan, Ordos, Shaanxi Yanchang and Middle East markets of CNPC. It will continue to optimize the allocation of internal resources such as crews, equipment and staff as well as improve and strengthen its business in logging/mud logging service. The Company plans to complete logging footage of 235,700 kilometers in 2019, which is a 3.0% decrease from the actual footage completed in 2018, in addition to completing mud logging footage of 7,850 kilometers, which is a 5.1% increase from the actually completed footage in 2018.

D. Downhole operation service

In 2019, the Company will constantly refine the construction technology system of special downhole operation, continuously extend the industry chain upwards and downwards in efforts to enhance its support capability in exploration and development service, with a focus to ensure the exploration and development and the increase in reserves and production of the Fuling shale gas field in the Sichuan Basin and the Weirong shale gas field, Ordos tight oil and gas, Tarim super deep oil and gas reserves, and offshore oil and gas fields. Moreover, SSC will continue to promote the cooperation with Sinopec Group to develop the difficult-to-produce reserves to further expand the scale. It will also refine and strengthen its high-end businesses in high pressure operation and intelligent coiled tubing; and continue to develop new businesses such as non-hydraulic fracturing and intelligent well completion. The Company will continue to expand the shale gas market of CNPC, and continue to expand the workover markets in the Middle East, Central Asia and other regions based on the Kuwaiti workover project, so as to improve its high-end business service capabilities, and increase its market share. In 2019, the Company plans to complete downhole operation service for 6,686 wells, which is a 12.3% increase from the actual completed number in 2018.

E. Engineering and construction service

In 2019, the Company will focus on enhancing project management, comprehensively control project risks and enhance the profitability of projects. It will make good preparation for the construction of some key projects, such as Qianjiang to Shaoguan gas transmission pipeline construction project, Wei-Rong shale gas project, Ordos-Anping-Cangzhou natural gas pipeline, and Rizhao-Puyang-Luoyang crude oil pipeline. The Company will also consolidate and increase the market share of Sinopec Group, actively participate in pipeline construction of Shunbei and Weirong, and continuously increase the market share of long-distance pipelines; set up pipeline emergency rescue teams, pay close attention to the national oil and gas pipeline market, and closely keep abreast of the key gas, water conservancy, municipal projects of central enterprises and local government. In the international market, the Company will strengthen key project development, focusing on Saudi Arabia, Kenya, Thailand and other advantageous markets, so as to continuously optimize the overseas market layout. Moreover, it will spare no effort to expand new businesses and new markets such as solid waste, hazardous waste disposal, and soil remediation. In 2019, the company plans to secure RMB15.0 billion worth of new contracts and complete RMB13.5 billion worth of contracts.

F. International business

In 2019, in terms of international business, the Company will focus on strengthening unified management, optimizing market layout, efficiently integrating resources, accelerating transformation and upgrading, and strictly preventing and controlling risks, striving to achieve sustainable and high-quality development. In efforts to make the drilling business better and bigger, the Company will enter into the clean energy fields such as natural gas wells in Saudi Arabia, develop deep wells drilling and repairing business in Kuwait, expand technical services business such as drilling fluids and directional wells in Ecuador and Algeria and actively explore markets in other countries like Ukraine and Iraq. The Company will focus on optimizing and centralizing the geophysical service business. It will integrate high-quality resources to develop regional markets in Africa, the Middle East, Latin America, and Central and South Asia, especially develop the Algerian market, and actively track markets such as the UAE, Oman, Nigeria, and Bangladesh. The Company will make progress in stability in the project construction business, through focusing on tracking Saudi Arabia, Uganda, Kenya, Thailand and other markets. In addition, the Company will steadily expand its integrated reservoir services business and summarize and promote the experience of the EBANO project in Mexico. The overseas equity oil and increased oil production will reach 184,000 tonnes. In 2019, the Company plans to secure USD2.2 billion worth of new contracts and complete USD1.9 billion worth of contracts.

G. Technology development

In 2019, the Company will continue to innovate scientific research management system and operational mechanism, optimize top-level design, and integrate superior resources to improve the quality and efficiency of innovation. The Company will focus on the three tasks of exploring developing, and utilizing reserves, improving oil and gas production and recovery efficiency, conducting cost control and speed improvement, increase scientific research and technology promotion and application, and ensure quality services for major projects in Shunbei construction area, Sichuan and Chongqing construction area and the North Hubei construction area. Furthermore, the Company will continuously improve the seismic exploration technologies such as high-density, complex surface and vibroseis, make breakthroughs and optimize the key technologies such as deep shale gas, atmospheric shale gas and deep oil and gas reservoirs, improve key technologies such as tight oil and gas reservoirs, shallow sea oil and gas reservoirs, and old oil fields in the east, and increase the pilot test and promotion of mature processing technology, and strengthen the safe, rapid and effective construction capacity. Moreover, the Company will make efforts to extend industry chain and provide technical support for emerging business development, and foster new economic growth points. It will also promote the upgrade and transformation of equipment to be more automatic, information-based and intelligent to improve the operational efficiency.

H. Internal reform and management

In 2019, the Company will continue to deepen reforms and promote the sustainable and high-quality development of the Company. The Company will optimize the overall utilization of internal resources, promote financial, personnel, information sharing services, streamline the organizational structuring, and promote the reduction of business units and departments to reduce operating costs. The Company will deepen the professional development of auxiliary business, improve the contracting operation mechanism, and promote the market-oriented operation mechanism of auxiliary business. It will increase the performance appraisal, and make substantial breakthroughs in the reforms of the three systems of personnel, labor, and distribution to stimulate business vitality. It will also make joint efforts to reduce cost and fees and deepen the cost goal management of all staff by enhancing the cost control in all factors and the entire process. In 2019, the Company plans to reduce cost and fees of RMB 600 million.

I. Capital Expenditures

In 2019, the Company plans to arrange a capital expenditure of RMB2.5 billion, including RMB2.19 billion for non-installed equipment investment, RMB30 million for engineering projects, RMB30 million for computer information projects, RMB90 million for safety and environmental protection projects, and RMB160 million for general technical measures. The capital expenditure is mainly used for the rig's electrification, network automation, automatic transformation that can improve operational speed and efficiency, updating electric fracturing crowbars and fracturing trucks, purchasing high-precision and high-density geophysical equipment, upgrading the construction equipment in overseas markets, managing safety hazards, environmental protection projects, and strictly controlling non-production or non-main business projects, thereby enhancing the Company's technical service capabilities, developing core competitiveness, and vigorously improving the efficiency of investment.

(3). Potential risks

In the course of its production and operation, the Company actively took various measures to avoid and mitigate various types of risks. However, in practice, it may not be possible to prevent all risks and uncertainties completely.

Section V Report of the Board of Directors

A. Risk in fluctuation of international crude oil prices

International crude oil prices are affected by various factors including global and regional political and economic changes, supply and demand conditions, and emergencies and disputes with international influence. After the volatility in 2018, the international oil price has rebounded currently, but there are still many uncertain factors such as the implementation of OPEC production reduction agreement. It is expected that international oil prices will still possibly fluctuate in a wide range in 2019. The rise and fall of international oil prices will directly relate to the revenue of oil companies, which in turn affects the capital expenditure of upstream exploration and development directly affects the number of orders of the oil service companies, which in turn affects the profitability of the oil service companies.

B. Market competition risk

In recent years, although the bidding activities of the oilfield service industry have been active with the rebound of international oil prices, the competition pattern of the entire market has not changed significantly. Coupled with political, economic and other factors, the international oil price trend remains uncertain. There are uncertainties and there may be some countries or regions that protect the local oilfield service industry market. The market competition is still fierce. The oilfield service industry still faces greater operational pressure. The market competition risk is still the risk that the company needs to face.

C. Environmental damage, hidden hazards and force majeure risk

Oilfield services involve certain risks, which may cause unexpected or dangerous incidents such as personal injury or death, property damage, environmental damage and disruption to operations, etc. In light of tougher requirements in environmental protection, the Company may cause environmental pollution caused by accidents in its operation, stand trial and pay compensation. As its operation expands, hazard risks faced by the Company also increase accordingly. Further, new regulations promulgated by the state in recent years set out higher standards for production safety. In addition, natural disasters such as earthquake and typhoon as well as emergency public health events may cause losses to properties and personnel of the Company, and may affect the normal operations of the Company. The Company has implemented a strict HSE management system and used its best endeavors to avoid the occurrence of accidents. However, the Company cannot completely avoid potential financial losses caused by such contingent incidents.

D. Overseas operation risk

The company has business in many foreign countries who will have political, legal, supervision and management influences on the business. The conditions there are unstable and quite different with those in developed countries. There may also be risks of political volatility, religious issues, public security, unstable tax policies, import and export restrictions, and regulatory uncertainties, etc.

E. Exchange rate risk

At present, the implementation of the RMB exchange was based on market supply & demand, regulated and managed by floating exchange rate system with the reference to a basket of currency. As the Company uses foreign currency to pay international business and signs the contract mainly in US dollar, the fluctuation in exchange rates of US dollar or other currency to RMB will affect the revenue of the Company.

4. Assets, liabilities, equity and cash flow (extracted from the financial statements prepared in accordance with IFRS)

Funds of the Group comes mainly form operation and borrowings of short or long term. Expenditure spends mainly on operation, CAPEX and repayment of loan of short or long term.

(1). Assets, liabilities and equity analysis

	As at 31 December 2018	As at 31 December 2017 (Restated)	The rate of change
	RMB'000	RMB'000	%
Total assets	60,904,715	62,089,315	-1.9
Current assets	32,042,484	31,905,421	0.4
Non-current assets	28,862,231	30,183,894	-4.4
Total liabilities	55,126,305	64,190,633	-14.1
Current liabilities	52,990,402	63,521,579	-16.6
Non-current liabilities	2,135,903	669,054	219.2
Total equity attributable to owners of the Company	5,778,410	-2,099,946	Not Applicable

Total assets were RMB 60,904,715,000, representing a decrease of RMB 1,184,600,000 from that at the end of 2017, of which: Current assets were RMB 32,042,484,000, representing an increase of RMB 137,063,000 from that at the end of 2017. The increase was mainly due to comprehensive impact of the reclassification of the items in consolidated statement of financial position in the implementation of the new accounting standards in 2018, resulting in an increase in contract assets of RMB 9,066,019,000, and a decrease of RMB 6,624,302,000 in amounts due from customers for contract works, and a decrease of RMB 2,080,157,000 in notes and trade receivables. Non-current assets were RMB 28,862,231,000, representing a decrease of RMB 1,321,663,000 from that at the end of 2017, which was mainly due to a decrease of RMB 1,692,078,000 in property, plant and equipment and an increase of RMB 588,709,000 in other non-current assets.

Total liabilities were RMB 55,126,305,000, representing a decrease of RMB 9,064,328,000 from that at the end of 2017, of which: Current liabilities were RMB 52,990,402,000, an decrease of RMB 10,531,177,000 as compared with the end of 2017, which was mainly due to comprehensive impact of a decrease of RMB 2,486,513,000 in notes and trade payables, the implementation of the new accounting standards for the reclassification of items in consolidated statement of financial position resulted in an increase amount of RMB 4,390,293,000 in contract liabilities and a decrease of RMB 6,788,227,000 of amounts due to customer for contract works. Non-current liabilities were RMB 2,135,903,000, an increase of RMB 1,466,849,000 compared with the end of 2017, which was mainly due to an increase of RMB 869,046,000 in long-term borrowings and an increase of RMB 595,742,000 in provisions.

Total equity attributable to owners of the Company was RMB 5,778,410,000, an increase of RMB 7,878,356,000 as compared with the end of 2017, mainly due to the completion of the non-public placement of A shares and H shares in January 2018, the corresponding increase in share capital and reserves totalled RMB 7,637,715,000, and the profit attributable to equity holders of the Company in 2018 was RMB 240,188,000.

As at 31 December 2018, the ratio of total liabilities to total assets was 90.5%, and 103.4% as at 31 December 2017.

(2). Cash flow analysis

The main items of cash flow of the Group in 2018 and 2017 showed in the following table.

Main items of cash flow	2018	2017
	RMB'000	RMB'000 (Restated)
Net cash(outflow)/inflow from operating activities	-2,939,789	404,761
Net cash outflow from investing activities	-1,174,471	-1,011,944
Net cash inflow from financing activities	3,618,785	748,034
(Decrease)/Increase in cash and cash equivalents	-495,475	140,851
Effect of exchange rate changes	135,618	-79,460
Cash and cash equivalents at the beginning of the year	2,533,437	2,472,046
Cash and cash equivalents at the end of the year	2,173,580	2,533,437

During the year ended 31 December 2018, the Group's net cash outflow from operating activities was RMB 2,939,789,000, representing an increase of cash outflow by RMB 3,344,550,000 as compared with last year. This was mainly due to increase in cash outflow to settle notes and trade payables in 2018 by RMB 2,293,211,000 as compared with last year.

During the year ended 31 December 2018, the Group's net cash outflow from investing activities was RMB 1,174,471,000, an increase of cash outflow by RMB 162,527,000 as compared with last year. It was mainly due to the increase in cash outflows of RMB 98,033,000 for additions of property, plant and equipment in 2018.

During the year ended 31 December 2018, the Group's net cash inflow from financing activities was RMB 3,618,785,000, presenting an increase of cash inflow by RMB 2,870,751,000 compared with last year. It was mainly due to the completion of the non-public placement of A shares and H shares in January 2018 and the company received net proceeds of RMB 7,637,715,000.

(3). Affiliated company borrowings

As at 31 December 2018, the Group's affiliated borrowings were RMB 18,142,373,000 (31 December 2017: RMB17,966,656,000). These borrowings included the short-term borrowings in RMB17,606,082,000, and the long-term borrowings due more than one year of RMB536,291,000; the fixed-rate loans were RMB14,600,000,000 and the floating rate loans were RMB 3,542,373,000. As at 31 December 2018, the balance of RMB borrowings accounted for approximately 80.5% and the balance of US dollar borrowings accounted for 19.5%.

(4). Gearing ratio

As at 31 December 2018, the gearing ratio of the Group was 74.6% (31 December 2017: 115.7%). The gearing ratio is computed as the following formula: (liability with interest – cash & cash equivalents)/(liability with interest – cash & cash equivalents)/(liability with interest – cash & cash equivalents)

5. The required information disclosure according to the Listing Rules of HKSE

(1). Assets pledge

For the year ended 31 December 2018, there was no pledge on the Group's assets.

(2). Foreign Exchange Risk Management

It is set forth in note 42 to the consolidated financial statements prepared in accordance with the IFRSs of the Annual Report.

(3). Financial Summary

A summary of the results and of the assets and liabilities of the Company for the last five financial years (extracted from the financial statements prepared in accordance with the IFRSs) is set forth in the section on "Company Profile and Principal Financial Indicators" of the Annual Report.

A summary of the results and of the assets and liabilities of the Company for the last three financial years (extracted from the financial statements prepared in accordance with the PRC Accounting Standards for Business Enterprises) is set forth in the section on "Company Profile and Principal Financial Indicators" of the Annual Report.

(4). Reserves

Changes in reserves of the Group and the Company during the reporting period are set forth in the consolidated statement of changes in equity on on page 157 and note 29(ii) to the consolidated financial statements prepared in accordance with the IFRSs of the Annual Report.

(5). Fixed assets

Movements in fixed assets of the Group, during the reporting period, are set forth in note 17 to the consolidated financial statements prepared in accordance with the IFRSs of the Annual Report.

(6). Bank loans and other borrowings

Details of bank loans and other borrowings of the Group as at 31 December 2018 are set out in note 35 to the consolidated financial statements prepared in accordance with the IFRSs of the Annual Report.

(7). Retirement plan

Particulars of the retirement plan operated by the Group are set forth in note 16 to the consolidated financial statements prepared in accordance with the IFRSs of the Annual Report.

(8). Income tax

As of the twelve months ended 31 December 2018, the Company's incoming tax was RMB 373,581,000 (2017: RMB 239,034,000). The main reason for the change of the tax amount is as following: 1) the existence of losses of the Group and its certain subsidiaries, 2) the expansion of the Group's overseas business, and the different calculation method of tax rate in different countries of the Group's overseas subsidiaries, and 3) the fluctuations of the revenue contributions of the Group's certain subsidiaries which enjoy preferential income tax rate. In addition, the Company has paid tax in the countries and regions where it has businesses.

(9). Capitalized Interest

For the year ended 31 December 2018, there was no capitalized interest of the Company.

(10). Environmental policy and performance of the Company

- (1) Led by construction of ecological civilization and green low-carbon strategy, the Company continue to carry out clean production, energy saving and emission reduction, carbon asset inventory and verification, and the energy efficiency doubling plan. The special action of blue sky environmental protection is launched and effectiveness of energy and environment work gets sustainable improvement.
- (2) In 2018, the Company was not in the list of heavily polluting enterprises released by relevant Chinese environmental department. There were no significant environmental or other social security issues about the Company.
- (3) The Company has established a comprehensive environmental impact assessment system to enhance environmental management and control. In 2018, the Company had no environmental pollution accident, nor had been sued, fined or sanctioned due to environmental pollution or violating environmental laws and regulations.

(11). Compliance with laws and regulations

- (1) For detailed information about laws and regulations of significant influence on the Company, please refer to the related disclosure in Appendix I "regulatory review" of the circular regarding the material asset restructuring dated 27 October 2014 on the website of Shanghai Stock Exchange www.sse.com.cn and website of Hong Kong Stock Exchange.
- (2) In 2018, the Company strictly abide by the laws and regulations which have significant influence on the Company and has not been sued, fined or sanctioned due to violating major laws and regulations.

(12). Important employees, customers and suppliers of the Company

- (1) There were no employees, customers and suppliers who has significant influence on the Company's prosperity.
- (2) For the information about the Company's major clients and suppliers, please refer to the section 5 "Information about major customer and major suppliers "under section 5 "Report of the Board of Directors" in this annual report.

(13). Management contract

During the reporting period, no contracts concerning management or administration of the whole or any substantial part of the business of the Company were entered into or existed.

(14). Pre-emptive rights

Neither the Company's "Articles" nor Chinese law stipulates the clause about preemption.

(15). Purchase, sale or redemption of the Company's listed securities

For the year ended 31 December 2018, neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of the their listed securities.

(16). Directors' interests in competing business

During the reporting period, there remains a few competing business between China Petrochemical Corproation (and its subsidiaries) and the Group. Certain directors of the Company hold positions in China Petrochemical Corporation and its subsidiaries. For details, please refer to the chapter Directors, Supervisors, Senior Management and Employees of this Annual Report.

(17). Directors' interests in contracts

No Director had a material interest, either directly or indirectly, in any contract of significance to the business of the Group to which the Company or any of its holding companies, subsidiaries or fellow subsidiaries was a party during the reporting period.

(18). Directors service contracts

No Director has a service contract with the Company or any of its subsidiaries which is not terminable by the Company within one year without payment of compensation, other than statutory compensation.

(19). Permitted indemnity provisions

During the reporting period, the Company has purchased liability insurance for all directors to minimize their risks arising from the performance of their duties. The permitted indemnity provisions are provided in such directors liability insurance in respect of potential liability and costs associated with legal proceedings that may be brought against such directors.

(20). Equity-linked agreement

For the year ended 31 December 2018, except for the Share Option Scheme disclosed under "Company's share option incentive plan and its respective effect" under "Significant Events" in this annual report. The Company has not entered into any equity-linked agreement.

On behalf of the Board

Liu Zhongyun

Chairman

Beijing, China

25 March 2019

1. Profit Distribution Plan for Ordinary Shares or Plan to Convert Surplus Reserves into Share Capital

(1). Formulation, implementation or adjustment of dividend policy

The Company's current dividend policy is as follows: during the reporting period, under the situation of: 1) Company's profit gaining, 2) the Company's positive accumulated undistributed profit and 3) the Company's cash flow meets the requirement of its normal operation and sustainable development, then the Company shall have the dividends and the annual dividends shall not less than 40% of the current net profit attributed to the Company shareholder's. The specific amount of dividends shall be proposed by the Board of Directors of the Company, and be finally approved by the General Meeting. During the process of enacting and executing of the Company's dividend policy, the independent directors fulfilled their responsibilities following the corresponding obligations, which fully reflected the opinions and demands of minority shareholders and protected their legitimate rights and interests.

Due to the negative of the Company's undistributed profits at the end of 2018, there were no cash dividends. But the Company would strictly implement its "Articles of Association', soon as the achievement of capability for cash dividends, the Company will perform decision-making process in accordance with relevant provisions and play the role of independent directors in order to safeguard the legitimate rights and interests of the minority shareholders.

(2). Profit distribution plan for Ordinary Shares or pre-arranged plan or plan or pre-arranged plan to convert surplus reserves into share capital in the previous three years (inclusive of the reporting period) (in accordance with "ASBE")

Years of distribution	Amount of dividend for every 10 shares	Amount of cash dividends	Numbers of shares converted for every 10 shares	financial statement	Percentage of the net profit attributable to the shareholders of the listed companies in the consolidated financial statement
	(RMB) (Tax included)	(RMB) (Tax included)	(share)	(RMB'000)	(%)
2018			_	142,056	
2017	_	_	_	-10,589,524	
2016	_	_	_	-16,114,763	_

(3). If the Company records profits and the parent company records a positive distribution of profit available to shareholders of ordinary shares during the Reporting Period but there is no proposal for cash dividend for ordinary shares, the Company shall disclose the reasons and the usage of the undistributed profits and the usage plan in details

 \square Applicable $\sqrt{}$ Not Applicable

2. Performance of undertaking

(1). The undertakings made by the Company, shareholders, the ultimate controllers, directors, supervisors, senior management and other associated parties during or until the reporting period.

						Whether there is a performance	Whether the undertaking has been
Background		Туре	Party	Undertaking	Date and Duration	period	strictly fulfilled timely
Undertaking regarding the Material Asse Reorganizatio	ets	Solve the horizontal competition	China Petrochemical Corporation	The Non-Competition undertaking 1. China Petrochemical Corporation issued the commitment that it will not engage with the Company's production and business activities in competition, and will ensure its subsidiaries not to engage with the Company's production and business activities in competition through its exercise of shareholder rights. 2. After the Material Assets Reorganisation, if Sinopec Star's new business opportunity has any direct or indirect competition with the Company's main business, priorities of the above-mentioned opportunity will be given to the Company. Within 5 years of the Material Assets Reorganisation, China Petrochemical Corporation will find the appropriate opportunity to sell the Petroleum Service Business belonged "Exploration IV" drilling rig of Sinopec Star to the Company, after the China Petrochemical Corporation's comprehensive consideration of the related factors of National Law, Industry Norms and International Political Economy. 3. After the Material Assets Reorganisation, if China Petrochemical Corporation and its subsidiaries' new business opportunity has any direct or indirect competition with the Company's main business, priorities of the above-mentioned opportunity will be given to the Company. If China Petrochemical Corporation intends to transfer, sell, lease, license or otherwise transfer or permit to use any of the above business which would result in the competition with the Company's main business, priorities of the above-mentioned opportunity will be given to the Company for avoiding the competition. 4. China Petrochemical Corporation consent that it will bear and pay damages to the listed companies caused by its violation of the commitment.	12 September 2014	Yes	During the reporting period, China Petrochemical Corporation did not act contrary to the undertaking.
Undertaking regarding the Material Asse Reorganizatio	ets	Solve the connected transaction	China Petrochemical Corporation	The undertaking of regulating the connected transaction: China Petrochemical Corporation and its other controlling companies will regulate its/their connected transactions with the Company. For the connected transactions with reasonable grounds, China Petrochemical Corporation an its controlling Company's will sign the standard agreement of connected transactions, and will fulfill the obligations of the program approval and information disclosure, in accordance with the provisions of relevant laws and regulations, and the Company's Articles of Association. The confirmation price related to the connected transaction will follow the principle of fair, reasonable and impartial.	undertaking: 12 September 2014 Duration:	Yes	During the reporting period, China Petrochemical Corporation did not act contrary to the undertaking.
Commitments regarding the Material Asse Reorganizatio	ets	Other	China Petrochemical Corporation	Issued "The commitment letter regarding to the regulating of connected transaction and maintaining the independence of the Company": 1. China Petrochemical Corporation and its controlling companies guarantee the maintaining of the separation from the Company's asset, personnel, finance, organization and business, strictly comply with the relevant provisions regarding to the listed Company's independency of CSRC. China Petrochemical Corporation will not utilize, control or violate the Standardized operation program of the listed company, not intervene the Company's operating decisions, and not jeopardize the legitimate rights and interests of the Company and its shareholders. 2. China Petrochemical Corporation and its controlling companies guarantee not to illegally use the funds of the Company violate the above commitment, it would undertake the law and compensate the losses caused to the Company.	Commitment: 12 September 2014 Duration:	Yes	During the reporting period, China Petrochemical Corporation did not act contrary to the promise.

(2). The existence of earnings forecast about the Company's assets and projects, and the reporting period is still in the earnings forecast period, the information about whether the Company's assets or projects achieved the original earning forecast and its reasons.

_ Adilieved _ Not Adilieved \ Not Applicat		Achieved		Not Achieved	V	Not Applicab
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3. Capital occupancy and progress on settlement of arrears

During the reporting period, there were no non-operating funds supplied by the Company to the controlling shareholders and its connected partners.

4. Explanation of the Company on non-standard opinion given by the auditors

	Applicable		Not applicable
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5. Analysis and explanation of the Company on the reasons and impact of the changes in accounting policy, accounting estimation and corrections to material accounting errors.

(1). Analysis and explanation of the Company on the reasons and impact of the changes in accounting policy and accounting estimation

1/	Applicable		Not applicable
V	Applicable	\Box	110t applicable

Changes in significant accounting policies of the Company are as follows:

A. Pursuant to the Accounting Standards for Business Enterprises No. 22 – Recognition and Measurement of Financial Instruments, the categories of financial assets have changed from the current "four categories" to "three categories", with a decrease in the categories of financial assets. The Group's financial assets are classified into three categories, namely financial assets measured at amortized cost, financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss. The determination of the provision for impairment of financial assets has been changed from the "incurred loss method" to the "expected loss method".

The above-mentioned changes in accounting policies require retrospective adjustments. The changes in accounting policies have no significant impact on the Company's financial position, operating results and cash flows.

B. Pursuant to the Accounting Standards for Business Enterprises No. 14 – Revenue, The Group adopts a unified revenue recognition model to calculate contract revenues with customers. The standard for the recognition of revenue has been changed from the current recognition of revenue "when the major risks and rewards of goods are transferred to customers" to recognition of revenue "when the customer obtains control of goods (or services)". On the contract commencement date, the Group assesses the contract, identifies each of the performance obligations in the contract, and ensures whether each of the performance obligations is to be fulfilled over time or at a certain point in time, and subsequently recognizes the revenue accordingly upon the complete fulfillment of each of the performance obligations.

The above changes in accounting policies require retrospective adjustment of the relevant projects in the opening financial statements. The changes in accounting policies have no significant impact on the Company's operating results and cash flows. The Group presents contract assets or contract liabilities in the balance sheet based on the relationship between the fulfillment of performance obligations and customer payment. The impact of applying the new revenue standard on items in the statements is as follows:

Unit: RMB'000

	Amount shown in previous years	Amount adjusted in accordance with the new standard	Restated amounts
Balance sheet:			
Inventory	7,835,489	-6,472,907	1,362,582
Contract assets	_	6,472,907	6,472,907
Prepayments	8,561,811	-8,561,811	_
Contract liabilities	_	8,561,811	8,561,811
Total:	16,397,300	_	16,397,300

C. Pursuant to the "Announcement of the revision of general enterprises financial statement format (Cai Kuai [2018] No. 15) of the Ministry of Finance, the Group revised the financial statement format. The revision of the financial statement format has no impact on the Group's total assets, total liabilities, net profit and other comprehensive income.

(2) .	Analysis and	d explanation	of the	Company	on the	reasons	and	impact	of	corrections	to	material
acc	ounting errors	6										

 \square Applicable $\sqrt{}$ Not applicable

6. The appointment and dismissal of the accounting firm

The present employment
Grant Thornton (special general partnership)
4
Grant Thornton Hong Kong Limited
RMB 9,800,000
4
Grant Thornton (special general partnership)
RMB2,000,000

Note: Grant Thornton Tax Services Limited provided the Company tax services on Hong Kong profit tax declaration in 2018, and the compensation was HKD 10,000.

The description for the appointment and dismissal of the auditor:

As proposed by the Company's audit committee, the Board has resolved to propose to appoint Grant Thornton (Special General Partnership) and Grant Thornton Hong Kong Limited as domestic and international auditor for the year 2018. The Proposal has been approved by the Shareholders at the annual general meeting of 2017 on 20 June 2018.

On 25 March 2019, the Board of the Company has resolved to propose to appoint Grant Thornton (Special General Partnership) and Grant Thornton Hong Kong Limited as domestic and international auditor of the Company for the year 2019. The proposal shall be subject to the approval by the shareholders at the Company's 2018 annual general meeting.

7. Situation about confronting the risk of the suspension of listing

(1). Reasons which re	esulted in the s	suspension (of listing
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Applicable	V	Not applicable

(2). Corresponding measures to be taken by the Company

 \square Applicable $\sqrt{}$ Not applicable

8. Situation about confronting the termination of listing and corresponding reasons

 \square Applicable $\sqrt{}$ Not applicable

9. Insolvency and restructuring

During the reporting period, the Company was not involved in any insolvency or restructuring matters.

10. Material litigation and arbitration

China National Chemical Engineering No. 11 Construction Co., Ltd. (中國化學工程第十一建設有限公司) (the "Applicant") entered into the "Works Contract for the Package C Construction of the Saudi Yanbu-Medina Phase III Pipeline Project (《沙特延布-麥迪那第三期管線項目C包施工工程合 同》)" (the "Construction Works Contract") with Sinopec International Petroleum Services Corporation (中國石化集團國際石油工程有限公司), a whollyowned subsidiary of the Company (the "International Services Corporation" or the "Respondent") on 16 August 2012. Pursuant to the Construction Works Contract, International Services Corporation subcontracted to the Applicant the construction of the "Package C Project" of the "Saudi Yanbu-Medina Phase III Pipeline Project". On 29 May 2018, the Applicant submitted to the China International Economic and Trade Arbitration Commission in Beijing the "Application for Arbitration" in respect of the contract dispute between the Applicant and the Respondent during the performance of the Construction Works Contract, requesting the Respondent to pay RMB 456,810,240 for the project fee and the accrued interest, RMB 145,968,410.5 for the loss due to stoppage of work and the accrued interest, RMB 38,018,100 for the advance payment under the letter of guarantee and the accrued interest, and RMB 500,000 for attorney fee and the arbitration fee for the case. The China International Economic and Trade Arbitration Commission accepted the case on 15 June 2018 and issued the "Notice of Arbitration for the Dispute Case of Project Contract No. P20180585 ([2018] China Trade Zhong Jing Zi No. 048223)".

As the case is still under trial, it is currently impossible to determine its impact on the current or future profits of the Company. The Company will make active response and safeguard the legitimate rights and interests of the Company.

For details, please refer to the "Announcement on a wholly-owned subsidiary involving arbitration" (P. 2018-049) disclosed at "China Securities Journal", "Shanghai Securities News", "Securities Times", www.sse.com.cn on 26 June 2018 and at www.hkexnews.hk on 25 June 2018.

On 16 August 2018, Sinopec (Brazil) Co., Ltd., an indirectly wholly-owned overseas subsidiary of the Company (the "Brazil Subsidiary") applied for judicial reorganization to the Third State Court of Commercial Enterprises in Rio de Janeiro, Brazil (the "Court of Rio") according to the relevant local laws in Brazil. On 31 August 2018, the Brazil Subsidiary received ruling from Court of Rio, approved Brazil subsidiary's entering into judicial reorganization and the law firm Nascimento & Rezende Advogados was appointed as the judicial reorganization manager by Court of Rio.

According to relevant laws of Brazil, the Brazil Subsidiary is required to prepare a reorganization plan upon the court of Rio has approved that the Brazil Subsidiary enters into the legal reorganization procedure. Such legal reorganization is conditional upon the approval of the reorganization plan from the creditors' meeting and the court of Rio.

For the purpose of obtaining approval from creditors' meeting and the court of Rio in Brazil, the Brazil Subsidiary's reorganization plan shall include fully settling the amount due to employees in respect of the Project, repaying a proportion of debts due to Three Suppliers, and paying legal fees, fees on judicial authorities and other service fees in relation to the implementation of the legal reorganization procedure. Such payments amount is estimated to be approximately RMB 370 million.

For details, please refer to the "Announcement regarding the Proposed Judicial Reorganization by an indirectly wholly-owned overseas Subsidiary" (P. 2018-056) disclosed at "China Securities Journal", "Shanghai Securities News", "Securities Times", www.sse.com.cn on 4 September 2018 and at www. hkexnews.hk on 3 September 2018.

11. The punishment or rectification situation suffered by the company or its directors, supervisors, senior management, controlling shareholders and ultimate controllers

During the reporting period, neither the Company nor its other Directors, Supervisors, senior management, controlling shareholders or ultimate controllers were subject to any investigation by relevant authorities or enforcement by judicial or disciplinary departments or subject to criminal liability, or subject to investigation or administrative penalty by the CSRC, or any denial of participation in the securities market or deemed unsuitability to act as directors thereby by other administrative authorities or any public criticisms made by a stock exchange.

12. The information on the integrity status of the Company and its controlling shareholders, ultimate controllers during the reporting period

During the reporting period, the company and its controlling shareholders, ultimate controllers kept honest and faithful, and there was no occurrence of dishonesty.

13. Company's share option incentive plan and its respective effect

(1). The grant date and quantity

Grant date: 1 November 2016

Number of share options granted: 49,050,000

Number of participants: 477 persons

(2). Information on share options granted to directors, chief executives or major shareholders

The Company granted 1.85 million A shares stock options to ten people such as Mr. Sun Qingde, vice chairman and general manager of the Company, Mr. Lu Baoping, director, Mr. Zhang Yongjie, deputy general manager, Mr. Liu Rushan, deputy secretary of the Party Committee, and Mr. Zuo Yaojiu, deputy general manager of the Company, Mr. Zhang Jinhong, deputy General Manager, Mr. Li Honghai, Secretary to the Board, and Mr. Zhou Shiliang, former director and deputy general manager, Mr. Huang Songwei, supervisor, and Mr. Wang Hongchen, former chief accountant, accounting for 3.8% of the total amount of share options in the proposed grant, and accounting for 0.0131% of the total shares of the Company.

(3). Information on share options granted to key business personnel holding core positions

The proposed grant covers 467 key business personnel holding core positions, and the total amount of share options granted to them was 47.20 million shares, accounting for 96.2% of the total amount of the share options in the Proposed Grant, and accounting for 0.3337% of the total shares of the Company.

(4). Exercise price of the proposed grant

According to the determining principal of exercise price, the exercise price of the proposed grant is RMB 5.63 per share (If, during the validity period, distribution of dividend, any capitalisation of capital reserves, bonus issue, subdivision, reduction or allotment of the shares or any other events takes place, an adjustment to the number of share options shall be made accordingly).

(5). Validity Period and Exercise Arrangement under the proposed grant

Under the scheme, options under the proposed grant have a validity period of five years commencing from the grant date. The exercise period for the options shall be three years after the expiry of the two-year vesting period after the grant date. There shall be three exercise periods (one year for each exercise period, same for the following) for each plan of grant under the scheme. And during the 1st, 2nd and 3rd exercise period, there will be 30%, 30% and 40% respectively of the total options granted may be exercised upon fulfillment of the conditions for exercise of share options.

Stage	Timing Arrangement	Exercise Ratio Cap
Grant Date	To be determined by the Board upon fulfillment of the grant conditions under the Scheme	
1st Exercise Period	Commencing on the first trading day after the expiration of 24 months from the Grant Date and ending on the last trading day of 36 months from the Grant Date	30%
2nd Exercise Period	Commencing on the first trading day after the expiration of 36 months from the Grant Date and ending on the last trading day of 48 months from the Grant Date	30%
3rd Exercise Period	Commencing on the first trading day after the expiration of 48 months from the Grant Date and ending on the last trading day of 60 months from the Grant Date	40%

(6). The exercise and cancellation of this grant during the reporting period

As the Company has not fulfilled the exercise conditions for exercise of Option during the 1st exercise period under the First Grant of the A Share Option Incentive Scheme, the Participants cannot exercise the options. On 29 October 2018, the Company convened the 7th meeting of the 9th session of the Board at which the "Resolution relating to non-fulfilment of the exercise conditions for the 1st exercise period under the First Grant of the A Share Option Incentive Scheme" was considered and approved. The Participants can not exercise the Options and we agreed to cancel the 14,715,000 Share Options corresponding to the 1st exercise period which have been granted to but not yet been exercised by the Participants of the A Share Option Incentive Scheme.

Meanwhile, in view of a total of 24 Participants of the Company's A Share Option Incentive Scheme came across matters such as retirement, change in job positions, resignation and death, etc., according to the Share Incentive Plan Measures and the relevant provisions of the Share Option Scheme, as the above Participants have not met the qualifications, the Company proposes to cancel a total of 2,163,000 Share Options that have been granted to but not yet been exercised by the above-mentioned personnel. After this adjustment, the Participants of the Company's A Share Option Incentives were adjusted from 477 to 453, and the number of A Share Options which have been granted but not yet been exercised were adjusted from 34,335,000 to 32,172,000.

For details, please refer to the "Announcements relating to Non-fulfilment of Exercise Conditions for the First Exercise Period and Adjustment to the List of Participants and the Number of Share Options under the First Grant of the A Share Option Incentive Scheme (P. 2018-064)" disclosed at "China Securities Journal", "Shanghai Securities News", "Securities Times" and www.sse.com.cn on 30 October 2018, and at www.hkexnews.hk on 29 October 2018.

14. Information on connected transactions

(1). The significant connected transactions related with daily operation

Related parties	Amount of transaction	Proportion of the same type of transaction
	RMB'000	(%)
China Petrochemical Corporation and its subsidiaries	8,097,321	52.9
China Petrochemical Corporation and its subsidiaries	36,501,508	62.0
China Petrochemical Corporation and its subsidiaries	1,002,930	100.0
China Petrochemical Corporation and its subsidiaries	325,003	100.0
China Petrochemical Corporation	271,345	93.8
China Petrochemical Corporation and its subsidiaries	207,951	10.5
China Petrochemical Corporation and its subsidiaries	582,557	87.9
China Petrochemical Corporation and its subsidiaries	35,585,650	100.0
China Petrochemical Corporation and its subsidiaries	35,608,897	100.0
China Petrochemical Corporation and its subsidiaries	81,630	100.0
China Petrochemical Corporation and its subsidiaries	171,495	100.0
	China Petrochemical Corporation and its subsidiaries China Petrochemical Corporation China Petrochemical Corporation and its subsidiaries	China Petrochemical Corporation and its subsidiaries 8,097,321 China Petrochemical Corporation and its subsidiaries 36,501,508 China Petrochemical Corporation and its subsidiaries 1,002,930 China Petrochemical Corporation and its subsidiaries 325,003 China Petrochemical Corporation 271,345 China Petrochemical Corporation and its subsidiaries 207,951 China Petrochemical Corporation and its subsidiaries 582,557 China Petrochemical Corporation and its subsidiaries 35,685,650 China Petrochemical Corporation and its subsidiaries 35,608,897 China Petrochemical Corporation and its subsidiaries 35,608,897 China Petrochemical Corporation and its subsidiaries 81,630

The Company considers that it is important for the above connected transactions and selection of related parties for transactions and the above transactions would continue to occur. The agreements of connected transaction are based on the Company's operations needs and actual market situation. Purchasing materials and equipment from China Petrochemical Corporation and its subsidiaries will ensure the stable and safe supply of the Company's raw materials. Providing engineering service to China Petrochemical Corporation and its subsidiaries is decided by the history of the operating system of China's petroleum development and by the history of China Petrochemical Corporation's development, which also constitute the Company's main business income source. The loan made from China Petrochemical Corporation can satisfy the financial needs of the Company under the situation of the fund shortage, which therefore is beneficial to the Company. The pricing of the above transactions was mainly based on the market price or contract price determined through open bidding or negotiation, reflecting the principal of fairness, justice and openness, which is beneficial to the development of Company's main business, and ensure the maximization of the shareholder interests. The above connected transactions have no adverse effects on the profits of the Company or the independence of the Company.

The Company's independent non-executive directors have reviewed all the Company's continued connected transactions, and concluded that (1) the transactions were concluded in the ordinary and usual course of business of the Company; (2) the transactions were concluded based on the normal commercial terms, if there were no comparable items, no less favour than the terms provided to or received from an independent third party; (3) the transactions were in accordance with the relevant agreements, all the clauses of the agreements were fair and reasonable, and was in the interests of the Company's shareholders as a whole; (4) the annual transaction amount of the above connected transactions did not exceed the relevant annual cap of each kind of connected transactions as approved by the independent shareholders.

In accordance with Rule 14A.56 of Hong Kong Listing Rules, the Company's auditor issued its unqualified opinion letter regarding the Company's disclosure of continuing connected transactions during the reporting period in which contained its findings and conclusions.

Details of related connected transaction of the Company are set out in Note 10 of the financial statements prepared in accordance with the PRC Accounting Standards for Business Enterprises of the Annual Report.

(2). Connected transactions related to acquisition or disposal of assets or equities

This matter has been disclosed in the announcement, which is subjected to further development and changes in any circumstance.

 $\sqrt{}$ Applicable \square Not applicable

On 28 December 2018, SOSC (a wholly-owned subsidiary of the Company) acquire the related assets, including the account receivables, other receivables, inventories, other current assets, properties and buildings, machinery and equipment, long-term amortized expenses and current liabilities of Nanjing Weinuo and 100% asset interests in Jiangsu Oilfield (Hereinafter referred to as "This Assets Acquisition"). Consideration for the Transaction will be determined according to the valuation amount calculated by the asset-based method, the Valuation Date is on 30 November 2018. According to the Valuation Report upon its filling, the total valuation amount of the assets above is RMB 82,411,600.

For details, please refer to the "Regarding the Acquisition of Nanjing Weinuo's related assets by Petroleum Engineering Co., Ltd. Connected Transaction Announcement (P. 2018-075)" disclosed at "China Securities Journal", "Shanghai Securities News", "Securities Times" and www.sse.com.cn disclosed on 29 December 2018, and "Connected Transaction – Acquisition of the Target Assets and the Jiangsu Oilfield Asset Interests" disclosed at www.hkexnews. hk on 28 December 2018.

As of the disclosure date of this report, the Company has completed the settlement of the relevant assets and the 100% equity of the Jiangsu Oilfield held by Nanjing Weinuo.

(3). Material connected transactions of joint external investment

During the reporting period, no Material connected transactions of joint external investment material connected transactions of joint external investment of the company occurred.

(4). The related obligatory rights and debts

Unit: RMB'000

Related parties	Funds	provided to related	d party	Funds provided to the Company by related party			
	Opening balance	Occurrence amount	Closing balance	Opening balance	Occurrence amount	Closing balance	
China Petrochemical Corporation and its subsidiaries	9,450,147	-1,720,597	7,729,550	13,662,161	-7,412,497	6,249,664	
Sinopec Finance Company Limited	_	_	_	6,995,000	2,605,000	9,600,000	
Sinopec Century Bright Capital Investment, Ltd.	_	_	_	8,471,656	-4,929,283	3,542,373	
Total	9,450,147	-1,720,597	7,729,550	29,128,817	-9,736,780	19,392,037	
Causes of connected claims and debts					Normal production	on and operation	
Influence of connected claims and debts on the Company					No materi	al adverse effect	

15. Significant contracts and performance

(1). Trusteeship, sub-contracting and leasing

A. Trusteeship, sub-contracting

 \square Applicable $\sqrt{}$ Not applicable

B. Leasing

 $\sqrt{}$ Applicable \square Not applicable Unit: RMB

Lessor	Lessee	Leased Assets	The amount of money involved	Lease commencement date	Lease termination date	Rental Income	The basis for determining the rental income The impact of leasing proc	The impact of leasing proceeds on the company	Is it a connected transaction?	Connected relation
Taiping & Sinopec Financial Leasing (TSFL)	Shengli Petroleum Engineering Company	machines and equipment used for drilling and downhole operations	RMB 1 billion	8 February 2018	8 February 2026	RMB -174 million	Calculated based on a fixed annual interest rate of 4%	No significant impact	Yes	TSFL is a joint venture company of the controlling shareholder of the company

(2). Guarantee

 $\sqrt{}$ Applicable \square Not applicable

	Unit: RMB'000
External Guarantee of the Company (excluding Guarantees for Subsidiaries)	
Total Amount of Guarantees during the Reporting Period (excluding Guarantees for Subsidiaries)	0
Total Balance of Guarantees at the end of the Reporting Period (A) (excluding Guarantees for Subsidiaries)	0
The Guarantee of the Company and its Subsidiaries to the Subsidiaries	
Total Amount of Guarantees paid to Subsidiaries during the Reporting Period	1,587,210
Total Balance of Guarantees to Subsidiaries at the end of the Reporting Period (B)	14,007,867
Total Company Guarantee (including Guarantee for Subsidiaries)	
Total guarantee (A+B)	14,007,867
Total Amount of Guarantees as a Percentage of the Company's Net Assets (%)	242.4
Including:	
Amount of Guarantee provided to Shareholders, Actual Controllers and their related Parties (C)	0
Debt Guarantee Amount directly or indirectly for the guaranteed Object whose asset-liability Ratio exceeds 70% (D)	14,007,867
The Amount of the total Guarantee exceeds 50% of the Net Assets (E)	11,118,662
Sum of the three Guarantee above (C+D+E)	25,126,529
Statement of Unexpired Guarantees as potential subject to Joint Liability	None
Guarantee Statement	The guarantees provided by the company are all provided by the guarantees for the performance of the performance guarantee letters issued by the subsidiaries in the domestic and foreign contracts. The guarantee amount is within the amount approved by the second extraordinary general meeting of the company in 2018.

(3). Entrusting others to manage cash assets

During the reporting period, no entrusted financing, entrusted loans, other investments and financing and derivatives investment items of the Company occurred.

(4). Other significant contract

During the reporting period, the Company did not enter into any other material contract which requires disclosure.

16. Other major issues

By the resolutions of the company's first extraordinary general meeting of shareholders in 2017, held on November 16, 2017, the first A shares class shareholder meeting in 2017 and the first H shares class shareholder meeting in 2017, and the approval of the China Securities Regulatory Commission China Securities Regulatory License [2018] No. 142, the company had issued 1,503,568,702 shares and 23,148,854 new A shares to the China Petrochemical Corporation and the QiXinGongYing Scheme with a nominal value of RMB1.00 per share (non-public issuance of A shares). On August 10, 2017 (the last trading day before the Company suspended the A share transaction for the non-public issuance of A shares), the closing price of the A shares was RMB 3.20 per share. The non-public issuance of RMB ordinary shares (A shares) was issued at RMB 2.62 per share. As of January 19, 2018, the company had received RMB 3,987,867,324.96 in subscription payments (after deducting various issuance expenses of RMB 12,132,671.76), the net proceed from each share was approximate RMB 2.612. The Grant Thornton Certified Public Accountants (Special General Partnership) conducted a capital verification of the above-mentioned raised funds, and on January 19, 2018, it issued the Capital Verification Report No.110ZC0018 of the "Comparative Verification" (2018). On January 25, 2018, the Company completed the registration and custody of the non-public issuance of A shares in the Shanghai Branch of China Securities Depository and Clearing Corporation Limited.

By the resolutions of the company's first extraordinary general meeting of shareholders held in 2017 on November 16, 2017, the first A shares class shareholder meeting in 2017 and the first H share class shareholder meeting in 2017, and the approval of the China Securities Regulatory Commission China Securities Regulatory License [2018] No. 130, the Company had issued 2,595,786,987 shares and 719,174,495 at RMB1.00 each new H shares to Century Bright Company and China Structural Reform Fund respectively. On the announcement date of non-public issurance of H shares (i.e. September 20, 2017), the closing price of H shares was HK\$1.40 per each H share. The non-public issuance of overseas-listed foreign shares (H shares) was HK\$1.35 per share. The closing price of such non-public issuance is HK\$1.29 per each H share, with reference to the date on August 10, 2017. As of January 24, 2018, the company had received RMB4,464,700,300.49 in subscribed shares from the issuer (net of issuance fees. RMB 8,650,000), equivalent to RMB 3,649,847,848.64. The net proceed from each share was RMB1.101. The Grant Thornton Certified Public Accountants (Special General Partnership) conducted a capital verification of the above-mentioned raised funds, and on January 30, 2018, it issued the Capital Verification Report No. 110ZC0039 of the "Comparative Verification" (2018).

Reasons for and benefits of the Non-public Placement are as follows: (a) Enhance the core competitiveness of the Company's main business. The Non-public Placement will enhance the financial strength of the Company, promote the business development of the Company and enhance the core competitiveness of the main business. (b) Optimise the capital structure and reduce the financial risk. All the proceeds from the Non-public Placement are proposed to be used to supplement the working capital of the Company. As of 30 June 2017, the Company's asset-liability ratio was 90.8%, which was relatively high. Through the Non-public Placement, the Company's asset-liability ratio will be reduced, which will help the Company to optimise the capital structure and reduce the financial risk. (c) Enjoy more support from the controlling shareholder. CPC plans to subscribes for Shares of the Company under the Non-public Placement, which reflects the supportive determination of the controlling shareholder to the Company and the confidence in the future development of the Company; meanwhile, the Company may enjoy more support from controlling shareholder, which is conducive to the protection of the Company's stable and sustainable development.

According to the circulars "Non-public Placement under specific Mandate and connected Transaction" disclosed at www.hkexnews.hk on 18 October 2017, all net proceeds from the Non-public Placement are proposed to be used to supplement the working capital of the Company as follows:

- (a) RMB3.5-4 billion are to be used to repay historical transactional payables within 3 months upon receiving the proceeds;
- (b) RMB2.5-3 billion are to be used to optimise financial structure of the Group by repaying operational payables and lowering the total liability scale of the Group within 3 months upon receiving the proceeds;
- (c) RMB1-1.5 billion are for general operational use of the Group.

The net proceeds raised from this Non-public Placement amounted to RMB 7.64 billion, of which: A shares raised funds amounted to RMB 3.988 billion, and repaid historical transaction payments amounted to RMB 3.719 billion, supplementing the company's liquidity of RMB 269 million; H shares proceeds Among the HK\$4,465 billion, the company's bank loans were repaid to US\$570 million, and the remainder was used to supplement the company's liquidity.

17. Information on social responsibility

(1)	. Poverty	all	eviation of listed companies
	Applicable		Not applicable

(2). Information on social responsibility

For information on social responsibility, please refer to "Report on Environment, Society and Governance for 2018" of the Company.

18. Information on environment

(1) Description	of the environmental	protection of listed	l companies and	l their sub	sidiaries that	t belong to
heavily pollutin	ng industries stipulated	d by the national env	rironmental prot	ection dep	artment	

 \square Applicable $\sqrt{}$ Not applicable

(2) Description of the environmental protection of listed companies and their subsidiaries other than heavily polluting industries stipulated by the national environmental protection department

√ Applicable □ Not applicable

The Company adhered to the value of safety, environmental protection, green and low carbon development. The Company established relevant systems such as the Measures for the Management on Safety and Environmental Protection Supervision of Sinopec Oilfield Service Corporation and the Management Rules on Pollution Prevention of Sinopec Oilfield Service Corporation, it strictly implemented environmental laws and regulations, as well as the effluent standards of project host countries and international conventions, while the hazardous waste is delivered to units with disposition qualification for recovery.

At present, the company's pollutants mainly include tail gas, domestic sewage, solid waste and oil-based cuttings. The tail gas includes diesel ail gas and gas-powered ail gas, and the emission index meets the requirements of the local standard; domestic sewage includes domestic sewage in the fixed place and in the mobile construction site, and the domestic sewage in the fixed production site is disposed of by the municipal pipe network, and the domestic sewage in the mobile construction site is recirculated after on-site disposal; solid waste mainly are drilling waste mud and cuttings, according to the owner's request, after being disposed by the owner or disposed after decontamination, after on-site solid-liquid separation, and after decontamination Comprehensive utilization and other methods for disposal, domestic garbage are disposed of by professional institutions; oil-based cuttings, according to the owner's requirements, handed over to the owner's organization for disposal or use thermal analysis for harmless disposal and comprehensive utilization In 2018, the company handled a total of 398,000 cubic meters of wastewater of drilling operations and 274,000 cubic meters of domestic sewage, and disposed of 845,000 tons of general solid waste and 47,600 tons of oil-based rock waste in compliance with the regulations.

In 2018, the Company carried out clean production and focused on the transformation and application of new technologies and equipment. Based on the work targets of "energy conservation, consumption reduction, pollution reduction and efficiency enhancement", the Company actively promoted advanced technologies such as grid powered drilling machines, dual-fuel engines, energy-saving variable frequency motors and environmental degradable mud, thereby reducing energy consumption and pollutant emission. Moreover, the Company established a long-term effective mechanism by putting duties of various departments into place, such that clean production examination is carried out on schedule, and inspection and acceptance of clean production is reported.

The Company earnestly implemented the "Three-Year Implementation Plan for Pollution Prevention and Control Work of the Green Enterprise Action Plan of Sinopec Oilfield Service Corporation.", and legally carried out the disposal of general solid waste, hazardous waste, drilling wastewater and domestic sewage, and increased the reduction harmless and resource level.

The Company established an environmental emergency management system, improved the environmental emergency network, and prepared a contingency plan according to the risk evaluation results, amended it in a timely manner and made fillings as required. Established an emergency rescue team and carried out regular training and drills based on the contingency plan.

Section VII Report of the Supervisory Committee

Dear shareholders,

In 2018, all supervisors of the Company follow the relevant provisions of "Company Law of the People's Republic of China" and "Articles of Association", complied with principles of being honest trustworthy and law-abiding, actively participate in supervising the Company's management process, seriously consider major decisions and earnestly fulfill the duties of supervision, in order to safeguard the interests of shareholders and the Company. They all serve their duties of supervision, security and service. Now the 2018 work report of supervisory committee is as follows:

1. Meetings of the supervisory committee

The supervisory committee convened eight meetings in 2018 and approved 28 resolutions. In line with a responsible attitude for all shareholders, the Supervisory Committee had serious discussion and careful analysis on every resolutions to make sure its Legal compliance. The details are as follows,

- (1). The Company's seventeenth meeting of the eighth session of the supervisory committee was held by written resolution on January 11, 2018. This meeting deliberated and approved the resolution of the Financing Lease Contract (Leaseback) entered into between Sinopec Shengli Oil Engineering Company Limited and Taiping & Sinopec Financial Leasing Co., Ltd.
- (2). The Company's first meeting of the ninth session of the supervisory committee was held on February 8, 2018. This meeting deliberated and approved the resolution on Election of the Chairman of the ninth session of the Supervisory Board of the Company, Mr. Li Wei was appointed as the Chairman of the ninth Session of the Supervisory Committee.
- (3). The Company's second meeting of the ninth session of the supervisory committee was held on March 27, 2018. This meeting deliberated and approved eight resolutions, of which were the Report of the Supervisory Committee of the Company for the year 2017, Financial Report of 2017, Annual Report of 2017 Resolutions of 2017 connected transactions, the profit distribution plan of the Company for the year 2017, the internal control evaluation report of 2017, Special report of raised funds on deposit and its actual use in 2017 Resolutions on provision for impairment of assets and disposal of assets.
- (4). The Company's third meeting of the ninth session of the supervisory committee was held by written resolution on April 25, 2018. This meeting deliberated and approved the 2018 First Quarterly Report, Resolutions on the Use of Partially Idle Raised Funds to Temporarily Add Working Capital.
- (5). The Company's fourth meeting of the ninth session of the supervisory committee was held on August 28, 2018. This meeting deliberated and approved four resolutions, of which were 2018 interim report, 2018 interim financial report; resolution to undistributed 2018 Interim dividend, special report of raised funds on deposit and its actual use in 2018 Semi-Annual.
- (6). The Company's fifth meeting of the ninth session of the supervisory committee was held on October 18, 2018. This meeting deliberated and approved eight resolutions, of which were (1)2018 Mutual Products Supply Framework Agreement with SINOPEC Group and Proposal under the Agreement on the maximum annual limit for continuing connected transactions as of December 31, 2019, December 31, 2020 and December 31, 2021, (2) Framework Agreement with SINOPEC Group and Proposal under the Agreement on the maximum annual limit for continuing connected transactions as of December 31, 2019, December 31, 2020 and December 31, 2021, (3) 2018 Engineering and Construction Services Framework Agreement with SINOPEC Group and Proposal under the Agreement on the maximum annual limit for continuing connected transactions as of December 31, 2019, December 31, 2019, December 31, 2020 and December 31, 2021, (5) 2018 Technology R&D Framework Agreement with SINOPEC Group and Proposal under the Agreement on the maximum annual limit for continuing connected transactions as of December 31, 2019, December 31, 2020 and December 31, 2021, (6) 2018 Land Use Rights and Proposal under the Agreement with SINOPEC Group and Proposal under the Agreement on the maximum annual limit for continuing connected transactions as of December 31, 2020, (7) 2018 Trademark License Agreement with SINOPEC Group and Proposal under the Agreement on the maximum annual limit for continuing connected transactions as of December 31, 2021, (8) SPI Fund Document and Proposal to pay the maximum annual limit amount of premiums to SINOPEC Group as of December 31, 2019, December 31, 2020 and December 31, 2020 and December 31, 2021.
- (7). The Company's sixth meeting of the ninth session of the supervisory committee was held by written resolution on October 29, 2018. This meeting deliberated and approved three resolutions, of which were 2018 third-quarter report, resolution of Non-fulfillment of Exercise Conditions for the First Exercise Period under the First Grant of the A Share Option Incentive Scheme, resolution of Adjustment to the List of Participants and the Number of Share Options under the First Grant of the A Share Option Incentive Scheme.
- (8). The Company's seventh meeting of the ninth session of the supervisory committee was held by written resolution on December 28, 2018. This meeting deliberated and approved resolutions of the asset transfer between Nanjing Weinuo and SOSC.

2. Fulfillment of duties

In 2018, the Company convened eleven meetings of the board and three General Meetings. The supervisory committee performed its duties of supervision in law, supervised the decision-making process of the General Meetings and meetings of the board in Legal compliance by attending the General Meetings and meetings of the board. The supervisory committee attended the internal meetings of the Company on time, strengthened communications with the management and the related functional departments and paid close attention to the Company's significant decision about operating situation and internal reform. The supervisory committee agreed that in 2018, all resolutions were effectively implemented, and the decision-making process of the General Meetings and meetings of the board were legal. The supervisory committee has no violation on supervision affairs during this reporting period.

(1) Information on the operations in accordance with the law

During the reporting period, the board of directors and management standardized the operation of the Company in strict accordance with the Company Law of the People's Republic of China, Articles of Association and related regulations in the place of listing, diligently fulfilled their duties, and earnestly implemented resolutions of General Meetings. Decisions and operating activities of the Company complied with laws, regulations and "Articles of Association". During the reporting period, we didn't find any violation of laws, rules and regulations, the articles of association or behaviors that would damage the interests of the Company or shareholders

(2) Check the company's financial situation

The financial report the Company prepared in 2018 reflected the operation results on the Company's financial situation truly and just which conforms to relevant regulations of domestic and foreign securities regulatory authorities. The disclosed information of the report were true and fair. We didn't find any violation of secret protection requirements in report preparation and review personnel.

(3) Check the actual use of the Company's raising fund

During the reporting period, the supervisory committee supervised the actual use of the Company's raising fund. The supervisory committee agreed that the use of raising fund has been strict followed by the Company's Raising Fund Management Method, and conformed to relevant regulations of domestic and foreign securities regulatory authorities and the Company's Corporate Governance System, which was beneficial to the Company's continuing development. There was no situation of changing the investment of raised fund or of damaging the shareholders' equity.

(4) Information of connected transactions

The transactions between the Company and Sinopec Group and its subsidiaries met the relevant provisions of The Stock Exchange of Hong Kong Limited and the Shanghai Stock Exchange. With fair terms of the transaction, these transactions fit the need of production and operation, and are consistent with the overall interests of shareholders and the Company.

(5) Establishments of the internal control system

The company has established and implemented effectively the internal control system. There was no find of existence significant deficiencies about the internal control system. The establishment of internal control system was a continuous work, and the company shall improve it in accordance with the business development.

In 2019, the board of directors will continue to uphold the principle of good faith and diligence, conscientiously perform supervisory duties, and enhance the supervision and inspection to protect interests of shareholders and the company.

Chairman of the supervisory committee

Li Wei

Beijing, China 25 March 2019

Section VIII Changes in Share Capital of Ordinary Shares and Information on Shareholders

1. Changes in Share Capital of Ordinary Shares

(1). Details of the ordinary share structure are as follows:

A. Details of the ordinary share structure are as follows:

Unit: Share

	Before cha	nge		Increase/(decrease) (+/-)					After change	
	Numbers of shares	Percent (%)	New issue	Stock dividends	Conversion from Reserve	Others	Sub-total	Numbers of shares	Percent (%)	
I. Shares with selling restrictions:	9,224,327,662	65.2	+4,122,504,543	_	_	-9,224,327,662	-5,101,823,119	4,122,504,543	21.7	
1. State-owned shares	_	_	_	_	_	_	_	_	_	
2. Shares held by state-owned companies	9,224,327,662	65.2	+1,503,568,702	_	_	-9,224,327,662	-7,720,758,960	1,503,568,702	7.9	
3. Shares held by other domestic investors	_	_	+23,148,854	_	-	_	+23,148,854	23,148,854	0.1	
4. Shares held by foreign investors	_	_	+2,595,786,987	_	_	_	+2,595,786,987	2,595,786,987	13.7	
II. Shares without selling restrictions	4,918,333,333	34.8	+719,174,495	_	_	+9,224,327,662	+9,943,502,157	14,861,835,490	78.3	
1. RMB-denominated ordinary shares	2,818,333,333	20.0	_	_	_	+9,224,327,662	+9,224,327,662	12,042,660,995	63.4	
Shares traded in non-RMB currencies and listed domestically	_	_	_	_		_	_	_	_	
3. Shares listed overseas	2,100,000,000	14.8	+719,174,495	_	_	_	+719,174,495	2,819,174,495	14.9	
4. Others	_	_	_		_	_	_	_	_	
III. Total shares	14,142,660,995	100.0	+4,841,679,038			_	+4,841,679,038	18,984,340,033	100.0	

B. Note for the changes in Share Capital of Ordinary Shares

 $\sqrt{}$ Applicable \square Not applicable

During the reporting period, the Company's total number of shares and its share capital structure have been changed. The main changes are: On January 2, 2018, the restricted period for the sale of 9,224,327,662 restricted-sale A Shares held by China Petrochemical Corporation (CPC) was completed and listed and circulated; On January 24, 2018, the Company non-publicly issued 2,595,786,987 restricted-sale H Shares and 719,174,495 unrestricted H shares to Sinopec Century Bright Capital Investment, Ltd. (Century Bright Company) and China Structural Reform Fund Corporation Limited or its designated related party (China Structural Reform Fund) respectively; on January 25, 2018, the Company non-publicly issued 1,503,568,702 and 23,148,854 shares of restricted-sale A shares to the China Petrochemical Corporation and the Qi Xin Gong Ying Scheme respectively, and completed the registration and custody of the nonpublic issuance of A shares in the Shanghai Branch of China Securities Depository and Clearing Corporation Limited. After completion of the above non-public placement, the total number of shares issued by the company increased from 14,142,660,995 shares to 18,984,340,033 shares.

C. The effects of changes in Share Capital of Ordinary Shares on the financial indicators of the Company such as earnings per share and net assets per share, in the previous year and the latest period

	\vee	Applicable		Not applicable
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Due to the accomplishment of the above non-public placement in 2018, the total number of shares issued by the company increased from 14,142,660,995 shares to 18,984,340,033 shares by 4,841,679,038 shares, which diluted earnings per share and book value of equity per share in the most recent year and period.

D. Other content that the company deems necessary or required by the securities regulator.

 \square Applicable $\sqrt{}$ Not applicable

(2). Changes in Shares with Selling Restrictions

 $\sqrt{}$ Applicable \square Not applicable

Unit: Share

Name of shareholders	Number of shares with selling restrictions at the beginning of the period	Number of expired shares with selling restrictions during the reporting period	Change in number of shares with selling restrictions during the reporting period	Number of shares with selling restrictions at the end of the period	Reasons for selling restrictions	Termination date of the lock-up period
China Petroleum Chemical Corporation	9,224,327,662	9,224,327,662	1,503,568,702	1,503,568,702	Non-public placement, not transferable within 36 months from 25 January, 2018	
Hong Kong Securities Clearing Company (Nominees) Limited ("HKSCC (Nominees) Limited") 1	0	0	2,595,786,987	2,595,786,987	Non-public placement, not transferable within 36 months from 24 January, 2018	
Changjiang Pension Insurance Co.,LtdChangjiang Shengshi Huazhang No.2 Community Pension Management Fund ²	0	0	23,148,854	23,148,854	Non-public placement, not transferable within 36 months from 25 January, 2018	
Total	9,224,327,662	9,224,327,662	4,122,504,543	4,122,504,543		

Note:

- a. HKSCC (Nominees) Limited acts as an agent to hold H shares of the company on behalf of Sinopec Century Bright Company;
- b. Changjiang Pension Insurance Co., Ltd. held it on behalf of Qi Xin Gong Ying Scheme.

2. Share issue and listings

(1). Share issue as at the end of the reporting period.

Types of stocks and their derivative securities	Issuing Date	Issuing Price	Issuing Quantity (shares)	Listing Date	Number of Approved Listings	Transaction end date
Share Capital	•					
A share	25 January 2018	RMB 2.62 per share	1,526,717,556	Expected 24 January 2021	_	_
H share	24 January 2018	HKD 1.35 per share	3,314,961,482	25 January 2018	719,174,495	_

During the reporting period, the Company did not issue convertible corporate bonds, convertible bonds, corporate bonds or other derivative securities, nor did it enter into any equity-linked agreements.

(2). Changes in total ordinary shares and share structure and changes in the structure of assets and liabilities

 $\sqrt{}$ Applicable \square Not applicable

As at 31 December 2018, total ordinary shares of the Company increased from 14,142,660,995 shares to 18,984,340,033 shares, with which total assets and shareholder equity increased correspondingly.

(3). Internal employee shares

The Company has not issued any internal employee shares till the end of the reporting period.

3. Information on Shareholders and the de facto Controller

(1). Number of shareholders

As at 31 December 2018, the number of shareholders of the Company was 136,301 including 135,960 holders of A shares and 341 registered holders of H shares. The minimum public float of the Company satisfied the requirements of the Listing Rules of the HKSE.

As at 28 February 2019, the number of shareholders of the Company was 131,776 including 131,432 holders of A shares and 344 registered holders of H shares.

(2). The shareholdings of the top ten shareholders of the Company and the shareholdings of the top ten shareholders of shares without selling restrictions of the Company

Shareholdings of the top ten shareholders Names of shareholders	Nature of shareholders	Number of shares held increased/ decreased by(shares)	Number of shares held at the end of the reporting period (shares)	Percentage to total share capital (%)	Number of shares with selling restrictions (shares)	Number of shares pledged or frozen
China Petrochemical Corporation ²	State-owned legal person	1,503,568,702	10,727,896,364	56.51	1,503,568,702	0
Hong Kong Securities Clearing Company (Nominees) Limited ("HKSCC (Nominees) Limited") 3	Overseas legal person	3,315,275,482	5,402,110,978	28.46	2,595,786,987	0
CITIC Limited	State-owned legal person	0	1,035,000,000	5.45	0	0
Darry Asset Management (Hangzhou) Co., Ltd.	Others	0	133,333,333	0.70	0	133,333,300
Donghai Fund-Xingye Bank-Huaxin Trust- Huizhi Investment No.49 Trust Plan	Others	0	66,666,666	0.35	0	0
Donghai Fund-Xingye Bank-Huaxin Trust- Huizhi Investment No.47 Trust Plan	Others	0	66,666,666	0.35	0	0
Changjiang Pension Insurance Co.,Ltd Changjiang Shengshi Huazhang No.2 Community Pension Management Fund ⁴	Others	23,148,854	23,148,854	0.12	23,148,854	0
Huaan Fund-Xingye Bank-China Foreign Economy and Trade Trust Co., Ltd.	Others	0	13,333,300	0.07	0	0
Shenzhen Yongtai Investment Co., Ltd	Domestic legal person	10,000,000	10,000,000	0.05	0	0
Cai Xilian	Domestic natural person	6,680,000	6,680,000	0.04	0	0

Shareholdings of top ten shareholders of shares without selling restrictions Name of shareholders	Number of shares without selling restrictions held at the end of the reporting period (shares)	Types of shares
China Petrochemical Corporation	9,224,327,662	A Share
HKSCC (Nominees) Limited*	2,806,323,991	H Share
CITIC Limited	1,035,000,000	A Share
Darry Asset Management (Hangzhou) Co., Ltd	133,333,333	A Share
Donghai Fund-Xingye Bank-Huaxin Trust- Huizhi Investment No.49 Trust Plan	66,666,666	A Share
Donghai Fund-Xingye Bank-Huaxin Trust- Huizhi Investment No.47 Trust Plan	66,666,666	A Share
Huaan Fund-Xingye Bank-China Foreign Economy and Trade Trust Co., Ltd.	13,333,300	A Share
Shenzhen Yongtai Investment Co., Ltd	10,000,000	A Share
Cai Xilian	6,680,000	A Share
Hu Xucang	6,200,189	A Share

Statement on the connected relationship or activities in concert among the above-mentioned shareholders

Except that "Donghai Fund-Xingye Bank-Huaxin Trust - Huizhi Investment No.49 Trust Plan" and "Donghai Fund-Xingye Bank-Huaxin Trust - Huizhi Investment No.47 Trust Plan" belong to Donghai Fund Management Limited Company, the Company is not aware of that there is any connected relationship or activities in concert among the above-mentioned s hareholders.

Section VIII Changes in Share Capital of Ordinary Shares and Information on Shareholders

Note:

- a. As compared with the number of shares held as of 31 December 2017.
- b. Apart from directly holding 10,727,896,364 A Shares of the Company, China Petrochemical Corporation also held 2,595,786,987 H Shares through its whollyowned subsidiary Century Bright Company. Therefore, China Petrochemical Corporation directly and indirectly holds 13,323,683,351 shares of the Company, which represents 70.18% of the total shares.
- c. "HKSCC (Nominees) Limited" is a wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited, acts as an agent to hold H shares of the company on behalf of other companies or individual shareholders.
- d. Changjiang Pension Insurance Co., Ltd held it on behalf of Qi Xin Gong Ying Scheme.

(3). Number of shares held by the top ten shareholders with selling restrictions and restrictions for sale

Unit: share

Names of shareholders with selling restrictions	Number of shares with selling restrictions	Date when the shares could be traded through listing	Number of additional shares could be traded through listing	Selling restriction
China Petrochemical Corporation	1,503,568,702	24 January 2021	1,503,568,702	3 years
HKSCC (Nominees) Limited* CI	2,595,786,987	23 January 2021	2,595,786,987	3 years
Changjiang Pension Insurance Co.,Ltd Changjiang Shengshi Huazhang No.2 Community Pension Management Fund	23,148,854	24 January 2021	23,148,854	3 years
Statement on the connected relationship or activities in concert among the above-mentioned shareholders	Hong Kong Securities restrictions on behalf o Petrochemical Corporat	f Sinopec Century Bright Capital Inv	mited holds 2,595,786, vestment, Ltd., which is	987 shares of H share with selling a wholly-owned subsidiary of China

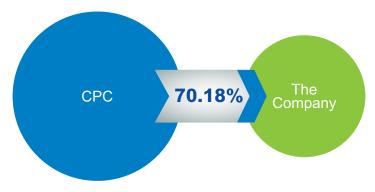
4. Information on Controlling Shareholders and de facto Controller

(1). Information on controlling shareholder

A. Legal Representative

Name of the holding shareholder	China Petrochemical Corporation		
Legal representative	Dai Houliang		
Date of establishment	14 September 1983		
Organization number	10169286-X		
Registered capital	RMB 274.867 billion		
Principal activities	Through reorganization in 2000, CPC injected its principal into Sinopec, and retained operations in certain smaller so provision of well drilling services, oil testing services, in—vaintenance of production equipment, engineering constructions.	well operation service	es, manufacture and
CPC's subsidiaries and associates listed in domestic and overseas during the reporting period	Name of company	Number of share held (shares)	Shareholding (%)
	Sinopec	83,309,227,393	68.81%
	SINOPEC Engineering (Group) Co., Ltd	2,907,856,000	65.67%
	Sinopec Oilfield Equipment Corporation	351,351,000	58.74%
	China Merchants Energy Shipping Co., LTD	912,886,426	17.23%

B. The block diagram of the property and control relationship between the Company and the controlling shareholder



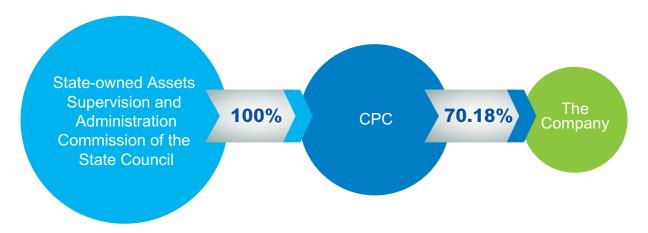
Note: Apart from directly holding 10,727,896,364 A Shares of the Company, Sinopec Group Company also held 2,595,786,987 H Shares through Century Bright Company. Therefore, Sinopec Group Company directly and indirectly holds 13,323,683,351 shares of the Company, which represents 70.18% of the total shares.

(2). The de facto controller

A. Legal Representative

The de facto controller is also China Petrochemical Corporation. See more information in this section relating to controlling shareholder.

B. The block diagram of the property and control relationship between the Company and the ultimate controller



5. Other Legal person shareholders that holding over 10% of the total shares of the Company

At the end of the reporting period, the Company has no other legal person shareholders that holding over 10% of the total shares of the Company.

6. The interest or short position held by the substantial shareholders and other persons in the Company's shares or underlying shares

As at 31 December 2018, so far as the Directors, Supervisors and Senior Management of the Company are aware of, each of the following persons, not being a Director, Supervisor or Senior Management of the Company, had an interest in the Company's shares which is required to be disclosed to the Company and the HKSE under the provisions of Divisions 2 and 3 of Part XV of the Securities and Futures Ordinance ("SFO").

Name of shareholder	Number of share held	Per cent of shareholding in the Company's total issued share capital	Per cent of shareholding in the Company's total issued domestic shares	Per cent of shareholding in the Company's total issued H shares	Short position
	(shares)	(%)	(%)	(%)	
China Petrochemical Corporation	10,727,896,364 (A shares)	56.51	79.06	Not Applicable	_
	2,595,786,987 (H shares) Note	13.67	Not Applicable	47.94	
CITIC Limited	1,035,000,000 (A shares)	5.45	7.63	Not Applicable	

Note: China Petrochemical Corporation held 2,595,786,987 H shares of the Company through its wholly-owned subsidiary Sinopec Century Bright Capital Investment, Ltd.. China Petrochemical Corporation is deemed to have H shares held by Sinopec Century Bright Capital Investment, Ltd..

Save as disclosed above and so far as the Directors, Supervisors and Senior Management of the Company are aware of, as at 31 December 2018, no other person had an interest or short position in the Company's shares or underlying shares (as the case may be) which are required to be disclosed to the Company and the HKSE under the provisions of Divisions 2 and 3 of Part XV of the SFO, or was otherwise a substantial shareholder (as such term is defined in the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("Listing Rules") of the Company.

7. Management contract

During the reporting period, the Company has not signed or has any contracts for the management and administration of the whole or any important business.

8. Priority purchase rights

There are no provisions for preemptive rights in the company's Articles of Association or Chinese laws.

9. Share repurchase, sale and redemption

The Company has not repurchased, sold or redeemed any of the Company's listed shares during the twelve months ended December 31, 2018.

1. Information on the changes of shareholdings and on the remuneration

(1). Information on the change of shareholdings and on the remuneration of current directors, supervisors and senior management, and former directors, supervisors and senior management during the reporting period.

Name	Position	Gender	Age	The beginning of the term	The end of the term	Number of shares at the beginning of the year	Number of shares at the end of the year	Reason for change	Salaries from the Company during reporting period (RMB) (before taxation)	Whether get payment from related party of the Company
Liu Zhongyun	Chairman	Male	56	24 December 2018	7 February 2021	0	0	No Change	_	Yes
Sun Qingde	Vice Chairman General Manager	Male	57	6 June 2016 11 March 2016	7 February 2021	0	0	No Change	678,600	No
Chen Xikun	Director, Deputy General Manager	Male	54	8 February 2018	7 February 2021	0	0	No Change	640,500	No
Lu Baoping	Director	Male	57	8 February 2018	7 February 2021	0	0	No Change	_	Yes
Fan Zhonghai	Director	Male	53	8 February 2018	7 February 2021	0	0	No Change	_	Yes
Wei Ran	Director	Male	51	20 June 2018	7 February 2021	0	0	No Change	_	No
Jiang Bo	Independent Non-Executive Director	Female	63	9 February 2015	7 February 2021	0	0	No Change	200,000	No
Pan Ying	Independent Non-Executive Director	Male	49	16 December 2015	7 February 2021	0	0	No Change	200,000	No
Chen Weidong	Independent Non-Executive Director	Male	63	20 June 2018	7 February 2021	0	0	No Change	100,000	No
Dong Xiucheng	Independent Non-Executive Director	Male	57	20 June 2018	7 February 2021	0	0	No Change	100,000	No
Li Wei	Chairman of the Supervisory Board	Male	41	27 June 2017	7 February 2021	0	0	No Change	540,550	No
Zou Huiping	Supervisor	Male	58	9 February 2015	7 February 2021	0	0	No Change	_	Yes
Du Jiangbo	Supervisor	Male	54	16 June 2015	7 February 2021	0	0	No Change	_	Yes
Zhang Qin	Supervisor	Female	56	9 February 2015	7 February 2021	0	0	No Change	_	Yes
Zhang Jianbo	Supervisor	Male	56	8 February 2018	7 February 2021	0	0	No Change		Yes
Zhang Hongshan	Supervisor	Male	58	23 February 2017	7 February 2021	0	0	No Change	734,300	No
Zhang Yongjie	Deputy General Manager	Male	55	9 February 2015	7 February 2021	0	0	No Change	685,700	No
Zuo Yaojiu	Deputy General Manager	Male	56	27 June 2017	7 February 2021	0	0	No Change	621,850	No
Zhang Jinhong	Deputy General Manager	Male	56	28 April 2015	7 February 2021	0	0	No Change	573,100	No
Li Tian	Chief Financial Manager	Male	44	29 August 2017	7 February 2021	0	0	No Change	571,833	No
Li Honghai	Secretary to the twelve Board	Male	55	9 February 2015	7 February 2021	0	0	No Change	429,360	No
Jiao Fangzheng	Former Chairman	Male	56	9 February 2015	7 June 2018	0	0	No Change	_	Yes
Ye Guohua	Former Director	Male	50	8 February 2018	23 August 2018	0	0	No Change	_	Yes
Zhang Huaqiao	Former Independent Non-Excutive Director	Male	55	9 February 2015	20 June 2018	0	0	No Change	100,000	No
Huang Songwei	Former Supervisor	Male	54	27 June 2017	11 December 2018	0	0	No Change	551,050	No
Zhou Shiliang	Former Director, Former Deputy General Manager	Male	61	9 February 2015	8 February 2018	0	0	No Change	55,425	No
Li Lianwu	Former Director	Male	61	9 February 2015	8 February 2018	0	0	No Change	_	Yes

Note:

A. Mr. Sun Qingde, Mr. Chen Xikun, Mr. Li Wei, Mr. Zhang Hongshan, Mr. Zhang Zongjie, Mr. Zuoyaojiu, Mr. Zhang Jinhong, Mr. Li Tian and Mr. Li Honghai and Mr. Huang Songwei all received twelve months of salary in 2018. Mr. Zhou Shiliang left the position of director and deputy general manager on February 8, 2018. Mr. Zhou Shiliang resigned in February 2018 from the Director and Deputy General Manager and received one month of salary in 2018.

B. Ms. Jiang Bo and Mr. Pan Ying received twelve months of remuneration in 2018. Mr. Chen Weidong and Mr. Dong Xiucheng started their positions on June 20, 2018 and received six months of remuneration in 2018. Mr.Zhang Huaqiao left the position of independent non-executive director on June 20, 2018. In 2018, he received six months of director's fee.

Information about current directors, supervisors and senior management

(1) Director

Mr. Liu Zhongyun*, aged 56, Chairman. Mr. Liu is a professor-level senior engineer with a Ph.D. degree. In December 2002, he was appointed as a Petrochemical Corporation; in November 2004, he was appointed as Deputy Secretary of CPC Committee and Director of Organization Department of Shengli Petroleum Administration Bureau under China Petrochemical Corporation; in November 2004, he was appointed as Deputy Secretary of CPC Committee of Shengli Petroleum Administration Bureau under China Petrochemical Corporation; in December 2005, he was appointed as Manager of Sinopec Shengli Oilfield Company; in December 2008, he was appointed as Secretary of CPC Committee of Sinopec International Petroleum Exploration and Production Corporation; in July 2010, he was appointed as General Manager of Sinopec Northwest Oilfield Company, Director General of Northwest Petroleum Bureau under China Petrochemical Corporation. Since August 2014, Mr. Liu has acted as Assistant to President and Director General of HR Department of China Petrochemical Corporation, and from May 2015 to February 2018, he served as Supervisor of Sinopec Corp.; in March 2017, he was appointed as Vice President of China Petrochemical Corporation; in February 2018, he was appointed as Senior Vice President of Sinopec Corp; in May 2018, he was elected as Executive Director of Sinopec Corp. Since December 2018, he has been appointed as the Chairman of the company

Mr. SUN Qingde#, aged 57, Vice Chairman and General Manager. Mr. Sun is a professor-level senior engineer with a Ph. D degree. He has been working for Zhongyuan Petroleum Exploration Administration of China Petrochemical Corporation as the deputy general manager of Drilling Company, the manager of Zhongyuan Argentina Company, the deputy manager of the Third Drilling Company and the manager of the Second Drilling Company; in December 2001, he was appointed as Deputy Director of Zhongyuan Petroleum Exploration Administration of China Petrochemical Corporation; from December 2012, he acted as the Excutive Director and General Manager of Sinopec Zhongyuan Oil Engineering Company Limited; from September 2014, he acted as Director of Henan Petroleum Exploration Administration of China Petrochemical Corporation and General Manager of Sinopec Henan Oilfield Branch Company. Since March 2016, he has been appointed as the General Manager of the company. Since June 2016, he has been appointed as the Vice Chairman of the company.

CHEN Xikun#, aged 54, Director and Deputy General Manager. Mr Chen is a Professor-level Senior Accountant with a Master degree. In January 2003, he was appointed as the chief accountant of Sinopec Jiangsu Oilfield Branch Company; in April 2006, he was appointed as deputy manager and chief accountant of Sinopec Shengli Oilfield Branch Company; in December 2008, he was appointed as deputy general manager and chief accountant of Sinopec Shengli Oilfield Branch Company; in December 2011, he was appointed as chief accountant of Sinopec Exploration & Production Department; since March 2015, he acted as deputy general director of Sinopec Exploration & Production Department; from June 2015 to June 2018, he acted as director of Sinopec Oilfield Equipment Corporation; from June 2017 to February 2018, he was appointed as executive deputy general manager of the Company; in January 2018, he was appointed as the Secretary of CPC Committee of the Company. Since February 2018, he has been appointed as the Director and Deputy General Manager of the company.

Mr. LU Baoping*, aged 57, Director. Mr. Lu is a professor-level senior engineer with a Ph.D. degree. In September 2001, he was appointed as Deputy General Manager of Sinopec Star Petroleum Co., Ltd. In June 2003, he was appointed as Deputy Manager of Sinopec International Petroleum Exploration and Production Corporation. Since April 2009, he has been served as the President of Sinopec Petroleum Engineering Technology Research Institute. From December 2012 to September 2014, he was appointed as Deputy Manager of SOSC. From August 2016 to December 2017, he was served as Deputy Manager of the Company. Since February 2018, he has been appointed as the Director of the company.

Mr. FAN Zhonghai*, aged 53, Director.Mr. Fan is a professor-level senior engineer with a master degree. Mr. Fan joined the Henan Petroleum Exploration Bureau in 1989 and was appointed as Deputy Chief Geologist, Chief Geologist and Vice Dean of Research Institute of Petroleum Exploration and Development of Henan Petroleum Exploration Bureau consecutively. In September 2000, he was appointed as Deputy Chief Geologist of Henan Petroleum Exploration Bureau of China Petrochemical Corporation. In November 2001, he was appointed as General Manager of Henan Öilfield Branch Company of Sinopec Corp. In June 2016, he was appointed as Deputy Director of Petroleum Exploration & Development Research Department of Sinopec Corp. Since February 2018, he has been appointed as the Director of the company.

Mr WEI Ran*, aged 51, Director. Mr. Wei is a Senior Economist and obtained a Master degree in Finance from Maastricht School of Management. Mr. Wei has successively served as the Deputy Head and the Deputy General Manager of Credit Department, Vice President of Hunan Branch, General Manager of Investment Management Department and General Manager of Business Development and Innovation Department of the Export-Import Bank of China. Since April 2016, he has served as General Manager of China Chengtong Fund Management Co., Ltd., and since September 2016, he has served concurrently as Secretary to the Board of Directors of China Structural Reform Fund Co., Ltd. Since June 2018, he has been appointed as the Director of the company

Ms. JIANG Bo+, aged 63 independent non-executive Director. Ms. Jiang is a senior economist and senior accountant with PH.D. degree. Since August 1983, she has been working in the General Office, Accounting & Auditing Department, and the International Division of Head Office of the Agricultural Bank of China. In October 1993, she was appointed as General Manager of the International Division of China Everbright Bank.In May 1996, she was appointed as Managing Director and Vice President of China Everbright Bank. In April 2007, she was appointed as Managing Director, Vice President and Chief Auditing Officer of China Everbright Bank. In November 2007, she was appointed as Vice President and Chief Auditing Officer of China Everbright Bank. and from August 2009 to January 2017, she was appointed as Chief Financial Officer and Chairman of the Labour Union of China Everbright Group. In December 2010, Ms. Jiang was appointed as Director of Shenyin & Wanguo Securities. Since January 2011, she has served as Director of China Everbright Financial Holding Asset Management Co., Ltd. She became Director of China Everbright Group Company Limited (Hong Kong) in January 2014. In June 2014, she served as Director of China Sun Life Everbright Life. Since June 2017, she has served as independent non-executive director of China Shenhua Energy Company Limited. Since February 2015, she has been appointed as independent non-executive Director of the company.

PAN Ying+, aged 49, independent non-executive Director, citizen of United States, bachelor degree. Mr. PAN began to work at China's State Administration of Foreign Exchange ("SAFE") in 1991, and was responsible for establishing SAFE Investment Company, Ltd., in 1994 based in Hong Kong. Mr. PAN joined Seagate Global Group Ltd., in Los Angeles in 1997 and served as CEO of SeaBright Asset Management Limited in 2004. He began to act as CEO of Everbright Ashmore (Beijing) Real Estate Investment Consultants Limited, a member of the management committee of China Everbright Limited, and a member of the investment & strategy committee, executive committee and audit committee of Everbright Prestige Capital. Since December 2015, he was appointed as independent non-executive Director of the company

Mr. CHEN Weidong+, aged 63, independent non-executive Director. Mr. Chen obtained a Master degree in Economic Law from China University of Political Science and Law. In 1982, Mr. Chen joined China National Offshore Oil Corporation ("CNOOC") and successively served as Deputy Manager of Exploration Department of CNOOC, General Manager of China Offshore Geophysical Company Limited under CNOOC, as well as Executive Vice President and Secretary to the Board of Directors, Chief Strategy Officer of China Oilfield Services Limited, etc. Since May 2017, he has served as the Dean of Beijing Zhongguancun Smart Energy Technology Innovation Institute. Since June 2018, he has been appointed as independent non-executive Director of the company

Mr. DONG Xiucheng+, aged 57, independent non-executive Director. Mr. Dong currently is a Professor and Ph.D. Supervisor of International Trade and Economics School of University of International Business and Economics, and concurrently serves as Vice President of China Petroleum Circulation Association, Vice Chairman of Energy Resources System Engineering Branch of Systems Engineering Society of China, member of the Price Expert Advisory Committee of National Development and Reform Commission and Distinguished Expert of National Energy Administration, etc. In 1985, Mr. Dong joined the Business Administration School of China University of Petroleum (Beijing) and he has been successively promoted as a Lecturer, Associate Professor and Professor, during which period he also served as Assistant Dean and Secretary of the Party Committee and other administrative positions. Since October 2017, he has served as a Professor and Ph.D. Supervisor in the International Trade and Economics School of University of International Business and Economics. Since June 2018, he has been appointed as independent non-executive Director of the company.

- **Executive Director**
- Non-executive Director Independent non-executive Director

Section IX Directors, Supervisors, Senior Management and Employees

(2) Supervisor

Mr. LI Wei, aged 41, chairman of the Supervisory Committee. Mr. Li is a Senior Economist with a MBA degree. In July 2003, he was appointed as deputy director of Business Department of China Petrochemical Corporation Beijing Oil Products Company; in July 2004, he was appointed as deputy director of Operation & Management Department of China Petrochemical Corporation Beijing Oil Products Company; in February 2007, he was appointed as director of Operation & Management Department of China Petrochemical Corporation Beijing Oil Products Company; in December 2009 he was appointed as deputy general manager of China Petrochemical Corporation Shaanxi Oil Products Company; in May 2014, he was appointed as secretary of CPC Committee, secretary of Discipline Inspection Committee and chairman of Worker's Union of China Petrochemical Corporation Qinghai Oil Products Company. Since June 2017, he has been appointed as deputy secretary of CPC Committee, secretary of Discipline Inspection Committee and chairman of Worker's Union of the Company. Since June 2017, he has been appointed employee representative supervisor of the Company and was elected as chairman of the Supervisory Committee.

Mr. ZOU Huiping, aged 58, Supervisor of the Company. Mr. Zou is a professor-level Senior Accountant with a college diploma. In November 1998, he was appointed as Chief Accountant of Guangzhou Petrochemical General Plant of China Petrochemical Corporation; in February 2000, he was appointed as Deputy Director of the Finance & Assets Department of China Petrochemical Corporation; in December 2001, he was appointed as Deputy Director of the Finance & Planning department of China Petrochemical Corporation; in March 2006, he was appointed as Director of the Finance & Assets Division of Sinopec Asset and Management Corporation. In May 2006, he was appointed as the supervisor of Sinopec Corp. In August 2012, he served as a supervisor of SOSC. Since September 2018, he has served as the Chief Representative of Hong Kong for Sinopec Group. Since August 2012, he has been serving as a supervisor of SOSC. Since February 2015, he has been appointed as Supervisor of the Company.

Mr. DU Jiangbo, aged 54, Supervisor of the Company. Mr. Du is a professor-level Senior Economist with a M.A. degree. In September 2006, he was appointed as Head of the Legal Affairs Division of Headquarters of Sichuan-East China Gas Transmission Construction project. In November 2010, he was appointed as Deputy Director of the Legal Affairs Division of China Petrochemical Corporation; and in March 2015, he was appointed as Director of the Legal Affairs Department of China Petrochemical Corporation. Since June 2015, he has been appointed as Supervisor of the Company.

Ms. ZHANG Qin, aged 56, Supervisor of the Company. Ms. Zhang is a professor-level senior administration engineer with a master degree. In December 1998, she was appointed as Head of the political Work Department, Propaganda Office of China Petrochemical Corporation; in January 2009, she was appointed as the Direct Deputy Secretary of CPC Committee, and the Direct Secretary of Discipline Inspection Committee of China Petrochemical Corporation; and from March 2015, she was appointed as the Deputy Director of the Political Work Department. Since September 2014, she has been serving as a supervisor of SOSC. Since February 2015, she has been appointed as Supervisor of the Company.

Mr. ZHANG Jianbo, aged 56, Supervisor of the Company. Mr. Zhang is a professor-level senior engineer with a bachelor degree. He joined Shengli Petroleum Administrative Bureau in 1985. Since 1999,Mr. Zhang has served as Deputy Director and Director of the Human Resources Department of China Petrochemical Corporation. Mr.Zhang was appointed Deputy Secretary of the Communist Party Committee of Shanghai Petrochemical since August 2013 and concurrently, he successively held several positions such as the Secretary of the Communist Party Discipline Supervisory Committee, Chairman of the Labor Union and Chairman of the Supervisory Committee of Shanghai Petrochemical. In June 2017, Mr. Zhang was appointed as Deputy Director of Supervision Bureau of China Petrochemical Corporation. Since February 2018, he has been appointed as the Supervisor of the company.

Mr. ZHANG Hongshan, aged 58, Employee Representative Supervisor. Mr Zhang is a professor-level senior engineer with a M.A. degree. In April 2005, he was appointed as Deputy Chief Engineer of the Shengli Petroleum Administration, and Director of the Production Management Department of the Shengli Petroleum Administration of China Petrochemical Corporation; in August 2007, he was appointed as Assistant Director of the Shengli Petroleum Administration, and Director of the Production Management Department of Shengli Petroleum Administration of China Petrochemical Corporation; in July 2010, he was appointed as Deputy General Manager of Sinopec Shengli Oilfield Branch Company. Since December 2016, he was appointed as the Secretary and CPC Committee and Deputy General Manager of Sinopec Shengli Oil Engineering Company Limited. Since December 2018, he was appointed as Executive Directive and the Secretary of CPC Committee and Deputy General Manager of Sinopec Shengli Oil Engineering Company Limited. Since February 2017, he has been appointed as employee representative supervisor of the company.

(3) Senior management

Mr. ZHANG Yongjie, aged 55, Deputy General Manager. Mr. Zhang is a senior engineer with a Master degree. In April 2002, he was appointed as Deputy General Manager and General Manager of the Foreign Trade and Economic Corporation under Zhongyuan Petroleum Exploration Administration of China Petrochemical Corporation; in December 2003, he was appointed as Deputy General Manager of Sinopec International Petroleum Service Corporation; and in November 2010, he was appointed as Director and General Manager of Sinopec International Petroleum Service Corporation. Since June 2012, Mr. Zhang has acted as Deputy General Manager of SOSC and also Director and General Manager of Sinopec International Petroleum Service Corporation. Since June 2012, he has been serving as Deputy General Manager of SOSC. Since February 2015, he has been appointed as Deputy General Manager of the company.

Mr. ZUO Yaojiu, aged 56, Deputy General Manager. Mr Zuo is a Professor-level Senior Engineer with a Bachelor degree. In December 2003, he was appointed as deputy general manager of Sinopec International Petroleum Service Corporation; since November 2011, he also acted as General Manager of Sinopec (Brazil) Co., Ltd. and chief representative of China Petrochemical Corporation's South America Representative Office; in August 2012, he was appointed as secretary of CPC Committee and deputy general manager of Sinopec Engineering & Construction Co., Ltd.; in September 2014, he was appointed as executive director and general manager of Sinopec Engineering & Construction Co., Ltd. From September 2014 to February 2015, he acted as deputy general manager of the Company. Since June 2017, he has been appointed as Deputy General Manager of the Company.

Mr. ZHANG Jinhong, aged 56, Deputy General Manager. Mr. Zhang is a Professor-level Senior Accountant, Master degree. In October 2000, he was appointed as the vice chief accountant and manager of drilling department of Jiangsu Petroleum Exploration Bureau of Sinopec Group; in July, 2004, he was appointed as the vice chief accountant and manager of the engineering technology management department; in June 2008, he was appointed as the vice director of Huadong Bureau of Sinopec Group; in December 2012, he was appointed as the Executive Director, General Manager and Party Secretary of Sinopec Huadong Oilfield Service Corporation. Since April 2015, he has been appointed as Deputy General Manager of the company.

Mr. LI Tian, aged 44, Chief Financial Manager. Mr. Li is a Senior Accountant with a MBA degree. Mr. Li has been responsible for financial management related work in the headquarter of China Petrochemical Corporation (the "CPC") since he started his career. In June 2010, he served as the head of accounting management division under CPC's Finance Department. In July 2013, he served as the head of financial management division under CPC's Finance Department. In June 2016, he became the deputy director of CPC's Finance Department. Since August 2017, he has been appointed as Chief Financial Manager of the company.

Mr. LI Honghai, aged 55, Secretary to the Board. Mr. Li is a professor-level senior economist with a Ph.D. degree. Since June 2000, he had held the position of Deputy Manager, Secretary to the Board, and Assistant to the Chairman of Zhongyuan Petroleum Company Limited; in December 2004, he was appointed as Manager of Zhongyuan Petroleum Company Limited; in May 2007, he was appointed as Head of the General Administration under the Enterprise Reform Department of China Petrochemical Corporation, and also as Head of the Assets Operation Division in August the same year; in June 2008, he was appointed as Head of the Assets Operation Division under the Enterprise Reform Department of China Petrochemical Corporation; and in July 2010, he was appointed as Head of the Assets Operation Division under the Capital Operations Department of China Petrochemical Corporation. Since September 2014, he has been serving as Secretary to the Board of SOSC. Since February 2015, he was appointed as Secretary to the Board of the company. He has served as the senior expert of Sinopec Group in capital operation Since January 2019.

(2). Information on share option scheme provided to directors, supervisors and senior management

√ Applicable □ Not Applicable

Name	Position	Number of share options held at the beginning of 2018	Number of share options newly granted during the reporting period	Exercisable share options during the reporting period	Share options exercised during the reporting period	Exercise price of share options (yuan/share)	Number of share options by the end of reporting period	Stock price at the end of reporting period (yuan/share)
Sun Qingde	Vice Chairman, General Manager	210,000	0	0	-63,000	5.63	147,000	1.83
Lu Baoping	Director	190,000	0	0	-190,000	5.63	0	1.83
Zhang Yongjie	Deputy Manager	190,000	0	0	-57,000	5.63	133,000	1.83
Liu Rushan	Deputy Party Secretary	190,000	0	0	-57,000	5.63	133,000	1.83
Zuo Yaojiu	Deputy Manager	180,000	0	0	-54,000	5.63	126,000	1.83
Zhang Jinhong	Deputy Manager	180,000	0	0	-54,000	5.63	126,000	1.83
Li Honghai	Secretary to the Board	140,000	0	0	-42,000	5.63	98,000	1.83
Zhou Shiliang	Former Director, Former Deputy Manager	210,000	0	0	-210,000	5.63	0	1.83
Wang Hongchen	Former Chief Financial Manager	180,000	0	0	-180,000	5.63	0	1.83
Huang Songwei	Former Supervisor	180,000	0	0	-180,000	5.63	0	1.83
Total	/	1,850,000	0	0	-1,087,000	/	763,000	/

(3). Qi Xin Gong Ying Scheme participated by directors, supervisors and senior management

On 25 January 2018, the Company non-publicly issued 1,503,568,702 and 23,148,854 shares of restricted-sale A shares in private to the China Petrochemical Corporation and the Qi Xin Gong Ying Scheme respectively. Qi Xin Gong Ying Scheme is managed by Changjiang Pension Insurance Co., Ltd., and its shares shall be subscribed by the certain directors, supervisors, senior management and other core management personnel of the Company. The number of subscribers is 198, and the subscription amount is RMB 60.65 million. The subscription price for each scheme share under Qi Xin Gong Ying Scheme is RMB 1.00. The duration of Qi Xin Gong Ying Scheme is 48 months commencing from 25 January, 2018. The first 36 months shall be the lock-up period and the last 12 months shall be the unlocking period.

In Qi Xin Gong Ying Scheme, directors, supervisors and chief executives of the Group have subscribed 3.55 million, accounting for approximately 5.9% of the total scheme shares of Qi Xin Gong Ying Scheme. There are 10 directors, supervisors and chief executives of the Company in total who have subscribed for Qi Xin Gong Ying Scheme, the subscription by the directors, supervisors and chief executives of the Company under Qi Xin Gong Ying Scheme are as follows:

Name	Position	Subscription amount under Qi Xin Gong Ying Scheme	Subscription scheme shares under Qi Xin Gong Ying Scheme	Subscription Price	Subscription of A share
		(RMB thousand)	('000 shares)	(RMB/A Share)	(share)
Sun Qingde	Vice Chairman, General Manager	400,000	400,000	2.62	152,671
Chen Xikun	Director, Deputy Manager	400,000	400,000	2.62	152,671
Li Wei	Chairman of Supervisory Committee	350,000	350,000	2.62	133,587
Zhang Hongshan	Supervisors	350,000	350,000	2.62	133,587
Zhang Yongjie	Deputy Manager	350,000	350,000	2.62	133,587
ZuoYaojiu	Deputy Manager	350,000	350,000	2.62	133,587
Zhang Jinhong	Deputy Manager	350,000	350,000	2.62	133,587
Li Tian	Chief financial manager	350,000	350,000	2.62	133,587
Li Honghai	Secretary to the Board	300,000	300,000	2.62	114,503
Huang Songwei	Former Supervisors	350,000	350,000	2.62	133,587
Total	/	3,550,000	3,550,000	_	1,354,954

2. Information on directors, supervisors and senior management holding positions

(1). Information on holding positions

Name	Name of corporate shareholders	Position held in corporate shareholders	The starting date of term in office	The termination date of term in office
Liu Zhongyun	China Petrochemical Corporation	Vice President of Sinopec Corp	March 2017	_
Zou Huiping	China Petrochemical Corporation	Director of the Audit Department	March 2006	September 2018
Du Jiangbo	China Petrochemical Corporation	Director of the Legal Affairs Department	March 2015	_
Zhang Qin	China Petrochemical Corporation	Deputy Director of the Political Work Department	March 2015	_
Zhang Jianbo	China Petrochemical Corporation	Deputy Director of the Supervisory Administration	June 2017	_
Jiao Fangzheng	China Petrochemical Corporation	Party members, Vice President of Sinopec Corp	July 2014	June 2018
Ye Guohua	China Petrochemical Corporation	Director of the Finance Department	January 2017	August 2018

(2). Information on holding positions in other enterprises

Name	Name of other enterprises	Position held in other enterprises	Beginning date of term	End date of term
Liu Zhongyun	Sinopec	Senior Vice President Director	February 2018 May 2018	=
Chen Xikun	Sinopec Petroleum Machinery Co., Ltd.	Director	June 2015	June 2018
Lu Baoping	Sinopec Petroleum Engineering Technology Research Institute	President	April 2009	_
Fan Zhonghai	Sinopec	Deputy Director of Petroleum Exploration & Development Research Department	June 2016	_
Zou Huiping	Sinopec	Supervisor Chief representative of Hong Kong	May 2006 September 2018	=
Zhang Jinghong	Sinopec Petroleum Machinery Co., Ltd.	Director	June 2018	June 2021
Jiao Fangzheng	Sinopec	Director; Senior Vice President	May 2015	June 2018

3. Information on the remuneration of the Company's directors, supervisors and senior management

Decision procedure of the remuneration of directors, supervisors and senior management.	The remuneration of directors and supervisors is approved by the General Meeting of shareholders, the remuneration of senior management is approved by the board of directors.
The basis of remuneration determination of directors, supervisors and senior management.	Decided by the duties and responsibilities of directors, supervisors and senior management, and by the performance of the company.
The information of payable remuneration of directors, supervisors and senior management.	RMB 6,782,268
As to the end of reporting period, the actual obtained remuneration of the directors, supervisors and senior management.	RMB 6,782,268

4. Information on the change of company's directors, supervisors and senior management

Name	Position	Change	Reason for change
Liu Zhongyun	Chairman	Elected as Chairman	Elected by the Shareholders' Meetings; Appointed by the Board of Directors
Chen Xikun	Director; Deputy General Manager	Elected as Director; Appointed as Deputy General Manager	Elected by the Shareholders' Meetings; Appointed by the Board of Directors
Lu Baoping	Director	Elected as Director	Elected by the Shareholders' Meetings
Fan Zhonghai	Director	Elected as Director	Elected by the Shareholders' Meetings
Wei Ran	Director	Elected as Director	Elected by the Shareholders' Meetings
Chen Weidong	Independent Non-Executive Director	Elected as Independent Non-Executive Director	Elected by the Shareholders' Meetings
Dong Xiucheng	Independent Non-Executive Director	Elected as Independent Non-Executive Director	Elected by the Shareholders' Meetings
Zhang Jianbo	Supervisor	Elected as Supervisor	Elected by the Shareholders' Meetings
Jiao Fangzheng	Chairman	Resigned	Change of work
Zhou Shiliang	Director; Deputy General Manager	Resigned	Expiration of term of office and arrival of statutory retirement age
Li Lianwu	Director	Resigned	Expiration of term of office and arrival of statutory retirement age
Zhang Huaqiao	Independent Non-Executive Director	Resigned	Personal reason
Ye Guohua	Director	Resigned	Change of work
Huang Songwei	Supervisor	Resigned	Change of work

Section IX Directors, Supervisors, Senior Management and Employees

Note

After the election of the Company's first extraordinary general meeting of shareholders in 2018 on February 8, 2018, Mr. Chen Xikun, Mr. Ye Guohua, Mr. Lu Baoping and Mr Fan Zhonghai were appointed as the directors of the 9th session of the Board of Directors. Mr. Jiao Fangzheng, Mr Sun Qingde, Ms. Jiang Bo, Mr Pan Ying and Mr. Zhang Huaqiao were re-appointed as the director of the 9th session of the Board of Directors. Mr. Zhang Jianbo was appointed as the supervisor of the 9th session of the Supervisory Committee; Mr. Zou Huiping, Mr. Du Jiangbo and Ms. Zhang Qin were re-appointed as the supervisors of the 9th session of the Supervisory Committee; After the election workers representatives meeting in 2018 on February 1, 2018, Mr. Li Wei, Mr. Zhang Hongshan and Mr. Huang Songwei were re-appointed as employee representative supervisors of the 9th session of the Supervisory Committee.

The directors of the Company, Mr. Zhou Shiliang and Mr. Li Lianwu, ceased to serve as directors of the Company since February 8, 2018 due to the expiration of their term of office and reaching the statutory retirement age. Mr. Jiao Fangzheng, the Chairman of the Board, tendered his resignation as Chairman, Non-executive Director of the Company and Chairman of the Strategy Committee of the Board of Directors due to change in his work positions. Mr. Zhang Huaqiao, the independent non-executive director of the Company, has been working as a director or independent non-executive director in a number of overseas and domestic listed companies. He has been busy since June 20, 2018 and has ceased to serve as the independent non-executive director of the ninth session of the board of directors of the Company. Mr. Ye Guohua, the director of the Company, has ceased to serve as a director of the Company and a member of the Audit Committee since August 23, 2018 due to change in his work positions. Mr. Huang Songwei, employee representative supervisor of the Company, has ceased to serve as a supervisor of the Company since December 11, 2018 due to change in his work positions.

The company expresses its sincere gratitude to Mr Jiao Fangzheng, Mr. Zhou Shiliang, Mr. Li Lianwu, Mr. Ye Guohua, Mr. Zhang Huaqiao and Mr. Huang Songwei for their hard work and their important contributions.

After the election of the Company's general meeting for the year 2017 on June 20, 2018, Mr. Wei Ran, Mr. Chen Weidong and Mr Dong Xiucheng were appointed as the directors of the 9th session of the Board of Directors. Mr. Chen Weidong and Mr. Dong Xiucheng were elected as independent non-executive directors of the Company.

After the election of the Company's second extraordinary general meeting of shareholders in 2018 on December 24, 2018, Mr. Liu Zhongyun, was appointed as the non-executive director of the 9th session of the Board of Directors. And after the election of the ninth meeting of the 9th session of the Board of Directors held on December 24, 2018, Mr. Liu Zhongyun was elected as the Chairman of the Board and the Director of the Strategy Committee.

5. The information of any punishment by Securities regulators in the last three years

 \square Applicable $\sqrt{}$ Not Applicable

6. Information on the personnel of the company and its subsidiaries

(1). Personnel information

The number of the Company' serving staff	130
The number of the Company's subsidiaries' serving staff	75,704
The total number of the serving staff	75,833
The number of retired staff whose expense should be born by the company and its subsidiaries	10,418
Professional composition	
Type of Professional	Number of the staff
Production Staff	40,332
Technical Staff	23,656
Researcher	3,002
Financial Staff	1,967
Market and Administrative Staff	5,556
Others	1,320
Total	75,833
Education	
Туре	Number of the staff
Master or above	2,184
Bachelor	23,942
Junior college	14,986
Others	34,721
Total	75,833

(2). Remuneration policies

The Company's Remuneration system consists of basic salary, performance bonuses, allowance, subsidies and mid/long-term incentives. The Company has established differentiation incentive system based on different positions and different kinds of professionals to create a fair competition environment to keep the remuneration in reasonable income difference.

(3). Training plan

Committed to staff training, the Company has established a differentiated and multi-tiered training management system which focuses on promoting staff fulfillment of responsibilities and talent building. Centered on central tasks in production and operation, the Company carries out the management, professional skills, operating skills and international training programs, highlights trainings in market development, overseas key positions, domestic project managers, conducts training for transferred employees and ability trainings, make effective use of various trainings such as on-job training, off-job training and online training to realize the mutual development of the employees and the Company.

7. Directors' and Supervisors' rights to acquire shares and debentures and short position

As at 31 December 2018, none of the Directors or Supervisors of the Company had any interest and short positions in any shares, underlying shares or debentures of the Company or any associated corporations within the meaning of Part XV of the SFO required to be recorded in the register mentioned under Section 352 of the SFO or as otherwise notifiable to the Company and the Hong Kong Stock Exchange by the Directors and Supervisors pursuant to the Model Code.

8. Directors' and Supervisors' service contracts

Each Directors and supervisors entered into a service contract with the Company. Main contents are set out below:

- More details about the expired date of the terms of Directors in the ninth session of the Board and the Supervisors in ninth session of Supervisory
 Committee, please see the section in "Information on the change of shareholdings and on the remuneration of current directors, supervisors and
 senior management, and former directors, supervisors and senior management during the reporting period".
- 2. The remuneration for executive Directors and Employee Representative Supervisor of the Ninth terms for their service offered under the Service Contract will be determined in accordance with relevant laws and regulations and the Measures for Implementation of Remuneration Packages for Senior Management. It is provided in the Measures for Implementation of Remuneration Packages for Senior Management of the Company that the remuneration consists of a basic salary, performance bonus and mid- and long term incentives, with specific functions and responsibilities of the management members and performance of the Company as a whole being taken into account. An independent non-executive Director is entitled to a director's fee of RMB200, 000 per annum (pre-tax). Non-executive directors and non-employee representative Supervisors shall not receive any remuneration from the company.

In addition, the Company has purchase liability insurance for the Directors and Supervisors in order to safeguard the interests of the Directors and Supervisors.

No Director or Supervisor has entered into a service contract with the Company which is not terminated by the Company within one year without payment other than statutory compensation.

9. Directors' and Supervisors' interests in contracts

No contract of significance to which the Company, its parent companies or any of their subsidiaries was a party, in which a Director or Supervisor of the Company had a material interest, subsisted at the end of the year or at any time during the year.

10. Special treatment to Directors, Supervisors and Senior Management

There has been no special treatment granted to the Directors, Supervisors or Senior Management during the reporting period.

1. Information on Corporate Governance

During the reporting period, the Company operated regularly according to domestic and foreign regulations. Based on Articles of Association, related laws and regulations, regulatory rules of the Company's listing place, and the Company's actual situation, the Company kept developing and effectively executing working system and working procedure of the Board and all specialized committees. The Company has amended the "Articles of Association" according to the regulatory requirements and the actual conditions, and has played a good role in promoting the company's decision-making science, effective implementation, and strong supervision of corporate governance mechanisms.

Before the board of directors of the company decided on the company's reform and development direction, main objectives and tasks, key work arrangements, and selection of personnel and other major issues, listen to the opinions and suggestions of the party organizations, strengthen the company's democratic decision-making, scientific decision-making; mobilize party members to take the lead in the implementation of responsibilities and motivate and mobilize the enthusiasm of the staff to help the management effectively implement the various arrangements of the board of directors; the party organization strengthens the supervision and accountability of the performance of the party members' management personnel and the integrity and self-discipline, and promotes the work and risk prevention and control.

During the reporting period, the members of the special committees of the board of directors, the board of supervisors and the board of directors were promptly optimized and adjusted. The independent directors actively performed their duties and played a good role. The internal control system was further improved and effectively implemented. The investor relations work was further refined, and the effectiveness of information disclosure was further enhanced, which promoted the improvement of internal management, improved the transparency of the company, and gained recognition from the capital market. Actively fulfilling social responsibilities and gaining appreciation from all walks of life.

In 2018, the Company kept managing the insider registration, and enhanced the confidentiality of insider information such as annual reports before official disclosure, etc. During the reporting period, the Information Disclosure System, and Insider Registration Management System were effectively executed by the management of the Company, and there were no insiders' illegal trading of company stock or significant mistakes of annual reports.

In strict accordance with the requirements of relevant laws and regulations including "Company Law", "the Securities Law", "Administrative Measures for the Disclosure of Information of Listed Companies", domestic and overseas "Listing Rules", the Company will continuously perfect management system of the Company, improve the standard operation and management level of the Company, protect the interests of company and all the shareholders and promote the sustainable and healthy development of the Company.

2. Summary of Shareholders' Meetings

During the reporting period, the Company held the 2018 first extraordinary general meeting on 8 February 2018, and the annual general meeting for the year 2017 on 20 June 2018, The 2018 second extraordinary general meeting on 24 December 2018 in Beijing. Details are as follows:

Name of meeting	Date of meeting	Website designated for searching the resolutions	Disclosure date of resolutions
The 2018 first extraordinary general meeting	8 February 2018	www.sse.com.cn www.hkexnews.hk	9 February 2018
The annual general meeting for the year 2017	20 June 2018	www.sse.com.cn www.hkexnews.hk	21 June 2018
The 2018 second extraordinary general meeting	24 December 2018	www.sse.com.cn www.hkexnews.hk	25 December 2018

3. Performance of the Directors

(1). The Directors' attendance at the Board Meetings and Shareholders' Meetings

Name of Director			Attendance at the Board meetings					
	Whether as Independent Director	Supposed Number of times for attending at meetings of the Board during the year	Attendance in person (no. of times)	Attendance by correspondence (no. of times)	Attendance by proxy (no. of times)	Absence (no. of times)	Whether not attending in person for two consecutive times	Number of times for attending at shareholders' meetings
Liu Zhongyun	No	2	2	1	0	0	No	1
Sun Qingde	No	11	11	7	0	0	No	3
Chen Xikun	No	10	10	6	0	0	No	3
Lu Baoping	No	10	9	6	1	0	No	3
Fan Zhonghai	No	10	9	6	1	0	No	3
Wei Ran	No	7	6	5	1	0	No	3
Jiang Bo	Yes	11	11	7	0	0	No	3
Pan Ying	Yes	11	9	6	2	0	No	2
Chen Weidong	Yes	7	6	5	1	0	No	3
Dong Xiucheng	Yes	7	7	5	0	0	No	3
Jiao Fangzheng	No	4	4	2	0	0	No	1
Zhang Huaqiao	Yes	4	2	2	2	0	No	0
Ye Guohua	No	4	4	2	0	0	No	2
Zhou Shiliang	No	1	1	1	0	0	No	0
Li Lianwu	No	1	1	1	0	0	No	0
The Board meetings held during the year (No. of times)								11
Including: meetings held on site (No. of times)								4
Meetings held by correspondence (No. of times)								7
Meetings held by correspondence on site and by correspondence (No. of times)								0

(2). The information of the objections proposed by the independent directors

During the reporting period, the Company's independent directors did not raise objections against the proposals of the meetings of board of directors or the proposals which does not require the review on the board meetings. The detail information related to the performance of the independent directors is published in the report of the Company's independent directors 2018 on the website of Shanghai Stock Exchange and Hong Kong Stock Exchange.

4. Important comments and suggestions from the special committee under the board of directors during the reporting period

The audit committee made significant suggestions as follows:

- (1) Pay attention to the company's liquidity risk, further increase the efforts in clearance of receivables and inventory, fully implement the supervision mechanism, strengthen the assessment and punishment, to ensure the clearances of receivables and inventory to be effective;
- (2) Further reduce the asset-liability ratio. At present, the company's asset-liability ratio is around 90%, which is still at a relatively high level. It is recommended to optimize and adjust the asset structure, vigorously implement cost reduction and efficiency increase, and further reduce debt levels.;
- (3) Continuously optimize the company's business structure, promote the industrial chain to extend to the resource side, participate in oil and gas development through joint ventures and production sharing, and extend the industrial chain down to advanced equipment manufacturing to promote integration of R&D, manufacturing and service.
- (4) Continue to pay attention to foreign exchange risks and rationally use financial derivatives to effectively hedge exchange rate fluctuations.

5. The information on the existence of risk found by the supervisory committee

The supervisory committee has no objection on the supervised matters during the reporting period.

6. The note to the information of that it can not be guaranteed the independence with respect to Business, Personnel, Assets, Organisation and Finance between the Company and the Controlling Shareholders and can not be guaranteed the independent operation ability between the Company and the Controlling Shareholders

There is no existence of non independence between the Company and the Controlling Shareholders with respect to Business, Personnel, Assets, Organisation and Finance.

The situation with the controlling shareholder in the same industry competition.

√Applicable □Not Applicable

For details, please refer to the implementation of the commitments of China Petrochemical Corporation in the Major Matters section.

7. Regarding the performance evaluation, stimulating and binding mechanism

Under the guidance of the annual operation and management target set by the Board, Remuneration and Assessment Committee of the Company effectively appraised the performance of senior management. The Company has been working hard to establish and optimize evaluation criteria and a stimulating and binding mechanism for senior management.

According to the company's share incentive plan and its supporting regulations reviewed which passed at the 2016 First Extraordinary General Meeting, the 2016 First A Share Class Meeting, and the 2016 First Extraordinary General Meeting of the Company, the company granted a total of 477 people with qualified incentive objects (including directors and senior management personnel) to A shares stock options of 49.05 million on November 1, 2016. Please refer to the Major Events section "Description of the company's equity incentives "for details of the relevant stock options.

8. Whether disclose the internal control self-evaluation report:

Whether disclose the internal control self-evaluation report: yes

In 2018, the Company kept improving the internal control system and risk management system, and made the operation of the Company more normalized, scientific and systematic by way of strengthening control and enhancing supervision. The board of directors will take responsibility for establishing and maintaining sufficient internal control of financial report and will guarantee its effective implementation. The board of supervisors conduct supervision on the board of directors about establishment and implement of internal control. Managers take charge of organizing routine operation of internal control. In 2018, the board of directors assessed internal control of the Company during the past year, in accordance with "basic norms of enterprise internal control", "application guidelines of enterprises internal control" and concluded that there is no important deficiency or significant deficiencies till December 31, 2018. The internal control system of the Company's financial report is sound and effective.

The board of directors approved the Company's 2018 annual self-assessment of internal control on 25 March 2019. Please visit the website of the Hong Kong stock exchange or the website of the Shanghai Stock Exchange for details of the report. All members of the board of directors ensure that this report is true, accurate and complete and there is no false records, misleading statements or major omissions.

Description about major defects of the internal control during the reporting period

□ Applicable √Not Applicable

9. Information about the audit report of internal control

Whether disclose the audit report of internal control: yes

Grant Thornton (special general partnership) audited the Company's internal control till 31 December 2018 and issued a standard unqualified audit report on internal control. For detailed information, please refer to the 2018 annual internal control audit report disclosed on March 26, 2019.

10. Compliance with Code of Corporate Governance Practices of HKSE

The company has not established a nomination committee. The duties of the nomination committee as stipulated in the "Corporate Governance Code" are implemented by the board of directors of the company. The company believes that the selection of director candidates by the board of directors is more in line with the actual operation of the company. In addition to the foregoing. During the reporting period, the Company has been in strict compliance with the Code of Corporate Governance of HKSE. The details are as follows:

A.1 The Board

- (1) The Board meets regularly to fulfill their responsibilities. The Board held eleven meetings in 2018, including four regular meetings. The Directors' attendance of the Board meetings is set forth in item 3 "Performance of duties by the Directors" of this section.
- (2) All Directors can raise matters in the agenda for the Board meetings and have the right to ask for more related documents.
- (3) The notice has been given 14 days before regular meetings and the notice of the other Board meetings has usually been given 10 days before.
- (4) The Board Secretary records and keeps the minutes of the Board meetings and meetings of Board Committees. The Articles of Association regulates the contents of the minutes, and the procedure that the minutes should be sent to all Directors for their comment and signature after the Board meetings.
- (5) The Secretary to the Board continuously provides service for the Directors and reminds all Directors in order to ensure them to follow all applicable rules and regulations of domestic and overseas regulatory authorities.

A.2 Chairman and Chief Executive Officer

- (1) Mr. Liu Zhongyun was elected as Chairman of the Board of the Company by the Board. Nominated by Chairman of the Company, Mr. Sun Qingde was appointed as General Manager of the Company by the Board. The responsibilities between Chairman and General Manager are set out clearly in the Articles of Association.
- (2) Procedures to acquire necessary information for decision were regulated in the "the Rules and Procedures for the Board" of the Company.

 Directors can require General Manger or relevant departments through General Manger to provide information and explanation. If necessary, Independent Directors can consult independent professionals and the Company should pay the relevant expenses.

A.3 The Board composition

- (1) The Board of Directors of the Company consists of 10 members with extensive professional and management experiences, one of which is female (Please refer to the Section headed "Directors, Supervisors, Other Senior Management and Employees" in this annual report for detailed information). Among the 10 members, there are 2 executive directors, 4 non-executive directors and 4 independent non-executive directors. The independent non-executive directors represent one third of the Board. The company's executive directors and non-executive directors have extensive management experiences in petrochemical and large-sized enterprises; Independent non-executive directors have working background as well-known finance experts with rich experience in international capital management and investment. The composition of the Board of Directors is reasonable and diversified. At the first meeting of the eighth session of the Board dated 9 February 2015, the Company has approved the boards' diversified policy.
- (2) The Company has received from each independent non-executive director a letter of confirmation regarding its compliance with relevant independence requirements set out in Rule 3.13 of the Hong Kong Listing Rules. The Company considers that each of the independent non-executive directors is independent.
- (3) The independent non-executive directors are identified in all corporate communications in which also listed all the directors' names. The list of the current Directors of the Company had been published on its website and the HKSE's website.

A.4 Appointment, re-election and removal

- (1) All Directors are elected by shareholders' general meetings for a term of not more than 3 years. A Director may serve consecutive terms if reelected upon the expiration of the term. The Board has no right to appoint temporary directors.
- (2) The re-election term of Independent non-executive Directors shall not be more than 6 years. For details of the term of the Company's independent non-executive directors, please refer to section 9 "Directors Supervisor, Senior Management and Employees" in this report.

A.5 Nomination Committee

The Board has not established Nomination Committee. The responsibility of Nomination Committee regulated in the Code of Corporate Governance will be taken by the board of the company. Pursuant to the Articles of Association of the Company, the candidates for independent directors may be nominated by the Board, the Supervisory Committee, or shareholders holding individually or collectively more than one per cent of the issued shares of the Company. The candidates for the remaining directors shall be nominated by the Board, the Supervisory Committee, or shareholders holding individually or collectively more than three per cent of the issued shares of the Company. All candidates should be elected by the shareholders' general meeting of the Company. The independent non-executive directors should express their independent opinions before the board of directors nominated the candidate for directors.

A.6 Responsibilities of Directors

- (1) All the non-executive directors have the same authorities as the executive directors. In addition, the nonexecutive directors, especially the independent non-executive directors are entitled to certain specific authorities. The Articles of Association and the Rules and Procedures of Board of Directors' Meetings clearly specify for the authorities of non-executive directors including independent non-executive directors, which are published on the website http://ssc.sinopec.com.
- (2) Each of the directors was able to devote sufficient time and efforts to handling the matters of the Company. Directors shall abstain from voting at the Board meeting due to conflicts of interests.
- (3) Each of the directors confirmed that he or she has complied with the "Model Code for Securities and Transactions by Directors of Listed Company" during the reporting period. In addition, the company formulated the "Rules Governing Shares Held by Company Directors, Supervisors and Senior Manager and changes in shares" and the "Model Code of Securities Transactions by Company Employees" to regulate the activities of Sinopec Corp.'s personnel in purchase and sale of the securities of the company.
- (4) The Company has arranged trainings for directors and provided relevant training fees. The directors actively participated in the sustainable professional development program. During the reporting period, all directors and supervisors of the Company have attended professional trainings no less than 8 training courses on listing rules, Corporate Governance, prevention of insider trading in securities transactions, Disclosure of Information, and responsibilities of directors.

A.7 Supply of and access to information

- (1) The Company provides information relating to business operation of the Company regularly, to help Directors to understand the Company's operation. Where any director requires information, the Company will supply the related materials in a timely manner.
- (2) All Directors usually acquire adequate information 3 working days before the Board meetings which can help them to make accurate decisions.
- (3) The Board Secretary provides sustainable services for all Directors. Directors can review all Board documents and relevant information at all times.

B. Remuneration of Directors and Senior Management

- (1) The company has set up the Remuneration Committee. The Remuneration Committee under the ninth term of the Board consists of independent non-executive Director Mr. Pan Ying as the Head, the non-executive director Mr. Fan Zhonghai and the independent non-executive director Ms. Jiang Bo as the members. The Remuneration Committee has its working rules which can be found in the website of the company or the Hong Kong Stock Exchange. During the reporting period, the Remuneration Committee held 2 meetings.
- (2) Pursuant to the principles approved by the shareholders' general meeting, the Service Contract which was entered into between the Company and each Director or Supervisor, the proposal raised by the Remuneration Committee and with reference to the operating results, the Board considered and approved the remuneration of the Directors, Supervisors and Senior Management. The details of the remuneration of the Directors during the reporting period are set forth in the section "Directors, Supervisors, Senior Management and Employees" of this Annual Report.
- (3) The members of Remuneration Committee can consult Chairman or General Manager, and can consult independent professionals and the Company shall pay the relevant expenses.

C. Accountability and audit

C.1 Financial reporting

- (1) The Company assures that the Senior Management has provided adequate financial information to the Board and the Audit Committee.
- (2) The Directors are responsible for preparing the accounts for every fiscal year, which can give a view of the state of affairs of the Company as at 31 December 2018 and of the Company's profit and cash flows for the year. The Directors has selected the appropriate accounting policies to carry out, made prudent and reasonable judges and estimates, and prepared accounts on a going concern basis. The Board of directors and all directors warranted that there were no material omissions, or misrepresentations or misleading statements contained in the annual report, and jointly and severally accepted full responsibility for the authenticity, accuracy and integrity of the content.
- (3) Required under the Listing Rules by HKSE, the Company announces and publishes the annual reports, interim reports, quarterly reports and other share price-sensitive affairs timely and accurately.
- (4) The external auditors of the company made a statement about their reporting responsibilities in the auditor's report contained in the financial statements.

C.2 Risk management and internal control

- (1) The Company has set up and kept improving risk management and internal control system to guard against the operational, financial and compliance risks. The Board is the decision-making body of internal control and risk management, and takes responsibility for examining the effect of internal control system and risk management procedures. The board of directors and the audit committee receive documents about internal control and risk management from the Company's management regularly (at least once a year). Significant issues about internal control and risk management will be reported to the Board and the audit committee. The Company has set up the internal audit department, which is equipped with sufficient professional staff. Internal control & management department and internal audit department report to the audit committee regularly (at least twice a year).
- (2) As for internal control, the Company adopts the international internal control frame structure proposed by the Committee of Sponsoring Organizations of The National Commission of Fraudulent Financial Reporting. Based on the Articles of Association and current management system, and combined with domestic and foreign supervisory regulations, the Company made the internal control manual and continuously improved it, and realized total-factor internal control of internal environment, risk evaluation, control activities, information & communication, and internal supervision. Meanwhile, the Company continuously supervised and evaluated its internal control, included the corporate and regional companies into the internal control and evaluation scope by comprehensive inspections such as periodic test, self-examination, audit examination, etc., and made internal control evaluation report. The board of directors reviews internal control evaluation report annually. For the information about the internal control during the reporting period, please refer to 2018 Internal Control Evaluation Report Prepared by the Company.

The Company developed and implemented Information disclosure system and insider registration system. The Company assessed the implement of system periodically and disclosed it according to related regulations. For detailed information about information disclosure system, please refer to the website of the Company.

- (3) As for the risk management, the Company adopts the enterprise risk management frame made by the Committee of Sponsoring Organizations of The National Commission of Fraudulent Financial Reporting. It developed risk management system and established risk management organization system. The Company organizes annual risk evaluation every year, recognizes significant risks, implements responsibilities for risk management, makes corresponding strategies and measures for significant risks based on internal control system, and tracks the implement of corresponding measures for significant risks on a regular basis, in order to make sure that the Company's significant risks can get enough attention, supervision and response.
- (4) During the reporting period, the Board of the Company assessed internal control and risk management, and the Board considers the Company's internal control and risk management is effective.

C.3 The Audit Committee

- (1) The Audit Committee consists of independent non-executive director Ms. Jiang Bo who acts as the committee chairman, and independent non-executive director Mr. Pan Ying, Mr. Chen Weidong and Dong Xiucheng who acted as committee members. As verified, none of them had served as a partner or former partner in our current auditing firm.
- (2) The Company has published the terms of reference of the Audit Committee. According to the terms of reference, the Audit Committee assist the Board in financial reports, risk management and internal control. The terms of reference are available for inspection at the website of the Company and the Hong Kong Stock Exchange for reference.
- (3) The Audit Committee may consult independent professionals. Reasonable costs arising from or in connection with such consultation are borne by the Company. The working expenses of the committee are included in the budget of the Company. Meanwhile, according to the Company policies, the senior management and relevant departments of the company shall actively cooperate with the Audit Committee.
- (4) During the reporting period, the Audit Committee held 4 meetings. The review opinions were given at the meetings and submitted to the Board of Directors after signed by members. During the reporting period, the Board and the Audit Committee did not have any different opinion.

As the recommendation of the fifth audit meeting of the ninth session of the Board, the eleventh meeting of the ninth session Board of Directors of the Company has resolved to appoint Grant Thornton (Special General Partnership) and Grant Thornton Hong Kong Limited as the Company's domestic and international auditors for 2019, appoint Grant Thornton (Special General Partnership) as the Company's auditor regarding internal control for 2019, and proposed to authorize the Board to fix their remuneration. The proposed appointment of auditors of the Company is subject to approval by the shareholders of the Company at the 2018 annual general meeting.

An analysis of remuneration in respect of audit services is set forth in item 6 of the "Significant Events" section in this Annual Report.

D. Delegation by the Board

- (1) The Strategy and Investment Committee, the Audit Committee and the Remuneration Committee under the Board have the specific authority and duties delegated by the Board, and should report to the Board.
- (2) The Board, the Senior Management and each committees under the Board have specific authority and duties, which are set forth in the Articles of Association, the Rules and Procedures for shareholders' general meeting, the Rules and Procedures for the Board.
- (3) The attendance record of the ninth session of the Board's Committee meetings during the reporting period is as follows.

The Audit Committee

Name	Attended in Person	Attended by Proxies	Times of Absence
Jiang Bo	4	_	_
Pan Ying	4	_	_
Chen Weidong	_	_	_
Dong Xiucheng	_	_	_
Ye Guohua	1	_	_

The Remuneration Committee

Name	Attended in Person	Attended by Proxies	Time of Absence
Pan Ying	2	_	_
Jiang Bo	2	_	_
Fan Zhonghai	2	_	_

E. Communication with shareholders

- (1) Shareholders who individually or jointly hold more than 10% of the total number of shares with voting rights issued by the company may request the board of directors to convene a general meeting of shareholders in writing; if the board of directors fails to agree to the shareholders' meeting convening meeting in accordance with the Rules of Procedure of the shareholders' meeting, shareholders may convene and hold a meeting, the reasonable expenses incurred by the company shall be borne by the company. The foregoing provisions are based on the premise that the contents of the shareholders' meeting proposal shall fall within the scope of the general meeting of shareholders, have clear issues and specific resolutions, and comply with the relevant provisions of laws, administrative regulations and the Articles of Association.
- (2) When the company convened a general meeting of shareholders, shareholders who hold more than 3% of the total number of shares with voting rights of the company, either individually or in combination, may submit an interim proposal 10 days before the general meeting of shareholders.
- (3) During the reporting period, the Chairman should propose a separate resolution in respect of each substantially separate issue at a shareholders' general meeting. All resolutions are voted by ballots, so that the interests of all shareholders could be guaranteed. When the Company is to hold a shareholders' general meeting, it shall issue a written notice 45 days prior to the meeting (the day of meeting not included) informing all the registered shareholders.
- (4) The circulars to the shareholders of the Company set forth in detail the rights of the shareholders who are entitled to attend the shareholders' general meetings, the agenda and the voting procedures.
- (5) Chairman attends the shareholders' general meetings as president. The members of the Board, the Senior Management attend the shareholders' general meetings to respond to the inquiries from the shareholders. The auditors of the Company also attend the 2017 annual general meetings.

F. The secretary to the Board

- (1) Relevant qualifications of the secretary to the Board are recognized by the HKSE as the company secretary, and the secretary nominated by the Board Chairman and appointed by the Board of Directors. He is the senior management officer who reports to SSC and the Board of Directors. The secretary makes recommendation to the Board in respect of corporate governance and arranges orientation training and professional development for directors.
- (2) The secretary to the Board will actively participate in career development trainings. During the reporting period, the secretary of the Board, Mr. Li Honghai, has already been trained over 15 hours during the reporting period.

G. Investor relations

- (1) In order to further improve corporate governance, adapt to the company's business expansion needs, considering the company's situation, the company revised the relevant provisions of the Articles of Association under the review and approval of the company's 2017 annual general meeting of shareholders.
 - For details, please refer to the relevant announcements disclosed at "China Securities Journal", "Shanghai Securities News", "Securities Times" on 28 March 2018 and on the website of the Hong Kong Stock Exchange on 27 March 2018.
- (2) The company attaches great importance to investor relations work. The management leads the team to introduce roadshows to investors every year, introducing the company's development strategy, production and operation performance and other issues of concern to investors; the company set up a particular staff responsible for communication with investors. Under the regulatory requirements, the Company strengthen communication with investors by holding meetings with institutional investors, set up investor hotlines and communicated via online platforms.

I. Prepared in accordance with PRC Accounting Standards for Business Enterprises



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Auditor's Report

GTCSZ (2019)NO.110ZA1960-T

To the Shareholders of Sinopec Oilfield Service Corporation:

I. Opinion

We have audited the accompanying Financial Statements of Sinopec Oilfield Service Corporation ("SSC"), which comprises the company and consolidated balance sheets at 31 December 2018, the company and consolidated income statement, the company and consolidated cash flow statement, the company and consolidated statement of changes in owners' equity and notes to the financial statements for the years ended 31 December 2018.

In our opinion, the accompanying financial statements are prepared in accordance with Accounting Standards for Business Enterprises. The financial position of SSC for the year ended 31 December 2018, and the results of its operations and cash flows for the year ended 31 December 2018 are fairly presented in all material respects.

II. Basis For Opinion

We conducted our audit in accordance with China Standards on Auditing. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the consolidated Financial Statement Section of our report. We are independent of the Group in accordance with the Code of Ethics for Chinese Certified Public Accountant (Ethics Code) together with the ethical requirements that are relevant to our audit of the financial statements, and we fulfilled our other ethical responsibilities in accordance with these requirements and the Ethics Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

III. 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 of the current period. 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.

Key audit matters identified in our audit are summarized as follow:

(I) The recognition of revenue and cost

Descriptions of the matter

Revenue related to rendering of services and construction contracts is derived from provision of petroleum engineering and technical services to PRC and overseas petroleum exploration and development companies, including geophysics, drilling engineering, logging and mud logging, special downhole operations and engineering construction services.

Since January 1, 2018, the Group has implemented the revised "Accounting Standards for Business Enterprises No. 14 – Income" issued by the Ministry of Finance (hereinafter referred to as "New Income Standards"). According to the new income standards, the Group's petroleum engineering and technical services income would be recognized over a period of time. The recognition of related labor income and profits depends on management's estimation of the estimated total revenue of the contract and performance of the contract. The management of the Group adopts either the expected value or most likely amount method according to the contract to estimate the total budgeted contract revenue, and evaluates the total budgeted contract costs according to historical information and construction plan, which are continuously evaluated and revised during the execution of the contract. These rely on management's critical accounting estimation.

With the progress towards satisfaction of a performance obligation becomes certain, the Group should recognized revenue and costs in accordance with the progress of performance obligation being satisfied on the balance sheet date. The recognition of revenue and costs mainly depends on the management's critical estimation and judgments, including the estimated total revenue of the contract, estimated total cost, variable consideration, remaining contract costs, estimated progress and contract execution risk. If there is any change on the final contract billing amount or actual execution progress, actual results may differ from the management's estimates. Hence, we have identified the revenue and costs recognition related to rendering of services and construction contracts as a key audit matter.

Refer to Notes III. 25 (Revenue), Notes III. 26 (Contract cost), Notes III. 32(6) (Critical accounting judgment and estimates) for related disclosures of accounting policy, significant accounting judgment and estimate about revenue recognition, other detailed information are set out in Notes V. 36 and Note XIV. 5.

How our audit addressed the Key Audit Matter

Our audit procedures for the recognition of revenue and cost include:

We checked whether the accounting policies for recognizing revenue and costs are appropriate combined with the relevant provisions of accounting standards in accordance with the specific circumstances of the Group's business and contract terms.

Confirmed the effectiveness of internal controls by understanding, assessing and testing the design and implementation of key internal controls about management's determination on the estimated total revenue of the contract, estimated total contract costs, actual costs incurred and remaining contract costs, and the progress of the performance.

Through reviewing business contracts and interviews with management, we understood and assessed the reasonableness of the basis and assumptions of estimated total revenue and estimated total cost. We checked the consistency of the preparation and assumptions of various types of projects. We compared the cumulative cost as of December 31, 2018 to the estimated total cost, and checked the large cost recorded after the balance sheet date to analyze and evaluate the management's reasonableness of future workload and estimated residual cost of the contract.

Sampling tests were carried out for the determination of the progress of contract performance, and the supporting documents such as the main clauses in the relevant business contracts and the settlement statements or acceptance sheets and completion schedules issued by the customers were checked. The estimated revenue and estimated cost of the sub-projects were analyzed and calculated to confirm its reasonableness. In addition, the sample was tested for the amount and period of revenue and cost recognition to analyze whether it was accurately confirmed on the balance sheet date according to the progress of contract performance. The budgeted cost was compared with the accumulated costs incurred up to the end of the reporting period on a sample basis to verify the existence of cost overrun.

Based on the audit procedures we have performed, we believe that the audit evidence we have obtained is sufficient to support the management's judgment in determining the progress of contract performance, estimated total revenue and estimated total cost.

(II) Measurement of expected credit losses of accounts receivable and contract assets

Descriptions of the matter

The accounts receivable and contract assets of the Group (hereinafter referred to as "receivables") mainly come from related parties and other PRC and overseas petroleum exploration and development companies. On December 31, 2018, the book value of accounts receivable of the Group was RMB 18.155 billion, and the book value of contract assets was RMB 8.988 billion, which aggregated to 40% of total assets. As at 31 December 2018, the accumulated expected credit losses for account receivables and contract assets amounted to RMB2.552 billion.

The measurement of expected credit losses involves management's subjective judgment and is inherently uncertain. In determining the expected credit losses of receivables, the management needs to comprehensively assess the current credit rating of the counterparty, the experience of historical credit losses, and the current operating conditions, macroeconomic environment, external market environment, technical environment and changes in customer conditions.

Due to the inherent uncertainty of the expected credit loss measurement of the receivables, involving the subjective judgment of the management, and the amount of the receivables has a significant impact on the consolidated financial statements of the Group, we identified the measurement of expected credit losses of receivables as a key audit matter.

Refer to Notes III. 10 Financial instruments (Measurement of expected credit losses), Notes III. 32(2) (Critical accounting judgment and estimates) for related disclosures of accounting policy, significant accounting judgment and estimate about Measurement of expected credit losses. Other detailed information is set out in Notes V. 2 and Notes V. 4.

Section XI Financial Reports

How our audit addressed the Key Audit Matter

Our audit procedures for measurement of expected credit losses include:

We understood and assessed the internal controls of the Group related to the expected credit loss measurement. In addition, we tested the effectiveness of such internal controls.

We reviewed the relevant considerations and objective evidence of the management's expected credit loss measurement, and evaluated the management's method and calculation which divide the receivables into several combinations by considering the actual amount of bad debts and the situation of similar receivables in the history, combined with factors such as customer credit and market environment.

For major customers whose balance of receivables is large or exceeds the credit period, we gathered information about the debtor or its industry development status to identify whether there is any situation that affects the expected credit loss assessment results of receivables.

We have obtained ageing analysis of receivables as at 31 December 2018. We checked the supporting documents such as accounting vouchers and invoices. We also reviewed the key information such as aging analysis, overdue days, and relationship by sampling basis in order to ascertain the accuracy and classification on receivables.

We arranged audit confirmation to those customers who have significant balance of trade receivables and contract assets, and compared the results for the returned confirmation with the Group's record.

We recalculated the expected credit losses of the receivables and compared our calculations with the amount recorded by the Group.

We evaluated the reasonableness of management's expected credit losses assessment by considering the customer's settlement subsequent to the reporting period.

Based on the audit procedures we have performed, we believe that the management's judgments and estimates of the expected credit loss measurement of receivables are acceptable.

(III) Estimated loss of judicial reorganization of Brazil Subsidiary

Descriptions of the matter

In 2018, Sinopec(Brazil) Co.,Ltd., an indirectly wholly-owned overseas subsidiary of the Company(the "Brazil Subsidiary") has been approved by Court to enter into judicial reorganization. After the management assessed the impact, it estimated the estimated judicial restructuring expenses of RMB 475 million according to the restructuring plan. The amount of the provision mainly depends on the management's estimation and judgment, and the amount is significant, so we have identified the matter as a key audit matter.

For the provision's accounting policies and the disclosures of significant accounting judgments and estimates, please refer to Notes III.23 Provisions. For further information, please refer to Notes V.28.

How our audit addressed the Key Audit Matter

Our audit procedures for the provision of the Brazil Subsidiary's judicial reorganization include:

We understood and assessed the internal controls related to the provision of the Company and the Brazilian subsidiary's judicial reorganization, and tested the effectiveness of key control execution.

We obtained and reviewed the judicial reorganization plan prepared by the Brazil Subsidiary, understood the approval of the judicial reorganization plan, reviewed the minutes of meeting for related matters, and inquired the lawyers and legal counsel about the progress of the judicial reorganization and the expected losses. We checked the calculation process of the provision of the judicial reorganization of the Brazil Subsidiary, evaluated its adequacy and appropriateness, and the supporting documents and subsequent payment for the project are checked.

We also paid attention to the adequacy of the Group's disclosure of the Brazil Subsidiary's judicial reorganization.

Based on the audit procedures we have performed, management's judgments and estimates regarding the provision of the Brazil Subsidiary's judicial reorganization are acceptable.

IV. Other Information

The directors of the Company are responsible for the other information. The other information comprises all the information in the 2016 annual report of the Company, but does not include the consolidated financial statements and our auditors' report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

V. Responsibilities of Management and Those Charge with Governance for the Financial Statement

Management of the Company is responsible for the preparation and fair presentation of the financial statement in accordance with Accounting Standards for Business Enterprises, and for such internal control as management determines in necessary to enable the preparation of financial statements that are free form material misstatement, whether due to fraud or error.

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

Those charge with governance are responsible for overseeing the Company's financial reporting process.

VI. Auditor's Responsibilities for the Audit of the Financial Statement

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's 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 China Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise form fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with China Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- (1) Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or 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.
- (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 auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, further events or conditions may cause the Company to cease to continue as a going concern.
- (5) Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- (6) Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group 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 the governance body 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 the governance body, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's 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.

Grant Thornton China

Certified Public Accountants: Liu Zhizeng Certified Public Accountants: Wang Tao

Beijing, China

March 25, 2019

Consolidated And Company Balance Sheet

Prepared by:Sinopec Oilfield Service Corporation

As at 31 December 2018

Expressed in RMB thousand

						Expressed in	RMB thousand	
		As at 31/1	12/2018	As at 1/1	As at 1/1/2018		As at 31/12/2017	
Item	Note	Consolidated	Company	Consolidated	Company	Consolidated	Company	
Current assets:								
Cash at bank and on hand	V.1	2,203,441	58,679	2,547,975	236,745	2,547,975	236,745	
Financial assets held for trading		_	_	_	_	_	_	
Bills receivable and accounts receivable	V.2	16,111,200	_	18,191,357	_	18,191,357	_	
Including:Bills receivable		481,196	_	1,218,029	_	1,218,029	_	
Accounts receivable		15,630,004	_	16,973,328	_	16,973,328	_	
Prepayments	V.3	444,749	_	429,006	_	429,006	_	
Other receivables	V.4 XV.1	1,712,575	4,357,230	1,999,979	5,313,186	1,999,979	5,313,186	
Including:Interest receivables		_	_	_	_	_	_	
Dividend receivables		188	_	188	_	188	_	
Inventories	V.5	1,411,638	_	1,362,582	_	7,835,489	_	
Contract assets	V.6	8,871,704	_	6,472,907	_	_	_	
Assets classified as held for sale		_	_	_	_	_	_	
Non-current assets due within one year	V.7	40,477	_	_	_	_	_	
Other current assets	V.8	1,218,035	_	885,473	_	885,473	_	
Total current assets		32,013,819	4,415,909	31,889,279	5,549,931	31,889,279	5,549,931	
Non-current assets:								
Debt investments		_	_	_	_	_	_	
Available-for-sale financial assets	V.9	_	_	_	_	24,389	_	
Other debt investments		_	_	_	_	_	_	
Held-to-maturity investments		_	_	_	_	_	_	
Long-term receivables	V.10	_	_	233,061	_	233,061	_	
Long-term equity investments	V.11 XV.2	232,823	27,891,662	207,046	20,215,327	207,046	20,215,327	
Other equity instrument investments	V.12	39,011	_	24,389	_	_	_	
Other non-current financial assets		_	_	_	_	_	_	
Investment property		_	_	_	_	_	_	
Fixed assets	V.13	23,842,767	_	25,662,256	_	25,662,256	_	
Construction in progress	V.14	365,414	_	237,638	_	237,638	_	
Intangible assets	V.15	237,275	_	283,161	_	283,161	_	
Research and development expenditure		_	_	_	_	_	_	
Long-term deferred expenses	V.16	3,681,168	_	3,080,301	_	3,080,301	_	
Deferred income tax assets	V.17	492,438	_	472,184	_	472,184	_	
Other non-current assets		_	_	_	_	_	_	
Total non-current assets		28,890,896	27,891,662	30,200,036	20,215,327	30,200,036	20,215,327	
Total assets		60,904,715	32,307,571	62,089,315	25,765,258	62,089,315	25,765,258	

Consolidated And Company Balance Sheet (Continued)

Prepared by:Sinopec Oilfield Service Corporation

As at 31 December 2018

Expressed in RMB thousand

				Expressed in time trioded			
		As at 31/	12/2018	As at 1/1	/2018	As at 31/12/2017	
Item	Note	Consolidated	Company	Consolidated	Company	Consolidated	Company
Current liabilities:							
Short-term loans	V.18	17,606,082	_	17,510,830	_	17,510,830	_
Financial liabilities at fair value through profit or loss		_	_	_	_	_	_
Bills payable and accounts payable	V.19	27,059,504	1,535	29,546,017	_	29,546,017	_
Advances from customers	V.20	_	_	_	_	8,561,811	_
Contract liabilities	V.21	4,390,293	_	8,561,811	_	_	_
Employee benefits payable	V.22	510,507	_	381,275	_	381,275	_
Taxes payable	V.23	1,053,477	26,371	1,034,596	26,231	1,034,596	26,231
Other payables	V.24	2,186,009	_	6,431,966	1,127,163	6,431,966	1,127,163
Including: Interest payable		12,893	_	10,927	_	10,927	_
Dividend payable		_	_	_	_	_	_
Liabilities classified as held for sale		_	_	_	_	_	_
Non-current liabilities due within one year	V.25	156,559	_	28,844	_	28,844	_
Other current liabilities		917	_	11,744	_	11,744	_
Total current liabilities		52,963,348	27,906	63,507,083	1,153,394	63,507,083	1,153,394
Non-current liabilities:							
Long-term loans	V.26	536,291	_	455,826	_	455,826	_
Bonds payables		_	_	_	_	_	_
Long-term payables	V.27	868,672	_	67,533	_	67,533	_
Provisions	V.28	595,742	_	_	_	_	_
Deferred income	V.29	139,594	_	136,312	_	136,312	_
Deferred income tax liabilities	V.17	22,658	_	23,879	_	23,879	_
Other non-current liabilities		_	_	_	_	_	_
Total non-current liabilities		2,162,957	_	683,550	_	683,550	_
Total liabilities		55,126,305	27,906	64,190,633	1,153,394	64,190,633	1,153,394
Share capital	V.30	18,984,340	18,984,340	14,142,661	14,142,661	14,142,661	14,142,661
Capital reserve	V.31	11,710,763	14,561,006	8,925,950	11,764,970	8,925,950	11,764,970
Other comprehensive income	V.32	11,676	_	_	_	_	_
Special reserve	V.33	300,609	_	202,477	_	202,477	_
Surplus reserve	V.34	200,383	200,383	200,383	200,383	200,383	200,383
Retained earnings	V.35	-25,429,361	-1,466,064	-25,571,417	-1,496,150	-25,571,417	-1,496,150
Equity attributable to theparent compa	ny	5,778,410	32,279,665	-2,099,946	24,611,864	-2,099,946	24,611,864
Minority interests		_	_	-1,372	_	-1,372	_
Total equity		5,778,410	32,279,665	-2,101,318	24,611,864	-2,101,318	24,611,864
Total liabilities and equity		60,904,715	32,307,571	62,089,315	25,765,258	62,089,315	25,765,258

Chairman: Liu Zhongyun General Manager: Sun Qingde Chief Financial Officer: Li Tian

Consolidated And Company Income Statement

Prepared by:Sinopec Oilfield Service Corporation

As at 31 December 2018

Expressed in RMB thousand

Item	Note	Year ended	31/12/2018	Year ended 31/1	2/2017
	14010	Consolidated	Company	Consolidated	Company
I.Operating income	V.36	58,409,078		48,593,948	
Less:operating costs	V.36	53,320,296	_	51,091,147	_
Taxes and surcharges	V.37	286,719	_	383,981	25,922
Selling and distribution expenses	V.38	64,249	_	59,615	
General and administrative expenses	V.39	3,239,084	9,835	3,619,364	35,450
Research and development expenses	V.40	928,586		517,599	
Financial expenses	V.41	441,190	-39,921	580,051	-4,640
Including: Interest expenses		662,443	_	634,657	_
Interest income		87,886	1,302	19,382	4,641
Impairment losses	V.42	_	_	2,735,857	_
Credit impairment losses	V.43	37,068	_	_	_
Add: Other income	V.44	733,308	_	376,261	_
Investment income ("-" for losses)	V.45	27,083	_	-12,911	_
Including: Income from investment in associates and joint ventures		26,483	_	-13,578	_
Gains from changes in fair value ("-" for losses)		_	_	_	_
Gains from assets disposal ("-" for losses)	V.46	1	_	-172,575	_
II.Operating profit ("-" for losses)		852,278	30,086	-10,202,891	-56,732
Add: Non-operating income	V.47	458,857	_	126,204	_
Less: Non-operating expenses	V.48	795,498	_	273,899	_
III.Profit before income tax ("-" for losses)		515,637	30,086	-10,350,586	-56,732
Less: Income tax expenses	V.49	373,581	_	239,034	_
IV.Net profit for the year ("-" for losses)		142,056	30,086	-10,589,620	-56,732
(1) Classification according to operation continuity					
Including: Net profit from continuing operations ("-" for net loss)		142,056	30,086	-10,589,620	-56,732
Net profit from discontinued operations("-" for net loss)		_	_	_	_
(2) Classification according to attibute					
Including: Shareholders of the company		142,056	_	-10,589,524	-56,732
Non-controlling interests		_	_	-96	_

Item	Note	Year ended	31/12/2018	Year ended 3	31/12/2017
		Consolidated	Company	Consolidated	Company
V.Other comprehensive income, net of tax		11,676	_	_	_
Other comprehensive income (net of tax) attributable to shareholders of the company		11,676	_	_	_
A.Items that will not be reclassified to profit or loss		11,676	_	_	_
a.Changes in fair value of other equity instruments	V.32	11,676	_	_	_
B. Items that may be reclassified to profit or loss		_	_	_	_
Other comprehensive income (net of tax) attributable to non-controlling interests		_	_	_	_
VI.Total comprehensive income for the year		153,732	30,086	-10,589,620	-56,732
Attributable to:		_	_	_	_
Shareholders of the company		_	_	-10,589,524	-56,732
Non-controlling interests		_	_	-96	_
VII.Earnings per share:					
(1) Basic earnings per share	XVI.2	0.008	_	-0.749	_
(2) Diluted earnings per share		0.008	_	-0.749	_

In a business combination involving enterprises under common control, (net losses)/net profit of the acquiree before the combination date is RMB -2,385 thousand, and (net losses)/net profit of the acquiree in prior period is RMB -6,983 thousand.

Chairman: Liu Zhongyun General Manager: Sun Qingde

Chief Financial Officer: Li Tian Manager of accounting department:

Pei Defang

Consolidated And Company Cash Flow Statement

Prepared by:Sinopec Oilfield Service Corporation

As at 31 December 2018

Expressed in RMB thousand

Item	Note	Yearended	31/12/2018	Yearended31/12/2017		
		Consolidated	Company	Consolidated	Company	
1. Cash flows from operating activities:						
Cash received from the sales of goods and provision of services		57,450,008	_	48,024,729	_	
Tax refund received		375,483	_	322,777	_	
Cash received from other operating activities	V.50	2,612,319	1,132,440	3,273,594	13,245	
Subtotal of cash inflow from operating activities		60,437,810	1,132,440	51,621,100	13,245	
Cash paid for the purchases of goods and receiving of services		43,257,951	_	30,950,492	_	
Cash paid for employees and on behalf of employees		14,701,830	_	13,338,367	_	
Taxes paid		1,615,629	_	1,922,076	_	
Cash paid for other operating activities	V.50	3,802,189	192,117	5,005,404	164,138	
Subtotal of cash outflow from operating activities		63,377,599	192,117	51,216,339	164,138	
Net cash flow from operating activities	V.51	-2,939,789	940,323	404,761	-150,893	
2. Cash flows from investing activities:						
Cash received from the investments		_	_	_	_	
Cash received from the investment income		1,306	_	1,178	_	
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		104,024	_	162,626	_	
Net cash received from disposal of subsidiaries and other business units		_	_	_	_	
Cash received from other investing activities		_	_	_	_	
Subtotal of cash inflow from investing activities		105,330	_	163,804	_	
Cash paid for purchases of fixed assets, intangible assets and other long-term assets		1,272,413	_	1,175,748	_	
Cash paid for the investments		_	7,719,955	_	_	
Net cash paid for acquisition of subsidiaries and other business units		7,388	_	_	_	
Cash paid for other investing activities		_	_	_	_	
Subtotal of cash outflow from investing activities		1,279,801	7,719,955	1,175,748	_	
Net cash flow from investing activities		-1,174,471	-7,719,955	-1,011,944	_	
III. Cash flows from financing activities:						
Cash received from the acquisition of investments		7,639,698	7,639,698	_	_	
Cash received from borrowings		35,585,650	_	37,253,867	_	
Cash received from issuance of bonds		_	_	_	_	
Cash received for other financing activities	V.50	500,520	520	532,641	4,641	
Subtotal of cash inflow from financing activities		43,725,868	7,640,218	37,786,508	4,641	
Cash paid for repayments of borrowings		35,608,897	_	36,256,236	_	
Cash paid for distribution of dividend, profit or payments of interests		613,895	_	709,622	_	
Cash paid for other financing activities	V.50	3,884,291	1,120,892	72,616	_	
Subtotal of cash outflow from financing activities		40,107,083	1,120,892	37,038,474		
Net cash flow from financing activities		3,618,785	6,519,326	748,034	4,641	
IV. Effect of exchange rate changes on cash and cash equivalents		135,618	82,240	-79,460	_	
V. Net changes in cash and cash equivalents		-359,857	-178,066	61,391	-146,252	
Add: Cash and cash equivalents at beginning of year/period		2,533,437	236,745	2,472,046	382,997	
VI.Cash and cash equivalents at end of year/period		2,173,580	58,679	2,533,437	236,745	
				-		

Chairman: Liu Zhongyun General Manager: Sun Qingde Chief Financial Officer: Li Tian

Consolidated Statement of Changes in Shareholders' Equity

Prepared by:Sinopec Oilfield Service Corporation

As at 31 December 2018

Expressed in RMB thousand

			Amount of this period						
	Equity attributable to the the parent company								
Items	Share capital	Capital reserve	Less: Treasury stock	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Minority interests	Total equity
I.Balance at 31/12/2017	14,142,661	8,925,950	_	_	202,477	200,383	-25,571,417	-1,372	-2,101,318
Add:Changes in accounting policies	_	_	_	_	_	_	_	_	_
Correction of prior period errors	_	_	_	_	_	_	_	_	-
Business combination under common control	_	_	_	_	_	_	_	_	_
II.Balance at 01/01/2018	14,142,661	8,925,950	_	_	202,477	200,383	-25,571,417	-1,372	-2,101,318
III.Changes in equity during the year ("- "for decrease)	4,841,679	2,784,813	_	11,676	98,132	_	142,056	1,372	7,879,728
(I) Total comprehensive income	_	_	_	11,676	_	_	142,056	_	153,732
(II) Shareholders' contributions and decrease of capital	4,841,679	2,785,110	_	_	_	_	_	1,372	7,628,161
1. Contribution by ordinary shareholders	4,841,679	2,796,036	_	_	_	_	_	_	7,637,715
Capital contributed by the holders of other equity instrument	_	_	_	_	_	_	_	_	_
3. Share payments recognised in equity	_	_	_	_	_	_	_	_	_
4. Others	_	-10,926	_	_	_	_	_	1,372	-9,554
(III) Appropriation of profits	_	_	_	_	_	_	_	_	_
1. Appropriation for surplus reserves	_	_	_	_	_	_	_	_	_
2. Distributions to shareholders	_	_	_	_	_	_	_	_	_
(IV) Transfer within equity	_	_	_	_	_	_	_	_	-
(V) Specific Reserve	_	_	_	_	98,132	_	_	_	98,132
1. Appropriation during the year	_	_	_	_	970,710	_	_	_	970,710
2. Utilisation during the year (expressed in "-")	_	_	_	_	-872,578	_	_	_	-872,578
(VI) Others	_	-297	_	_	_	_	_	_	-297
IV.Balance at 31/12/2018	18,984,340	11,710,763	_	11,676	300,609	200,383	-25,429,361	_	5,778,410

Chairman: Liu Zhongyun General Manager: Sun Qingde Chief Financial Officer: Li Tian

Consolidated Statement of Changes in Shareholders' Equity (Continued)

Prepared by:Sinopec Oilfield Service Corporation

As at 31 December 2018

Expressed in RMB thousand

Items	Share capital	Capital reserve	Less: Treasury stock	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Minority interests	Total equity
I.Balance at 31/12/2016	14,142,661	8,897,232	_	_	176,068	200,383	-14,973,476	-1,276	8,441,592
Add:Changes in accounting policies	_	_	_	_	_	_	_	_	_
Correction of prior period errors	_	_	_	_	_	_	_	_	_
Business combination under common control	_	18,082	_	_	_	_	-8,417	_	9,665
II.Balance at 01/01/2017	14,142,661	8,915,314	_	_	176,068	200,383	-14,981,893	-1,276	8,451,257
III.Changes in equity during the year("- "for decrease)	_	10,636	_	_	26,409	_	-10,589,524	-96	-10,552,575
(I) Total comprehensive income	_	_	_	_	_	_	-10,589,524	-96	-10,589,620
(II) Shareholders' contributions and decrease of capital	_	10,636	_	_	_	_	_	_	10,636
1. Contribution by ordinary shareholders	_	_	_	_	_	_	_	_	_
Capital contributed by the holders of other equity instrument	_	_	_	_	_	_	_	_	_
3. Share payments recognised in equity	_	10,636	_	_	_	_	_	_	10,636
4. Others	_	_	_	_	_	_	_	_	_
(III) Appropriation of profits	_	_	_	_	_	_	_	_	_
Appropriation for surplus reserves	_	_	_	_	_	_	_	_	_
2. Distributions to shareholders	_	_	_	_	_	_	_	_	_
(IV) Transfer within equity	_	_	_	_	_	_	_	_	_
(V) Specific Reserve	_	_	_	_	26,409	_	_	_	26,409
1. Appropriation during the year	_	_	_	_	702,477	_	_	_	702,477
2. Utilisation during the year (expressed in "-")	_	_	_	_	-676,068	_	_	_	-676,068
(VI) Others	_	_	_	_	_	_	_	_	_
IV.Balance at 31/12/2017	14,142,661	8,925,950	_	_	202,477	200,383	-25,571,417	-1,372	-2,101,318

Chairman: Liu Zhongyun General Manager: Sun Qingde Chief Financial Officer: Li Tian

Statement of Changes in Shareholders' Equity

Prepared by:Sinopec Oilfield Service Corporation

For the year ended 31 December 2018

Expressed in RMB thousand

	Amount of this period							
Items	Share capital	Capital reserve	Less: Treasury stock	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Total equity
I.Balance at 31/12/2017	14,142,661	11,764,970	_	_	_	200,383	-1,496,150	24,611,864
Add:Changes in accounting policies	_	_	_	_	_	_	_	_
Correction of prior period errors	_	_	_	_	_	_	_	_
Others	_	_	_	_	_	_	_	_
II.Balance at 01/01/2018	14,142,661	11,764,970	_	_	_	200,383	-1,496,150	24,611,864
III.Changes in equity during the year("- "for decrease)	4,841,679	2,796,036	_	_	_	_	30,086	7,667,801
(I) Total comprehensive income	_	_	_	_	_	_	30,086	30,086
(II) Shareholders' contributions and decrease of capital	4,841,679	2,796,036	_	_	_	_	_	7,637,715
1. Contribution by ordinary shareholders	4,841,679	2,796,036	_	_	_	_	_	7,637,715
Capital contributed by the holders of other equity instrument	_	_	_	_	_	_	_	_
3. Share payments recognised in equity	_	_	_	_	_	_	_	_
4. Others	_	_	_	_	_	_	_	_
(III) Appropriation of profits	_	_	_	_	_	_	_	_
1. Appropriation for surplus reserves	_	_	_	_	_	_	_	_
2. Distributions to shareholders	_	_	_	_	_	_	_	_
3. Others	_	_	_	_	_	_	_	_
(IV) Transfer within equity	_	_	_	_	_	_	_	_
(V) Specific Reserve	_	_	_	_	_	_	_	_
1. Appropriation during the year	_	_	_	_	_	_	_	_
2. Utilisation during the year (expressed in "-")	_	_	_	_	_	_	_	_
(VI) Others	_	_	_	_	_	_	_	_
IV.Balance at 31/12/2018	18,984,340	14,561,006	_	_	_	200,383	-1,466,064	32,279,665

Chairman: Liu Zhongyun General Manager: Sun Qingde Chief Financial Officer: Li Tian

Statement of Changes in Shareholders' Equity (Continued)

Prepared by:Sinopec Oilfield Service Corporation

For the year ended 31 December 2018

Expressed in RMB thousand

	Amount of this period							
Items	Share capital	Capital reserve	Less: Treasury stock	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Total equity
I.Balance at 31/12/2016	14,142,661	11,754,334	_	_	_	200,383	-1,439,418	24,657,960
Add:Changes in accounting policies	_	_	_	_	_	_	_	_
Correction of prior period errors	_	_	_	_	_	_	_	_
Others	_	_	_	_	_	_	_	_
II.Balance at 01/01/2017	14,142,661	11,754,334	_	_	_	200,383	-1,439,418	24,657,960
III.Changes in equity during the year("- "for decrease)	_	10,636	_	_	_	_	-56,732	-46,096
(I) Total comprehensive income	_	_	_	_	_	_	-56,732	-56,732
(II) Shareholders' contributions and decrease of capital	_	10,636	_	_	_	_	_	10,636
Contribution by ordinary shareholders	_	_	_	_	_	_	_	_
Capital contributed by the holders of other equity instrument	_	_	_	_	_	_	_	_
3. Share payments recognised in equity	_	10,636	_	_	_	_	_	10,636
4. Others	_	_	_	_	_	_	_	_
(III) Appropriation of profits	_	_	_	_	_	_	_	_
Appropriation for surplus reserves	_	_	_	_	_	_	_	_
2. Distributions to shareholders	_	_	_	_	_	_	_	_
3. Others	_	_	_	_	_	_	_	_
(IV) Transfer within equity	_	_	_	_	_	_	_	_
(V) Specific Reserve	_	_	_	_	_	_	_	_
1. Appropriation during the year	_	_	_	_	_	_	_	_
2. Utilisation during the year (expressed in "-")	_	_	_	_	_	_	_	_
(VI) Others	_	_	_	_	_	_	_	_
IV.Balance at 31/12/2017	14,142,661	11,764,970	_	_	_	200,383	-1,496,150	24,611,864

Chairman: Liu Zhongyun General Manager: Sun Qingde

Chief Financial Officer: Li Tian

NOTES TO THE FINANCIAL INFORMATION

I.COMPANY GENERAL INFORMATION

1. Company Profile

Sinopec Oilfield Service Corporation (hereinafter referred to as the Company, including its subsidiaries referred to as the Group), formerly known as Sinopec Yizheng Chemical Fibre Company Limited, which was registered in the People's Republic of China ("PRC") and exclusively established by Yihua Group Corporation (hereinafter referred to as "Yihua") on 31 December 1993. The Company's headquarter is located in the 22th North Street, Chaoyang District, Beijing.

The Company issued 1 billion H shares in March 1994, 200 million A shares in January 1995 and a further 400 million new H shares in April 1995. The Company's H shares and new H shares were listed and commenced trading on the HKSE on 29 March 1994 and 26 April 1995 respetively. The Company's A shares were listed and commenced trading on the SSE on 11 April 1995.

Pursuant to the directives on the reorganisation of certain companies involving the Company and Yihua as issued by the State Council and other government authorities of the PRC, China Eastern United Petrochemical (Group) Company Limited ("CEUPEC") became the largest shareholder of the Company on 19 November 1997, holding the 1,680,000,000 A shares (representing 42% of the Company's issued share capital) previously held by Yihua. CITIC Group Corporation ("CITIC", formerly "CITIC Group") continues to hold 720,000,000 A shares (representing 18% of the Company's issued share capital) that it held prior to the reorganisation, and the balance of 40% remains in public hands in the form of A shares and H shares, in total 1,600,000,000 shares.

Following the State Council's approval of the reorganisation of China Petrochemical Corporation (hereinafter referred to as "Sinopec Group") on 21 July 1998, CEUPEC joined Sinopec Group. As a result of the reorganisation, Yihua replaced CEUPEC as the holder of the 42% of the Company's issued share capital.

The reorganisation of Sinopec Group was completed on 25 February 2000 and Sinopec Group set up a joint stock limited company, China Petroleum & Chemical Corporation (hereinafter referred to as "Sinopec Corp."), in the PRC. From that date, the 1,680,000,000 A shares (representing 42% of the issued share capital of the Company), which were previously held by Yihua, were transferred to Sinopec Corp. and Sinopec Corp. became the largest shareholder of the Company.

On 27 December 2011, CITIC established CITIC Limited in PRC and a restructuring agreement was signed. Whereby 720,000,000 of the Company's non-public shares held by CITIC have been transferred to CITIC Limited as part of its capital contributions on 25 February 2013 and CITIC Limited thus holds 18% of the Company's share capital.

Pursuant to "the Approval for A Share Reform Scheme of Sinopec Yizheng Chemical Fibre Company Limited" (SASAC Property Right [2013] No.442) issued by the State-owned Assets Supervision and Administration Commission and "the Approval for A Share Reform Scheme of Sinopec Yizheng Chemical Fibre Company Limited" (Cai Jin Han [2013] No.61) issued by Ministry of Finance of the PRC, the Company implemented the A Share Reform in 2013 under which the non-circulating shareholders of the Company paid 5 shares for each 10 circulating A shares that were registered on 16 August 2013 (the date of registration as agreed in the reform plan). As a result, 100,000,000 shares were paid in total. After the payment, the shares held by Sinopec Corp. And CITIC Limited in the Company decreased from 42% and 18% to 40.25% and 17.25%, respectively. From 22 August 2013, all non-circulating shares obtained circulating rights in the Shanghai Stock Exchange. However, in accordance with the agreed terms of restriction on tradability, as at 22 August 2016, 1,035,000,000 shares held by CITIC Limited has been available for trading. Pursuant to the resolutions of general meeting of shareholders of the Company, the Company converted 5 shares for each 10 H shares and A shares that were registered on 13 November 2013 and 20 November 2013, respectively from share premium into share capital. Additional 700,000,000 H shares and additional 1,300,000,000 A shares were thus issued and the transaction was completed on 22 November 2013.

Pursuant to "the Approval to matters in relation to the Material Asset Reorganisation of Sinope Yizheng Chemical Fibre Company Limited and Subsequent A Share Placement" (SASAC Property Right [2014] No.1015) issued by the State-owned Assets Supervision and Administration Commission and "the Approval to the Material Asset Reorganisation of Sinopec Yizheng Chemical Fibre Company Limited and Issuance of Shares to China Petrochemical Corporation for Asset Acquisition and Subsequent A Share Placement" (CSRC Permit [2014] No.1370) issued by China Securities Regulatory Committee, the Company implemented the material asset reorganization in 2014. The Company sold all of its assets and liabilities (hereinafter referred to as the "Outgoing Business") to Sinopec Corp., in exchange, would repurchase A shares of the Company held by Sinopec Corp. for cancellation, and issue shares to Sinopec Group in order to acquire 100% equity interest of Sinopec Oilfield Service Corporation (hereinafter referred to as "SOSC") held by Sinopec Group (hereinafter referred to as the "Incoming Equities" or "SOSC", hereinafter collectively referred to as the "Reorganisation"). The Company executed the Confirmation on Completion of Outgoing Business with Sinopec Corp., excuted the Confirmation on Completion of Incoming Equities with Sinopec Group on 22 December 2014. According to the Confirmations, the Company transfered Outgoing Business to Sinopec Corp., Sinopec Group transferred Incoming Equities to the Company. On 30 December 2014, the Company repurchased the Repurchased Shares (a total of 2,415,000,000 A Shares) from Sinopec Corp. for cancellation. On the even date, the Company issued the Consideration Shares (a total of 9,224,327,662 A Shares) to Sinopec Group, on 13 February 2015, the Company issued 1,333,333,333 A Shares to seven specific investors such as Darry Asset Management (Hangzhou) Co., Ltd.

Approved by China Securities Regulatory Commission's license [2018] No. 142, "The Approval of Sinopec Oilfield Service Corporation issuing non-public shares", the company had issues 1,526,717,556 shares to China Petrochemical Corporation and the Changjiang Pension Insurance Co., Ltd.-Changjiang Shengshihuazhang No. 2 Community Pension anagement Fund. The non-public issuance of ordinary shares (A shares) was issued at RMB 2.62 per share. Approved by China Securities Regulatory Commission's license [2018] No. 130, "The Approval of Sinopec Oilfield Service Corporation issuing overseas-listed foreign shares", the company had issued 3,314,961,482 H shares to Sinopec Century Bright Capital Investment Limited and China Structural Reform Fund.

The business scope of the Group includes provision of oilfield service, such as geophysics, drilling, logging and mud logging, special downhole operations, for production of onshore and offshore oil and natural gas and contracting overseas petroleum, natural gas, chemical, bridge, road, housing construction, water resources and hydropower, municipal utility, steel structure, electricity, fire-fighting equipment industrial plant projects.

These financial statements and financial information notes have been approved for issue by the eleventh meeting of the ninth term Board of Directors of the Company on 25 March 2019.

2. The Scope of Consolidated Financial Statements

The scope of the Group's consolidated financial statements includes the Company and all its subsidiaries. Compared with the previous year, the scope has no change, the details refer to note VI. Changes in scope of consolidation and note VII. Interests in other entities.

II. Basis of preparation

The financial statements are prepared in accordance with the latest "China Accounting Standards for Business Enterprises" and their application guidelines, interpretations and other relevant requirements (collectively, CASBE) issued by the Ministry of Finance of the PRC ("MOF"). In addition, the Group discloses relevant financial information in accordance with requirements in the Preparation Convention of Information Disclosure by Companies Offering Securities to the Public No.15—General Rules on Financial Reporting(2014 revised) issued by the China Securities Regulatory Commission.

The financial statements are prepared on a going concern basis.

The financial statements are prepared on a going concern basis. The Group's accumulated loss is RMB 25,429,361 thousand, current liabilities exceed current assets of approximately RMB 20,949,529 thousand as at 31 December 2018(Current liabilities exceed current assets of RMB 31,617,804 thousand in 2017),committed capital expenditures are approximately RMB 136,467 thousand. The directors of the Company has assessed that the Group is expected to be continued during the next twelve months. As the Group's borrowings are mainly from Sinopec Group and its subsidiaries which have maintained its long-term good relations with the Group, the Group can obtain adequate financial supports from those institutions. In December 2018, the company obtained a credit line of RMB 12 billion and an equivalent value of USD 0.96 billion from subsidiaries of Sinopec Group, and line of credit promissory note of RMB 7 billion. After the reorganization, the Company will further broaden the financing channel, develop good relations with the public and state-owned financial institutions in order to obtain a more adequate line of credit. The directors of the Company consider the measures sufficient to meet the Group's debt repayment and capital commitment required. Consequently, the Company prepared the financial statements on a going concern

The Group follows the accrual basis of accounting. The financial statements are prepared under the historical cost convention except for certain financial instruments and otherwise described below. If assets are impaired, provision for impairment shall be made in accordance with the relevant policies.

III. Summary of significant accounting policies and accounting estimates

The Group's accounting policies for depreciation of fixed assets, amortization of intangible assets and long-term deferred expense and revenue are recognized on the basis of its production and management characterisitics, the specific accounting policies are set out in Note III, 15, Note III, 18, Notes III, 21, Notes III, 19 and Notes III, 25.

1. Declaration of compliance with the CASBE

The financial statements are in compliance with the requirement of CASBE, which gives a true view of the entire company's and consolidated financial position at 31 December 2018 and the Company's and the consolidated operating results during at 31 December 2018.

2. Accounting period

The accounting period of the Group is from 1 January to 31 December.

3. Operating cycle

The operating cycle of the Group is 12 months.

4. Functional currency

The Group uses RMB as its functional currency. All amounts in this report are expressed in RMB unless otherwise stated.

The Group's subsidiaries, joint ventures and associates' recording currency is determined on the basis of the currencies in which major income and costs are denominated and settled and translated into RMB for the preparation of the financial statements.

5. Business combinations

(1) Business combination involving entities under common control

For the business combination involving entities under common control, the assets and liabilities that are obtained in the business combination shall be measured at their original carrying amounts at the combination date as recorded by the party being combined, except for the adjustments of different accounting policies. The difference between the carrying amount of the net assets obtained and the carrying amount of assets paid shall be adjusted to capital reserve, if the capital reserve is not sufficient to absorb the difference, any excess difference shall be adjusted to the retained earnings.

Business combinations involving enterprises under common control and achieved in stages

In the separate financial statements, the initial investment cost is calculated based on the shareholding portion of the assets and liabilities obtained and are measured at the carrying amounts as recorded by the enterprise being combined at the combination date. The difference between the initial investment cost and the sum of the carrying amount of the original investment cost and the carrying amount of consideration paid for the combination is adjusted to the capital reserve, if the capital reserve is not sufficient to absorb the difference, the excess difference shall be adjusted to retained earning.

In the consolidated financial statements, the assets and liabilities obtained at the combination shall be measured at the carrying value as recorded by the enterprise at combination date, except for adjustments of different accounting policies. The difference between the sum of the carrying value from original shareholding portion and the new investment cost incurred at combination date and the carrying value of net assets obtained at combination date shall be adjusted to capital reserve, if the balance of capital reserve is not sufficient to absorb the differences, any excess is adjusted to retained earnings. The long-term investment held by the combination party, the recognized profit or lose, comprehensive income and other change of shareholding's equity at the closer date of the acquisition date and combination date under common control shall separately offset the opening balance of retained earnings and profit or loss during comparative statements.

5. Business combinations (Continued)

(2) Business combination involving entities not under common control

For business combinations involving entities not under common control, the consideration for each combination is measured at the aggragete fair value at acquisition date, of assets given, liabilities incurred or assumed, and equity securities issued by the acquirer in exchange for control of the acquiree. At acquisition date, the acquired assets. liabilities or contingent liabilities of acquiree are measured at their fair value.

Where the cost of combination exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised as goodwill, and measured on the basis of its cost minus accumulative impairment provision; Where the cost of combination is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised in profit or loss for the current period after reassessment.

Business combinations involving enterprises not under common control and achieved in stages

In the separate financial statements, the initial investment cost of the investment is the sum of the carrying amount of the equity investment held by the entity prior to the acquisition date and the additional investment cost at the acquisition date. The disposal accounting policy of other comprehensive income related with equity investment prior to the purchase date recognized under equity method shall be compliance with the method when the acquiree disposes the related assets or liabilities. Shareholder's equity due to the changes of other shareholder's equity other than the changes of net profit, other comprehensive income and profit distribution shall be transferred to profit or lose for current period when disposed. If the equity investment held by the entity prior to the acquisition date is measured at fair value, the cumulative changes in fair value recognized in other comprehensive income shall be transferred to profit or loss for current period when accounted for using cost method.

In the consolidation financial statements, the combination cost is the sum of consideration paid at acquisition date and fair value of the acquiree's equity investment held prior to acquisition date; the cost of equity of the acquiree held prior to acquisition date shall be re-measured at the fair value at acquisition date, the difference between the fair value and book value shall be recognized as investment income or loss for the current period. Other comprehensive income and changes of investment equity related with acquiree's equity held prior to acquisition date shall be transferred to investment profit or loss for current period at acquisition date, besides there is other comprehensive income incurred by the changes of net assets or net liabilities due to the re-measurement of defined benefit plan.

(3) Transaction fees attribution during the combination

The intermediary and other relevant administrative expenses such as audit, legal and valuation advisory for business combinations are recognised in profit or loss when incurred. Transaction costs of equity or debt securities issued as the considerations of business combination are included in the initial recognition amounts.

6. Method of preparing consolidated financial statements

(1) Scope of consolidation

The scope of consolidation financial statements is on the basis of control. Control refers to the power over investee of the Group, exposure or rights to variable returns in participating in the investee's related activities and the ability to use the power to affect those variable returns. A subsidiary is the entity controlled by the Group (including severable part of the investee and the enterprise, structured body controlled by the enterprise, etc).

(2) Method of preparing of consolidated financial statements

The consolidated financial statements are based on the financial statements of the Company and its subsidiaries, and are prepared by the Company in accordance with other relevant information. In preparing the consolidation financial statements, the Company and its subsidiaries are required to apply consistent accounting policy and accounting period, intra-group transactions and balances shall be offset.

A subsidiary acquired through a business combination involving entities under common control in the reporting period shall be included in the scope of the consolidation from the beginning of the combination date, the subsidiary's income, expenses and profits are included in the consolidated results of operations, and cash flows are included in the consolidated cash flow statement from the acquisition date.

A subsidiary acquired through a business combination involving entities not under common control in the reporting period, the subsidiary's income, expenses and profits are included in the consolidated results of operations, and cash flows are included in the consolidated cash flow statement from the acquisition date to the end of the reporting date.

The portion of a subsidiary's equity that is not attributable to the parent is treated as minority interests and presented in the consolidated balance sheet within shareholders' equity. The portion of a subsidiary's profit or loss that is attributable to the minority interests presented in the consolidated statement of comprehensive income as "minority interests". The portion of a subsidiary's losses that exceeds to the beginning minority interests in the shareholders' equity, the remaining balance still reduces the minority interests.

(3) Purchase of the minority stake in the subsidiary

The difference between the long-term equity investments costs acquired by the purchase of minority interests and the share of the net assets that the subsidiaries have to continue to calculate from the date of purchase or the date of consolidation in proportion to the new shareholding ratio is adjusted to the capital reserve, if the capital reserve is not sufficient, any excess is adjusted to retained earning. The difference between the disposal of the equity investment without losing control over its subsidiary and the disposal of the long-term equity investment corresponding to the share of the net assets of

the subsidiaries from the date of purchase or the date of consolidation is as well.

III. Summary of significant accounting policies and accounting estimates (Continued)

6. Method of preparing consolidated financial statements (Continued)

(4) Treatment of loss of control of subsidiaries

When an enterprise loses control over investee because of disposing part of equity investment or other reasons, the remaining part of the equity investment should be re-measured at fair value at the date when losing control over the investee; the cash received in disposal of the equity investment and the fair value of remaining part of the equity investment, deducting net assets proportion calculated by original share percentage since the acquisition date and goodwill should be recorded in profit or loss for current period of disposal

Other comprehensive income related with acquiree's equity held prior to acquisition date shall be transferred to investment income or loss for current period at acquisition date, besides there is other comprehensive income incurred by the changes of net assets or net liabilities due to the re-measurement of defined benefit plan.

(5) Special treatment of step disposal until the loss of control of subsidiaries

The clauses, conditions and economic impact of step disposal until the loss of control of subsidiaries satisfies one or more criteria, the Group will consider these transactions as package transactions for the accounting treatment:

- ① These transactions are entered simultaneously or in consideration of the mutual influence;
- 2 These transactions can only achieve one complete business results:
- ③ The occurrence of a transaction is depending at least one of other transactions;
- A transaction alone is not the economical; however, it becomes economical to consider together with other transactions.

In the separate financial statements, the difference between the related long term equity investment for each disposal of equity interest and received consideration are recognized in the profit or loss in the current period. The difference between the disposal before the loss of control and the carrying amount of the long-term equity investment is recognized as other comprehensive income, and shall be transferred to the profit or loss for the current period when the entity loses the control.

In the consolidated financial statements, the measurement of the remaining equity interest and treatment of the loss of disposal is in accordance to "Treatment of loss of control of subsidiaries as described above". The difference between the disposal consideration and the related share of net assets of the subsidiaries for each step disposal:

- A. Related to a package transaction: Recognized as other comprehensive income. It is recognized in the profit or loss in the current period when the entity loses the control.
- B. Not related to a package transaction: Recognized in capital reserve as equity. It shouldn't be recognized in the profit or loss in the current period when the entity loses the control.

7. Classification of joint arrangement and accounting treatment for joint operation

A joint arrangement is an arrangement of which two or more parties have joint control. The group's joint arrangement is divided into joint operation and joint venture.

(1) Joint operation

A joint operation is a joint arrangement whereby the group that have joint control of the arrangement have rights to the assets, and obligations for the liabilities.

A joint operator shall recognise in relation to its interest in a joint operation:

- A. its assets, including its share of any assets held jointly;
- B. its liabilities, including its share of any liabilities incurred jointly;
- C. its revenue from the sale of its share of the output arising from the joint operation;
- D. its share of the revenue from the sale of the output by the joint operation;
- E. its expenses, including its share of any expenses incurred jointly.

(2) Joint ventures

A joint venture is a joint arrangement whereby the group that have joint control of the arrangement have rights to the net assets of the arrangement.

The accounting treatment is in accordance with the provisions of long-term investment under equity method.

III. Summary of significant accounting policies and accounting estimates (Continued)

8. Standard of determining cash and cash equivalents

Cash comprises cash on hand and deposits that can be readily drawn on demand. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

9. Foreign currency transactions and translation of foreign currency statement

(1) Foreign currency transactions

If foreign currency transactions occur, they are translated into the amount of functional currency by applying the spot exchange rate at the dates of the transactions.

At the end of the period, foreign currency monetary items are translated using the spot exchange rate at the balance sheet date. Exchange differences arising from the differences between the spot exchange rate prevailing at the balance sheet date and those spot rates used on initial recognition or at the previous balance sheet date are recognised in profit or loss for the current period; foreign currency non-monetary items carried at historical cost continue to be measured at the amounts in functional currency translated using the spot exchange rates at the dates of the transactions; foreign currency non-monetary items carried at fair value are translated using the spot exchange rates at the date when the fair value was determined. Differences between the translated amount and the original amount of functional currency are included in profit or loss for the current period.

(2) Translation of foreign currency information

At the balance sheet date, when translating the foreign currency financial statements of overseas subsidiaries, the assets and liabilities of the balance sheet are translated using the spot exchange rate at the balance sheet date; all items except for "undistributed profits" of the shareholders' equity are translated at the spot exchange rate.

The revenue and expenses in profit or loss are translated using at rates with reasonable approximation of the rates prevailing on the transaction dates.

All items of the statement of cash flows are translated using at rates with reasonable approximation of the rates prevailing on the transaction dates. As an adjustment item, the impact of exchange rate changes on cash amount is reflected separately in the cash flow as "Effect of exchange rate changes on cash and cash equivalents".

Differences arising from the translation of financial statements are separately presented as the "other comprehensive income" in the shareholders' equity of the balance sheet.

When disposing overseas operations and losing control, the "Translation reserve" related to the overseas operation presented in the shareholders' equity in the balance sheet shall be transferred together or as the percentage of disposing the overseas operation to profit or loss for the current period of disposal.

10. Financial instruments

Financial instruments refer to the contracts of forming enterprise financial assets and other entities' financial liabilities or equity instruments.

(1) Recognition and Derecognition of financial instruments

A financial asset or financial liability is recognised when the Group becomes one party of financial instrument contracts.

If one of the following conditions is met, the financial assets are terminated:

- ① The right of the contract to receive the cash flows of financial assets terminates
- 2 The financial asset has been transferred, and is in accordance with the following conditions for derecognition.

If the obligations of financial liability have been discharged in total or in part, derecognize all or part of it. If the Group (debtor) makes an agreement with the creditor to replace the current financial liability of assuming new financial liability which contract provisions are different in substance, derecognize the current financial liability and meanwhile recognize as the new financial liability.

If the financial assets are traded routinely, they are recognised and derecognised at the transaction date.

10. Financial instruments (Continued)

(2) Classification and measurement of financial assets

Financial assets are classified into the following three categories depends on the Group's business mode of managing financial assets and cash flow characteristics of financial assets: financial assets measured at amortized cost, financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss.

Financial assets measured at amortised cost

The Group shall classify financial assets that meet the following conditions and are not designated as financial assets at fair value through profit or loss as financial assets measured at amortized cost:

- The Group's business model for managing the financial assets is to collect contractual cash flows;
- The terms of the financial asset contract stipulate that cash flows generated on a specific date are only payments of principal and interest based on the amount of outstanding principal.

After initial confirmation, the real interest rate method is used to measure the amortized cost of such financial assets. Profits or losses arising from financial assets measured at amortized costs and not part of any hedging relationship are included in current profits and losses when the recognition is terminated, amortized or impaired according to the Actual Interest Rate Law.

Financial assets at fair value through other comprehensive income

The Group shall classify financial assets that meet the following conditions and are not designated as financial assets measured at fair value and whose changes are recorded in current profits and losses as financial assets measured at fair value through other comprehensive income:

- The Group's business model for managing the financial assets is both to collect contractual cash flows and to sell the financial assets;
- The terms of the financial asset contract stipulate that cash flows generated on a specific date are only payments of principal and interest based on the amount of outstanding principal.

After initial recognition, financial assets are subsequently measured at fair value. Interest, impairment losses or gains and exchange gains calculated by the effective interest rate method are recognised in profit or loss, while other gains or losses are recognised in other comprehensive gains. When derecognized, the accumulated gains or losses previously recognised in other comprehensive gains are transferred from other comprehensive gains and recorded in current profits and losses.

Financial assets at fair value through profit or loss

In addition to the aboving financial assets which are measured at amortized cost or at fair value a through other comprehensive income, the Group classifies all other financial assets as financial assets measured at fair value through profit or loss. When initial recognition, in order to eliminate or significantly reduce accounting mismatches, the Group irrevocably designates some financial assets that should have been measured at amortized cost or at fair value through other comprehensive gains as financial assets at fair value through profit or loss.

After initial recognition, the financial assets are subsequently measured at fair value, and the profits or losses (including interest and dividend income) generated from which are recognised in profit or loss, unless the financial assets are part of the hedging relationship.

However, for non-tradable equity instrument investment, when initially recognized, the Group irrevocably designates them as financial assets at fair value through other comprehensive gains. The designation is made on the basis of individual investment, and the relevant investment conforms to the definition of equity instruments from the issuer's point of view.

After initial confirmation, financial assets are subsequently measured at fair value. Dividend income that meets the requirements is recognised in profit and loss, and other gains or losses and changes in fair value are recognised in other comprehensive gains. When derecognized, the accumulated gains or losses previously recognised in other comprehensive gains are transferred from other comprehensive gains to retained earnings.

The business model of managing financial assets refers to how the group manages financial assets to generate cash flow. The business model decides whether the source of cash flow of financial assets managed by the Group is to collect contract cash flow, sell financial assets or both of them. Based on objective facts and the specific business objectives of financial assets management decided by key managers, the Group determines the business model of financial assets management.

The Group evaluates the characteristics of the contract cash flow of financial assets to determine whether the contract cash flow generated by the relevant financial assets on a specific date is only to pay principal and interest based on the amount of unpaid principal. Among them, principal refers to the fair value of financial assets at the time of initial confirmation; interest includes the consideration of time value of money, credit risk related to the amount of unpaid principal in a specific period, and other basic borrowing risks, costs and profits. In addition, the Group evaluates the terms and conditions of the contracts that may lead to changes in the time distribution or amount of cash flow in financial asset contracts to determine whether they meet the requirements of the aboving contract cash flow's. characteristics

Only when the Group changes its business model of managing financial assets, all the financial assets affected shall be reclassified on the first day of the first reporting period after the business model changes, otherwise, financial assets shall not be reclassified after initial confirmation.

In addition to accounts receivable without significant financing elements, financial assets are measured at fair value when initially recognized. For financial assets at fair value through profits and losses, the related transaction costs are directly recognized through profits and losses, and the related transaction costs of other types of financial assets are included in the initial recognition amounts. For accounts receivable without significant financing elements, the Group shall initially measure with the transaction price according to the accounting policies in Note III,27.

10. Financial instruments (Continued)

(3) Classification and Measurement of financial liabilities

On initial recognition, financial liabilities are classified as: financial liabilities at fair value through profit or loss (FVTPL), and financial liabilities measured at amortized cost. For financial liabilities not classified as at fair value through profit or loss, the transaction costs are recognised in the initially recognised amount

Financial liabilities at fair value through profits and losses

Financial liabilities at FVTPL include transaction financial liabilities and financial liabilities designated as at fair value through profit or loss in the initial recognition. Such financial liabilities are subsequently measured at fair value, all gains and losses arising from changes in fair value and dividend and interest expense relative to the financial liabilities are recognised in profit or loss for the current period.

Financial liabilities measured at amortized cost

Other financial liabilities are subsequently measured at amortized cost using the effective interest method; gains and losses arising from derecognition or amortization is recognised in profit or loss for the current period.

Financial guarantee contract

Financial guarantee contract are not related to financial liabilities measured at fair value through profits and losses. They are measured at fair value on initial recognition,, subsequenty measured by the higher amount of the loss reserve of provisions determined by the expected credit losses model and the initial confirmation amount deducting the accumulated amortization.

Distinction between financial liabilities and equity instruments

The financial liability is the liability that meets one of following cateria:

- ① Contractual obligation to deliver cash or other financial instruments to another entity.
- ② Under potential adverse condition, contractual obligation to exchange financial assets or financial liabilities with other parties.
- ③ A contract that will or may be settled in the entity's own equity instruments and is a non-derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instruments.
- A derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments.

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

If the group cannot unconditionally avoid fulfilling a contractual obligation by delivering cash or other financial assets, the contractual obligation meets the definition of financial liability.

If a financial instrument must or are able to be settled by the group's own equity instrument, the group should consider whether the group's equity instrument as the settlement instrument is a substitute of cash or other financial assets or the residual interest in the assets of an entity after deducting all of its liabilities. If the former, the tool is the group's financial liability; if the latter, the tool is the equity instrument of the group.

(4) Derivative financial instruments and embedded derivatives

The Group's derivative financial instruments include forward foreign exchange contracts, currency exchange rate contracts, interest rate swap contracts, foreign exchange option contracts, etc. Initially measured at fair value on the date of the derivative contract signed and are subsequently measured at fair value. A derivative with positive fair value shall be recognized as an asset, otherwise that with negative fair value shall be recognized as a liability. Any profit or loss arising from changes of fair value and not compliance with the accounting provision of hedge shall be recognized as profit or loss for current period.

The hybrid instrument contains an embedded derivative, if the main contract belongs to financial asset, the hybrid instrument as a whole shall apply to the regulations of financial assets. If the main contract is not belongs to financial asset and the mixed instrument is not measured at fair value through profits and losses, the economic characteristics and risks of the embedded derivative and the main contract are not closely related, and under the same conditions with embedded derivative, the individual instrument as defined in line with derivatives, embedded derivatives are separated from the hybrid instrument as a separate derivative instrument. If the embedded derivative cannot be separately measured at the date of acquisition or the date subsequent to the financial reporting date, then the hybrid instrument accounted for financial assets or financial liabilities at fair value through profit and loss.

10. Financial instruments (Continued)

(5) Fair value of financial instruments

The recognization of fair value of financial assets and financial liability is stated as note III. 11.

(6) Impairment of financial assets

On the basis of expected credit losses, the Group performs impairment assessment on the following items and confirms the loss provision.

- financial assets measured at amortized cost;
- debt investments at fair value through other comprehensive income;
- contract assets defined in Accounting Standards for Business Enterprises No. 14 Revenue;
- lease receivables;
- Financial guarantee contract(except measured at fair value through profit or loss or formed by continuing involvement of transferred financial assets or the transfer does not qualify for derecognition).

Measurement of expected credit losses

The expected credit losses refers to the weighted average of the credit losses of financial instruments that are weighted by the risk of default. Credit loss refers to the difference between all contractual cash flows receivable from the contract and all cash flows expected to be received by the Group at the original effective interest rate, that is, the present value of all cash shortages.

The Group separately measures the expected credit losses of financial instruments at different stages. The credit risk on a financial instrument has not increased significantly since initial recognition, which is in the first stage. The Group shall measure the loss allowance for that financial instrument at an amount eequal to 12-month expected credit losses. If the credit risk of financial instruments has increased significantly since the initial recognition, but no credit impairment has occurred, which is in the second stage. The Group shall measure the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses. If the financial instrument has occurred credit impairment since initial recognition, which is in the third stage, and the Group shall measure the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses.

For financial instruments with lower credit risk at the balance sheet date, the Group assumes that their credit risk has not increased significantly since the initial recognition, and shall measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses.

The lifetime expected credit losses,refer to the expected credit losses caused by all possible defaults during the whole expected lifetime. The 12-month expected credit losses,refer to the expected credit losses caused by all possible defaults during the 12-month after balance sheet date(if the expected duration of financial instrument is less than 12 months, then for the expected duration),which is part of the lifetime expected credit losses

When measure the expected credit loss, the longest contract period (including the option of renewal) that the group needs to consider is the longest contract period the enterprise facing credit risk.

For financial instruments in the first stages, second stages and with lower credit risk, the Group calculates interest income on the basis of their book balances without deduction of impairment provisions and actual interest rates. For financial instruments in the third stage, the Group calculates interest income according to their book balance minus the impairment provision and the actual interest rate.

For bills receivable, accounts receivable and contract assets, whether or not there are significant financing elements, the Group shall always measure the loss allowance for them at an amount equal to the lifetime expected credit losses.

According to the characteristics of credit risk, the group divides and combines bills receivable and accounts receivable, contract assets and leased receivables. On the basis of the combination, the group calculates the expected credit losses. The basis of determining the combination is as follows:

- A. Bills receivable
- Bill receivable group 1: Bank acceptance bills
- Bill receivable group 2:Trade acceptance bills
- B. Accounts receivable
- Accounts receivable group 1: Amount receivables of related parties
- Accounts receivable group 2: Amount receivables of other customers

10. Financial instruments (Continued)

(6) Impairment of financial assets (Continued)

- C. Contract assets
- Contract assets group 1: Engineering services
- Contract assets group 1:Other

For the accounts receivable divided into group, the group refers to the historical credit losses, combines the current situation with the forecast of future economic situation, compiles a comparison table between the age of accounts receivable and the lifetime expected credit losses rate to calculate the expected credit losses.

For the bills receivables and contract assets divided into group, the Group refers to historical credit losses, with the current situation and the forecast of future economic situation, calculates the expected credit losses through the exposure on default and the lifetime expected credit losses rate.

Other receivables

According to the characteristics of credit risk, the group divides other receivables into group. On the basis of the combination, the group calculates the expected credit losses. The basis of determining the combination is as follows:

- Other receivables group 1: Amount receivables of related parties
- Other receivables group 1: Amount receivables of other customers

For other receivables a divided into group, the Group calculates the expected credit losses through the exposure on default and the lifetime expected credit losses rate.

Long-term receivables

Long-term receivables inculdes receivables for construction, installation receivables for providing services.

According to the characteristics of credit risk, the group divides receivables for construction, installation receivables for providing services into group. On the basis of the group, the group calculates the expected credit losses. The basis of determining the combination is as follows:

- A. Long-term receivables
- Long-term receivables group1:Receivables for construction
- Long-term receivables group2:Installation receivables for providing services.
- Long-term receivables group2:Amount receivables of other customers

For receivables for construction and installation receivables for providing services, the Group refers to historical credit losses, with the current situation and the forecast of future economic situation, calculates the expected credit losses through the exposure on default and the lifetime expected credit losses rate.

For other receivables and long-term receivables divided into group expect receivables for construction and installation receivables for providing services, the Group calculates the expected credit losses through the exposure on default and the future 12-month or lifetime expected credit losses rate.

Debt investments. Other debt investments

For debt investments and other debt investments, the group calculates the expected credit losses through the exposure on default and the future 12-month or lifetime expected credit losses rate, according to the nature of the investment, the types of counterparty and risk exposure.

10. Financial instruments (Continued)

(6) Impairment of financial assets (Continued)

Assessment of Significant Increase in Credit Risk

By comparing the default risk of financial instruments on balance sheet day with that on initial recognition day, the Group determines the relative change of default risk of financial instruments during the expected life of financial instruments, to evaluate whether the credit risk of financial instruments has increased significantly since the initial recognition.

To determine whether credit risk has increased significantly since the initial recognition, the Group considers reasonable and valid information, including forward-looking information, that can be obtained without unnecessary additional costs or efforts. Information considered by the Group includes:

- The debtor can't pay principal and interest on the expiration date of the contract;
- · Serious deterioration of external or internal credit ratings (if any) of financial instruments that have occurred or are expected to occur;
- Serious deterioration of the debtor's operating results that have occurred or are expected to occur;
- Changes in the existing or anticipated technological, market, economic or legal environment will have a significant negative impact on the debtor's repayment capacity.

According to the nature of financial instruments, the Group evaluates whether credit risk has increased significantly on the basis of a single financial instrument or a combination of financial instruments. When assessing on the basis of the combination of financial instruments, the Group can classify financial instruments based on common credit risk characteristics, such as overdue information and credit risk rating.

If the delay exceeds 30 days, the Group determines that the credit risk of financial instruments has increased significantly.

The Group considers that financial assets default in the following circumstances

- The debtor is unlikely to full pay its arrears to the group, and the assessment does not take into account recourse actions taken by the group, such as liquidation of collateral (if held); or
- Financial assets have delay more than 90 days.

Financial assets that have occured credit impairment

On the balance sheet date, the Group assesses whether credit impairment has occurred in financial assets measured at amortized cost and debt investments measured at fair value through other comprehensive income. When one or more events adversely affect the expected future cash flow of a financial asset occur, the financial asset becomes a financial asset with credit impairment. Evidence of credit impairment of financial assets includes the following observable information:

- Significant financial difficulties occurs to the issuer or debtor;
- The debtor breaches any of the contractual stipulations, for example, fails to pay or delays the payment of interests or the principal, etc.;
- For economic or contractual considerations related to the financial difficulties of the debtor, the Group grants concessions to the debtor that will not be made under any other circumstances.
- The debtor is probable to go bankrupt or undergo other financial restructuring.
- Financial difficulties of issuer or debtor lead to the disappearance of financial assets active market.

Presentation of expected credit losses reserve

In order to reflect the changes happened to the credit risk of financial instruments since the initial recognition, the Group recalculates the expected credit losses on each balance sheet day. The increase or reversal of the loss provision resulting therefrom is recognised as an impairment loss or gain in the current profit or loss. For financial assets measured at amortized cost, loss provision offsets the carrying amount of the financial assets shown on the balance sheet; for debt investments measured at fair value through other comprehensive income, the Group recognizes its loss provision through other comprehensive income and does not offset the financial assets' carrying amount.

Write off

If the Group no longer reasonably expects that the financial assets contract cash flow can be recovered fully or partially, the financial assets book balance will be reduced directly. Such reduction constitute the derecognition of the financial assets. What usually occurs when the Group determines that the debtor has no assets or sources of income to generate sufficient cash flows to pay the amount to be reduced. However, in accordance with the Group's procedures for recovering due payment, the financial assets reduced may still be affected by enforcement activities.

If the reduced financial assets are recovered later, the returns as impairment losses shall be included in the profits and losses of the recovery period.

10. Financial instruments (Continued)

(7) Transfer of financial assets

Transfer of financial assets refers to the transference or deliverance of financial assets to the other party (the transferee) other than the issuer of financial assets.

The Group derecognizes a financial asset only if it transfers substantially all the risks and rewards of ownership of the financial asset to the transferee; the Group should not derecognize a financial asset if it retains substantially all the risks and rewards of ownership of the financial asset.

The Group neither transfers nor retains substantially all the risks and rewards of ownership, shows as the following circumstances: if the Group has forgone control over the financial assets, derecognize the financial assets and verify the assets and liabilities; if the Group retains its control of the financial asset, the financial asset is recognized to the extent of its continuing involvement in the transferred financial asset and recognize an associated liability is recognized.

(8) Offseting financial assets and financial liabilities

When the Group has the legal rights to offset the recognized financial assets and financial liabilities and is capable to carry it out, the Group plans to net settlement or realize the financial assets and pay off the financial liabilities, the financial assets and financial liabilities shall be listed separately with the neutralized amount in balance sheet and are not allowed to be offset.

11. Fair value measurement

The fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The group measures the relevant assets or liability at fair value supposing the orderly transaction of asset selling or liability transferring incurring in a principal market of relevant assets or liabilities. In the absence of a principal market for the asset or liability, the group assumes that the transaction take place at the most advantageous market of relevant asset or liability. A principal market (or the most advantageous market) is the transaction market that the group can enter into at measurement date. The Group implements the hypothesis used by the market participants to realize the maximum economic benefit in assets or liabilities pricing.

If there exists an active market for the financial assets or financial liabilities, the Group uses the quotation on the active market as its fair value. For those in the absence of active market, the Group uses valuation technique to recognize its fair value.

For non-financial assets measured at fair value, the Group should consider the capacity of the market participants to put the assets into optimal use thus generating the economic benefit, or the capacity to sell assets to other market participants who can put the assets into optimal use and generate economic benefit.

The Group implements the valuation technique suitable for the current condition and supported by enough available data and other information, gives priority in use of relevant observable inputs, only the observable inputs cannot be obtained or impracticable before using unobservable inputs.

The Group implements the valuation technique suitable for the current condition and supported by enough available data and other information, gives priority in use of relevant observable inputs, only the observable inputs cannot be obtained or impracticable before using unobservable inputs.

At each balance sheet date, the group reviews the assets and liabilities recognized to be measured at fair value on the financial statements to make sure whether conversion occurs between fair value hierarchies.

12. Inventories

(1) Category of inventory

Inventories include raw materials, work in progress, finished goods, turnover materials, costs to fulfil a contract, etc

(2) Determination of cost

Inventories are determined at the actual cost when acquired. Costs of raw materials, work in progress, finished goods, issuing goods are calculated in weighted average method when issued.

(3) Recognition of the net realizable value and provision for decline in value of inventories

Net realizable value is based on the estimated selling price deducting the estimated costs to be incurred when completed, the estimated selling expenses and related taxes amount. Recognition of the net realizable value is based on the verified evidences and considers the purpose of holding inventories and the effect of post balance sheet events.

At the balance sheet date, if the cost of closing inventory of the Group exceeds its net realizable value, provision for impairment of inventories is recognised. The Group usually recognises provision for impairment of inventories on individual inventory basis, if the factors caused the inventory previously written-down have disappeared, provision for impairment of inventories in the amount originally made is reversed.

(4) Inventory system

The Group adopts perpetual inventory system.

13. Assets Held for sale and discontinued operations

(1) Category and measurement of non-current assets or the disposal group

Non-current assets and disposal groups are classified as held for sale if the Group recovers its book value by selling (including the exchange of non-monetary assets) rather than continuing to use it.

The aforesaid non-current assets do not include investment property measured with the basis of fair value; the biological assets measured with the basis of fair value less selling costs; the assets formed by employee benefits; financial assets and the right arising from deferred income tax assets and rights from insurance contracts.

Disposal groups refer to a set of assets disposed as a whole through selling and liabilities which are transferred by the transaction that directly related to those assets. In certain circumstance, disposal groups include the goodwill obtained through business combination.

Non-current assets and disposal groups that meet the following conditions are classified as held for sale: (1) The non-current assets or disposal groups are sold immediately under the current conditions. (2) The sale is likely to occur, that is, a decision has been made on a sale plan and a determined purchase commitment is made, and the sale is expected to be completed within one year. The loss of control over the subsidiaries due to the sales of investment in subsidiaries, no matter whether the Group retains part of the equity investment after selling investment in subsidiaries and losing control over the subsidiaries or not, the investment in subsidiaries shall be classified as held for sale in the separate financial statements when it satisfies the conditions for category of held for sale; assets and liabilities shall be classified as held for sale in the consolidated financial statements.

The difference between carrying amount of non-current assets classified as held for sale or disposal groups and the net amount of fair value less selling costs shall be recognized as impairment loss on assets at the date of balance sheet. For the amount of impairment loss on assets, the book value of disposal groups' goodwill shall be offset against first, and then offset against the book value of non-current assets according to the proportion of book value of non-current assets.

The amount of write-down shall be recovered when the net amount of fair value less selling costs get increased and the recovered amount shall not exceed the amount of impairment loss and shall be recognized in profit or loss for current period. The book value of the goodwill that has been offset can not be recovered.

The non-current assets classified as held for sale and the part of disposal group classified as held for sale shall not be depreciated (or amortized); interest and other expenses of liabilities of disposal groups classified as held for sale are continued to be recognized. All or part of investment in joint ventures and associates which were classified as held for sale can not be accounted under equity method, the retained part (which is not classified as held for sale) still accounted under equity method. When the Group loses joint control or has no significant influence over investees due to the elimination of parts of the investment, equity method is prohibited to use.

If an entity has classified an asset (or disposal group) as held for sale, but the criteria of non-current assets held for sale no longer met, the Group shall cease to classify the asset (or disposal group) as held for sale and measure at the lower of:

- ① its carrying amount before the asset (or disposal group) was classified as held for sale, adjusted for any depreciation, amortization or revaluations that would have been recognized had the asset (or disposal group) not been classified as held for sale, and
- 2 its recoverable amount

(2) Discontinued operation

A discontinued operation is a component of an entity that either has been disposed of, or is classified as held for sale and can be separately distinguished in operation and preparation of financial statements, and

- ① Represents a separate major line of business or geographical area of operations,
- 2 is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations or
- 3 is a subsidiary acquired exclusively with a view to resale.

(3) Disclosure

In the balance sheet, the non-current assets classified as held for sale and the part of disposal group classified as held for sale should be presented as "held for sale assets", liabilities in disposal group classified as held for sale shall be presented as "held for sale liabilities"

Profit and loss from continuing operations and profit and loss from discontinued operations are separately presented in the income statement. For non-current assets or disposal groups held for sale that do not meet the definition of discontinued operations, the impairment loss, reversal amount, and disposal profit or loss are presented as continuing profits and losses. The operating profit or loss and disposal profit and loss such as impairment loss and reversal of discontinued operations are reported as operating profit and loss

Disposal group that intends to end the use but not for sale and meet the conditions relating to discontinued operations, should be presented as discontinued operations from the date of its cessation of use.

For the discontinued operations in the current financial statements, the information originally presented as a profit or loss from continuing operations was re-stated as the profit or loss from discontinued operations. If discontinued operations do not meet the requirement of classifying the held-for-sale category any longer, the information previously presented as a profit and loss on discontinued operations should be reclassified as the profit or loss from continuing operations for the comparable accounting period.

14. Long-term equity investment

The group's long-term equity investments include equity investments in subsidiaries, joint ventures and associates. Joint ventures are the investees over which the Company is able to exercise joint control together with other venturers.

(1) Recognition of initial investment cost

For the long-term investment acquired from the business combination: the cost of the long-term investment acquired from the business combination under common control is recognized as the carrying amount of combined party's equity recorded in the ultimate controlling party's consolidated financial statements at the combination date. For the long-term investment acquired from business combination not under common control, the cost of investment is equal to the combination cost.

For the long-term equity investment acquired in a manner other than business combination: the initial investment cost of the long-term equity investment acquired by payment in cash is recognized as the actual payment of the purchase price; the initial investment cost of the long-term equity investment acquired by issuing equity securities is recognized as the fair value of the equity securities issued.

(2) Subsequent measurement and recognition of related profit and loss

For the investment in subsidiaries, the long-term equity investment is accounted for using the cost method unless the investment meets the conditions for holding for sale; where the Group has joint control or significant influence over the investee, the long-term equity investment is accounted for using the equity method.

For long-term equity investment which is accounted for using the cost method, investment income is recognized in profit or loss for the current period as the cash dividend or profit announced and distributed, except for those cash dividend or profit which have already included in the actual payment or consideration of offer when the investment was made.

Under the equity method, where the initial investment cost of a long-term equity investment exceeds the Group's interest in the fair values of the investee's identifiable net assets, no adjustment is made to the initial investment cost; where the initial investment cost is less than the Group's interest in the fair values of the investee's identifiable net assets, the difference is charged to profit or loss for the current period, and the carrying amount of the long-term equity investment is adjusted accordingly.

For long-term equity investments accounted for using the equity method, the Company recognizes the investment income according to its share of net profit or loss of the investee, and the carrying amount of the long-term equity investments shall be adjusted accordingly; The carrying amount of the investment is reduced by the Company's share of the profit distribution or cash dividends declared by an investee; for changes in owners' equity of the investee other than those arising from its net profit or loss, other comprehensive income and profit distribution, the carrying amount of the long-term equity investment shall be adjusted and recognized to capital reserve.

If an entity has significant influences or can implement joint control over investees due to additional investment, the initial investment cost is recognized as the sum of the fair value of the original portion of equity investment and the additional investment cost under equity method. The difference between the fair value and carrying amount and cumulative changes in fair value recognized as other comprehensive income shall be recognized as current profit of loss under equity method.

If an entity loses joint control or has no significant influence over investees due to the elimination of parts of the equity investment, the surplus equity after disposal shall be recognized in accordance with "CASBE 22-Recognition and Measurement of Financial Instruments", and the difference between fair value and carrying amount should be recognized as profit or loss for current period. Other comprehensive income of original equity investment recognized under equity method shall be recognized in accordance with the same foundation used by the investees when dispose the relevant assets or liabilities directly in the termination of equity method. Other changes of owners' equity related to the original equity investment shall be transferred into profit or loss for current period.

If an entity loses control over investees due to the elimination of parts of the equity investment, the surplus owners' equity that are able to implement joint control or have significant influence over investees shall be measured at equity method and are deemed to be recognized under equity method since the acquisition date. The surplus owners' equity that are unable to implement joint control or have no significant influence over investees shall be processed in accordance with "CASBE 22-Recognition and Measurement of financial instruments", and the difference between fair value and carrying amount at the day of loss of control shall be recognized as profit or loss for current period.

If the shareholding ratio of the Company is reduced due to the increase of capital of other investors, and thus the control is lost, but the joint control or significant influence can be exerted on the invested entity, the company should recognize net asset according to the new shareholding ratio. The difference between the original book value of the long-term equity investment corresponding to the decrease in the shareholding ratio should be included in the current profit and loss; then, according to the new shareholding ratio, the equity method is used to adjust the investment.

The group recognizes the unrealized profit or loss of intra-transaction between the joint ventures or associates that belongs to itself according to the proportion of the shares and recognizes the investment income or loss after offset. But the loss arising from the unrealized intra-transaction between the group and investees, which belongs to the impairment loss of assets transferred, cannot be offset.

(3) Basis for recognition of joint control or significant influence over an investee

Joint control refers to any joint venture party alone cannot control the production and operation activities of the joint venture, decisions related to the basic operating activities of joint venture should require the unanimous consent of the parties sharing control. In determining whether there is a joint control, the first judge is to determine whether the relevant arrangement is controlled collectively by all the parties involved or the group of the parties involved. Secondly, and then determine whether the decisions related to the basic operating activities should require the unanimous consent of the parties involved. If the parties involved or the group of the parties involved must act consistently to determine the relevant arrangement, it is considered that the parties involved or the group of the parties involved control the arrangement. If two or more parties involve in the collectively control of certain arrangement, it shall not be considered as joint control. Protection of rights shall not be considered in determining whether there is joint control.

Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies. When determining whether an investing enterprise is able to exercise control or significant influence over an investee, the effect of potential voting rights of the investee (for example, warrants and convertible debts) held by the investing enterprises or other parties that are currently exercisable or convertible shall be considered.

When the Group, directly or indirectly through subsidiaries, owns 20% of the investee (including 20%) or more but less than 50% of the voting shares, it has significant impact on the investee unless there is clear evidence to show that in this case the Group cannot participate in the production and business decisions of the investee, and cannot form a significant influence; when the Group owns 20% (excluding) or less of the voting shares, generally it is not considered to have a significant impact on the investee, unless there is clear evidence to show that in this case the Group can participate in the production and business decisions of the investee so as to form a significant influence.

14. Long-term equity investment (Continued)

(4) Held-for-sale equity investment

Refer to note III, 13 for the relevant accounting treatment of the equity investment to joint ventures or associates all or partially classified as assets held for sale.

The surplus equity investments that are not classified as assets held for sale shall be accounted for using equity method.

The equity investment to joint ventures or associates already classified as held for sale no longer meets the conditions of assets held for sale shall be adjusted retroactively using equity method from the date of being classified as assets held for sale.

Impairment test and Impairment provision

Refer to note III.20 for investment and the impairment provision of assets.

15. Fixed asset

(1) Conditions for confirmation of fixed assets

Fixed assets represent the tangible assets held by the Group using in the production of goods, rendering of services and for operation and administrative purposes with useful life over one year.

Fixed assets represent the tangible assets held by the Group using in the production of goods, rendering of services and for operation and administrative purposes with useful life over one year.

The Group's fixed assets are initially measured at the actual cost at the time of acquisition.

(2) Depreciation methods of fixed assets

Fixed assets are depreciated using the straight-line method to allocate the cost of the assets to their estimated residual values over their estimated useful lives. Fixed assets start to be depreciated from the day the assets to the expected conditions for use and stop to be depreciated when the assets are derecognized and are divided into hold-for-sale as non-current assets. For those property, plant and equipment without considering impairment provision, the Group's annual depreciation rates are shown as follows according to the category, expected useful lives and estimated net residual values rates.

Category	Useful years (year)	Residual rate %	Annual depreciation rate %
Buildings	12-50	3	4.9-2.43
Oil engineering equipment and others	4-30	3	24.3-3.2

The fixed assets that have been withdrawn for impairment provision shall also be deducted from the accumulative amount of the provision for impairment of fixed assets that have been accrued.

(3) Refer to note III,20 for the impairment testing and the impairment provision of fixed assets.

(4) Recognition and measurement of fixed assets financed by leasing

The leased fixed assets are recognized as fixed assets financed by leasing if they meet the following one or more criteria:

- ① The ownership of leased assets can be transferred to the Group at the end of the lease period.
- ② The Group has the option of buying leased assets and the purchase price is estimated to be far less than the fair value of leased assets when exercising the option. So at the beginning date of lease period it is reasonably determined that the Group will exercise the option.
- 3 Even if the ownership of assets is not transferred, lease period accounts for most of leased assets' useful life.
- (4) The present value of minimum lease payment almost equals to the fair value of leased asset of the beginning date of lease period.
- ⑤ Leased assets have special characteristics and they are used for the Group only if not reconstructed largely.

At the beginning date of lease period, the Group will recognize the lower of the fair value of leased asset of the beginning date of lease period and the present value of minimum lease payment as the recorded value of the leased asset, their difference is recorded as unrecognized financing charges. Initial direct costs such as charges, legal fee, travelling expenses and stamp taxes of the lease incurred during leasing negotiation and signing leasing contracts are recognized in leased assets' value. Unrecognized financing charges are measured at amortized cost using the effective interest method in the periods of leasing.

Fixed assets financed by leasing are depreciated according to the policy of owned assets. If it can be reasonably determined that the ownership of the leased assets can be obtained at the end of the lease period, the leased assets are depreciated over their useful lives; otherwise, the leased assets are depreciated over the shorter of the lease terms and the useful lives of the leased assets.

15. Fixed asset (Continued)

(5) The Group reviews the useful life and estimated net residual value of a property, plant and equipment and the depreciation method applied annually at each of the period end.

The useful lives of property, plant and equipment are adjusted if their expected useful lives are different from the original estimates; the estimated net residual values are adjusted if they are different from the original estimates.

(6) Overhaul costs

The overhaul costs occurred in regular inspection of property, plant and equipment are recognised in the cost of property, plant and equipment if there is undoubted evidence to confirm that they meet the recognition criteria of fixed assets, otherwise, the overhaul costs are recognised in profit or loss for the current period. Property, plant and equipment are depreciated during the intervals of the regular overhaul.

16. Construction in progress

Construction in progress is measured at actual cost. Actual cost comprises necessary project expenditure incurred during construction, borrowing cost that are eligible for capitalization and other necessary cost incurred to bring the fixed assets ready for their intended use.

Construction in progress is transferred to fixed assets when the assets are ready for their intended use.

For provision for impairment of construction in progress, refer to note III, 20.

17. Borrowing costs

(1) Recognition principle of capitalization of borrowing costs

For borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset, they shall be capitalized and included in the cost of related assets; other borrowing costs are recognized as expenses and included in profit or loss when incurred. Capitalization of such borrowing costs can commence only when all of the following conditions are satisfied:

- ① Expenditures for the asset incurred, capital expenditure includes the expenditure in the form of cash payment, transfer of non-cash assets or the interest bearing liabilities for the purpose of acquiring or constructing assets eligible for capitalization;
- 2 Borrowing costs incurred; and
- 3 Activities relating to the acquisition, construction or production of the asset that are necessary to prepare the asset for its intended use or sale have commenced.

(2) Capitalization period of borrowing costs

Capitalization of such borrowing costs ceases when the qualifying assets being acquired, constructed or produced become ready for their intended use or sale. The borrowing cost incurred after that is recognised as an expense in the period in which they are incurred and included in profit or loss for the current period.

Capitalization of borrowing costs is suspended during periods in which the acquisition, construction or production of a qualifying asset is interrupted abnormally and when the interruption is for a continuous period of more than 3 months; the borrowing costs in the normally interrupted period continue to capitalize.

(3) Calculation of the capitalization rate and amount of borrowing costs.

The interest expense of the specific borrowings incurred at the current period, deducting any interest income earned from depositing the unused specific borrowings in bank or the investment income arising from temporary investment, shall be capitalized. The capitalization rate of the general borrowing is determined by applying the weighted average effective interest rate of general borrowings, to the weighted average of the excess amount of cumulative expenditures on the asset over the amount of specific borrowings.

During the capitalization period, exchange differences on foreign currency special borrowings shall be capitalized; exchange differences on foreign currency special borrowings shall be recognized as current profits or losses.

18. Intangible assets

Intangible assets include land use rights, patent rights and technology rights, and are measured at cost.

Intangible assets initially measured at cost. The intangible assets contributed by the State shareholders at the reorganization of the Company into a corporation are recognized based on the revaluated amounts as approved by the state-owned assets administration department. The group analyzes and judges the service life of intangible assets when obtained. An intangible asset with finite useful life shall be amortized over the expected useful life using method which can reflect the expected realization of the economic benefits related to the assets from when the intangible asset is available for use. An intangible asset whose expected realization can't be reliably determined is amortized using straight-line amortization; an intangible asset with indefinite useful life shall not be amortized.

Amortization of an intangible asset with finite useful life is as follows:

category	Useful life	amortization	notes
Land use rights	50 years	straight-line basis	
software	5 years	straight-line basis	
Patent rights	10 years	straight-line basis	
Technology rights	10 years	straight-line basis	

For an intangible asset with a finite useful life, the Group reviews the useful life and amortization method at the end of each financial year, if it is different from the previous estimates, adjust the previous estimates and deal with it according to changes in accounting estimates.

The Group estimates an intangible asset can no longer bring future economic benefits to the Group at the end of a period, the carrying amount of which should be reversed to profit or loss for the current period.

For the impairment method of intangible assets, refer to Note III, 20.

19. Research and development expenditure

Expenditure on an internal research and development project is classified into expenditure on the research phase and expenditure on the development phase.

Expenditure on the research phase is recognised in profit or loss when incurred.

Expenditure on the development phase is capitalized only when the Group can satisfy all of the following conditions: the technical feasibility of completing the intangible asset so that it will be available for use or sale; its intention to complete the intangible asset is to use or sell it; how the intangible asset will generate economic benefits. Among other things, the Group can demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset; the availability of adequate technical, financial and other resources to complete the development and the ability to use or sell the intangible asset; its ability to measure reliably the expenditure attributable to the intangible asset during its development phase. Otherwise, it is charged to profit or loss.

The research and development projects of the Group will enter into the development stage after meeting the above conditions and passing through the technical feasibility and economic feasibility studies and the formation of the project.

Capitalized expenditure on the development phase is presented as "development costs" in the balance sheet and shall be transferred to intangible assets when the project is completed to its intended use state.

Capitalization conditions for specific R&D projects:

(The enterprise fills in according to the actual situation)

20. Impairment of assets

The impairment of subsidiaries, associates and joint ventures in the long-term equity investments, fixed assets, construction in progress, intangible assets, etc. (Excluding inventories, deferred income tax assets and financial assets) are determined as follows:

At the balance sheet date, the Group determines whether there may be evidence of impairment, if there is any, the Group will estimate the recoverable amount for impairment, and then test for impairment. For goodwill arising from a business combination, intangible assets with indefinite useful life and the intangible assets that have not yet ready for use are tested for impairment annually regardless of whether such evidence exists.

The recoverable amount of an asset is determined by the higher amount of fair value deducting disposal costs and net present value of future cash flows expected from the assets. The Group estimates the recoverable amount based on individual asset; for individual asset which is difficult to estimate the recoverable amount, the recoverable amount of the asset group is determined based on the asset group involving the asset. The identification of the asset group is based on whether the cash flow generated from the asset group is independent of the major cash inflows from other assets or asset groups.

When the asset or asset group's recoverable amount is lower than its carrying amount, the Group reduces its carrying amount to its recoverable amount, the reduced amount is included in profit or loss, while the provision for impairment of assets is recognised.

In terms of impairment test of the goodwill, the carrying amount of the goodwill, arising from business combination, shall be allocated to the related asset group in accordance with a reasonable basis at acquisition date. Those that are difficult to be allocated to related assets shall be allocated to related asset group. Related assets or assets group refer to those that can benefit from the synergies of business combination and are not larger than the group's recognized reporting segment.

When there is an indication that the asset and asset group are prone to impair, the group should test for impairment for asset and asset group excluding goodwill and calculate the recoverable amount and recognize the impairment loss accordingly. The group should test for impairment for asset or the asset group including goodwill and compare the asset or asset group's recoverable amount with its carrying amount, provision for impairment of assets shall be recognized when the recoverable amount of assets is lower than its carrying amount.

Once impairment loss is recognized, it cannot be reversed in subsequent accounting periods.

21. Long-term deferred expenses

The Group's long-term deferred expenses mainly include oil construction specific drilling equipment, logging equipment, cables and catalyst and evenly amortized on straight-line basis over the expected beneficial period or over operation capacity. For the long-term deferred expense items that cannot benefit in the accounting period, their amortized value is recognized through profit or loss.

22. Employee benefits

(1) The scope of employee benefits

Employee benefits are all forms of consideration and compensation given by the Group in exchange for service rendered by employees or the termination of employment. Employee benefits include short term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits. Employee benefits include benefits provided to employees' spouses, children, other dependants, survivors of the deceased employees or to other beneficiaries

According to liquidity, employment benefits are presented separately as "accrued payroll" and "long-term employment benefits payable" in the balance sheet

(2) Short-term employee benefits

During the accounting period in which the employee render the related services, wages, bonuses, social security contributions (including medical insurance, injury insurance, maternity insurance, etc.) and house funding are recognized as liability and recognized as current profit of loss or assets related costs. If the short-term employee benefits are expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service and have significant financial impact, the liability shall be measured as the discounted amounts.

(3) Post-employment benefits

Post-employment benefit plans inculdes defined contribution plans or defined benefit plans. Among them defined contribution plans, an entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods. Defined benefit plans refers to post-employment benefit expect defined contribution plans.Post-employment benefit of outgoing business includes the basic pension insurance, unemployment insurance and annuity, which belongs to the defined contribution plans.

The basic pension insurance

The employees of the Group participate in the social basic pension insurance operated by the local labor and social security department. The group provides a monthly payment of pension insurance to the local community in basic pension insurance agency according to the local basic pension insurance base and rate. The local labor and social department are responsible for the payment of social pension to the retired employees after the employees retire.

Pension plan

In addition to the basic social pension insurance, the Group sets up annuity scheme according to the relevant policies of annuity system, employees may voluntarily participate in the annuity scheme. The Group accrues annuity at a certain percentage of the total wages, and the corresponding expense is recognized in profit or loss. In addition to this, the Group has no other significant commitments of social security of employees.

During the accounting period in which the employees render services, the group should recognize the amount of pension insurance calculated with defined contribution plans as a liability, and profit or loss or assets associated costs.

(4) Termination benefits

The Group recognises termination benefits liabilities and profit or loss in the period in the earlier date of the followings: (i) The Group cannot unilaterally withdraws the termination plan or reduce the termination benefits under the proposal, or (ii) The Group recognises the payment of the termination benefits costs and expenses.

For the implementation of the internal retirement plan for employees, the economic compensation before the official retirement date is a termination benefit. From the date when the employee stops providing the service to the normal retirement date, the wages of the internally retired employees and the social insurance premiums to be paid are included in the current period's profit or loss. Economic compensation after the official retirement date (such as normal pension) should be treated as post-employment benefits.

(5) Other long-term employee benefits

Other long-term employee benefits provided by employees of the Group to meet the conditions of a defined contribution plan, shall be treated in accordance with the relevant provisions of the above defined contribution plans.

23. Provisions

An obligation for additional losses of investees related to a contingency is recognised as a provision when all of the following conditions are satisfied:

- ① The obligation is a present obligation of the Group;
- 2 It is probable that an outflow of economic benefits will be required to settle the obligation;
- 3 The amount of the obligation can be measured reliably.

Provisions are initially measured at the best estimate of the payment to settle the associated obligations and consider the relevant risk, uncertainty and time value of money. If the impact of time value of money is significant, the best estimate is determined as its present value of future cash outflow. The Group reviews the carrying amount of provisions at the balance sheet date and adjusts the carrying amount to reflect the best estimate.

If the expenses for clearing of provisions is fully or partially compensated by a third party, and the compensated amount can be definitely received, it is recognised separated as asset. The compensated amount shall not be greater than the carrying amount of the predictive liability.

24. Share-based payment and equity instruments

(1) Category of share-based payment

Share-based payment is classified into cash-settled share-based payment and equity-based share-based payment.

(2) Fair value of equity instrument

For the existence of an active market for options and other equity instruments granted by the group, the fair value is determined at the active market quotations. For options and other equity instruments with no active market, option pricing model shall be used to estimate the fair value of the equity instruments. Factors as follows shall be taken into account using option pricing models: A, the exercise price of the option B, the validity of the option C, the current market price of the share D, the expected volatility of the share price E, predicted dividend of the share F, risk-free rate of the option within the validity period.

(3) Recognition of vesting of equity instrument based on the best estimate

During the waiting period at each balance sheet date, the Group shall make the best available estimate of the number of equity instruments expected to vest and shall revise that estimate, if necessary, if subsequent information indicates that the number of equity instruments expected to vest differs from previous estimates. On vesting date, the entity shall revise the estimate to equal the number of equity instruments that ultimately vested.

(4) Accounting treatment of implementation, modification and termination of share-based payment

Equity-settled share-based payment is measured at the fair value of the equity instruments granted to employees. For the shares exercise immediately after the grant, the fair value of equity instrument at the grant date included in the relevant costs or expenses and increase in capital reserve accordingly. Within the vesting period, it will recognize the received service-related costs or expense and capital reserves for each reporting date based on the best estimate of the number of vested equity instruments on the grant date of the equity instruments value. After the vesting period, relevant costs or expenses and total shareholders' equity has been confirmed and will not be adjusted.

Cash-settled share-based payment is calculated by the fair value of liabilities assumed in accordance with the Group's shares or other equity instruments. For those exercised immediately after the grant, the fair value of the liability included in the relevant costs or expenses cause a corresponding increase in liabilities. For each reporting date in the vesting period, the best estimate of the vesting conditions in accordance with the Group is committed to the fair value of the amount of debt service will recognize the received costs or expenses and the corresponding liabilities. At each reporting date and the settlement date prior to the settlement of liabilities, the fair value of the liability is re-measured through profit or loss.

When there is changes in Group's share-based payment plans, if the modification increases the fair value of the equity instruments granted, corresponding recognition of service increase in accordance with the increase in the fair value of the equity instruments; if the modification increases the number of equity instruments granted, the increase in fair value of the equity instruments is recognized as a corresponding increase in service achieved. Increase in the fair value of equity instruments refer to the difference between the fair values of the modified date. If the modification reduces the total fair value of shares paid or not conductive to the use of other employees share-based payment plans to modify the terms and conditions of service, it will continue to be accounted for in the accounting treatment, as if the change had not occurred, unless the Group cancelled some or all of the equity instruments granted.

During the vesting period, if the cancelled equity instruments (except for failure to meet the conditions of the non-market vesting conditions) granted by the Group to cancel the equity instruments granted amount treated as accelerated vesting of the remaining period should be recognized immediately in profit or loss, while recognizing the capital reserve. Employees or other parties can choose to meet non-vesting conditions but are not met in the vesting period, the Group will treat it as canceled equity instruments granted.

25. Revenue

(1) General principle

The Group recognize revenue when the contract performance obligations have been fulfilled, the customer has gained control of the relevant goods and services

If two or more performance obligations are included in the contract, the Group shall, on the commencement date of the contract, apportion the transaction price to the individual performance obligations according to the relative proportion of the individual selling prices of the commodities or services promised by the individual performance obligations, and measure the income according to the transaction price apportioned to the individual performance obligations.

If one of the following conditions is met, the Group shall be obliged to fulfil its performance obligations within a certain period; otherwise, it shall be obliged to fulfil its performance obligations at a certain point:

- ① The customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs; or
- ② The Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or
- The commodities produced by the Group in the course of its performance are irreplaceable and the Group has the right to collect payments for the part of performance that has been completed so far during the entire contract period.

If the control of the relevant goods and services is transferred over time, the Group recognises revenue based on the progress of the performance obligations that have been fulfilled throughout the contract period. When the progress of the performance obligation cannot be reasonably measured, if the cost incurred is expected to be recovered, the revenue shall be recognized according to the amount of cost incurred, until the progress can be reasonably determined.

For obligations performed at certain point, the Group recognize revenue when the customer gains control of the relevant goods and services. When judging whether customers have gained control of the relevant goods and services, the Group will consider the following signs:

- ① The group has obtained the current collection rights, the customer has obtained the current payment obligation.
- The Group have transferred the legal ownership of the commodity to the customer, the customer has obtained the legal ownership of the commodity.
- 3 The Group has transferred the physical commodity to the customer, the customer has possessed the commodity in kind.
- The Group has transferred the ownership and accompanying risk and payment of goods to the customer, the customer has obtained the ownership and accompanying risk and payment of goods.
- ⑤ The customer has accepted the goods or services.
- 6 Other signs that customers have acquired the control of goods

The Group has transferred goods or services to its customers and has the right to receive consideration (which depends on factors other than the passage of time) as its contract assets, which are deducted on the basis of expected credit losses(refer to Note III. 10 (6)). The unconditional (time-dependent) right to collect consideration from customers is shown as accounts receivable. The obligation to transfer goods or services to the customer after consideration received or receivable is shown as contract liabilities.

Contract assets and contract liabilities under the same contract shall be shown in net amount, if the net amount is debit balance, according to their liquidity, which shall be listed in the "contract assets" or "other non-current assets" project; if the net amount is credit balance, according to its liquidity, which shall be listed in the "contract liabilities" or "other non-current liabilities" project.

(2) The specific methods

The specific methods for the Group's revenue recognition are as follows:

Provide drilling engineering, geophysical exploration services and construction services

The Group recognizes revenue during the progress of providing the services of drilling, geophysical exploration and construction, and the progress of fulfilling its obligations is determined by the proportion of executed projects to the total contract value. If two or more performance obligations are included in the contract, the Group shall, on the commencement date of the contract, apportion the transaction price to the individual performance according to the relative proportion of the individual selling prices of the services. The individual selling prices of the services according to the price selled by the Group for each service separately..

Revenue associated with daily rate contract is recognized when the services are provided.

Revenue from engineering services such as special down-hole operations and logging, cementing, etc. shall be recognized during the accounting period in which the services are provided and the related receivables are settled.

When the progress of the performance obligation cannot be reasonably measured, if the cost incurred is expected to be recovered, the revenue shall be recognized according to the amount of cost incurred, until the progress can be reasonably determined.

Sale of goods

Revenue should be recognized at the point that the commodity is delivered to the customer and the customer has accepted the commodity, the customer gains control of the commodity.

For sales of goods with sales return clauses, the revenue recognized is limited to the amount of accumulated recognized revenue which is unlikely to result in significant return., the Group recognizes the liabilities according to the expected amount of refund, at the same time, recognizes the carrying amount of the goods returned at the time of transfer deducting the estimated cost of recovering the goods. as an asset (including the loss of the value of the returned commodity).

26. Contract cost

Contract costs include incremental costs incurred to obtain a contract and costs to fulfil a contract.

Incremental costs incurred to obtain a contract refer to the costs (such as sales commissions) that the Group will not incur without obtaining contracts. If the cost is expected to be recovered, the Group shall recognizes it as an asset as contract acquisition cost. Expenditures incurred by the Group for the purpose of obtaining contracts, other than incremental costs expected to be recovered, are recorded in current profits and losses when incurred.

The costs to fulfil a contract, which does not fall within the scope of other CASBE such as inventory and meets the following conditions at the same time, the Group recognizes it as an asset for the costs to fulfil a contract.:

- ① This cost is directly related to a current or expected contract, including direct labor cost, direct materials cost, manufacturing costs (or similar costs), costs clearly borne by the customer, and other costs incurred solely for the contract;
- 2 This cost increases the group's future resources for fulfilling its performance obligations.
- 3 The cost is expected to be recovered.

Assets recognized from contract acquisition cost and contract performance cost (hereinafter referred to as "assets related to contract cost") are amortized on the same basis as revenue recognition of goods or services related to the assets and are recorded in current profits and losses. If the amortization period does not exceed one year, the profits and losses of the current period shall be included when it occurs.

When the carrying amount of the assets related to contract cost is higher than the difference between the following two items, the Group shall make provision for impairment in excess of the assets and shall consider the impairment loss of the assets as follows:

- ① The residual consideration that the Group expect to obtain for transferring goods or services related to the asset;
- 2 The cost estimated to be incurred for transfering the relevant goods or services.

The contract performance cost recognized as assets shall be listed in the "inventory" project, if the amortization period is not exceeding one year or a normal business cycle at initial recognition, and shall be listed in the "other non-current assets" project, if the amortization period exceeding one year or a normal business cycle at initial recognition.

The contract acquisition cost recognized as assets shall be listed in the "other current assets" project, if the amortization period is not exceeding one year or a normal business cycle at initial recognition, and shall be listed in the "other non-current assets" project, if the amortization period exceeding one year or a normal business cycle at initial recognition.

27. Government grants

A government grant shall be recognised only when the enterprise can comply with the conditions attaching to the grant and the enterprise can receive the grant.

If a government grant is in the form of a transfer of a monetary asset, the item is measured at the amount received or receivable. If a government grant is in the form of a transfer of a non-monetary asset, the item is measured at fair value, when fair value is not reliably determinable, the item is measured at RMB 1 of nominal amount.

Government grant related to assets represents the government grant received for acquisition, construction and other ways of form of long term assets. Except for these, all are government grant related to income.

Regarding to the government grant not clearly defined in the official documents and can form long term assets, the part of government grant which can be referred to the value of the assets is classified as government grant related to assets and the remaining part is government grant related to income. For the government grant that is difficult to distinguish, the entire government grant is classified as government grant related to income.

The government grant related to assets reduce the book value of related assets, or recognized as deferred income and evenly amortised to profit or loss over the useful life of the related asset. For a government grant related to income, if the grant is a compensation for related expenses or losses already incurred, the grant is recognized immediately in profit or loss for the current period; if the grant is a compensation for related expenses or losses to be incurred in subsequent periods, the grant is recognized as deferred income, and then recognized in profit or loss over the periods in which the costs are recognized. Government grants measured at nominal amounts are directly recognized in through profit or loss. The Group adopts a consistent approach to the same or similar government grants' operations.

The government grants related to daily activities are recognized as other income or offset against relevant costs in accordance with the substance of economic business. Government grants that are not related to daily activities are recognized as non-operating income and expenses.

When recognized government grants need to be returned, the book value of the relevant assets should be adjusted if the assets' book value is written off at the initial recognition. If there is a balance of related deferred income, the book value of deferred income should be offset first and the excess is recognized in profit or loss for the current period. In other cases, it is directly recognized in profit or loss for the current period.

28. Deferred tax assets and deferred tax liabilities

Tax expense comprises current tax expense and deferred tax expense. Current tax and deferred tax are included in profit or loss for the current period as tax expense, except for deferred tax related to transactions or events that are directly recognised in shareholders' equity which are recognised directly in shareholders' equity, and deferred tax arising from a business combination, which is adjusted against the carrying amount of goodwill.

Temporary differences arising from the difference between the carrying amount of an asset or liability and its tax base are recognised as deferred tax using the balance sheet liability method.

All the taxable temporary differences are recognised as deferred tax liabilities except for those incurred in the following transactions:

- (1) The initial recognition of goodwill, and the initial recognition of an asset or liability in a transaction which is neither a business combination nor affects accounting profit or taxable profit (or deductible loss) when the transaction occurs;
- (2) The taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, and the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The Group recognizes a deferred tax asset for the carry forward of deductible temporary differences, deductible losses and tax credits to subsequent periods, to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences, deductible losses and tax credits can be utilized, except for those incurred in the following transactions:

- (1) The transaction is neither a business combination nor affects accounting profit or taxable profit (or deductible loss) when the transaction occurs;
- (2) The deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, the corresponding deferred tax asset is recognized when both of the following conditions are satisfied: it is probable that the temporary difference will reverse in the foreseeable future, it is probable that taxable profits will be available in the future, against which the temporary difference can be utilized.

At the balance sheet date, deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, and their tax effect is reflected.

At the balance sheet date, the Group reviews the carrying amount of a deferred tax asset. If it is probable that sufficient taxable profits will not be available in future periods to allow the benefit of the deferred tax asset to be utilized, the carrying amount of the deferred tax asset is reduced. Any such reduction in amount is reversed when it becomes probable that sufficient taxable profits will be available.

29. Operating leases and finance leases

A finance lease is a lease that transfers in substance all the risks and rewards incidental to ownership of an asset. An operating lease is a lease other than a finance lease.

(1) As lessor

In finance leases, at the beginning date of lease period, the Group will recognize the sum of minimum lease collection and initial direct costs as the recorded value of finance leases receivable and meanwhile is recorded as unguaranteed residual value; the difference between the sum of minimum lease collection, initial direct costs and unguaranteed residual value and their present value is recorded as unrecognized financing income. Unrecognized financing income are measured at amortized cost using the effective interest method in the periods of leasing and recognized in financing income for the current period.

Lease from operating leases is recognized in profit or loss on a straight-line basis over the lease term. The initial direct costs incurred are recognized in profit or loss for the current period.

(2) As lessee

In finance leases, at the beginning date of lease period, the Group will recognize the lower of the fair value of leased asset of the beginning date of lease period and the present value of minimum lease payment as the recorded value of the leased asset, their difference is recorded as unrecognized financing charges. Initial direct costs are recognized in leased assets' value. Unrecognized financing charges are measured at amortized cost using the effective interest method in the periods of leasing and recognized in financing charges for the current period. The Group depreciates the leased assets by adopting the depreciation policy consistent with self-owned fixed assets.

Lease from operating leases is recognised in the cost of relevant assets or profit or loss on a straight-line basis over the lease term. The initial direct costs incurred are recognised in profit or loss for the current period.

30. Safety costs

The Company accrued production safety fund according to the national regulations for high-risk industry. The production safety fund accrued is charged to the cost of related products, and recorded in the specific reserve. As production safety fund is utilised, if it is of expenditure nature, the cost is directly charged against the specific reserves. If it is used for construction, the cost being used is recorded in construction in progress, and transferred to fixed assets when it is ready for its intended use. Meanwhile, the cost of fixed asset is offset against the specific reserves and accumulated depreciation of the same amount is recognised, then the fixed asset is no longer depreciated in its useful life.

31. Repurchase of shares

The repurchased shares prior to cancellation or transfer of shares are managed as treasury stocks, all costs incurred from repurchase of shares are recognized as the costs of treasury stocks. Considerations and transaction fee incurred from the repurchase of shares shall lead to the elimination of shareholders' equity and does not recognize profit or loss when shares of the company are repurchased, transferred or cancelled.

The difference between the actual amount received and the carrying amount of the treasury stock are recognized as capital reserve when the treasury stocks are transferred, if the capital reserve is not sufficient to be offset, the excess amount shall be recognized to offset surplus reserve and redistributed profit. When the treasury stocks are cancelled, the capital shall be eliminated according to the number of shares and par value of cancellation shares, the difference between the actual amount received and the carrying amount of the treasury stock are recognized as capital reserve, if the capital reserve is not sufficient to be offset, the excess amount shall be recognized to offset surplus reserve and redistributed profit.

32. Critical accounting judgments and estimates

The Group gives continuous assessment of the reasonable expectations of future events and the critical accounting estimates and key assumptions based on its historical experience and other factors. The critical accounting estimates and key assumptions that are likely to lead to significant adjusted risks of the carrying amount of assets and liabilities for the next financial year are listed as follows:

(1) Classification of financial assets

The Group's major judgments in determining the classification of financial assets include the analysis of business models and the characteristics of contract cash flows.

At the level of financial asset group, the Group determines the business model for managing financial assets, taking into account factors such as the way to evaluate and report financial assets performance to key managers, the risks affecting financial assets performance and their management methods, and the way in which relevant business managers are paid.

In assessing whether the contract cash flow of financial assets is consistent with the basic lending arrangements, the Group has the following judgments: whether the principal's time distribution or amount may change during the lifetime for early repayment and other reasons; whether the interest only includes the time value of money, credit risk, other basic lending risks and the consideration of cost and profit. For example, does the amount of advance payment only reflect the unpaid principal and interest based on the unpaid principal, and reasonable compensation paid for the early termination of the contract.

(2) Measurement of Expected Credit Loss of Receivables

The Group calculates the expected credit losses of accounts receivable by default risk exposure and expected credit losses rate of accounts receivable, and determines the expected credit losses rate based on default probability and default loss rate. In determining the expected credit losses rate, the Group uses internal historical credit loss and other data, and adjusts the historical data with current situation and forward-looking information. In considering forward-looking information, the indicators used by the Group include the risks of economic downturn, external market environment, technological environment and changes in customer conditions. The Group regularly monitors and reviews assumptions related to the calculation of expected credit losses.

(3) Provision for diminution in value of inventories

The net realisable value of inventories is under management's regular review, and as a result, provision for diminution in value of inventories is recognised for the excess of inventories' carrying amounts over their net realisable value. When making estimates of net realisable value, the Company takes into consideration the use of inventories held on hand and other information available to form the underlying assumptions, including the inventories' market prices and the Company's historical operating costs. The actual selling price, the costs of completion and the costs necessary to make the sale and relevant taxes may vary based on the changes in market conditions and product sale ability, manufacturing technology and the actual use of the inventories, resulting in the changes in provision for diminution in value of inventories. The net profit or loss may then be affected in the period when the provision for diminution in value of inventories is adjusted.

(4) Depreciation and amortisation of assets such as fixed assets, intangible assets and long-term prepaid expenses

Fixed assets, intangible assets and long-term prepaid expenses are depreciated and amortised over their useful lives after taking into account residual value. The estimated useful lives of the assets are regularly reviewed to determine the depreciation and amortisation costs charged in each reporting period. The useful lives of the assets are determined based on historical experiences of similar assets and the estimated technical changes, the amortisation periods for the long-term prepaid expenses are determined by the Company in accordance with the expected benefit period of each expense. If there have been significant changes in the factors used to determine the depreciation or amortisation, the rate of depreciation or amortisation is revised.

(5) development costs

When determining the amount of capitalization, management must make assumptions about the expected cash flow of assets in the future, the discount rate to be applied and the expected benefit period.

(6) Revenue recognition

The Group recognize the revenue related to the provision of oilfield service over a period of time. The recognition of the relevant revenue and profits depends on the Group's estimates of the contract results and the performance progress. The Group uses the expected value method or the most likely amount to estimate the total revenue of the contrat, and evaluates the estimated total cost of the contract based on historical experience and construction plan. In view of the construction service contract cycle may span multiple accounting periods, the Group will review and revise the contract revenue and contract cost estimation in the budget periodically as the contract's completion schedule. If the total revenue and total cost actually incurred are higher or lower than the estimated value of management, it will affect the revenue and profit recognition amount of the Group in the future.

32. Critical accounting judgments and estimates (Continued)

(7) Pending claims

For the legal proceedings and claims, the Group derive the best estimate of committed losses to the related current obligations based on legal advices consulted and according to the process and solutions of the legal proceedings and claims. The estimated losses will change during the development of the legal proceedings and claims.

(8) Deferred income tax assets

Deferred tax assets relating to certain temporary differences and tax losses are recognised as management considers it is probable that future taxable profit will be available against which the temporary differences or tax losses can be utilised. The management needs significant judgment to estimate the time and extent of the future taxable profits and tax planning strategy to recognise the appropriate amount of deferred income tax assets. Where the expectation is different from the original estimate of the future taxable profits, such differences will impact the recognition of deferred tax assets and taxation in the years when the estimates are changed.

(9) Taxation

There are various uncertainties on interpretation of the complicated tax jurisdictions (including related tax incentive regulations) and time and extent of the future taxable revenue. Regarding to various international business relationship and current contract complication, there may be adjustment to the recognized taxable income and expenses in the future due to the differences arising from actual operating results and its assumptions or estimated changes in the future. The Group has reasonably estimated the provision of taxation from the possible results of the tax authorities where the Group operates. Such provision of taxation is based on different factors, such as previous tax audit experience and the tax jurisdiction interpretation from taxable entity and related tax authorities. Since the Group operates in different tax regions, different interpretation may be resulted from various events

33. Changes in significant accounting policies and accounting estimates

(1) Provisions Changes in significant accounting policies

New Revenue Standards

The Ministry of Finance have issued "the Accounting Standards for Business Enterprises No. 14 - Revenue (Revised)" (hereinafter referred to as the "New Revenue Standards"). The Group has implemented the Accounting Standards since January 1, 2018, and adjusted the relevant contents of accounting policies.

The Group recognize revenue when the contract performance obligations have been fulfilled, the customer has gained control of the relevant goods and services. When certain condition is met, the Group shall be obliged to fulfil its performance obligations within a certain period, otherwise, it shall be obliged to fulfil its performance obligations at a certain point. If two or more performance obligations are included in the contract, the Group shall, on the commencement date of the contract, apportion the transaction price to the individual performance obligations according to the relative proportion of the individual selling prices of the commodities or services promised by the individual performance obligations, and measure the income according to the transaction price apportioned to the individual performance obligations.

The Group has adjusted the related accounting policies in accordance with the specific provisions of the new revenue standards on specific matters or transactions. For example: contract cost, quality assurance, the distinction between the principal responsible person and the agent, the treatment of advances from customers, etc.

The right to receive consideration for transferring goods to the customer, which depends on factors other than the passage of time, shall be listed as contract assets. The obligation to transfer goods to the customer after onsideration received or receivable shall be listed as contract liabilities.

Based on the cumulative impact of the first implementation of the new revenue standards, the Group adjusted the retained earnings and other related items in the financial statements at the beginning of 2018 without adjusting the comparative financial statements data. The new revenue standards have no significant impact on consolidated financial statements shareholders' equity. The first implementation of the new revenue standards has the following impact on other related items of the financial statements:

Details of and the reasons for the changes in accounting policies	Affected items in the financial statements	Amounts of adjustments (January 1, 2018)
As a result of the implementation of the new revenue standards, the Group will include the right to collect consideration related to the sale of goods and the provision of services that do not satisfy the unconditional right to receive payment in contract assets; the Group will include the completed outstanding accounts, long-term receivables related to infrastructure construction, partial manufacturing, installation operations and the provision of labour services that do not satisfy the unconditional right of collection in the contract assets and other non-current assets; the Group will reclassify the advance payment from settled unfinished projects, sales of goods and the provision of services related to infrastructure construction, partial manufacturing and installation business into contract liabilities.	Contract assets-original value Other non-current assets Long-term receivables Inventory Contract liability Advance payment Provisions	6,472,907 -6,472,907 8,561,811 -8,561,811

Compared with the original revenue standards, the impact of the implementation of the new revenue standards on the items related to the financial statements as at 31 December 2018 is as follows:

Affected statement items	Amounts of adjustments
Contract assets-original value	8,898,228
Inventory	-8,898,228
Contract liability	4,390,293
Advance payment	-4,390,293

33. Changes in significant accounting policies and accounting estimates (Continued)

(1) Provisions Changes in significant accounting policies (Continued)

2 New guidelines for financial instrument guidelines

In 2017,the Ministry of Finance have issued "Accounting Standards for Business Enterprises No. 22 - Recognition and Measurement of Financial Instruments (Revised)", "Accounting Standards for Business Enterprises No. 23 - Finance Asset Transfer (Revised)", "Accounting Standards for Business Enterprises No.24 - Hedge Accounting(Revised)", "Accounting Standards for Business Enterprises No.37 - Financial Instruments Presentation (Revised)"(hereinafter referred to as the "New Financial Instruments Standards"). The Group has implemented the Accounting Standards since January 1, 2018, and adjusted the relevant contents of accounting policies.

According to the new financial instruments standards, financial assets are classified into the following three categories depends on the Group's business mode of managing financial assets and cash flow characteristics of financial assets: financial assets measured at amortized cost, financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss. If the main contract contained in the mixed contract belongs to financial assets, it should not be separated from the mixed contract and embedded in derivatives, but should be applied as a whole to the relevant provisions of the classification of financial assets.

Except for financial guarantee contract liabilities, the adoption of new financial instrument standards has no significant impact on the accounting policy of the Group's financial liabilities.

On January 1, 2018, the Group did not designate any financial assets or liabilities as financial assets or liabilities measured at fair value through profits and losses, nor did it revoke its previous designation.

The new financial instrument standard replaces the method of recognising impairment provision according to actual impairment loss stipulated in the original financial instrument standard with the method of "expected credit losses method". The "expected credit losses method" model requires continuous assessment of the credit risk of financial assets. Therefore, under the new financial instrument standard, the group's credit loss is recognised earlier than the original financial instrument standard.

On the basis of expected credit losses, the Group performs impairment assessment on the following items and confirms the loss provision.

- Financial assets measured at amortized cost;
- Debt investments at fair value through other comprehensive income;
- Contract assets defined in Accounting Standards for Business Enterprises No. 14 Revenue;
- Lease receivables;
- Financial guarantee contract(except measured at fair value through profit or loss or formed by continuing involvement of transferred financial assets or the transfer does not qualify for derecognition).

In accordance with the provisions of the new financial instrument standard, except in certain specific cases, the Group retrospectively adjusts the classification and measurement of financial instruments (including impairment), and calculates the difference between the original book value of financial instruments and the new book value on the date of implementation of the n new financial instrument standard (i.e. January 1, 2018) into the retained earnings or other comprehensive earnings at the beginning of 2018. At the same time, the Group did not adjust the comparative financial statements data.

On January 1, 2018, the results of classification and measurement of financial assets in accordance with the original financial instrument standards and the new financial instrument standards are as follows:

	The original financial instrument standards		standards The new financial instrument standards		ards
Items	Categories	Book Value	Items	Categories	Book Value
Available-for-sale financial assets	measured at cost (equity instrument)	24,389	Other equity instrument investments	measured at fair value through other comprehensive income.	24,389
Bills receivable and accounts receivable Other receivables	measured at amortised cost	18,191,357	Bills receivable and accounts receivable	measured at amortised cost	18,191,357
			Financial assets held for trading	measured at fair value through profit or loss	_
Long-term receivables Bills receivable and accounts receivable	measured at amortised cost	1,999,979	Other current assets	measured at amortised cost	_
			Other receivables	measured at amortised cost	1,999,979
Other receivables	measured at amortised cost	233,061	Long-term receivables	measured at amortised cost	233,061
			Other non-current financial assets	measured at fair value through profit or loss	_
			Debt investments	measured at amortised cost	_

33. Changes in significant accounting policies and accounting estimates (Continued)

(1) Provisions Changes in significant accounting policies (Continued)

New guidelines for financial instrument guidelines (Continued)

On January 1, 2018, the adjustment table of the financial instrument classification and book value, at the implemention of the new financial instrument standards were as follows:

Items	Pre-adjustment book value (31 December 2017)	Reclassification	Re-measurement	Adjusted book value (January 1, 2018)
Assets::				
Bills receivable and accounts receivable	18,191,357			18,191,357
Other receivables	1,999,979			1,999,979
Other current assets	885,473			885,473
Available-for-sale financial assets	24,389	-24,389	_	_
Long-term receivables	233,061			233,061
Other equity instrument investments	_	24,389		24,389
Shareholders' equity.:				
Surplus reserve	200,383			200,383
Retained earnings	-25,556,017			-25,556,017
Minority interests	-1,372			-1,372

On January 1, 2018, the Group calculated the impairment of financial assets measured at amortized cost according to the requirements of the new financial instrument standards. The estimated loss provision is no significant difference from the bad debt provision under the original standards.

③ Financial statements format

According to "the Announcement of the revision of general enterprise financial statements format for 2018" (Accounting [2018] No. 15) issued by MOF, the Group revised the financial statement format as follows:

A. Balance sheet

Combine "bills receivable" and "accounts receivable" into "bills receivable and accounts receivable"; Combine "interest receivable" and "dividends receivable" into "bills receivable and accounts receivable"; Merge "Disposal of Fixed Assets" into "Fixed Assets"; Merge "engineering materials" into "construction in progress"; Combine "bills payables" and "accounts payable" into "bills payables and accounts payable"; Consolidate the original "interest payables" and "dividend payables" line items to "other payables"; Consolidate "special payables" into "long-term payables".

B. Income statement

Separate the "research&development expenses" from the original "administrative expenses"; "interest expenses" and "interest income" separately presented under "finance expenses"

"Changes of re-measurement in net liabilities or net assets of defined benefit plans" is replaced by "The amount of changes of re-measurement in defined benefit plans"; "other comprehensive income to propotional shares in the investee cannot be reclassified into profit or loss under equity method" is changed to "other comprehensive income that cannot be transferred to profit or loss under the equity method"; other comprehensive income to propotional shares in the investee shall be reclassified into profit or loss under equity method is changed to "Other comprehensive income can be converted into profits or losses";

C. Statement of changes in shareholder's equity

Under the "internal transfer of shareholders' equity" line item, the original "Changes of re-measurement in net liabilities or net assets of defined benefit plans" was changed to "Transfer of change amount of defined benefit plans to retained earnings".

The Group dajust comparative data for comparable periods in accordance with Finance [2018] No. 15

The revision of the financial statement format has no impact on the Group's total assets, total liabilities, net profit, other comprehensive income, etc.

Accord, ing to "Interpretation related to the financial statements format in 2018 for general enterprises" issued by the MOF, as the withholding agent for the individual income tax, the Company recognized the received handling fee according to "Individual Income Tax Law of the People's Republic of China" in "Other income". The Company adjusted the comparative figure for comparable periods, "Other income" for year 2017 was adjusted up by RMB 3,828 thousand, "Other revenue" for year 2017 was adjusted down by RMB 3,828 housand.

33. Changes in significant accounting policies and accounting estimates (Continued)

(2) Significant changes in accounting estimates

The group has no significant changes in accounting estimates this year.

(3) At the first implementation of the new financial instrument standards or the new revenue standards, the situation to adjust the relevant items of the financial statements at the beginning of the first implementation year is as follow:

Consolidated Balance Sheet

Item	As at 31/12/2017	As at 1/1/2018	Adjustments
Current assets:			
Cash at bank and on hand	2,547,975	2,547,975	
Bills receivable and accounts receivable	18,191,357	18,191,357	
Including:Bills receivable	1,218,029	1,218,029	
Accounts receivable	16,973,328	16,973,328	
Prepayments	429,006	429,006	
Other receivables	1,999,979	1,999,979	
Including:Interest receivables			
Dividend receivables	188	188	
Inventories	7,835,489	1,362,582	-6,472,907
Contract assets		6,472,907	6,472,907
Other current assets	885,473	885,473	
Total current assets	31,889,279	31,889,279	
Non-current assets:			
Available-for-sale financial assets	24,389		-24,389
Long-term receivables	233,061	233,061	
Long-term equity investments	207,046	207,046	
Other equity instrument investments		24,389	24,389
Fixed assets	25,660,612	25,662,256	1,644
Construction in progress	237,638	237,638	
Disposal of fixed assets	1,644		-1,644
Intangible assets	283,161	283,161	
Long-term deferred expenses	3,080,301	3,080,301	
Deferred income tax assets	472,184	472,184	
Total non-current assets	30,200,036	30,200,036	
Total assets	62,089,315	62,089,315	

33. Changes in significant accounting policies and accounting estimates (Continued)

(3) At the first implementation of the new financial instrument standards or the new revenue standards, the situation to adjust the relevant items of the financial statements at the beginning of the first implementation year is as follow: (Continued)

Consolidated Balance Sheet (Continued)

Item	As at 31/12/2017	As at 1/1/2018	Adjustments
Current liabilities:			
Short-term loans	17,510,830	17,510,830	
Bills payable and accounts payable	29,546,017	29,546,017	
Advances from customers	8,561,811		- 8,561,811
Contract liabilities		8,561,811	8,561,811
Employee benefits payable	381,275	381,275	
Taxes payable	1,034,596	1,034,596	
Other payables	6,431,966	6,431,966	
Including: Interest payable	10,927	10,927	
Dividend payable			
Non-current liabilities due within one year	28,844	28,844	
Other current liabilities	11,744	11,744	
Total current liabilities	63,507,083	63,507,083	
Non-current liabilities:			
Long-term loans	455,826	455,826	
Long-term payables	67,533	67,533	
Deferred income	136,312	136,312	
Deferred income tax liabilities	23,879	23,879	
Total non-current liabilities	683,550	683,550	
Total liabilities	64,190,633	64,190,633	
Shareholders' equity.:			
Share capital	14,142,661	14,142,661	
Capital reserve	8,925,950	8,925,950	
Other comprehensive income			
Special reserve	202,477	202,477	
Surplus reserve	200,383	200,383	
Retained earnings	-25,571,417	-25,571,417	
Equity attributable to the parent company	-2,099,946	-2,099,946	
Minority interests	-1,372	-1,372	
Total equity	-2,101,318	-2,101,318	
Total liabilities and equity	62,089,315	62,089,315	

33. Changes in significant accounting policies and accounting estimates (Continued)

(3) At the first implementation of the new financial instrument standards or the new revenue standards, the situation to adjust the relevant items of the financial statements at the beginning of the first implementation year is as follow: (Continued)

Consolidated Balance Sheet (Continued)

Balance sheet of parent company

Item	As at 31/12/2017	As at 1/1/2018	Adjustments
Current assets:			
Cash at bank and on hand	236,745	236,745	
Other receivables	5,313,186	5,313,186	
Including:Interest receivables			
Dividend receivables			
Total current assets	5,549,931	5,549,931	
Non-current assets:			
Long-term equity investments	20,215,327	20,215,327	
Total non-current assets	20,215,327	20,215,327	
Total assets	25,765,258	25,765,258	
Current liabilities:			
Taxes payable	26,231	26,231	
Other payables	1,127,163	1,127,163	
Including: Interest payable			
Dividend payable			
Total current liabilities	1,153,394	1,153,394	
Non-current liabilities:			
Long-term loans			
Total non-current liabilities	_		
Total liabilities	1,153,394	1,153,394	
Shareholders' equity.:			
Share capital	14,142,661	14,142,661	
Capital reserve	11,764,970	11,764,970	
Other comprehensive income			
Special reserve			
Surplus reserve	200,383	200,383	
Retained earnings	-1,496,150	-1,496,150	
Total equity	24,611,864	24,611,864	
Total liabilities and equity	25,765,258	25,765,258	

IV. Types of taxes and tax rates

1. Major taxes and tax rate

Type of taxes	Tax base	Tax rate%
Value added tax	Taxable value added(for the calculation of the output VAT and deducted by the input VAT)	3, 6, 10 or 16
Urban maintenance and construction tax	Turnover tax payable	1, 5, 7
Educational surtax	Turnover tax payable	5
Income tax	Tax payable	25

Corporate income tax:

Taxpayer	Tax rate%
Sinopec Shengli Petroleum Engineering Company Limited	15
Sinopec Jianghan Petroleum Engineering Company Limited	15
Sinopec South West Petroleum Engineering Company Limited	15, 25
Sinopec Zhongyuan Oil Engineering Design Company Limited	15
Sinopec Henan Oil Engineering Design Company Limited	15
Sinopec Oil Engineering geophysical Company Limited	15

2. Tax incentives and approval documents

(1) Consumption tax refund of self-used refined oil

In accordance to "Notification of refund of consumption tax for own use refined oil during oil (gas) field production" (Cai Shui [2011] No.7)) issued by MOF and State Taxation Administration, from 1 January 2009, the oil (gas) field enterprises will be refunded the consumption tax after the actual payment of temporary consumption tax paid for the purchases of refined oil used in the exploitation of crude oil.

(2) Corporate income tax

In accordance to "Notification of tax policy issues on thorough implementation of western development strategy issued by MOF and State Taxation Administration" (Cai Shui[2011]No.58) and "Proclamation of corporate income tax issues on thorough implementation of western development strategy issued by State Taxation Administration" ([2012]No.12), a subsidiary of the Group, Sinopec Southwest Oil Engineering Company Limited has enjoyed a preferential western development corporate income tax rate at 15% confirmed by "Permission of agreement that Sinopec Southwest Oil Engineering Company Limited enjoys preferential western development corporate income tax rate" (Cuan Guo Shui Zhi Fa[2014]No.8) issued by SiChuan province state taxation bureau directly-managed branch bureau.

In accordance to "PRC Enterprise Income Tax Law"and "Notice on Implementing Income Tax Preferences for High-tech Enterprises" (Circular [2009] No. 203) issued by State Taxation Administration, Sinopec Shengli Petroleum Engineering Company Limited, Sinopec Jianghan Petroleum Engineering Company Limited, Sinopec Oil Engineering geophysical Company Limited, Sinopec Zhongyuan Oil Engineering Design Company Limited and Sinopec Henan Oil Engineering Design Company Limited have obtained High-tech enterprise accreditation and enjoy a preferential income tax rate at 15%.

V. Notes to the consolidated financial statements

1. Cash at bank and on hand

Items	As	at 31 December 20	18	As	As at 31 December 2017		
	Original currency	Exchange rate	Amount (RMB)	Original currency	Exchange rate	Amount (RMB)	
Cash on hand:			8,114			8,180	
RMB	_	_	553	_	_	2,054	
USD	476	6.8632	3,267	296	6.5342	1,934	
EUR	38	7.8473	295	45	7.8023	348	
BRL	21	1.7741	38	15	1.9725	29	
DZD	11,290	0.0580	655	7,558	0.0569	430	
SAR	314	1.8287	574	491	1.7423	855	
KWD	21	22.5726	474	28	21.6185	609	
KZT	30,936	0.0185	572	7,982	0.0197	157	
XAF	18,230	0.0119	218	38,591	0.0120	461	
ВОВ	81	0.9932	81	58	0.9456	54	
Others			1,387			1,249	
Cash at banks:	_	_	2,186,785	_	_	2,500,230	
RMB	_	_	335,668	_	_	784,145	
USD	171,988	6.8632	1,180,389	171,569	6.5342	1,121,068	
EUR	209	7.8473	1,638	1,766	7.8023	13,780	
BRL	98	1.7741	173	217	1.9725	427	
DZD	862,705	0.0580	50,067	869,091	0.0569	49,423	
SAR	106,345	1.8287	194,469	48,453	1.7423	84,417	
KWD	6,140	22.5726	138,588	3,122	21.6185	67,494	
KZT	854,247	0.0185	15,804	1,471,807	0.0197	28,996	
XAF	566,629	0.0119	6,763	781,002	0.0120	9,334	
вов	70,216	0.9932	69,740	104,516	0.9456	98,832	
KES	147,596	0.0674	9,949	771,726	0.0633	48,848	
Others	_	_	183,537	_	_	193,466	
Among cash at bank:Related party			1,058,840			1,050,750	
Including:RMB	_	_	60,455	_	_	153,952	
USD	106,655	6.8632	731,993	126,308	6.5342	825,322	
SAR	88,023	1.8287	160,965	13,023	1.7423	22,690	
KWD	4,610	22.5726	104,052	1,610	21.6185	34,801	
EUR	165	7.8473	1,293	1,734	7.8023	13,528	
Others			82			457	
Other monetary funds:	_	_	8,542	_	_	39,565	
RMB	_	_	901	_	_	243	
USD	_	_	_	5,562	6.5342	36,341	
AED	131	1.8706	246	131	1.7790	234	
DZD	8,454	0.0580	491	8,454	0.0569	481	
KZT	_	_	_	1,420	0.0197	28	
BOB	_	_	_	209	0.9456	198	
Others	_	_	6,904	_	_	2,040	
Total:			2,203,441			2,547,975	
			1,693,181			, ,	

At 31 December 2018, the Group's restricted cash such as margin deposit is RMB 29,861 thousand (At 31 December 2017: RMB 14,538 thousand), including frozen deposit is RMB 26,255 thousand (At 31 December 2017: RMB 11,805 thousand), there is no deposits pledged to banks for issuing bankers' acceptances.

2. Bills receivable and accounts receivable

Category	As at 31 December 2018	As at 31 December 2017
Bills receivable	481,196	1,218,029
Accounts receivable	15,630,004	16,973,328
Total	16,111,200	18,191,357

(1) Bills receivable

Туре	As at 31 December 2018	As at 31 December 2017
Bank acceptance bills	394,009	1,023,219
Trade acceptance bills	87,187	194,810
Total	481,196	1,218,029

Management does not expect that the bills receivable will be any significant losses from default by banks or other drawers.

- ① There is no pledged or overdue notes receivable at 31 December 2018 and 31 December 2017.
- ② At 31 December 2018, the endorsed undue bills receivable.

Туре	Recognized amount at 31 December 2018	Derecognized amount at 31 December 2017
Bank acceptance bills	1,958,967	
Trade acceptance bills	701,731	
Total	2,660,698	

Bank acceptance bills and trade acceptance bills for discounts are accepted by banks with higher credit rating or Sinopec Finance Co.Ltd. Because of the low credit risk and deferred payment risk, the bills have been recognized. In addition, the interest rate risk associated with the notes has been transferred to banks and Sinopec Finance Co.Ltd, the ownership of the major risk and remuneration has been transferred at the same time.

③ There is no bill transferred to accounts receivable due to non-performance of the issuers at the end of the year.

(2) Accounts receivable

1 The details of accounts receivable is as follows:

Category	As at 31 December 2018
Within 1 year	14,273,578
Including:	
No overdue	12,465,752
Overdue within 1 year	1,807,826
Subtotal of within 1 year	14,273,578
1 – 2 years	1,336,538
2 – 3 years	1,035,758
3 – 4 years	964,447
4 – 5 years	201,736
Over 5 years	343,138
Subtotal:	18,155,195
Less: provision for bad debts	2,525,191
Total:	15,630,004

2. Bills receivable and accounts receivable (Continued)

(2) Accounts receivable (Continued)

② Accounts receivable disclosed by bad debt provision:

	As at 31 December 2018				As at 31 December 2017					
	Co	ost	Bad debt provision			Cost		Bad debt	Bad debt provision	
Туре	Amount	Proportion (%)	Amount	Expected credit loss (%)	Net carrying amount	Amount	Proportion (%)	Amount	Expected credit loss (%)	Net carrying amount
Provision made on an individual basis	1,180,800	6.50	1,180,800	100		973,982	5.05	973,982	100	
Provision for bad and doubtful debts collectively:										
Including:Related party grouping	7,682,527	42.32	122,102	1.59	7,560,425	9,204,810	47.68	172,002	1.87	9,032,808
Third party grouping	9,291,868	51.18	1,222,289	13.15	8,069,579	9,126,351	47.27	1,185,831	12.99	7,940,520
Subtotal	16,974,395	93.50	1,344,391	7.92	15,630,004	18,331,161	94.95	1,357,833	7.41	16,973,328
Total	18,155,195	100	2,525,191	13.91	15,630,004	19,305,143	100	2,331,815	12.08	16,973,328

Provision made on an individual basis

	As at 31 December 2018					
Name	Amount	Bad debt provision	Expected credit loss (%)	Provision reason		
Entity A	1,023,023	1,023,023	100	The debtor is short of funds and the funds have not been recovered for a long time.		
Entity B	45,716	45,716	100	The debtor is short of funds and the funds have not been recovered for a long time.		
Entity C	42,644	42,644	100	The debtor is short of funds and the funds have not been recovered for a long time.		
Others	69,417	69,417	100	The debtor is short of funds and the funds have not been recovered for a long time.		
Total	1,180,800	1,180,800	100			

Provision for bad and doubtful debts collectively

	Related party grouping			Third party grouping		
	Amount	Bad debt provision	Expected credit loss (%)	Amount	Bad debt provision	Expected credit loss (%)
Within 1 year	6,832,696	21,613	0.32	7,236,137	89,569	0.51
Including:						
No overdue	6,673,453	20,020	0.30	5,792,299	17,377	0.30
Overdue within 1 year	159,243	1,593	1	1,443,838	72,192	5
1 – 2 years	507,011	25,351	5	822,863	205,716	25
2 – 3 years	209,514	20,951	10	377,086	188,543	50
3 – 4 years	77,409	15,482	20	411,320	329,057	80
4 – 5 years	20,040	10,020	50	175,284	140,227	80
Over 5 years	35,857	28,685	80	269,178	269,177	100
Total	7,682,527	122,102	1.59	9,291,868	1,222,289	13.15

2. Bills receivable and accounts receivable (Continued)

(2) Accounts receivable (Continued)

3 Provision, recovery or reversal of bad debt

	Bad debt provision
As at 31 December 2017	2,331,815
Adjustment amount for the first implementation of the new financial instrument guidelines	
As at 1 January 2018	2,331,815
Provision	517,168
Increase in scope of consolidation	167,766
Recovery or reversal	489,947
Written-off	1,611
As at 31 December 2018	2,525,191

2 Written-off of accounts receivable

Items	Amount
Written-off of accounts receivable	1,611

③ The five largest accounts receivable are analyzed as follows:

Company Name	Amount	Percentage of total accounts receivable %	Ending balance of bad debt provision
Entity A	6,512,338	35.87	76,793
Entity B	1,351,157	7.44	51,474
Entity C	1,023,023	5.63	1,023,023
Entity D	1,027,149	5.66	42,695
Entity E	953,068	5.25	71,763
Total	10,866,735	59.85	1,265,748

3. Prepayments

(1) The ageing analysis of prepayments is as follows:

Ageing	As at 31 Dec	cember 2018	As at 31 December 2017		
	Amount Proportion %		Amount	Proportion %	
Within 1 year	431,000	96.91	418,241	97.48	
1 – 2 years	13,027	2.92	4,838	1.13	
2 – 3 years	654	0.15	3,028	0.71	
Over 3 years	68	0.02	2,899	0.68	
Total	444,749	100.00	429,006	100.00	

(2) The five largest prepayments are analyzed as follows:

The total amount of the five largest prepayments is 118,465 thousand, which contributed 26.64% of the total ending balance amount of prepayments.

4. Other receivables

Items	As at 31 December 2018	As at 31 December 2017
Interests receivable		
Dividends receivable	188	188
Other receivables	1,712,387	1,999,791
Total	1,712,575	1,999,979

(1) Dividends receivable

Items	As at 31 December 2018	As at 31 December 2017
Entity A	188	188
Total	188	188

(2) Other receivable

① The ageing analysis is as follows:

Ageing	As at 31 December 2018
Within 1 year	1,359,350
1 – 2 years	235,806
2 – 3 years	279,926
3 – 4 years	127,671
4 – 5 years	36,069
Over 5 years	272,081
Subtotal	2,310,903
Less: provision for bad debts	598,516
Total	1,712,387

② Other receivables disclosed by nature:

	As	at 31 December 20)18	As at 31 December 2017			
Items	Ending balance	Provision for diminution in value	Carrying amount	Ending balance	Provision for diminution Ending balance in value		
Imprest	22,440		22,440	34,523		34,523	
Guarantee	668,383	175,072	493,311	846,193	292,919	553,274	
Amount paid on behalf	676,630	130,600	546,030	641,003	18,510	622,493	
Temporary payment	622,173	260,252	361,921	759,129	240,886	518,243	
Escrow funds	9,738	5,756	3,982	9,733	5,903	3,830	
Deposits	40,709	5,297	35,412	42,944	10,211	32,733	
Export tax refund receivable	28,671	1,664	27,007	5,261	263	4,998	
Others	242,159	19,875	222,284	274,405	44,708	229,697	
Total	2,310,903	598,516	1,712,387	2,613,191	613,400	1,999,791	

4. Other receivables (Continued)

③ Provision for bad debts

Accounts receivable disclosed by bad debt provision:

Туре		As at 31 December 2018					As at 31 December 2017									
	C	Cost Bad o		Bad debt provision		Bad debt provision		Bad debt provision		Bad debt provision		Co	ost	Bad debt	provision	Net carrying amount
	Amount	Proportion (%)	Amount	Expected credit loss (%)		Amount	Proportion (%)	Amount	Expected credit loss (%)	賬面價值						
Provision made on an individual basis																
Provision for bad and doubtful debts collectively:																
Including:Related party grouping	188,525	8.16	13,470	7.14	175,055	357,311	13.67	26,030	7.28	331,281						
Imprest	64,455	2.79			64,455	69,204	2.65			69,204						
Third party grouping	2,057,923	89.05	585,046	28.43	1,472,877	2,186,676	83.68	587,370	26.86	1,599,306						
Subtotal	2,310,903	100.00	598,516	25.90	1,712,387	2,613,191	100.00	613,400	23.47	1,999,791						
Total	2,310,903	100.00	598,516	25.90	1,712,387	2,613,191	100.00	613,400	23.47	1,999,791						

Provision for bad and doubtful debts collectively

	Re	elated party group	ing	Third party grouping			
	Amount	Bad debt provision	Expected credit loss (%)	Amount	Bad debt provision	Expected credit loss (%)	
Within 1 year	123,288	1,233	1.00	1,171,607	59,924	5	
1 – 2 years	38,034	3,803	10.00	197,772	49,443	25	
2 – 3 years	13,808	2,762	20.00	266,118	106,447	40	
3 – 4 years	12,264	4,906	40.00	115,407	69,244	60	
4 – 5 years	912	547	60.00	35,157	28,126	80	
Over 5 years	219	219	100.00	271,862	271,862	100	
Total	188,525	13,470		2,057,923	585,046		

4 Provision, recovery or reversal of bad debt

	Bad debt provision
As at 31 December 2017	613,400
Adjustment amount for the first implementation of the new financial instrument guidelines	
As at 1 January 2018	613,400
Provision	199,426
Increase in scope of consolidation	7,057
Recovery	215,479
Written-off	5,888
As at 31 December 2018	598,516

⑤ Written-off of other receivable

Items	Amount
Written-off of other receivable	5,888

4. Other receivables (Continued)

⑥ The five largest other receivable are analyzed as follows:

Company Name	Nature of payment	Amount	Ageing	Percentage of total other receivable %	Ending balance of bad debt provision
Entity A	Amount paid on behalf	440,592	1 – 3 years	19.07	22,030
Entity B	Temporary payment	261,927	1 – 3 years	11.33	104,996
Entity C	Temporary payment	166,339	Over 5 years	7.20	166,339
Entity D	Amount paid on	133,157	1 – 5 years	5.76	74,697
Entity E	Guarantee	82,391	Within 1 year	3.57	824
Total		1,084,406		46.93	_

5. Inventories

(1) Inventories by categories

Items	As	at 31 December 20)18	As at 31 December 2017			
	Cost	Provision for diminution in value	Carrying amount	Cost	Provision for diminution in value	Carrying amount	
Raw materials	1,136,487	58,808	1,077,679	1,182,524	64,576	1,117,948	
Work in progress	11,986	1,987	9,999	2,887	1,987	900	
Finished goods	124,201	3,290	120,911	86,134	5,893	80,241	
Turnover materials	8,734	_	8,734	10,151		10,151	
Costs to fulfil a contract	194,315	_	194,315	_	_	_	
Amounts due from customers for contract work	_	_	_	6,883,350	259,048	6,624,302	
Others	_	_	_	1,947		1,947	
Total	1,475,723	64,085	1,411,638	8,166,993	331,504	7,835,489	

As at 31 December 2018 and 2017 the cost of inventories didn't include capitalized interest. In addition, the inventories haven't been used for mortgage or quarantee.

(2) Provision for diminution in value of inventories

Items		Increase duri	ng the period	Written back du		
	As at 1 January 2018	Provision	Others	Reversal or Write-off	Others	As at 31 December 2018
Raw materials	64,576			5,768		58,808
Work in progress	1,987			_		1,987
Finished goods	5,893			2,603		3,290
Amounts due from customers for contract work	259,048			_	259,048	_
Total	331,504			8,371	259,048	64,085

Provision for decline in the value of inventories is determined at the excess amount of the carrying amounts of the inventories over their net realisable value. Net realisable value is determined based on the estimated selling price in the ordinary course of business, less the estimated costs to completion and estimated costs necessary to make the sale and related taxes.

6. Contract assets

Items	As at 31 December 2018	As at 31 December 2017
Contract assets	8,898,229	_
Less: Impairment of contract assets	26,525	_
Subtotal	8,871,704	_
Less: Contract assets listed in other non-current assets		_
Total	8,871,704	_

⁽¹⁾ The petroleum engineering services provided by the Group are usually settled in installments according to the contractual completion schedule, and the Group will receive project fee in 30 to 180 days after settlement. Engineering construction business will reserve quality guarantee as 5% of progress billings, and have an unconditional right to receive the guarantee after guarantee period.

There are no significant changes of contract assets when the revenue has additional adjustment in the period.

(2) Provision for impairment of contract assets

Туре		As at 31 December 2018				As at 1 January 2018				
	Co	ost	Provision for	rimpairment		Cost		Provision for impairment		
	Amount	Proportion (%)	Amount	Expected credit loss (%)	Net carrying amount	Amount	Proportion(%)	Amount	Expected credit loss (%)	Net carrying amount
Provision for bad and doubtful debts collectively										
Including:										
Petroleum Engineering	8,898,228	100	26,524	0.3	8,871,704	6,472,907	100	_	_	6,472,907
Total	8,898,228	100	26,524	0.3	8,871,704	6,472,907	100	_	_	6,472,907

7. Non-current assets due within one year

Items	As at 31 December 2018	As at 31 December 2017
Long-term deferred expenses due within one year	40,477	_
Others		
Total	40,477	_

8. Other current assets

Items	As at 31 December 2018	As at 31 December 2017
Prepaid VAT	353,291	205,916
Value-added tax to be certified	29,772	24,043
Excess value-added tax paid	827,769	651,200
Prepaid income tax	7,203	4,314
Total	1,218,035	885,473

9. Available-for-sale financial assets

Items	As at 31 December 2018			As at 31 December 2017		
	Ending balance	Provision for diminution in value	Carrying amount	Ending balance	Provision for diminution in value	Carrying amount
Availabel-for-sale equity instruments	_	_	_	24,389	_	24,389
Including:based on fair value	_	_	_			
Based on cost	_	_	_	24,389	_	24,389
Total	_	_	_	24,389	_	24,389

10. Long-term receivable

(1) Long-term receivables disclosed by nature

()						
Items	As	at 31 December 2	018	As at 31 December 2017		
	Ending balance	Provision for diminution in value	Carrying amount	Ending balance	Provision for diminution in value	Carrying amount
Installment collection services	40,477	_	40,477	233,061	_	233,061
Subtotal	40,477	_	40,477	233,061	_	233,061
Less: Long-term receivables due within 1 year	40,477	_	40,477	_	_	_
Total	_	_		233,061	_	233,061

(2) Analysis of long-term receivables overdue:

At 31 December 2018, there are no overdue long-term receivables.

11. Long-term equity investments

11. Long-term equity	IIIvesu	nents									
Name of company					The fluctuation	of this period					
	As at 1 January 2018	Additional investment	Reduce investment	Investment gains and losses confirmed by the equity method	Adjustment of other comprehensive income	Changes in other equity	The issuance of profit	Impairment	Others	As at 31 December 2018	The ending balance of impairment
① Joint venture											
SinoFTS Petroleum Services Ltd. (SinoFTS)	168,122			26,799						194,921	_
Zhong Wei Energy Service Co. Ltd. (A Sinopec – Weatherford Joint Venture)	11,825			-2,863						8,962	_
Sinopec Gulf Petroleum Engineering Services, LLC	13,383									13,383	_
Qianjiang HengYun Comprehensive Vehicle Performance Inspecting Company Limited	1,135			412						1,547	_
Subtotal	194,465			24,348						218,813	_
② associates											
Hua Bei Ruida Oil Service Company Limited ("Ordos North")	3,839			701						4,540	
Xinjiang North China Tianxiang Oil Service Company Limited ("Xinjiang North")	2,700			685			520			2,865	-
Zhenjiang Huajiang Oil and Gas Engineering Technology Service Co., Ltd	2,138			257			186			2,209	_
Henan Zhongyuan Oil & Gas Technology Service Co., Ltd	1,704			19						1,723	
Henan Zhongyou Oil & Gas Technology Service Co., Ltd	2,200			473						2,673	
Subtotal	12,581			2,135			706			14,010	
Total	207,046			26,483			706			232,823	

Notes: There is no restriction on sale of the long-term equity investments held by the Group. The information of the Group's joint venture and associates refer to note VII.2.

12. Other equity instrument investments

Item	As at 31 December 2018	As at 31 December 2017
Sinopec&Tharwa Drilling Company	29,712	_
Shengli oilfield Niuzhuang Petroleum Development Co., Ltd	9,142	_
Dongying Kewei Intelligent Technology Co., Ltd	157	_
Total	39,011	_

As Sinopec&Tharwa Drilling Company and other equity instruments are planned long-term holdings for strategic purposes, thus the Group specify them as financial assets measured at fair value through other comprehensive income.

13. Fixed assets

Category	As at 31 December 2018	As at 31 December 2017
Fixed assets	23,840,758	25,660,612
Disposal of fixed assets	2,009	1,644
Total	23,842,767	25,662,256

(1) Fixed assets

① Fixed assets by categories

Items	Buildings	Equipment and others	Total
Cost:			
1. At 31 December 2017	1,416,882	58,813,415	60,230,297
2.Increase in the year	154,455	1,269,278	1,423,733
(1) Purchase	3,230	852,878	856,108
(2) Transferred from construction in progress	76,353	362,336	438,689
(3) Purchase from related parties	74,872	54,064	128,936
3. Written back during the year	25,456	863,729	889,185
(1) Disposal or retirement	25,456	863,729	889,185
4. At 31 December 2018	1,545,881	59,218,964	60,764,845
Accumulated depreciation:			
1. At 31 December 2017	447,942	32,725,026	33,172,968
2. Increase in the year	63,815	3,067,174	3,130,989
(1) Depreciation	48,598	3,025,870	3,074,468
(2) Purchase from related parties	15,217	41,304	56,521
3. Written back during the year	11,240	749,571	760,811
(1) Disposal or retirement	11,240	749,571	760,811
4. At 31 December 2018	500,517	35,042,629	35,543,146
Provision for impairment			
1. At 31 December 2017	8,436	1,388,281	1,396,717
2. Increase in the year		2,903	2,903
(1) Purchase from related parties		2,903	2,903
3. Written back during the year		18,679	18,679
(1) Disposal or retirement		18,679	18,679
4. At 31 December 2018	8,436	1,372,505	1,380,941
Net carrying amount			
1. At 31 December 2018	1,036,928	22,803,830	23,840,758
2. At 31 December 2017	960,504	24,700,108	25,660,612

Note

 $A. \quad \text{At 31 December 2018, the net amount of the Group's fixed assets were pledged is 925,727 thousand.}\\$

13. Fixed assets (Continued)

(1) Fixed assets (Continued)

② Fixed assets rented under finance leases

Items	Cost	Accumulated depreciation	Provision for impairment	Net carrying amount
Equipment	105,013	33,414	_	71,599
Total	105,013	33,414	_	71,599

③ The situation of premises without qualified ownership certificates

There had been a total amount of 19 premises without qualified ownership certificates up to 31 December 2018, totaling amount in cost of 170,134 thousand, in accumulated depreciation of 20,354 thousand and net book value of 149,780 thousand.

(2) Disposal of fixed assets

Items	As at 31 December 2018	As at 31 December 2017	Reasons for moving to disposal
Equipment	2,009	1,644	Written off
Total	2,009	1,644	

As at 31 December 2018, no disposal of fixed assets were turned in more than a year.

14. Construction in progress

Category	As at 31 December 2018	As at 31 December 2017
Construction in progress	365,414	237,638
Construction materials	_	_
Total	365,414	237,638

(1) Construction in progress

① Details of construction in progress

Items	As at 31 December 2018			As at 31 December 2017		
	Cost	Impairment	Net carrying amount	Cost	Impairment	Net carrying amount
Infrastructure improvement expenditure	108,832	3,502	105,330	88,319	3,502	84,817
Major Materials and equipment procurement projects	320,801	68,232	252,569	205,511	68,232	137,279
Other construction projects	7,515		7,515	15,542		15,542
Total	437,148	71,734	365,414	309,372	71,734	237,638

14. Construction in progress (Continued)

(1) Construction in progress (Continued)

 $\ensuremath{\textcircled{2}}$ The major construction projects in progress are set out as follows:

Project name	As at 31 December 2017	Additions	Transfer to fixed assets	Other deduction	Accumulated capitalized interest	As at 31 December 2018
	Α	В	С	D		E=A+B-C-D
No.3 drilling paltform part of equipment facilities update project	74,410		69,925	4,485		
Saudi drilling logistics service base construction	68,856		68,856			
No.3 drilling paltform crane update project	20,200		20,200			
Liquidation station renovation project	9,566	15,286				24,852
Modification of ZJ90DB Drilling Rig		36,848	198			36,650
Production and living base construction of Zhuangxi oceaneering		36,767				36,767
DISCOVERER 2's geophysical exploration equipment replacement	269	40,899	40,899			269
Long-term pipeline construction equipment of Xinyuezhe		66,137	61,337			4,800
Modification of rigs in Kuwait		37,243	37,243			
Modification of 9000m Drilling Rig		38,689	38,689			
Total	173,301	271,869	337,347	4,485		103,338

Project name	Budget	Percentage of current input over budget (%)	Progress(%)	Sources of funds
No.3 drilling paltform part of equipment facilities update project	133,340	55.80	100.00	Selfraised
Saudi drilling logistics service base construction	87,378	78.80	100.00	Selfraised
No.3 drilling paltform crane update project	30,000	67.33	100.00	Selfraised
Liquidation station renovation project	31,930	77.83	77.83	Selfraised
Modification of ZJ90DB Drilling Rig	36,850	99.00	99.00	Selfraised
Production and living base construction of Zhuangxi oceaneering	42,150	87.23	87.23	Selfraised
DISCOVERER 2's geophysical exploration equipment replacement	79,290	51.92	51.92	Selfraised
Long-term pipeline construction equipment of Xinyuezhe	91,380	72.38	72.38	Fundraising
Modification of rigs in Kuwait	38,100	97.75	100.00	Selfraised
Modification of 9000m Drilling Rig	38,700	99.97	100.00	Selfraised
Total	_	_	_	_

15. Intangible assets

(1) Classification of intangible assets

Items	Land use rights	Computer software	Contract revenue right	Others	Total
Cost:					
1.At 31 December 2017	143,408	146,826	224,726	9,162	524,122
2. Increase in the year	1,762	13,088	8,837	_	23,687
(1) Purchase	1,762	13,088	_	_	14,850
(2) Construction completed	_	_	8,837	_	8,837
3. Written back during the year	639				639
(1) Reclassification	639				639
4. At 31 December 2018	144,531	159,914	233,563	9,162	547,170
Accumulated amortization:					
1. At 31 December 2017	23,241	106,029	108,518	3,173	240,961
2. Increase in the year	3,261	12,523	52,692	764	69,240
(1) Provision	3,261	12,523	52,692	764	69,240
3. Written back during the year	306				306
(1) Reclassification	306				306
4. At 31 December 2018	26,196	118,552	161,210	3,937	309,895
Provision for impairment					
1. At 31 December 2017					
2. Increase in the year					
3. Written back during the year					
4. At 31 December 2018					
Carrying amount					
1. At 31 December 2018	118,335	41,362	72,353	5,225	237,275
2. At 31 December 2017	120,167	40,797	116,208	5,989	283,161

(2) Land use right without qualified ownership certificates.

There was no land use right without qualified ownership certificates.

16. Long-term deferred expenses

			Decrease in the year		
Items	As at 31 December 2017	Increase in the year	Amortisation in the year	Other decreases	As at 31 December 2018
Special tools of petroleum engineering	2,411,362	1,466,070	1,158,663		2,718,769
Other tools of Petroleum engineering	338,554	543,468	222,120	10,217	649,685
Camping house	315,207	127,197	167,945		274,459
Other long-term deferred expenses	15,178	34,158	11,081		38,255
Total	3,080,301	2,170,893	1,559,809	10,217	3,681,168

Long-term deferred expenses mainly represent special drilling and logging tools of petroleum engineering, geophysical special tools, camping house etc.

 ⁽¹⁾ At 31 December 2018, no internal research form intangible assets.
 (2) At 31 December 2018, the above intangible assets were not pledged.

17. Deferred income tax assets and deferred income tax liabilities

(1) Deferred income tax assets and deferred income tax liabilities without offsetting

· /	9			
	As at 31 December 2018		As at 31 December 2017	
Items	Deductible/taxable temporary differences	Deferred incoome tax assets/liabilities	Deductible/taxable temporary differences	Deferred incoome tax assets/liabilities
Deferred income tax assets				
Provision for assets impairment and influence on depreciation	1,494,331	289,261	1,404,657	296,036
provision for bad debts	874,990	187,904	794,530	160,840
Defferred income	101,818	15,273	102,050	15,308
Subtotal	2,471,139	492,438	2,301,237	472,184
Deferred income tax liabilities				
Revaluation of assets	78,535	19,202	94,215	23,038
Depreciation of fixed assets	2,039	510	5,221	841
Changes in fair value through other comprehensive income	14,881	2,946		
Subtotal	95,455	22,658	99,436	23,879

(2) Details of unrecognised deferred income tax assets of deductible temporary differences and tax losses:

The tax losses of the Group can be carried forward to subsequent 5 years for deduction of the taxable profit in accordance with the PRC tax laws. According to the accounting policy of the Group, deferred tax assets are only recognised to the extent that it is probable that taxable profit will be available in the future

Tax losses that are not recognized as deferred tax assets are analysed as follows:

Items	As at 31 December 2018	As at 31 December 2017
Deductible temporary differences	2,704,729	2,585,097
Tax losses	19,576,148	23,534,199
Total	22,280,877	26,119,296

(3) Tax losses that are not recognized as deferred tax assets will be expired as follows:

Years	As at 31 December 2018	As at 31 December 2017	Note
year 2018	_	1,143,155	
year 2019	1,192,966	1,551,644	
year 2020	633,847	710,556	
year 2021	11,216,550	12,456,813	
year 2022	6,160,927	7,672,031	
year 2023	371,858	_	
Total	19,576,148	23,534,199	

18. Short-term loans

Items	Currency	As at 31 December 2018	As at 31 December 2017
Unsecured borrowings from related parties	RMB	14,600,000	9,495,000
	USD	3,006,082	8,015,830
Total		17,606,082	17,510,830

As at 31 December 2018, no assets of the Group were pledged.

As at 31 December 2018, the Group has no overdue short-term borrowings.

As at 31 December 2018, the interest rate range of short-term borrowings is 3.30%-3.98% (31 December 2017: 1.70%-7.90%).

19. Bills payable and accounts payable

Item	As at 31 December 2018	As at 31 December 2017
Bills payable	3,797,742	3,045,393
Accounts payable	23,261,762	26,500,624
Total	27,059,504	29,546,017

(1) Bills payable

Category	As at 31 December 2018	As at 31 December 2017
Bank acceptance bills	3,481,297	1,861,349
Trade acceptance draft	316,445	1,184,044
Total	3,797,742	3,045,393

Notes:There is no unpaid bills and bank deposit pledged for bills payable at 31 December 2018.

(2) Accounts payable

Items	As at 31 December 2018	As at 31 December 2017
Payables for materials	5,710,618	7,252,290
Payables for construction	7,186,037	7,646,548
Payable for labour cost	6,987,172	8,102,709
Payables for equipment	2,740,517	2,796,545
Others	637,418	702,532
Total	23,261,762	26,500,624

Important accounts payable aged over one year:

Items	As at 31 December 2018	Overdue reasons
Entity A	53,893	Retention money、Unsettled
Entity B	34,495	Retention money、Unsettled
Entity C	30,082	Retention money、Unsettled
Entity D	29,959	Retention money、Unsettled
Entity E	29,619	Retention money、Unsettled
Total	178,048	

20. Advances from customers

Items	As at 31 December 2018	As at 31 December 2017
Advances for construction and labor	_	1,773,584
Amounts due to customers for contract work	_	6,788,227
Total	_	8,561,811

21. Contract liabilities

Items	As at 31 December 2018	As at 31 December 2017
Petroleum Engineering	2,507,146	_
Engineering and Construction	1,883,147	_
Total	4,390,293	_

The amount of revenue recognized at 31 December 2017 of contract liabilities in the current period was 7,640,727 thousand.

22. Employee benefits payable

Items	As at 31 December 2017	Increase in the year	Decrease in the year	As at 31 December 2018
Short term employee benefits	381,275	13,255,161	13,125,929	510,507
Post-employment benefits		1,651,945	1,651,945	
Termination benefits		47,500	47,500	
Total	381,275	14,954,606	14,825,374	510,507

(1) Short-term employee benefits

Items	As at 31 December 2017	Increase in the year	Decrease in the year	As at 31 December 2018
Wages or salaries, bonuses, allowances and subsidies	215,347	9,119,102	8,972,570	361,879
Staff welfare	547	974,535	975,082	_
Social security contributions	270	891,153	891,407	16
Including: 1. Basic medical insurance	_	652,815	652,815	_
2.Supplementary medical insurance	254	88,193	88,447	_
3. Work-related injury insurance	_	58,671	58,671	
4. Birth insurance	_	35,521	35,521	_
5. Other insurance	16	55,953	55,953	16
Housing funds	1,463	805,431	805,238	1,656
Labor union and employee education funds	155,210	267,876	283,756	139,330
Others	8,438	1,197,064	1,197,876	7,626
Total	381,275	13,255,161	13,125,929	510,507

22. Employee benefits payable (Continued)

(2) Post-employment benefits

Items	As at 31 December 2017	Increase in the year	Decrease in the year	As at 31 December 2018
Basic pension insurance		1,267,235	1,267,235	
Unemployment insurance		45,594	45,594	
Annuity		339,116	339,116	
Total		1,651,945	1,651,945	

The in-service employees of the Group are subject to basic pension and medical insurance, which are extracted and paid according to regulated rates and set up and governed by local government. In addition, the Company provides a supplementary defined contribution retirement plan for its employees at rates not exceeding 5% of their salaries. Employees who have served the Group for more than one year may participate in this plan. The assets of this plan are held separately from those of the Group in an independent fund administered by a committee consisting of representatives from the employees and the Group. A member of the above plans is entitled to a pension amount equal to a fixed proportion of the salary prevailing at his or her retirement date. The Group has no other material obligation for the payment of pension benefits associated with the basic and supplementary pension plans beyond the annual contributions described above.

(3) Termination benefits

During this report, the Group paid 47,500 thousand compensation to the resigning employee for terminating labor relation.

23. Taxes payable

Items	As at 31 December 2018	As at 31 December 2017
VAT	486,166	489,972
Urban maintenance and construction tax	43,746	46,443
Education surtax	27,207	28,653
Corporate income tax	261,753	203,780
individual income tax	114,721	170,577
Withholding tax	30,969	5,467
Others	88,915	89,704
Total	1,053,477	1,034,596

24. Other payables

Items	As at 31 December 2018	As at 31 December 2017
Interest payable	12,893	10,927
Other payables	2,173,116	6,421,039
Total	2,186,009	6,431,966

(1) Interest payable

Items	As at 31 December 2018	As at 31 December 2017
Interest payable of long term loan which interest paid by installment and principal paid at maturity date	1,802	1,907
Interest payable of short term loan	11,091	9,020
Total	12,893	10,927

The Group have no overdue interest to pay at 31 December 2018.

24. Other payables (Continued)

(2) Other payables

Items	As at 31 December 2018	As at 31 December 2017
Guarantee	724,468	670,463
Deposits	64,712	164,697
Amount paid on behalf	601,140	473,452
Temporary receipts	458,704	743,062
Escrow payments	66,355	44,850
Withheld payments	48,657	67,641
Sinopec Group capital restructuring funds	_	2,600,000
The net profit or loss during the reorganization	_	1,118,903
Others	209,080	537,971
Total	2,173,116	6,421,039

As at 31 December 2018, other payables with aging over 1 year with a carrying amount of 793,474 thousand (31 December 2017: 4,463,245 thousand). Those are mainly construction projects retention money, deposits, guarantee and so on. Those payables are unsettled due to the guarantee period isn't end or not yet reached the settlement period.

25. Non-current liabilities due within one year

Items	As at 31 December 2018	As at 31 December 2017
Long-term payables within one year	156,559	28,844
Total	156,559	28,844

(1) Long-term payables within one year

Items	As at 31 December 2018	As at 31 December 2017
Payables of finance lease	150,142	28,844
Other long-term payables	6,417	_
Total	156,559	28,844

26. Long-term loans

Items	As at 31 December 2018	Range of interest rate	As at 31 December 2017	Range of interest rate
Loans on credit	536,291	7.35%-8.80%	455,826	6.86%-7.57%
Subtotal	536,291		455,826	
Less: Long-term loans within one year				
Total	536,291		455,826	

Note: The Group has no overdue long-term loans.

27. Long-term payables

Items	As at 31 December 2018	As at 31 December 2017
Long-term payables	868,672	67,533
Special payables		
合計	868,672	67,533

27. Long-term payables (Continued)

(1) Long-term payables

Items	As at 31 December 2018	As at 31 December 2017
Payables of finance lease	990,640	81,881
Others	28,884	14,496
Subtotal	1,019,524	96,377
Less: Long-term payables within one year	150,852	28,844
Total	868,672	67,533

28. Provisions

Items	As at 31 December 2018	As at 31 December 2017	形成原因
Executory onerous contracts	120,466	_	Expected loss of construction contract
Expected loss of judicial restructuring	475,276	_	Estimated payment of judicial restructuring
Total	595,742	_	

Estimated losses of judicial restructuring refer to Note XII. No.2 (2).

29. Deferred income

Items	As at 31 December 2017	Increase for the period	Decrease for the period	As at 31 December 2018
Government grants related to income	132,389	728,105	724,218	136,276
Government grants related to assets	3,923	5,225	5,830	3,318
Total	136,312	733,330	730,048	139,594

Notes: The government grants which recognized as deferred income refer to Note IV.6. government grants

30. Share capital(Unit: thousand shares)

		Changes in current (+、-)			
Items	As at 31 December 2017	Issued shares	Others	Subtotal	As at 31 December 2018
Held by state-owned legal person (A share)	10,259,328	1,526,718		1,526,718	11,786,046
RMB public shares (A share)	1,783,333				1,783,333
Foreign shares listed overseas (H share)	2,100,000	3,314,961		3,314,961	5,414,961
Total	14,142,661	4,841,679		4,841,679	18,984,340

At 31 December 2017:

		Changes in c	current (+、-)		
Items	As at 1 january 2017	Issued shares	Others	Subtotal	As at 31 December 2017
Held by state-owned legal person (A share)	10,259,328	_	_	_	10,259,328
RMB public shares (A share)	1,783,333	_	_	_	1,783,333
Foreign shares listed overseas (H share)	2,100,000	_	_	_	2,100,000
Total	14,142,661	_	_	_	14,142,661

Approved by China Securities Regulatory Commission's license [2018] No. 142, "The Approval of Sinopec Oilfield Service Corporation issuing non-public shares", the company had issues 1,526,717,556 shares to China Petrochemical Corporation and the Changjiang Pension Insurance Co., Ltd.-Changjiang Shengshihuazhang Collective Group Pension Insurance Management Products Progressive Profits No. 2 Combination. The non-public issuance of ordinary shares (A shares) was issued at RMB 2.62 per share. Approved by China Securities Regulatory Commission's license [2018] No. 130, "The Approval of Sinopec Oilfield Service Corporation issuing overseas-listed foreign shares", the company had issued 3,314,961,482 H shares to Sinopec Century Bright Capital Investment Limited and China Structural Reform Fund at a price of HK\$1.35 per share. After deducting the issuance fee of RMB20,783thousand, the net proceeds raised were approximately RMB7,637,715thousand.

31. Capital reserve

Items	As at 1 January 2018	Increase for the period	Decrease for the period	As at 31 December 2018
Share premium	8,844,329	2,796,036	11,223	11,629,142
Other capital reserve	81,621	_	_	81,621
Total	8,925,950	2,796,036	11,223	11,710,763

At 31 December 2017:

Items	As at 1 January 2017	Increase for the period	Decrease for the period	As at 31 December 2017
Share premium	8,844,329	_	_	8,844,329
Other capital reserve	70,985	10,636	_	81,621
Total	8,915,314	10,636	_	8,925,950

¹⁾ The increase in capital reserve is mainly due to the difference between the face value of the non-public offering shares and the actual issue price.

32. Other comprehensive income

	2018					
As at 31 December 2017(1)	Pre-tax income for the period	Less: previously recognized amount transferred to profit or loss	Less: Income tax expense	Net-of-tax amount attributable to shareholders of the Company (2)	Net-of-tax amount attributable to non-controlling interests	As at 31 December 2018 (3) = (1) + (2)
	14,622		2,946	11,676		11,676
	14,622		2,946	11,676		11,676
	31 December	31 December income for the period 14,622	As at 31 December 2017(1) Pre-tax income for the period to profit or loss	As at 31 December 2017(1) Pre-tax income for the period 2017(2) Pre-tax 2017(2) Pre-tax 2017(3) Pre-tax 2017(4) Pre-tax 2017(6) Pre-tax 2017(6	As at 31 December 2017(1) As at 2017(1) As at 31 December for the period for the period 14,622 As at 31 December transferred to profit or loss 14,622 As at 31 December transferred to profit or loss 14,622 2,946 11,676	As at 31 December 2017(1) As at 31 December 2017(1) As at 31 December 1 income for the period 2 14,622 2,946 1,676 Net-of-tax amount attributable to shareholders of the Company (2) 14,622 2,946 11,676

Note: The amount of other comprehensive income after tax for the period is 11,676 thousand. The amount of other comprehensive income after tax for the period attributable to the owners' of parent company is 11,676 thousand.

33. Special reserve

Items	As at 31 December 2017	Increase for the period	Decrease for the period	As at 31 December 2018
Special reserve	202,477	970,710	872,578	300,609
Total	202,477	970,710	872,578	300,609

In accordance with PRC regulations, the Group appropriated production safety fund of RMB970,710 thousand to specific reserve for the year ended 31 December 2018 (2017: RMB702,477 thousand), which was recognised in the cost of related products and the Specific reserve. For the year ended 31 December 2018, the Group utilised production safety fund amounting to RMB872,578 thousand (2017: RMB676,068 thousand) which was of expenditure nature.

34. Surplus reserve

	Items	As at 31 December 2017	Increase for the period	Decrease for the period	As at 31 December 2018
	Statutory surplus reserve	200,383			200,383
	Discretionary surplus reserve			•	
Ī	Total	200,383			200,383

Note: In accordance with the Company Law and the Company's Articles of Association, the Company should appropriate 10% of net profit for the year to the statutory surplus reserve, and the Company can cease appropriation when the statutory surplus reserve accumulated to more than 50% of the registered capital. The statutory surplus reserve can be used to make up for the loss or increase the paid in capital after approval from the appropriate authorities.

²⁾ The decrease amount in capital reserve is 11,223 thousand, including repurchase minority shares cost 1,372 thousand, the difference between the carrying amount of the net assets obtained and the carrying amount of assets paid is 9,554 thousand.

35. Retained earnings

Items	For the year ended 31 December 2018	For the year ended 31 December 2017	Appropriation/ distribution ratio
Retained earnings at 31 December 2017 before adjustment	-25,571,417	-14,973,476	_
Adjustment of total retained earnings at 31 December 2017 (Increase in "+", decrease in "-")		-8,417	_
Retained earnings at 31 December 2017 after adjustment	-25,571,417	-14,981,893	
Add: Net profit attributable to parent company	142,056	-10,589,524	_
Less: Withdrawal of statutory surplus reserves			10%
Retained earnings at 31 December 2018	-25,429,361	-25,571,417	
Including: Surplus reserve attributable to parent company extracted by subsidiaries	16,993	5,545	

Note

Adjustments on beginning retained earnings are as follows: -8,417 thousand on beginning retained earnings due to changes in consolidation scope resulting from business combinations involving entities under common control.

36. Revenue and cost of sales

Items	2018		2017	
	Revenue	Cost	Revenue	Cost
Major business	57,297,141	52,615,885	47,696,130	50,541,402
Other business	1,111,937	704,411	897,818	549,745

(1) Income decomposition information

The Group has six reportable segments, they are geophysics, drilling engineering, logging and mud logging, special down-hole operations, engineering construction and others. The Group expects that classify and disclose revenue according to customer type, major business area and revenue recognition time can reflect the impact of relevant economic factors on the nature, amount, time distribution and uncertainty of enterprise income and cash flow.

Reporting policy	Geophysics	Drilling engineering	Logging and mud logging	Special down-hole operations	Engineering construction	Others	Total
Major areas of business	,			- Postanono			
PRC	4,184,806	20,962,894	1,943,514	5,097,497	10,498,092	1,499,026	44,185,829
Other countries or regions	946,843	8,920,227	62,666	546,811	2,634,765	_	13,111,312
Total	5,131,649	29,883,121	2,006,180	5,644,308	13,132,857	1,499,026	57,297,141
Customer types							
Related party	3,844,348	17,158,580	1,779,450	4,220,076	9,237,829	408,867	36,649,150
Third party	1,287,301	12,724,541	226,730	1,424,232	3,895,028	1,090,159	20,647,991
Total	5,131,649	29,883,121	2,006,180	5,644,308	13,132,857	1,499,026	57,297,141
Time of revenue recognition							
Recognized (outputs) at a certain time		25,886	594	27	52,517	119,683	198,707
Recognized (services) over time	5,131,649	29,857,235	2,005,586	5,644,281	13,080,340	1,379,343	57,098,434
Total	5,131,649	29,883,121	2,006,180	5,644,308	13,132,857	1,499,026	57,297,141

36. Revenue and cost of sales (Continued)

(2) Statement of performance obligations

The Group's accounting policies for revenue is set out in Note III, No.25. The Group signs petroleum engineering technical service contracts or construction engineering contracting contracts with customers to provide geophysical, drilling engineering, logging and mud logging, special down-hole operations and engineering construction, and usually completes labor services or delivers construction within the agreed period. The customer settles the completed workload in installments during the contract performance period, and pays the progress payment within 30-180 days after settlement. The final settlement and payment are made after the completion of the project and the completion acceptance.

According to the contractual stipulations and legal provisions, etc., the Group's engineering construction business provides quality assurance for the construction. This type of quality assurance is a guarantee quality assurance to the customer that the construction meet the established standards and does not constitute an individual performance obligation. The Group accounts in accordance with the accounting policies described in Note III. No.23.

The Group determines whether the Group's identity is the major principal or agent when engaging in a transaction based on whether it has control over the goods or services before transferring the goods or services to the customers. If the Group is able to control the goods or services before transferring goods or services to customers, the Group is the major principal and recognizes revenue according to the total amount received or receivable; otherwise, the Group is an agent and recognizes revenue in accordance with the amount of commission or poundage expected to be recognized. The amount is determined by the net amount of deducting to the payable of other related parties from the total amount received or receivable, or according to the established commission amount or proportion.

(3) Information related to residual performance obligations

The Group signs engineering service contracts with several customers to provide petroleum engineering technical services and construction engineering contracting services, and will perform them in a certain period of time. These contracts usually constitute an individual performance obligation. As at 31 December 2018, some of the Group's petroleum engineering technical services and construction projects are still in the course of performance, and the total transaction price allocated to the unfulfilled obligations is approximately 16.95 billion. The amount is related to performance of each contract and will be recognized as revenue based on the progress of the performance in the future performance period of each contract.

37. Tax and surcharges

Items	2018	2017
Urban maintenance and construction tax	35,127	46,183
Education surtax	26,864	42,297
Overseas tax	87,048	136,217
Property tax	9,537	8,924
Land use tax	84,467	87,984
Vehicle usage tax	9,509	9,522
Stamp duty	31,375	49,220
Others	2,792	3,634
Total	286,719	383,981

Notes: The provision and payment standards of tax and surcharges refer to Note IV. Taxation.

38. Selling expenses

Items	2018	2017
Freight	2,754	2,027
Staff costs	44,744	38,726
Depreciation	383	591
Transportation	5,656	5,366
Sales service fees	1,747	4,710
Business promotion fee	651	547
Rental expenses	1,549	568
Office expense	2,474	2,293
Others	4,291	4,787
Total	64,249	59,615

39. General and administrative expenses

Items	2018	2017
Repair and maintenance	522,590	371,368
Staff costs	1,247,596	986,308
Integrated service	1,002,930	1,583,799
Destroyed inventory	_	97,637
The information system runs maintenance fees	42,314	73,818
Business entertainment	32,311	35,222
Transportation	58,977	81,110
Rental expenses	43,914	59,292
Depreciation and amortization	24,938	33,742
Consultation	23,256	19,347
Property insurance	2,013	8,249
Others	238,245	269,472
Total	3,239,084	3,619,364

40. Research and development expenses

Items	2018	2017
Staff costs	353,648	150,107
Material cost	374,024	214,021
Technical collaboration fee	90,201	79,079
Experimental expenses	40,210	566
Depreciation	25,157	8,472
Others	45,346	65,354
Total	928,586	517,599

41. Finance costs

Items	2018	2017
Interest expenses	662,443	646,017
Less: Interest capitalized	_	11,360
Interest income	87,886	19,382
Exchange losses/(gains)	-173,931	-116,166
Less: Exchange losses and gains capitalized		
Bank charges and others	40,564	80,942
Total	441,190	580,051

42. Impairment losses on assets

Items	2018	2017
(1) Provision for bad debts	_	1,268,868
(2) Provision for decline in the value of inventories	_	317,495
(3) Provision for decline in the value of fixed assets	_	1,149,494
(4) Others	_	
Total	_	2,735,857

43. Credit impairment losses

Items	2018	2017
Provision for bad debts of bills receivable and accounts receivable	10,543	_
Provision for decline in the value of Contract assets	26,525	_
Others		
Total	37,068	_

44. Other income

Items	2018	2017	Related to assets/income
Subsidy funds for resettlement	375,146	55,335	Related to income
National research grants	65,266	55,008	Related to income
Recurrent funding subsidies	_	4,141	Related to income
Subsidy funds for business development	1,107	2,640	Related to income
Subsidies of stable post	20,520	17,262	Related to income
Government incentives	3,501	2,156	Related to income
Subsidy income for asset replacement	1,199	2,362	Related to income
Self-use consumption tax refund	257,479	221,759	Related to income
Non-profit compensation of relocation	5,032	9,303	Related to asset
National research grants	798	2,467	Related to asset
Subtotal of government grants	730,048	372,433	
Return of individual income tax fee	3,260	3,828	
Total	733,308	376,261	

Notes:

- (1) The analysis information of the government grants refer to Note XIV No.8.
- (2) Specific reason for government grants as a regular profit or loss refer to Note XVI No.1.

45. Investment income

Items	2018	2017
Investment income from long-term equity	26,483	-13,578
Investment income from available-for-sale financial assets	_	600
Dividend income from other equity instrument investments	600	_
Others	_	67
Total	27,083	-12,911

46. Disposal income on assets

Items	2018	2017
Gains from disposal of fixed assets (loss in "-")	-7,446	-156,144
Others	7,447	-16,431
Total	1	-172,575

47. Non-operating income

Items	2018	2017	Recognised as non-recurring income
Debt restructuring gains	395,916	49,849	395,916
Waived payables	29,969	35,791	29,969
Compensation received	581	4,598	581
Penalty income	3,566	26,852	3,566
Gains from assets counts	5,534	2	5,534
Insurance compensation	11,451	5,930	11,451
Others	11,840	3,182	11,840
Total	458,857	126,204	458,857

48. Non-operating expenses

Items	2018	2017	Recognised as non-recurring income
Debt restructuring loss	655	35,368	655
Donation	610	1,040	610
Expected loss of pending claims	10,241	13,500	10,241
Expected loss of judicial restructuring	475,276		475,276
Compensation	8,227	162,882	8,227
Penalty	13,593	29,019	13,593
Non-current assets written off	8,837	55	8,837
Others	278,059	32,035	278,059
Total	795,498	273,899	795,498

49. Income tax expense

(1) Details of income taxes expenses

Items	2018	2017
Current tax in accordance with tax laws and related regulations	398,002	531,071
Deferred income tax	-24,421	-292,037
Total	373,581	239,034

49. Income tax expense (Continued)

(2) Reconciliation between income tax expenses and accounting profits is as follows:

Items	2018	2017
Profit before income tax	515,637	-10,350,586
Taxation calculated at the statutory tax rate	128,909	-2,587,647
Effect of other tax rates used by certain subsidiaries	255,179	335,235
Adjustments of current tax in previous years	3,719	16,047
Equity method accounting for the joint venture and associates' profit or loss	-6,730	3,609
Non-deductible costs, expenses and losses	98,888	597,005
Effect on the change in statutory tax rate on opening balance of deferred tax	-368	_
Effect of utilization of unrecognised tax losses and deductible temporary differences(expressed in "-")	-220,689	-43,578
Effect of unrecognised tax losses and deductible temporary differences	210,514	1,972,463
Tax effect on research and development expenses (expressed in "-")	-95,841	-54,854
Others		754
Income tax expense	373,581	239,034

50. Notes to Cash Flow Statement

(1) Cash received from other operating activities

Items	2018	2017
Amount paid on behalf	496,940	1,124,792
Government grants	479,111	396,575
Temporary receipt and payment	232,178	418,371
Guarantee	815,989	1,146,308
Compensation	25,970	5,229
Deposits	70,621	53,187
Others	491,510	129,132
Total	2,612,319	3,273,594

(2) Cash paid for other operating activities

Items	2018	2017
Temporary receipt and payment	303,130	404,226
Guarantee	1,207,214	1,068,578
Integrated service	658,267	1,583,799
Repair and maintenance expenses	522,708	371,750
Other period expenses	951,635	1,218,499
Others	159,235	358,552
Total	3,802,189	5,005,404

(3) Cash received from other financing activities

Items	2018	2017
Temporary loans	500,000	500,000
Amount of leaseback		28,000
Interest received from selfraised funds special deposit	520	4,641
Total	500,520	532,641

50. Notes to Cash Flow Statement (Continued)

(4) Cash paid for other financing activities

Items	2018	2017
Finance lease expense	117,546	29,190
Net profit or loss during the major asset restructuring	1,118,903	
Payment of capital structure adjustment funds to Sinopec Group	2,600,000	
Notes acceptance fees	863	1,062
Payment of guarantee and commitment fees	44,989	41,824
Others	1,990	540
Total	3,884,291	72,616

51. Supplement information to Cash Flow Statement

(1) Supplement information to Cash Flow Statement:

Supplement information	2018	2017
1. Reconciliation of net profits to cash flows from operating activities:		
Net profit	142,056	-10,589,620
Add: Impairment losses on assets		2,735,857
Credit impairment losses	37,068	
Depreciation of fixed assets	3,074,468	3,289,287
Amortization of intangible assets	69,240	83,963
Amortization of long-term deferred expenses	1,559,809	2,088,723
Losses on disposal of fixed assets, intangible assets and other long-term assets (Gain as in "-")	-1	172,575
Losses on retirement of fixed assets (Gain as in "-")	8,837	55
Fair value losses (Gain as in "-")		
Finance costs (Income as in "-")	538,286	553,835
Investment losses(Income as in "-")	-27,083	12,911
Decrease in deferred tax income assets (Increase as in "-")	-20,254	-288,636
Increase in deferred income tax liabilities (Decrease as in "-")	-4,167	-3,401
Decrease in inventories (Increase as in "-")	6,582,590	1,224,141
Decrease in operating receivables (Increase as in "-")	-6,704,432	4,959,821
Increase in operating payables (Decrease as in "-")	-8,294,338	-3,871,795
Safety costs	98,132	26,409
Others		10,636
Net cash flows from operating activities	-2,939,789	404,761
2. Significant investment or finance activities not involving cash:		
conversion of debt into capital		
Convertible bonds due within one year		
Fixed assets under financing lease		
3. Net changes in cash and cash equivalents:		
Closing balance of cash	2,173,580	2,533,437
Less: Opening balance of cash	2,533,437	2,472,046
Add: Closing balance of cash equivalents		
Less: Opening balance of cash equivalents		
Net decrease/(increase) in cash and cash equivalents	-359,857	61,391

51. Supplement information to Cash Flow Statement (Continued)

(2) Net cash paid for acquisition of subsidiaries in the current period

Items	2018
Cash and cash equivalents paid for business combination in the current period	9,851
Less: Cash and cash equivalents held by the subsidiary on the acquisition date.	11,413
Add: Cash or cash equivalents paid in the current period for business combinations in the previous period	
Net cash paid for acquisition of subsidiaries	-1,562

(3) Composition of cash and cash equivalents

Items	2018	2017
1. Cash	2,173,580	2,533,437
Including:Cash in hand	8,114	8,180
Cash at bank	2,160,530	2,488,623
Other monetary funds	4,936	36,634
2. Cash equivalents		
3. Closing balance of cash and cash equivalents	2,173,580	2,533,437
Including:Restricted cash and cash equivalents by the parent company or its subsidiary subsidiaries		

52. Notes to Statements Of Changes In Equity

Note:

(1) The Group acquired 100% equity interest of Jiangsu Oilfield Service Construction Corporation in cash in 2018. (The details of the takeover refer to note VI. No.1.) As stated in note VI. No.1, changes in scope resulting from business combinations under the same control caused an increase of capital reserve of 18,082 thousand and a decrease in retained earnings of 8,417 thousand on 1 January 2017. In 2018, the capital reserve of the merged party was reduced 297 thousand by the merger date.

53. Restricted asstes

Items	2018	Restricted reasons
Cash at bank and on hand	29,861	Guarantee、freeze payment
Fixed assets	925,727	Leaseback assets
Total	955,588	

54. Foreign currency items

ltems	Original	Exchange rate	Amount (RMB)
Cash at bank and on hand	Original	Exchange rate	1,866,319
Including:USD	172,464	6.8632	1,183,656
DZD	882,449	0.0580	51,213
KWD		22.5726	139,062
	6,161		
KZT	885,183	0.0185	16,376
SAR	106,659	1.8287	195,043
BOB	70,297	0.9932	69,821
Others			211,148
Bills receivable and accounts receivable			5,801,514
Including: USD	648,669	6.8632	4,451,945
DZD	841,164	0.0580	48,788
KWD	21,892	22.5726	494,154
KZT	5,412,598	0.0185	100,133
SAR	184,892	1.8287	338,104
ВОВ	52,870	0.9932	52,512
Others			315,878
Other receivables			1,279,202
Including: USD	109,965	6.8632	754,710
DZD	108,054	0.0580	6,271
KWD	3,851	22.5726	86,917
KZT	37,175	0.0185	688
SAR	177,242	1.8287	324,115
ВОВ	17,343	0.9932	17,225
Others			89,276
Long-term receivables			40,477
Including: USD	5,898	6.8632	40,477
Bills payable and accounts payable			1,564,578
Including: USD	123,251	6.8632	845,894
DZD	933,260	0.0580	54,162
KWD	2,554	22.5726	57,655
KZT	432,986	0.0185	8,010
SAR	203,167	1.8287	371,523
ВОВ	7,603	0.9932	7,551
Others			219,783
Other payables		·	596,791
Including: USD	55,707	6.8632	382,329
DZD	610,644	0.0580	35,439
KWD	1,647	22.5726	37,179
KZT	303,412	0.0185	5,613
SAR	65,118	1.8287	119,078
BOB	1,268	0.9932	1,259
Others	.,	0.0002	15,894
Dividend payable			10,004
Including: USD	263	6.8632	1,802
	203	0.0032	1,002
Short-term loans	400,000	6,000	2,000,000
Including: USD	438,000	6.8632	3,006,082
Long-term loans	70.140	0.0000	F00.001
Including: USD	78,140	6.8632	536,291

VI. Change of consolidation scope

1. Business combinations involving enterprises under common control

(1) Business combinations involving enterprises under common control during the period

Acquiree	Proportion of equity interests acquired in business combination	Basis for business combination under common control	Combination date	Basis for determination of combination date	Income from the beginning of the year to the combination date	Net profit from the beginning of the year to the combination date	Acquiree's income for year 2017	Acquiree's net profit for year 2017
Jiangsu Oilfield Service Construction Corporation	100%	Controlled by Sinopec Group before and after the transaction		Completion of equity delivery	169,565	-2,385	149,672	-6,983

The Group acquired 100% equity interest of Jiangsu Oilfield Service Construction Corporation in cash of 7,287.9 thousand in December 2018, which was a wholly owned subsidiary of the Group's parent company. The combination belongs to business combination involving enterprises under common control as a result of both parties are controlled by the Sinopec Group, and combination date was set at 31 December 2018. The assets and liabilities that were obtained in the business combination between the Group and Jiangsu Oilfield Service Construction Corporation were measured at original carrying amount at the combination date.

(2) Combination cost

Items	Amount
Cash	9,851
Contingent consideration	
Total combination cost	9,851

(3) Assets and liabilities of the acquire at the combination date

The carrying amount of assets and liabilities of Jiangsu Oilfield Service Construction Corporation at 31 December 2018 and 2017 is as follows:

Items	As at 31 December 2018	As at 31 December 2017
Current assets	122,010	193,690
Non-current assets	76,377	79,762
Total assets	198,387	273,452
Current liabilities	198,090	270,770
Non-current liabilities	_	_
Total liabilities	198,090	270,770
Net assets	297	2,682
Less: non-controlling interests		
Net assets acquired	297	2,682
Combination cost	9,851	_
Combination differences (recognized in profit or loss)	-9,554	_

VII. Interest in other entities

1. Interests in subsidiaries

(1) Composition of enterprise groups

				% of shareholding held		
Name	Place of Major operation activities	Place of registration	Nature of business	directly	indirectly	Ways of acquisition
Sinopec Oilfield Service Corporation	China	Beijing	Petroleum Engineering	100		Business combination under common control
Sinopec Shengli Petroleum Engineering Corporation	China	Dongying, Shandong	Petroleum Engineering	100		Business combination under common control
Sinopec Zhongyuan Petroleum Engineering Corporation	China	Puyagn,Henan	Petroleum Engineering	100		Business combination under common control
Sinopec Jianghan Petroleum Engineering Corporation	China	Qianjiang,Hubei	Petroleum Engineering	100		Business combination under common control
Sinopec East China Petroleum Engineering Corporation	China	Nanjing, Jiangsu	Petroleum Engineering	100		Business combination under common control
Sinopec North China Petroleum Engineering Corporation	China	Zhengzhou, Henan	Petroleum Engineering	100		Business combination under common control
Sinopec South West Petroleum Engineering Corporation	China	Chengdu, Sichuan	Petroleum Engineering	100		Business combination under common control
Sinopec Geophysical Corporation	China	Beijing	Geophysical prospecting	100		Business combination under common control
Sinopec Petroleum Engineering and Construction Corporation	China	Beijing	Engineering and Construction	100		Business combination under common control
Sinopec Offshore Petroleum Engineering Corporation	China	Shanghai	Offshore Petroleum Engineering	100		Business combination under common control
Sinopec International Petroleum Service Corporation	China	Beijing	Petroleum Engineering	100		Business combination under common control

2. Equities in joint ventures and associates

(1) Principal joint ventures and associates

				% of shareh	olding held	
Name	Place of major operational activities	Place of registration	Nature of business	Directly	Indirectly	Method of accounting
① Joint ventures						
SinoFTS Petroleum Services Ltd. (SinoFTS)	China	Beijing	Petroleum service	55.00		Equity method
Zhong Wei Energy Service Co. Ltd. (A Sinopec – Weatherford Joint Venture)	China	Beijing	Oilfield Service	50.00		Equity method

The Group holds 55% shareholding and 50% voting rights of SinoFTS. Both parties to the joint venture must reach an agreement when an essential financial and operation decision is supposed to be made.

2. Equities in joint ventures and associates

(2) Financial information of principal joint ventures

	SinoFTS		Zhong Wei Energ	y Service Co. Ltd.
Items	Closing balance	Opening balance	Closing balance	Opening balance
Current assets:	239,569	117,204	23,905	66,202
Including: Cash and cash equivalents	75,772	47,991	3,335	1,998
Non-current assets	208,933	225,684	5,366	6,159
Total assets	448,502	342,888	29,271	72,361
Current liabilities	91,617	34,730	11,316	48,711
Non-current liabilities	_		_	
Total liabilities	91,617	34,730	11,316	48,711
Net assets	356,885	308,158	17,955	23,650
Equity attributable to shareholders of the Company	196,286	169,487	8,977	11,825
Adjustments			-15	
Including: Goodwill				
Others	-1,365	-1,365	-15	
Carrying amount of equity investment in joint ventures	194,921	168,122	8,962	11,825
Fair value of investments in joint ventures which have quoted market price				

VII. Interest in other entities (Continued)

2. Equities in joint ventures and associates

	SinoFTS		Zhong Wei Energy Service Co. Ltd.	
Items	2018	2017	2018	2017
Revenue	246,104	92,664	5,163	26,280
Finance costs	373	1,293	-2	-151
Income tax expense	2,555		_	
Net profit	48,727	-17,108	-5,728	-11,182
Other comprehensive income				
Total comprehensive income	48,727	-17,108	-5,728	-11,182
Dividend received from joint ventures	_	_	_	_

(3) Financial information of other joint ventures and associates

Items	For the current period and the closing balance	For the previous period and the opening balance
Joint ventures		
Total investment from the Group	14,930	14,518
Equity contributed to the Group		
Net profit	412	209
Other comprehensive income		
Total comprehensive income	412	209
Associates:		
Total investment from the Group	14,010	12,582
Equity contributed to the Group:		
Net profit	2,174	1,214
Other comprehensive income	133	
Total comprehensive income	2,307	1,214

⁽⁴⁾ No material restrictions on transfers of funds from investees to the Group.

⁽⁵⁾ The Group has signed the investment contract and remains RMB129,625 thousand on 31 December 2018.

III. Financial instruments and risk management

The major financial instruments of the Group include cash at bank and on hand, bills receivable and accounts receivable, other receivables, non-current assets due within one year, other current assets, other equity instrument investments, long-term receivables, bills payable and accounts payable, other payables, short-term loans, non-current liabilities due within one year, long-term loans, long-term payables. The details of these financial instruments are disclosed in the respective notes. The financial risk of these financial instruments and financial management policies used by the Group to minimize the risk are disclosed as below. The management manages and monitors the exposure of these risks to ensure the above risks are controlled in the limited range.

1. Objectives and policies of financial risk management

The Group's objective in risk management is to obtain an appropriate equilibrium between risk and return. It also focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. Based on the objectives of financial risk management, certain policies are made to recognize and analyze risk and internal control is designed according to proper acceptable in order to monitor the risk position of the Group. Both the policies and internal control will be reviewed and revised regularly to adapt the changes of the market and business activities of the Group. The performance of internal control will be reviewed regularly or randomly in accordance with the financial management policies.

The Group's financial instrument risks mainly include credit risk, liquidity risk and market risk. (Including currency risk and interest rate risk.)

The board of directors is responsible for planning and establishing the risk management structure of the Group, formulating the Group's risk management policies and related guidelines, supervising the implementation of risk management measures. The Group has established risk management policies to identify and analyze the risks faced by the Group. These risk management policies clearly define specific risks, covering market risk, credit risk and liquidity risk. The Group regularly assesses changes in the market environment and the Group's operating activities to determine whether update risk management policies and systems. The risk management of the Group is carried out by the Risk Management Committee in accordance with the policies approved by the Board of Directors. The Risk Management Committee identifies, evaluates and circumvents related risks through close cooperation with other departments of the Group. The internal audit department of the Group reviews regularly on risk management controls and procedures, then reports the audit results to the audit committee of the Group.

The Group diversifies the risk of financial instruments through appropriate diversified investments and business combinations, and reduces the risk of concentration in a single industry, a specific region or a specific counterparty by developing appropriate risk management policies.

(1) Credit risk

Credit risk refers to the risk that the counterparty to a financial instrument would fail to discharge its obligation under the terms of the financial instrument and cause a financial loss to the Group.

Credit is managed on the grouping basis. Credit risk is mainly arises from cash at bank, bills receivable and accounts receivable, other receivables, contract assets, long-term receivables etc.

The Group expects that there is no significant credit risk associated with cash at bank since it is deposited or will be accepted by the sate-owned banks and other medium or large size listed banks.

In addition, the Group has policies to limit the credit risk exposure on bills receivable and accounts receivable, other receivables, contract assets and long-term receivables. The Group assesses the credit quality of and sets credit limits on it customers by taking into account their financial position, the availability of guarantee from third parties, the availability of guarantee from third parties, their credit history and other factors such as current market conditions. The credit history of the customers is regularly monitored by the Group. In respect of customers with a poor credit history, the Group will use written payment reminders, or shorten or cancel credit periods, to ensure the overall credit risk of the Group is limited to a controllable extent.

The highest credit risk exposed to the Group is limited to the carrying amount of each financial instrument illustrated in the balance sheet. The Group would not provide any guarantee that might cause credit risk to the Group.

Among the bills receivable and accounts receivable of the Group, the bills receivable and accounts receivable of the top five customers accounted for 58.64% (2017:57.13%); among the other receivable of the Group, the other receivable of the top five customers accounted for 46.92% (2017:43.44%)

(2) Liquidity risk

Liquidity risk refers to the risks that the Group will not be able to meet its obligations associated with its financial liabilities that are settled by delivering cash or other financial assets.

Cash flow forecasting is performed by Group's finance department. The Group's finance management monitors cash and cash equivalents to meet operational needs and reduce the effect of floating cash flow. The department monitors the usage of bank loan so that the Group does not breach borrowing limits or covenants while maintaining sufficient headroom on its undrawn committed borrowing facilities from Sinopec Finance Co., LTD and major financial institute to meet the short-term and long-term liquidity requirements. In addition, the Group will also consider negotiating with suppliers to reduce the amount of debt to reduce the company's cash flow pressure.

The Group raises working capital from its operations, bank and other borrowings. As at 31 December 2018, the amount of bank loans not yet used by the Group is 5,773,675 thousand. (As at 31 December 2017: 4,262,127)

1. Objectives and policies of financial risk management (Continued)

(2) Liquidity risk (Continued)

The financial assets and liabilities, off-balance-sheet guarantee items of the Group at 31 December 2018 are analyzed by their maturity date below at their undiscounted contractual cash flows:

	As at 31 December 2018				
Items	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total amount
Financial assets:					
Cash and cash equivalents	2,203,441	_	_	_	2,203,441
Bills receivable and accounts receivable	16,111,200	_	_	_	16,111,200
Other receivables	1,712,575	_	_	_	1,712,575
Long-term receivables	_	_	_	_	_
Other current assets	1,218,035	_	_	_	1,218,035
Non-current assets due within one year	40,477	_	_	_	40,477
Total assets	21,285,728	_	_	_	21,285,728
Financial liabilities:					
Short-term loans	17,606,082	_	_	_	17,606,082
Bills payable and accounts payable	27,059,504	_	_	_	27,059,504
Other payables	2,186,009	_	_	_	2,186,009
Non-current liabilities due within 1 year	156,559	_	_	_	156,559
Other current liabilities	917	_	_	_	917
Long-term loans	_	536,291	_	_	536,291
Long-term payables	_	134,779	393,219	340,674	868,672
Financial lease payables of unrecognized financial expenses	37,987	31,737	62,324	17,699	149,747
Total liabilities	47,047,058	702,807	455,543	358,373	48,563,781

1. Objectives and policies of financial risk management (Continued)

(2) Liquidity risk (Continued)

The financial assets and liabilities, off-balance-sheet guarantee items of the Group at 31 December 2017 are analyzed by their maturity date below at their undiscounted contractual cash flows:

	As at 31 December 2017					
Items	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total amount	
Financial assets:						
Cash and cash equivalents	2,547,975	_	_	_	2,547,975	
Bills receivable and accounts receivable	18,191,357	_	_	_	18,191,357	
Other receivables	1,999,979	_	_	_	1,999,979	
Long-term receivables	_	233,061	_	_	233,061	
Other current assets	885,473	_	_	_	885,473	
Total assets	23,624,784	233,061	_	_	23,857,845	
Financial liabilities:						
Short-term loans	17,510,830	_	_	_	17,510,830	
Bills payable and accounts payable	29,546,017	_	_	_	29,546,017	
Other payables	6,431,966	_	_	_	6,431,966	
Non-current liabilities due within 1 year	28,844	_	_	_	28,844	
Other current liabilities	11,744	_	_	_	11,744	
Long-term loans	_	455,826	_	_	455,826	
Long-term payables	_	23,919	43,614	_	67,533	
Financial lease payables of unrecognized financial expenses	5,356	3,304	3,075	_	11,735	
Total liabilities	53,534,757	483,049	46,689	_	54,064,495	

The amount of financial liabilities disclosed in the above table is undiscounted contractual cash flow and may differ from the carrying amount in the balance sheet.

(3) Market risk

Market risk, includes interest rate risk and foreign currency risk, refers to the risk that the fair value or future cash flow of a financial instrument will fluctuate because of the changes in market price.

Interest rate risk

Interest rate risk refers to the risk that the fair value or future cash flow of a financial instrument will fluctuate because of the floating rate. Interest rate risk arises from recognized interest-bearing financial instrument and unrecognized financial instrument (e.g. loan commitments).

The Group's interest rate risk arises from long-term bank loans and other interest-bearing liabilities. Financial liabilities issued at floating rate expose the Group to cash flows interest rate risk. Financial liabilities issued at fixed rate expose the Group to fair value interest rate risk. The Group determines the relative proportions of its fixed rate and floating rate contracts depending on the prevailing market conditions. At the same time, the Group monitors and maintains the combined financial instruments of fixed rate and floating rate.

The Group closely monitors the impact of changes in interest rates on the Group's interest rate risk. The Group currently does not adopt an interest rate hedging policy. However, management is responsible for monitoring interest rate risk and will consider hedging significant interest rate risk when it will be needed. Increase in interest rates will increase the cost of new borrowing and the interest expenses with respect to the Group's outstanding floating rate borrowings, and therefore could have a material adverse effect on the Group's financial position. The Group's management will make decisions with reference to the latest market conditions. The Group may enter into interest swap agreement to mitigate its exposure to the interest rate risk. For the year ended 31 December 2017 and 31 December 2018, the Company did not enter into any interest rate swap arrangements. The fair value interest rate risk of the deposit with bank was not principal because the fixed term deposits are short-term deposits etc.

1. Objectives and policies of financial risk management (Continued)

(3) Market risk (Continued)

Interest-bearing financial instruments held by the Group:

Items	31-Dec-18	31-Dec-17
Fixed interest rate financial instruments		
Financial instruments		
including: Cash and cash equivalents	161,363	311,176
Long-term receivables	40,477	233,061
Financial liabilities		
Including: Short-term borrowings	14,600,000	9,495,000
Long-term borrowings		_
Long-term payables	990,640	81,881
Total		
Floating interest rate financial instruments		
Financial assets		
including: Cash and cash equivalents	2,042,078	2,236,799
Financial liabilities		
Including: Short-term borrowings	3,006,082	8,015,830
Long-term borrowings	536,291	455,826
Total		

As at 31 December 2018, it is estimated that a general increase or decrease of 50 basis points in variable interest rates, while all other variables held constant, would decrease or increase the Group's net profit and shareholder's equity for the year by approximately RMB 13,284 thousand (2017: RMB 31,769 thousand).

The financial instruments held by the Group at the date of balance sheet expose the Group to fair value interest rate risk. Under the hypothesis of a floating interest rate at the date of balance sheet, the effect to the net profit and shareholder's equity illustrated in the sensitivity analysis as above is arised from the recalculation of these financial instrument issued at new interest rates. The non-derivative tools issued at floating interest rate held by the Group at the date of balance sheet expose the Group to cash flow interest rate risk. The effect to the net profit and shareholder's equity illustrated in the sensitivity analysis as above is arised from the effect to the annual estimate amount of interest expenses or revenues at the floating interest rate. The analysis of the previous period is based on the same hypothesis and method.

Foreign curreccy risk

Foreign currency risk refers to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign currency rates. Foreign currency risk arises from the functional currency denominated financial instrument measured at individual entity.

The Group's major operational activities are carried out in Mainland China and a majority of the transactions are denominated in RMB. The Group is exposed to foreign currency risk arising from the recognized assets and liabilities, and future transactions denominated in foreign currencies, primarily with respect to US dollars, Saudi riyals and Kuwait dinars.

The following table details the recognized assets or liabilities denominated in currencies other than RMB as at 31 December 2018:

		nated in currencies an RMB	Assets denominated in currencies other than RMB		
Items	As at 2018/12/31 As at 2017/12/31		As at 2018/12/31	As at 2017/12/31	
USD	4,772,398	9,797,529	6,430,789	6,580,306	
SAR	490,601	484,209	857,262	766,894	
KWD	94,834	112,209	720,132	836,802	
Others	347,711	224,051	979,330	1,062,754	
Net exposure in RMB	5,705,544	10,617,998	8,987,513	9,246,756	

The Group closely monitors the impact of changes in interest rates on the Group's interest rate risk. The Group's management is responsible for monitoring the amount of assets and liabilities, and transactions denominated in foreign currencies. The Group may consider entering into forward exchange agreements or currency swap agreements to mitigate the foreign currency risk. The Group has not entered into any forward exchange agreements or currency swap agreements in the year ended 2018 and the year ended 2017.

1. Objectives and policies of financial risk management (Continued)

(3) Market risk (Continued)

The following table illustrates the Group's net profit to a possible change in floating interest rates while other variables were held constant:

Increase/decrease in net profits	2018		20	17
Appreciation in USD	5%	62,190	5%	-120,646
Depreciation in USD	-5%	-62,190	-5%	120,646
Appreciation in SAR	5%	13,750	5%	10,601
Depreciation in SAR	-5%	-13,750	-5%	-10,601
Appreciation in KWD	5%	23,449	5%	27,172
Depreciation in KWD	-5%	-23,449	-5%	-27,172

2. Capital management

The capital management policies are made to keep the continuous operation of the Group, to enhance the return to shareholders, to benefit other related parties and to maintain the best capital structure to minimize the cost of capital.

For the maintenance or adjustment of the capital structure, the Group might adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or make an asset disposal to reduce the liabilities.

The Group monitors the performance of capital management with capital-to-debt ratio. The ratio is calculated as Net liabilities/Total capital. The Net liabilities are calculated as total borrowings – cash in Cash flow statement. Total borrowing includes short-term borrowings, long-term borrowings due within 1 year, bonds payables and long-term borrowings. Total assets equals to the sum of the shareholders' equity and net liabilities. The shareholders' equity includes minority interest and equity attributed to the parent company.

As at the date of balance sheet, the debt to equity ratio is as below:

Items	As at 31 December 2018	As at 31 December 2017
Short-term borrowings	17,606,082	17,510,830
Long-term borrowings due within 1 year		
Long-term payables due within 1 year	150,142	28,844
Long-term borrowings	536,291	455,826
Long-term payables	840,498	53,037
Less: cash and cash equivalents	2,173,580	2,533,437
Net debt	16,959,433	15,515,100
Shareholder's equity	5,778,410	-2,101,318
Total equity	22,737,843	13,413,782
Debt to equity ratio	74.59	115.67

IX. Fair value

Fair value hierarchies are categorized into three levels as the lowest level input that is significant to the entire fair value measurement.

Level 1: inputs are quoted prices (unadjusted) in active markets for identical assets and liabilities.

Level 2: inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: inputs are unobservable inputs for the asset or liability.

(1) Fair value of assets and liabilities measured at fair value

As at 31/12/2018, assets and liabilities measured at fair value are shown as follows:

Items	Level 1 fair value measurement	Level 2 fair value measurement	Level 3 fair value measurement	Total
I. Recurring fair value measurement				
Other equity instrument investments			39,011	39,011
Total assets measured at fair value on a recurring basis			39,011	39,011
Total liabilities measured at fair value on a recurring basis				

The Group recognises transfers between different levels at the end of the current reporting period during which such transfers are made. During 2018, there were no transfers between different levels of the Group's other assets and liabilities.

For financial instruments with active market, the Group measures fair value at quoted price in active market; for financial instrument without active market, the Group measures fair value using valuation techniques. Valuation models used are mainly cash flow discount model and market comparable entity model. Inputs include non-risk interest rate, base rate, foreign exchange rate, credit spread, liquidity premium, lack of liquidity discount, etc.

(2) Quantitative information about the unobservable inputs used in the fair value measurement that are significant and are reasonably available.

Items	Fair value As at 31/12/2018	Valuation techniques	Unobservable inputs	Range (weighted average)
Equity instrument investments:				
Unlisted equity investments		Net assets	N/A	N/A

(3) Fair values of assets and liabilities not measured at fair value

Financial assets and financial liabilities measured at amortized cost include: cash at bank and on hand, bills receivable and accounts receivable, other receivables, short-term loans, bills payable and accounts payable, other payables, long-term loans due within one year, long-term payables, long-term loans and debentures payable, etc.

All financial instruments are carried at amounts not materially different from their fair value except as follows:

	As at 31 December 2018		As at 31 Dec	ember 2017
	Carrying amount Fair value		Carrying amount	Fair value
Accounts receivable with fixed interest rate	40,477	45,796	233,061	261,618

X. Related parties and transaction

1. Particulars of parent company

Name Of parent company	Place of registration	Nature of business	Registered capital	Percentage of the Company shareholding held by parent company %	Percentage of the Company voting power held by parent company %
China Petrochemical Corporation	22 Chaoyangmen North Street, Chaoyang District Beijing	Exploring for, extracting and selling crude oil and natural gas; production, sale and transport of petro-chemical, chemical fibres and other chemical products; pipe transport of crude oil and natural gas; research, development and application of new technologies and information.	247.9 billion	56.51	70.18

The Company's ultimate controlling party is Sinopec Group.

China Petrochemical Corporation Co., Ltd. directly holds 56.51% equity of the Group, and holds 13.67% equity of the Group through its wholly-owned subsidiary Sinopec Century Bright Capital Investment Limited, with a total voting rights ratio of 70.18%.

2. Subsidiaries

Details of subsidiaries refer to Note VII.1.

3. Joint ventures and associates of the Group

Details of principal joint ventures and associates refer to Note VII.2

Other joint ventures and associates which have related party transactions for the current period or balances brought forward from the prior period arising with the Group are as follows:

Names of joint ventures or associates	Relationship with the Group
Sinopec Bayshore Ptroleum Service Co., LTD	Joint venture
Qianjiang Hengyun Motor Vehicle Performance Testing Corporation	Joint venture
Huabei Ruida Oil Service Company Limited	Associate
Xinjiang North China Tianxiang Oil Service Company Limited	Associate
Zhenjiang Huajiang Oil & Gas Engineering Technology Service Co., Ltd	Associate
Henan Zhongyuan Oil & Gas Engineering Technology Service Co., Ltd	Associate
Oil & Gas Engineering Technology Service Co., Ltd	Associate

4. Other related parties of the Group

Names of other related parties	Relationships with the Group
China Petroleum & Chemical Corporation	Controlled by Sinopec Group
Sinopec Shengli Petroleum Administrative Bureau	Controlled by Sinopec Group
Sinopec Zhongyuan Petroleum Explorative Bureau	Controlled by Sinopec Group
Sinopec Jianghan Petroleum Administrative Bureau	Controlled by Sinopec Group
Sinopec Henan Petroleum Explorative Bureau	Controlled by Sinopec Group
Sinopec Jiangsu Petroleum Explorative Bureau	Controlled by Sinopec Group
Sinopec Star Petroleum Co., LTD	Controlled by Sinopec Group
Sinopec East China Petroleum Bureau	Controlled by Sinopec Group
Sinopec North China Petroleum Bureau	Controlled by Sinopec Group
Sinopec Southwest Petroleum Bureau	Controlled by Sinopec Group
Sinopec Northeast Petroleum Bureau	Controlled by Sinopec Group
Sinopec Pipeline Storage & Transportation Company	Controlled by Sinopec Group
Sinopec Shanghai Offshore Petroleum Bureau	Controlled by Sinopec Group
Sinopec International Petroleum Exploration And Production Corporation	Controlled by Sinopec Group
Sinopec Finance Co., LTD	Controlled by Sinopec Group
Sinopec Century Bright Capital Investment Limited	Controlled by Sinopec Group
Sinopec Assets Operating And Management Company	Controlled by Sinopec Group
CITIC Group Corporation	Shareholder with 5% of voting rights
China CITIC Bank	Subsidiary of CITIC Group Corporation
Taiping Petrochemical Financial Lease Co. Ltd	Joint ventures of the Sinopec Group
Director、General Manager、Chief Financial Office And the Secretary of the Board of Directors	Key Managers

5. Transactions with related parties

(1) Details of related purchase and sales

① Purchase of goods and Receiving of services

Related party	Type of the transaction	Pricing policy and procedure for decision-making	2018	2017
Sinopec Group and its subsidiaries	Purchases of materials and equipments	Based on normal commercial terms or relevant agreements	8,097,321	5,797,473
② Sales of goods and provision of services				
Related party	Type of the transaction	Pricing policy and procedure for decision-making	2018	2017
Sinopec Group and its subsidiaries	Sales of goods	Based on normal commercial terms or relevant agreements	111,870	85,984

5. Transactions with related parties (Continued)

(2) Details of related rendering of engineering services

1) Rendering of engineering services:

U Rendering of engineering services:				
Related party	Type of the transaction	Pricing policy and procedure for decision-making	2018	2017
Sinopec Group and its subsidiaries	Petroleum engineering and technical services	Based on normal commercial terms or relevant agreements	36,501,508	27,982,159
Joint ventures and associates of the Group	Petroleum engineering and technical services	Based on normal commercial terms or relevant agreements	312,970	128,499
Joint ventures and associates	Petroleum engineering and technical services	Based on normal commercial terms or relevant agreements	22,580	
Total			36,837,058	28,110,658
② Receiving of services		Pricing policy and procedure		
Related party	Type of the transaction	for decision-making	2018	2017
Joint ventures and associates	Services	Based on normal commercial terms or relevant agreements	2,065,450	901,953
Sinopec Group and its subsidiaries	Services	Based on normal commercial terms or relevant agreements	394,110	
(3) Details of related comprehensive se	ervices			
Related party	Type of the transaction	Pricing policy and procedure for decision-making	2018	2017

(4) Technology research and development service

Related party	lated party Type of the transaction		2018	2017
Sinopec Group and its subsidiaries	research and development service	Based on normal commercial terms or relevant agreements	271,345	265,207

Purchase of other comprehensive resident services

Purchase of other comprehensive resident

Based on normal commercial terms

Based on normal commercial terms

or relevant agreements

or relevant agreements

1,002,930

325,003

1,583,799

293,071

(5) Details of related party leases

Sinopec Group and its subsidiaries

1 The Group as a lessor

Lessee	Type of leasing assets	Pricing policy and procedure for decision-making	Lease income recognized in 2018	Lease income recognized in 2017
Sinopec Group and its subsidiaries	Buildings	Based on normal commercial terms or relevant agreements	571	571

② The Group as a lessee

Name of lessor	Type of leasing assets	Pricing policy and procedure for decision-making	Leasing expense for the current period	Leasing expense for the previous period
Sinopec Group and its subsidiaries	Land and buildings	Based on normal commercial terms or relevant agreements	150,425	117,136
Sinopec Group's subsidiaries	Equipment and vehicles	Based on normal commercial terms or relevant agreements	57,526	14,811
Joint ventures and associates of the Group	Equipment	Based on normal commercial terms or relevant agreements	62,524	

③ Sale-leaseback financing lease of related party

The company signed a "Financial Lease Contract (Rent-Back)" with Taiping Petrochemical Financial Lease Co. Ltd., which stipulates that the company will lease drilling equipment, underground operations equipment and other equipment as leased property I for a financial lease of 1 billion - after-sales lease business with Taiping Petrochemical Financial Lease Co., Ltd., which would last for 8 years and take a fixed interest rate of 4% as the rental rate. The rental interest is about 174,160 thousand.

5. Transactions with related parties (Continued)

(6) Related party guarantees

① the Group as a guarantor

Guarantee	Type of guarantee	Amount of guarantee	Beginning date	Maturity date	Status of Guarantee
Sinopec International Petroleum Service Corporation	Performance guarantee	USD 107,000 thousand	June 2013	End of warranty period	Incomplete
Sinopec International Petroleum Service Corporation	Performance guarantee	USD 588,000 thousand	December 2015	December 2020	Incomplete
Sinopec International Petroleum Service Corporation	Performance guarantee	USD 61,830 thousand	September 2015	December 2024	Incomplete
Sinopec International Petroleum Service Corporation	Performance guarantee	THB314,290 thousand; USD 123,929 thousand	April 2017	October 2020	Incomplete

(7) Related financial services

Related party	Content of related transaction	Pricing policy and procedure for decision-making	2018	2017
Sinopec Group and its subsidiaries	Deposit interest income	Based on normal commercial terms	1,877	524
	Loan interest expense	Based on normal commercial terms or relevant agreements	582,557	639,109
	Entrusted loans interest income	Based on normal commercial terms or relevant agreements	_	67
	Obtaining the borrowings	Based on normal commercial terms or relevant agreements	35,585,650	37,416,244
	Payment of the loan	Based on normal commercial terms or relevant agreements	35,608,897	36,929,663
Joint ventures and associates of the Group	Financial leasing interest expense	Based on normal commercial terms or relevant agreements	30,154	_
CITIC Bank	Deposit interest income	Based on normal commercial terms	_	_

As at 31 December 2018, the balance of borrowings from Sinopec Group and its subsidiaries was 18,142,373 thousand.

(8) Security funds

Related party	Content of related transaction	Pricing policy and procedure for decision-making	2018	2017
Sinopec Group	Security fund expenditure	Relevant agreement	81,630	79,326
	Return on security fund	Relevant agreement	171,495	87,111

(9) Transfer of assets and debt restructuring

Related party	Content of related transaction	2018	2017
Subsidiaries of Sinopec Group	Accepting asset transfer	75,024	_

(10) Remuneration of key management personnel

The Group has 27 key management personnel for the year ended 31 December 2018 and 19 for the prior period. The remuneration payment is as follows:

Item	2018	2017
Remuneration	6,782	6,368
Retirement scheme contribution	538	532
Share options	_	360
Total	7,320	7,260

6. Receivables from and payables to related parties

(1) Amount receivables of related parties

Item	Related party	As at 31 December 2018 Amount	As at 31 December 2017 Amount
Bank deposit	Sinopec Finance Co., LTD	53,605	152,155
	Sinopec Century Bright Capital Investment Limited	1,005,234	898,594
	CITIC Bank	1	
Accounts receivable	Sinopec Group and its subsidiaries	7,539,486	9,082,346
	Joint ventures of the Group	14,854	14
	Joint ventures and associates of Sinopec Group	128,187	122,450
Prepayments	Sinopec Group and its subsidiaries	28,064	30,088
	Joint ventures and associates of the Group		72
	Joint ventures and associates of Sinopec Group		3
Other receivables	Sinopec Group and its subsidiaries	162,000	337,713
	Joint ventures of the Group	11,015	10,443
	Joint ventures and associates of Sinopec Group	15,510	12,137

(2) Payables to related parties

Item	Related party	As at 31 December 2018	As at 31 December 2017
Accounts payable	Sinopec Group and its subsidiaries	1,208,415	1,150,292
	Joint ventures and associates of the Group	14,950	49,643
	Joint ventures and associates of Sinopec Group	75,055	47,623
Prepayments	Sinopec Group and its subsidiaries		6,244,831
	Joint ventures and associates of the Group		7,024
Other payables	Sinopec Group and its subsidiaries	41,249	3,767,038
Short-term borrowings	Sinopec Finance Co., LTD	9,600,000	6,995,000
	Sinopec Century Bright Capital Investment Limited	3,006,082	8,015,830
	Sinopec Group	5,000,000	2,500,000
Interest payable	Sinopec Group and its subsidiaries	12,893	10,927
Long-term loan	Sinopec Finance Co., LTD		
	Sinopec Century Bright Capital Investment Limited	536,291	455,826
Long-term payable	Joint ventures and associates of Sinopec Group	959,900	28,000

XI. Payment of share option

1. General information of payment of share options

On 1 November 2016, the Proposal regarding the Adjustment of the List of Participants and the Number of the Share Option under the Proposed Grant of the Share Option Incentive Scheme and the Proposal regarding the Proposed Grant under the Share Option Incentive Scheme were reviewed and adopted at the 14th meeting of the Eighth Session of the board of directors of Sinopec Oilfield Service Corporation.

The Company granted 49,050,000 A share options (0.3469% of the total share capital of the company) to 477 employees on the grant date, 1 November 2016. The Exercise Price of the Proposed Grant shall be RMB5.63 per share. The Company may only grant options under the Scheme to the Participants provided that both the Company and the Participants have fulfilled the following conditions:

The Company's compound growth rate for 2017、2018、2019 shall not be less than 6% (on the base of the Company's total profit for 2015)

II. The Company's EOE for 2017, 2018, 2019 shall not be less than 32%;

The performance conditions of item I and II are no less than the average performance level of the target enterprise.

III. The Economic Value Added for 2017、2018、2019 reaches the performance objective set by China Petrochemical Corporation, and Δ EVA shall be more than 0.

XI. Payment of share option

1. General information of payment of share options (Continued)

As at 31 December 2018, the exercise date and exercise price of the share options are as follows, the share options will expire in 12 months after the exercise date:

Exercise date	Exercise price (RMB per share)	Number of share options
1 November 2019	5.63	14,715,000
1 November 2020	5.63	19,620,000

2. Changes of share options for 2018

	2018
Number of share options at 1 January 2018	34,335,000
Number of share options granted in the period	_
Number of share options exercised in the period	_
Number of share options lapsed in the period	14,715,000
Number of share options in the end of balance sheet date	19,620,000

3. Calculation of the fair value of the share options on the Grant Date

The Company has elected the Black-Scholes option pricing model to calculate the fair value of the share option. On the Grant Date of the Share Options, the principle figures are as follows:

Exercise price for the Proposed Grant(RMB: yuan)	5.63
Validity period of the share options(year)	3-5
Closing price of A share(RMB: yuan)	3.96
Expected volatility	46.17%
Expected dividend yield ratio	0
Risk-free rate of interest during the validity period	2.3407%-2.4518%

The fair value of share options calculated with the figures above is 54,229,200 thousand.

4. The impact on financial condition and operating results under the Share Option Scheme:

	Amount
The cost of equity-settled share-based payment within the period	_
The accumulated amount of equity-settled share-based payment in capital reserves	-

XII. Commitments and contingences

1. Principle commitments

(1) Capital commitments

Capital commitments contracted for but not yet necessary to be recognized on the balance sheet	As at 31 December 2018	As at 31 December 2017
Construction of long-term assets commitments	136,467	130,116

(2) Operating lease commitments

On the balance sheet date, the future minimum lease payment under the sighed irrevocable operating leases contracts are summarized as follows:

Minimum lease payment under irrevocable operating lease contracts	As at 31 December 2018	As at 31 December 2017
Within one year	322,639	291,189
Between one and two years	16,633	32,746
Between two and three years	14,187	11,775
After three years	29,531	21,130
Total	382,990	356,840

XII. Commitments and contingences

1. Principle commitments (Continued)

(3) Investment commitments

As at 31 December 2018, the outstanding commitment in respect of the Group's investment in associates which is not provided in the financial statements is RMB 129,625 thousand. (31 December 2017: RMB 129,625 thousand)

(4) Fulfillment of commitments for the previous period

The Group has fulfilled the capital and operating lease commitments as at 31 December 2017.

2. Contingency

(1) Contingent liabilities due to pending actions

The Group might involve in disputes, litigations and claims for compensation with customers, sub-contractors and suppliers in the ordinary course of business. Management has assessed the possibility of adverse results of these contingencies, litigations or other proceedings and believes that any resulting liabilities will not have material adverse effect on the financial position, operating results or cash flow of the Group.

China National Chemical Engineering No.11 Construction Co., Ltd. ("No.11 Construction") as a subcontractor of the Group undertook the construction of the "Package C project" of "Saudi Yanbu-Medina Phase III Pipeline Project" on 16 August 2012. On 29 May 2018, No.11 Construction submitted an arbitration application to the China International Economic and Trade Arbitration Commission because of contract dispute, requesting the Group to pay RMB 456,810 thousand for the project fee and the accrued interest, RMB 145,968 thousand for the loss due to stoppage of work and the accrued interest, RMB 38,018 thousand for the advance payment under the letter of guarantee and the accrued interest, and RMB 500 thousand for attorney fee and the arbitration fees for the case. The China International Economic and Trade Arbitration Commission accepted the case on 15 June 2018. As the case is still under trial, it is currently impossible to determine its impact on the current or future profits of the Group. The Group will make active response and safeguard the legitimate rights and interests of the company.

(2) Judicial reorganization and financial impact of the Brazil subsidiary

On 16 August 2018, Sinopec(Brazil) Co.,Ltd., an indirectly wholly-owned overseas subsidiary od the Company (the "Brazilian Subsidiary")applied for judicial reorganization to the Third State Court of Commercial Enterprises in Rio de Janeiro, Brazil (the "Court of Rio") according to the relevant local laws in Brazil. On 31 August 2018, the Brazil subsidiary received ruling from Court of Rio, approved Brazil Subsidiary's entering into judicial reorganization and the law firm Nascimento & Rezende Advogados was appointed as the judicial reorganization manager by Court of Rio.

According to the relevant laws of Brazil, the Brazil Subsidiary is required to prepare a reorganization plan upon the Court of Rio has approved that the Brazil Subsidiary enters into the legal reorganization procedure. Such legal reorganization is conditional upon the approval od the reorganization plan from the creditors' meeting and the Court of Rio.

For the purpose of obtaining approval from creditors' meeting and the Court of Rio in Brazil, the Brazil Subsidiary's reorganization plan shall include fully settling the amount due to employees in respect of the Project, repaying a proportion of debt due to Three Suppliers, and paying legal fees, fees on judicial authorities and other services fees in relation to the implementation of legal reorganization procedure. Such payments amount is estimated to be approximately RMB 475,276 thousand.

(3) Contingent liabilities guarantee provided for other entities and its financial effects

As at 31 December 2018, there is no contingent liability from guarantee provided for other entities.

As at 31 December 2018, Sinopec Oilfield Service Company Limited, the subsidiary of the Company, has provided amount of USD 860,759 thousand and THB 3,142,900 thousand guarantee to its subsidiaries.

(4) Overseas tax penalties

On 7 February 2014, Federal Tax Administration of Rio de Janeiro conducted a tax audit on the Brazilian subsidiary of International Engineering. On 11 February 2014, the Brazilian subsidiary of International Engineering received a notice of the tax payments and penalties from Federal Tax Administration of Rio de Janeiro with total amount of BRL 80,459,100 thousand (equivalent to USD 24,289,800 thousand), including tax of BRL 36,467,100 thousand, interest of BRL 13,929,800 thousand and tax penalties of BRL 30,062,200 thousand. According to the legal opinion of the Brazilian subsidiary of International Engineering, the Brazilian subsidiary of International Engineering has administratively replied to such tax penalties and no final results can be predicted up to the report date. Even if Federal Tax Administration of Rio de Janeiro has made unfavorable decision against the Brazilian subsidiary of International Engineering still has the right for the administrative legal proceedings to the local court. Since the tax penalties are not predictable, SOSC Group did not provide the provision of such incident.

(5) Other contingent liabilities

With respect to uncertainties about enterprise income tax differences arising from 2006 and before as originated from a tax circular (Circular No. 644) issued by the State Administrative of Taxation in June 2007, the Company has been informed the relevant tax authority to settle the corporation income tax ("CIT") for 2007 at a rate of 33 percent. To date, the Company has not been requested to pay additional CIT in respect of any years prior to 2007. There is no further development of this matter as at 31 December 2018. No provision has been made in the financial statements for this uncertainty for tax year prior to 2007 for the reason that management believes it cannot reliably estimate the amount of the obligation, if any, that might exist.

XIII. Post balance sheet date events

As at 25 March 2019, there are no other events after balance sheet date to be disclosed in the Group.

XIV. Other significant events

1. Correction of errors

There is no correction of errors during the reporting period.

2. Significant debt restructuring

The Group restructured the debts with the creditors in the current period by modifying the debt principal. The total amount of profits recognized in the current period due to debt restructuring was 395,916 thousand. There is no individually significant debt restructuring during the period.

3. The main contents and major changes of pension plan

The main contents of pension plan refer to Note.III. 23(3).

4. Discontinued operation

There is no discontinued operation during the reporting period.

5. Segment information

The Group has identified five reportable segments based on the internal structure, management requirements and internal reporting policy. The reportable segments are: geophysics, drilling engineering, logging and mud logging, special down-hole operations, engineering construction. The segment information is prepared based on the financial information of the Company's daily management requirements. The Company's executive management reviews reportable segments' financial information periodically for the purposes of allocating resources and assessing the performance.

Inter-segment transfers are measured by reference to market price. The assets are allocated based on the operations of the segment and the physical location of the asset.

The resources related to long-term equity investment and investment (loss)/income on joint venture, income tax expenses as well as shared assets of all segments are centrally managed and accounted for by the Company, and thus are not allocated among segments.

The segment information is disclosed in accordance with the accounting policies and measurement standards reported to management by each segment. These accounting policies and measurement standards are consistent with the accounting policies and measurement standards of preparation of the financial statements.

XIV. Other significant events (Continued)

5. Segment information (Continued)

(1) Segment profit or loss, assets and liabilities

(1) Segment profit or loss, assets ar	ia liabilities							
For the year ended 31 December 2018 and as at 31 December 2018	Geophysics	Drilling engineering	logging and mud logging	Special down-hole operations	Engineering construction	Others	Elimination	Total
Revenue	5,132,418	30,269,319	2,864,545	6,112,458	13,323,175	2,563,852	-1,856,689	58,409,078
Including:External revenue	5,132,418	30,086,180	2,044,752	5,671,037	13,242,985	2,231,706		58,409,078
Inter-segment revenue	_	183,139	819,793	441,421	80,190	332,146	-1,856,689	_
Including: Major business revenue	5,131,649	30,066,259	2,825,973	6,085,729	13,213,047	1,831,173	-1,856,689	57,297,141
Cost of sales	4,738,216	27,691,655	2,794,712	5,544,467	12,251,200	2,156,735	-1,856,689	53,320,296
Including: Major business cost	4,737,771	27,485,300	2,787,647	5,544,458	12,040,137	1,877,261	-1,856,689	52,615,885
Operating expenses	352,915	2,031,942	359,489	335,361	1,194,762	722,427	_	4,996,896
Operating profit/(loss)	63,779	753,194	-282,351	263,938	302,179	-248,461	_	852,278
Total assets	5,155,309	35,314,230	2,124,388	5,471,270	23,430,227	27,336,770	-37,927,479	60,904,715
Total liabilities	4,004,200	28,583,953	1,527,149	2,833,859	23,366,680	32,737,943	-37,927,479	55,126,305
Supplementary information:								
Capital expenditure	126,784	940,162	80,021	112,999	236,676	19,130	_	1,515,772
Depreciation and amortization	454,600	2,874,758	204,168	518,436	214,795	436,760	_	4,703,517
Impairment loss on assets	37,029	149,116	7,165	-3,208	-137,487	-15,547	_	37,068
For the year ended 31 December 2017 and as at 31 December 2017	Geophysics	Drilling engineering	logging and mud logging	Special down-hole operations	Engineering construction	Others	Elimination	Total
Revenue	3,985,345	25,002,907	2,438,312	4,404,985	12,137,506	2,034,303	-1,409,410	48,593,948
Including:External revenue	3,980,166	24,821,489	1,823,517	4,193,964	11,920,110	1,854,702	_	48,593,948
Inter-segment revenue	5,179	181,418	614,795	211,021	217,396	179,601	-1,409,410	_
Including: Major business revenue	3,985,248	24,900,188	2,425,663	4,400,024	12,069,113	1,325,304	-1,409,410	47,696,130
Cost of sales	3,760,807	26,761,261	2,678,955	4,731,074	12,829,196	1,739,264	-1,409,410	51,091,147
Including: Major business cost	3,760,728	26,687,945	2,678,863	4,732,625	12,720,468	1,370,183	-1,409,410	50,541,402
Operating expenses	536,235	3,660,968	530,305	1,226,044	1,537,753	405,162	_	7,896,467
Operating profit/(loss)	-311,698	-5,419,321	-770,948	-1,552,133	-2,038,669	-110,122	_	-10,202,891
Total assets	5,318,569	34,807,136	2,007,167	6,394,501	7,075,014	22,703,276	-16,216,348	62,089,315
Total liabilities	4,602,485	29,309,833	1,568,472	3,830,778	15,701,754	25,393,659	-16,216,348	64,190,633
Supplementary information:								
Capital expenditure	142.746	653.891	45.940	61.983	57.963	74.973	_	1,037,496
The state of the s	142,740	000,091	45,540	01,303	01,000	,		
Depreciation and amortization	529,657	3,723,547	242,715	558,548	241,676	165,830		5,461,973

XIV. Other significant events (Continued)

5. Segment information (Continued)

(2) Other segment information

① External revenue of goods and services

Item	2018	2017
Geophysics	5,132,418	3,980,166
Drilling engineering	30,086,180	24,821,489
Logging and mud logging	2,044,752	1,823,517
Special down-hole operations	5,671,037	4,193,964
Engineering construction	13,242,985	11,920,110
Others	2,231,706	1,854,702
Total	58,409,078	48,593,948

2Geographical information

For the year ended 31 December 2018 and as at 31 December 2018	PRC	Other countries or regions	Total
External revenue	45,268,611	13,140,467	58,409,078
Non-current assets	25,004,467	3,886,429	28,890,896
For the year ended 31 December 2017 and as at 31 December 2017	PRC	Other countries or regions	Total
External revenue	35,607,732	12,986,216	48,593,948
Non-current assets	25,176,370	5,023,666	30,200,036

³ The dependence of principle customers

The Group obtained over 50 % of the total geophysics, drilling engineering, logging and mud logging, special down-hole operations and engineering construction revenue from a single customer.

6. Government grants

(1) Government grants which recognized as deferred income shall be subsequently measured via total-value method.

Government grants projects	category	As at 31 December 2017	Increase in current year	Amount recognized in current profit or loss	As at 31 December 2018	Presentation item in current income statements	Related to assets/income
Consumption tax refund of self-used refined oil	Financial appropriation		257,479	257,479		Other income	Related to income
Special funds for national scientific research	Financial appropriation	132,389	69,153	65,266	136,276	Other income	Related to income
Stabilization allowance	Financial appropriation		20,520	20,520		Other income	Related to income
Subsidies for enterprises' development	Financial appropriation		1,107	1,107		Other income	Related to income
Asset replacement subsidy income	Financial appropriation		1,199	1,199		Other income	Related to income
Government incentives	Financial appropriation		3,501	3,501		Other income	Related to income
Subsidy funds for resettlement	Financial appropriation		375,146	375,146		Other income	Related to income
Special funds for national scientific research	Financial appropriation	3,923	193	798	3,318	Other income	Related to assets
Compensation for public welfare relocation	Compensation for public welfare relocation		5,032	5,032		Other income	Related to assets
Total		136,312	733,330	730,048	139,594		

Notes:

- (1) In accordance to "Notification of refund of consumption tax for own-used refined oil during oil or gas field production" (Cai Shui [2011] No.7) issued by MOF and State Taxation Administration, from 1 January 2009, the oil or gas field enterprises will be refunded the consumption tax after the actual payment of temporary consumption tax paid for the purchases of refined oil used in the exploitation of crude oil. In 2018, the company received refund of consumption tax (RMB 257,479 thousand) from MOF, which was recognized as other income.
 - In accordance to "Notification of subsidy funds of disposing zombie companies approved by central state-owned capital operating budget in 2016" (Cai Zi [2016] No.100) issued by MOF,, the company received subsidy fund (RMB 375,146 thousand) which was recognized as other income in 2018.
 - The Group undertook national scientific research projects, and received special funds from the Ministry of Finance for scientific research, which was carried forward profits and losses with the progress of research and development. RMB 65,266 thousand was recognized as other income in 2018.
- (2) The government subsidy of RMB 730,048 thousand which was recognized in current profit and loss was counted in other income.

XV.Notes to parent company's financial statements

1. Other receivables

① Other receivables disclosed by aging

Aging	As at 31 December 2018
Within 1 year	4,357,230
Over 1 years	_
Subtotal	4,357,230
Less: provision for bad debts	_
Total	4,357,230

② Other receivables disclosed by nature:

Items	As at 31 December 2018			As at 31 December 2017			
	Book value	Provision for bad debts	Carrying amount	Book value	Provision for bad debts	Carrying amount	
Current account of wholly-owned subsidiaries	4,357,230		4,357,230	5,313,186	_	5,313,186	
Others							
Total	4,357,230		4,357,230	5,313,186		5,313,186	

③ The five largest other accounts receivable are analyzed as follows:

Company Name	Nature of payment	Amount	Aging	Percentage of total accounts receivable	Ending balance of bad debt provision
Sinopec oilfield service corporation	Current account	4,357,230	Within 1 year	100	
Total	_	4,357,230	_	100	_

2. Long-term equity investment

Item	As at 31 December 2018			As at 31 December 2017		
	Ending balance	Provision for diminution in value	Carrying amount	Ending balance	Provision for diminution in value	Carrying
Investments in subsidiaries	27,891,662		27,891,662	20,215,327		20,215,327
Total	27,891,662		27,891,662	20,215,327		20,215,327

There is no restriction on sale of the long-term equity investments held by the Company.

(1) Investment in subsidiary

Investee	As at 31 December 2017	Increas during the period	Decreas during the period	As at 31 December 2018
Sinopec oilfield service corporation	20,215,327	7,676,335		27,891,662
Total	20,215,327	7,676,335		27,891,662

XVI. Supplementary information

1. Details of non-recurring gains or losses

Items	2018	Notes
Gain or loss on disposal of non-current assets	278	
Government grants recognized in profit or loss for the year/period	472,569	
Gain or loss on debt restructuring	395,261	
Net profit or loss of the subsidiary from 31 December 2017 to the merger date in the business combination which under the same control	-2,385	
Profit or loss arising from contingency not related to the normal business of the company	-475,276	Estimated expenditure on judicial reorganization of Brazilian subsidiaries
Non-operating income/(expenses) excepht the above	-257,894	
Total non-recurring gains or losses	132,553	
Less: Effects of income tax on non-recurring gains or losses	28,448	
Net non-recurring gains or losses	104,105	
Less: Effects of non-recurring gains or losses attributable to the minority shareholders of the Company (after tax)		
Non-recurring gains or losses attributable to the shareholders of the Company	104,105	

2. Return on net assets and earnings/(loss) per share

		Earnings/(los	s) per share
Profit of reporting period	Weighted average return on net assets%	Basic earnings/(loss) (Yuan/share)	Diluted earnings/(loss) (Yuan/share)
Net profit attributable to the Company's ordinary equity shareholders	2.86	0.008	0.008
Net loss attributable to the Company's ordinary equity shareholders after deduction of non-recurring profit or loss	0.76	0.002	0.002

3. Differences between local and overseas accounting standards

(1) Reconciliation of differences between CASBE and IFRS financial statements

	Net profit attributed	to narent company	Net assets attributed to parent company		
	Net profit attributed	to parent company	ivet assets attributed	to parent company	
Item	For the year ended 31 December 2018	For the year ended 31 December 2017	As at 31 December 2018	As at 31 December 2017	
Based on CASBE	142,056	-10,589,524	5,778,410	-2,099,946	
Adjusted items and amounts in accordance with IFRS:					
Special reserve	98,132	26,409			
Based on IFRS	240,188	-10,563,115	5,778,410	-2,099,946	

(2) Related notes

In accordance to CASBE, provision of safety fund according to the PRC regulation is recognised to the profit or loss in the current period and at the same time included in the "special reserve" account. When safety costs and maintenance funds provided are used according to the specified scope, payment of expenses is directly offset against the special reserve; payment in formation of fixed assets is first imputed through "construction in progress" account, then recognised as fixed assets when the project is completed to its intended use state; meanwhile, offset the special reserve according to the cost in formation of the fixed assets and recognize the same amount of accumulated depreciation. The fixed assets will no longer depreciate in the subsequent accounting periods. According to IFRSs, expenditure in cost nature is recognised in the profit or loss and expenditure in capital nature is recognised as fixed assets when incurred and depreciate in the corresponding depreciation method.

Sinopec Oilfield Service Corporation

25 March 2019



II. Prepared in accordance with International Financial Reporting Standards

Independent Auditor's Report

To the Shareholders of Sinopec Oilfield Service Corporation

(Established in the People's Republic of China with limited liability)

Opinion

We have audited the consolidated financial statements of Sinopec Oilfield Service Corporation (the "Company") and its subsidiaries (together, the "Group") set out on pages 154 to 230, which comprise the consolidated statement of financial position as at 31 December 2018, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2018, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (the "IESBA Code"), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. 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 of the current period. 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.

Key audit matters identified in our audit are summarised as follow:

Key Audit Matter

Revenue and costs recognition

Refer to note 2.23 (Revenue recognition), note 4(7) (Critical accounting judgement and estimates), note 5 (revenue and segment information) and notes 24(b) and (c) (contract assets/contract liabilities) to the consolidated financial statements for related disclosures and accounting polices respectively.

Revenue related to rendering of services and construction contracts is derived from provision of petroleum engineering and technical services to PRC and overseas petroleum exploration and development companies, including geophysics, drilling engineering, logging and mud logging, special downhole operations and engineering construction services. According to the accounting policies, the contract revenue would be recognised over time, and the revenue and profit recognition of related service depends on the management's estimation of the total budgeted contract revenue and the progress towards satisfaction of a performance obligation. The management of the Group adopts either the expected value or most likely amount method according to the contract to estimate the total budgeted contract revenue, and evaluates the total budgeted contract costs according to historical information and construction plan, which are continuously evaluated and revised during the execution of the contract. These rely on management's critical accounting estimation.

When the progress towards satisfaction of a performance obligation can be reasonably measured, the Group should recognised revenue and costs in accordance with the progress of performance obligation being satisfied at the end of reporting period. The recognition of revenue and costs mainly depends on the management's critical estimation and judgement, including total budgeted revenue, total budgeted costs, variable consideration, remaining contract costs, estimated progress and contract execution risk. If there is any change on the final contract billing amount or actual execution progress, actual results may differ from the management's estimates. Hence, we have identified the revenue and costs recognition related to rendering of services and construction contracts as a key audit matter.

How our audit addressed the Key Audit Matter

Our procedures in relation to the revenue and costs recognition related to provision of petroleum engineering and technical services included:

- evaluating the appropriateness of the application of accounting policies for recognising revenue and costs associated with the rendering of services and construction contracts in light of business nature, contract terms and IFRS15 "Revenue from contracts with customers";
- understanding, assessing and testing the design and implementation of internal
 controls about management's determination on the total budgeted contract
 revenue, the total budgeted contract costs, the actual contract costs incurred,
 remaining contract costs and progress of performance obligation being satisfied
 for contract to evaluate the operating effectiveness of such internal controls;
- reviewing contracts and interviewing with the management to understand and assess the reasonableness of the basis and assumptions of the total budgeted revenue and total budgeted contract costs, and checking the consistency of the preparation and assumptions of various types of projects;
- performing variance analysis by comparing the accumulated costs incurred as at 31 December 2018 with the budgeted contract costs, checking the significant costs incurred subsequent to the end of the reporting period and assessing the reasonableness of the management's estimation on workload forecast and remaining contract costs;
- testing, on a sample basis, the application of progress of performance obligation being satisfied by cross-checking the principal terms set out in the relevant contracts to supporting documents such as progress billing reports or acceptance certificates and progress reports being issued by customers;
- evaluating the reasonableness about budgeted revenue, budgeted costs and budgeted gross profit of sub-divisional contracts by analysis and calculation; and
- testing, on a sample basis, the amount and period of the aforesaid revenue recognised having regard to respective progress of performance obligation being satisfied at the end of the reporting period, and comparing, on a sample basis, the accumulated costs incurred up to the end of the reporting period with the budgeted costs to verify the existence of cost overrun.

We found that the management's judgment in determining the progress of performance obligation being satisfied and the revenue and costs recognition are supported by available evidence.

Key Audit Matter

Expected credit losses ("ECL") on trade receivables and contract assets

Refer to note 2.10 (Financial instruments), note 4(2) (Critical accounting judgement and estimates), note 22 (Notes and trade receivables) and note 24(b) (Contract assets) to the consolidated financial statements for related disclosures and accounting polices respectively.

During the year ended 31 December 2018, the Group's gross amount of trade receivables and contract assets are RMB18.155 billion and RMB9.066 billion respectively, representing 45% of total assets. As at 31 December 2018, the accumulated ECL allowance for trade receivables and contract assets amounted to RMB2.552 billion.

We have identified ECL measurement of trade receivables and contract assets as a key audit matter because the ECL measurement of trade receivables and contract assets is inherent uncertain as it requires the management's subjective judgment and the aforesaid balance has a significant impact on the Group's consolidated financial statements.

How our audit addressed the Key Audit Matter

Our procedures in relation to the ECL on trade receivables and contract assets included:

- assessing and testing the related internal controls of the measurement of ECL established by the management, and testing the effectiveness of key control executions:
- evaluating the management's relevant considerations and objective evidences for ECL measurement of trade receivables and contract assets (including historical records and circumstances of bad debts of trade receivables and contract assets with similar characteristics, customer credit and market environment, etc.), and assessing the appropriateness of the methods being applied in grouping of the trade receivables and contract assets and calculation for the ECL;
- gathering public information about the customers whose balances of trade receivables and contract assets is material or exceeds the credit period or its industry development status to identify any situations affecting the Group's ECL assessment results of trade receivables and contract assets.
- assessing the accuracy and classification on trade receivables and contract
 assets by obtaining ageing analysis of the trade receivables and contract assets
 as at 31 December 2018 and reviewing, on a sample basis, key information such
 as aging, overdue days, and relationship by checking supporting documents
 such as accounting vouchers and invoices;
- arranging audit confirmations to those customers with significant balance of trade receivables and contract assets, and comparing the results of the returned confirmations with the Group's record;
- recalculating the ECL on trade receivables and contract assets and comparing the results with the amounts recorded by the Group; and
- evaluating the reasonableness of management's ECL assessment by considering the customer's settlement subsequent to the reporting period.

We found that that the management's judgment in determination and estimation in the measurement of ECL on trade receivables and contract assets is supported by available evidence.

Key Audit Matter

Provision for loss on judicial reorganisation of Brazil subsidiary

Refer to note 2.20 (Provisions) and note 39 (Provisions) to the consolidated financial statements for related disclosures and accounting polices respectively.

During the year ended 31 December 2018, the Group's subsidiary, Sinopec (Brazil) Co., Ltd ("Brazil subsidiary") implemented the judicial reorganisation with the court's approval. In accordance with the management's assessment, estimated expenditure about judicial reorganisation amounting to RMB475 million was provided according to the restructuring plan. The amount of the provision mainly relied on the management's estimation and judgment, and the amount is significant. Hence, we identified provision for loss on judicial reorganisation of Brazil subsidiary is a key audit matter.

How our audit addressed the Key Audit Matter

Our procedures in relation to the provision for loss on judicial reorganisation of Brazil subsidiary included:

- assessing and testing the management's internal controls over the provision for loss on judicial reorganisation of Brazil subsidiary and testing the effectiveness of key control executions;
- obtaining and reviewing the judicial reorganisation plan prepared by the Brazil subsidiary, understanding the approval status of the judicial reorganisation plan, reviewing the minutes of meetings for related matters, and inquiring the lawyers and legal counsel about the progress of the judicial reorganisation and the expected loss;
- evaluating the adequacy and appropriateness of the Group's provision for the judicial reorganisation of the Brazil subsidiary by examining its calculation process and checking the supporting documents and subsequent payments;
- assessing the adequacy of disclosure on the judicial reorganisation of Brazil subsidiary.

We found that the management's judgment in determining the provision for loss on judicial reorganisation of Brazil subsidiary is supported by available evidence.

Other Information

The directors of the Company are responsible for the other information. The other information comprises all the information in the annual report, but does not include the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of directors for the consolidated financial statements

The directors of the Company are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with IFRSs and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group'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 the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The directors are assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

Auditor's 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 auditor's report that includes our opinion. We report our opinion solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs 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 ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- 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.
- 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 Group's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- conclude on the appropriateness of the directors' 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 Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's 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 auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- 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.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group 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 the Audit Committee 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 the Audit Committee 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 the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's 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.

Grant Thornton Hong Kong Limited

Certified Public Accountants

Level 12

28 Hennessy Road

Wanchai

Hong Kong

25 March 2019

Shaw Chi Kit

Practising Certificate No.: P04834

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2018

	Notes	2018	2017
		RMB'000	RMB'000 (Restated)
Revenue	5	58,409,078	48,593,948
Cost of sales and taxes and surcharges		(53,508,883)	(51,448,719)
Gross profit/(loss)		4,900,195	(2,854,771)
Selling expenses		(64,249)	(59,615)
General and administrative expenses		(3,239,084)	(3,619,364)
Research and development expenses		(928,586)	(517,599)
Finance expenses - net	6	(441,190)	(579,984)
Expected credit loss and impairment losses on assets	7	(37,068)	(2,735,857)
Investment income	8	600	600
Share of profit/(loss) from joint ventures	20(a)	24,348	(14,791)
Share of profit from associates	20(b)	2,135	1,213
Operating profit/(loss)		217,101	(10,380,168)
Other income	9	1,199,612	502,465
Other expenses	10	(802,944)	(446,474)
Profit/(Loss) before income tax	11	613,769	(10,324,177)
Income tax expense	12	(373,581)	(239,034)
Profit/(Loss) for the year		240,188	(10,563,211)
Other comprehensive income for the year, net of tax			
Items that will not be reclassified subsequently to profit or loss:			
Net movement in fair value of financial assets at fair value through other comprehensive income ("FVTOCI")		11,676	_
Total comprehensive income/(expense) for the year		251,864	(10,563,211)
Profit/(Loss) for the year attributable to:			
Owners of the Company		240,188	(10,563,115)
Non-controlling interests		_	(96)
Profit/(Loss) for the year		240,188	(10,563,211)
Total comprehensive income/(expense) for the year attributable to:			
Owners of the Company		251,864	(10,563,115)
Non-controlling interests		_	(96)
Total comprehensive income/(expense) for the year		251,864	(10,563,211)
		RMB	RMB (Restated)
Earnings/(Loss) per share for profit/(loss) attributable to owners of the Company (presented in RMB per share)	13		
Basic and diluted		0.013	(0.747)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2018

	Notes	As at 31 December 2018	As at 31 December 2017	As at 1 January 2017
		RMB'000	RMB'000 (Restated)	RMB'000 (Restated)
Assets				
Non-current assets				
Property, plant and equipment	17	24,206,172	25,898,250	29,753,367
Other non-current assets		3,654,512	3,065,803	4,049,224
Long-term receivables		_	233,061	_
Prepaid land leases	18	118,335	120,167	109,866
Intangible assets	19	118,940	162,994	77,147
Interests in joint ventures	20(a)	218,813	194,465	209,444
Interests in associates	20(b)	14,010	12,581	11,885
Available-for-sale financial assets	21	_	24,389	24,389
Financial assets at FVTOCI	21	39,011	_	_
Deferred tax assets	36	492,438	472,184	183,548
Total non-current assets		28,862,231	30,183,894	34,418,870
Current assets				
Inventories	25	1,217,323	1,211,187	1,453,729
Notes and trade receivables	22	16,111,200	18,191,357	24,876,707
Prepayments and other receivables	23	3,444,501	3,330,600	3,646,908
Contract assets	24(b)	9,066,019	_	_
Amounts due from customers for contract works	24(a)	_	6,624,302	7,923,397
Restricted cash	26	29,861	14,538	3,012
Cash and cash equivalents	27	2,173,580	2,533,437	2,472,046
Total current assets		32,042,484	31,905,421	40,375,799
Total assets		60,904,715	62,089,315	74,794,669

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (Continued)

As at 31 December 2018

	Notes	As at 31 December 2018	As at 31 December 2017	As at 1 January 2017
		RMB'000	RMB'000 (Restated)	RMB'000 (Restated)
Equity			(**************************************	(*
Share capital	28	18,984,340	14,142,661	14,142,661
Reserves		(13,205,930)	(16,242,607)	(5,690,128)
Equity attributable to owners of the Company		5,778,410	(2,099,946)	8,452,533
Non-controlling interests		_	(1,372)	(1,276)
Total equity/(Capital deficiencies)		5,778,410	(2,101,318)	8,451,257
Liabilities				
Non-current liabilities				
Long term borrowings	35	1,377,909	508,863	796,634
Deferred income	32	139,594	136,312	112,171
Deferred tax liabilities	36	22,658	23,879	27,280
Provisions	39	595,742	_	_
Total non-current liabilities		2,135,903	669,054	936,085
Current liabilities				
Notes and trade payables	33	27,059,504	29,546,017	30,419,672
Deposits received and other payables	34	3,523,748	9,443,881	8,582,827
Contract liabilities	24(c)	4,390,293	_	_
Amounts due to customers for contract works	24(a)	_	6,788,227	9,057,412
Short term borrowings	35	17,755,104	17,539,674	17,254,639
Current income tax payable		261,753	203,780	92,777
Total current liabilities		52,990,402	63,521,579	65,407,327
Total liabilities		55,126,305	64,190,633	66,343,412
Total equity and liabilities		60,904,715	62,089,315	74,794,669
Net current liabilities		(20,947,918)	(31,616,158)	(25,031,528)
Total assets less current liabilities		7,914,313	(1,432,264)	9,387,342

Chairman of the Board: LIU Zhongyun

Vice Chairman of the Board, General Manager: SUN Qingde

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Attributable to owners of the Company								
	Share capital	Share premium	Other capital reserve	Surplus reserve	Specific reserve	Accumulated losses	Total	Non- controlling interests	(Capital deficiencies)/ Total equity
	RMB'000 (Note 28)	RMB'000 (Note 30(i))	RMB'000 (Note 30(i))	RMB'000 (Note 30(ii))	RMB'000 (Note 30(iii))	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2017 (as previously reported)	14,142,661	8,826,247	70,985	200,383	176,068	(14,973,476)	8,442,868	(1,276)	8,441,592
Business combination under common control (Note 2.1)	_	_	18,082	_	_	(8,417)	9,665	_	9,665
Balance at 1 January 2017 (Restated)	14,142,661	8,826,247	89,067	200,383	176,068	(14,981,893)	8,452,533	(1,276)	8,451,257
Total comprehensive expense	_	_	_	_	_	(10,563,115)	(10,563,115)	(96)	(10,563,211)
Transactions with owners:									
Equity settled share-based transaction (Note 31)	_	_	10,636	_	_	_	10,636	_	10,636
Appropriation of specific reserve	_	_	_	_	702,477	(702,477)	_	_	_
Utilisation of specific reserve	_	_	_	_	(676,068)	676,068	_	_	_
Total transactions with owners	_	_	10,636	_	26,409	(26,409)	10,636	_	10,636
At 31 December 2017 (Restated)	14,142,661	8,826,247	99,703	200,383	202,477	(25,571,417)	(2,099,946)	(1,372)	(2,101,318)

	Attributable to owners of the Company									
	Share capital RMB'000	Share premium RMB'000	Other capital reserve	Surplus reserve RMB'000	Specific reserve	Other comprehensive income reserve (non-recycling)	Accumulated losses	Total	Non- controlling interests RMB'000	(Capital deficiencies)/ Total equity RMB'000
	(Note 28)	(Note 30(i))	(Note 30(i))	(Note 30(ii))	(Note 30(iii))	(Note 30(iv))				
At 1 January 2018 (as previously reported)	14,142,661	8,826,247	81,621	200,383	202,477	-	(25,556,017)	(2,102,628)	(1,372)	(2,104,000)
Business combination under common control (Note 2.1)		_	18,082		_	_	(15,400)	2,682		2,682
Balance at 1 January 2018 (Restated)	14,142,661	8,826,247	99,703	200,383	202,477	_	(25,571,417)	(2,099,946)	(1,372)	(2,101,318)
Profit for the year	-	_	_	-	_	_	240,188	240,188	_	240,188
Other comprehensive income for the year:										
Net movement in fair value of financial assets at FVTOCI	-	_	_	-	_	11,676	_	11,676	_	11,676
Total comprehensive income	-	_	_	-	_	11,676	240,188	251,864	_	251,864
Transactions with owners:										
Issue of share capital (Note 28)	4,841,679	2,796,036	_	-	_	_	_	7,637,715	_	7,637,715
Acquisition of Jiangsu Oilfield (Note 2.1 and Note 44)	_	_	(9,851)	-	_	_	_	(9,851)	_	(9,851)
Acquisition of additional interests of subsidiaries	_	_	(1,372)	_	_	_	_	(1,372)	1,372	_
Appropriation of specific reserve	_	_	_	_	970,710	_	(970,710)	_	_	_
Utilisation of specific reserve	_	_	_	_	(872,578)	_	872,578	_	_	_
Total transactions with owners	4,841,679	2,796,036	(11,223)	_	98,132	_	(98,132)	7,626,492	1,372	7,627,864
At 31 December 2018	18,984,340	11,622,283	88,480	200,383	300,609	11,676	(25,429,361)	5,778,410	_	5,778,410

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2018

	Notes	2018	2017
		RMB'000	RMB'000 (Restated)
Cash flows from operating activities			, ,
Cash flows (used in)/from operations	38 (a)	(2,687,646)	805,447
Interests received		87,886	19,382
Income tax paid		(340,029)	(420,068)
Net cash (used in)/generated from operating activities		(2,939,789)	404,761
Cash flows from investing activities			
Purchases of property, plant and equipment		(1,266,945)	(1,168,912)
Proceeds from disposal of property, plant and equipment		86,027	121,497
Proceeds from disposal of other non-current assets		17,664	41,129
Proceeds from disposal of prepaid land leases		333	_
Payment of prepaid land leases		(1,762)	_
Purchases of intangible assets		(3,706)	(6,836)
Acquisition of a subsidiary		(7,388)	_
Dividends received from joint ventures		_	22
Dividends received from associates		706	489
Interests received		_	67
Investment income received from financial assets at FVTOCI/Investment income received from available-for-sale financial assets		600	600
Net cash used in investing activities		(1,174,471)	(1,011,944)
Cash flows from financing activities			
Proceeds from borrowings		36,085,650	37,781,867
Repayments of borrowings		(35,726,443)	(36,285,426)
Interests paid		(659,235)	(748,407)
Proceeds from issuance of new shares		7,637,715	_
Payment for profit arising during major assets restructuring		(1,118,902)	_
Payment for Sinopec Group capital restructuring funds		(2,600,000)	_
Net cash generated from financing activities		3,618,785	748,034
Net (decrease)/increase in cash and cash equivalents		(495,475)	140,851
Effect of foreign exchange rate changes on cash and cash equivalents		135,618	(79,460)
Cash and cash equivalents at beginning of year		2,533,437	2,472,046
Cash and cash equivalents at end of year	27	2,173,580	2,533,437

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2018

1 GENERAL INFORMATION, THE REORGANISATION AND BASIS OF PRESENTATION

1.1 General information and the Reorganisation

Sinopec Oilfield Service Corporation (the "Company") is a joint stock company with limited liability established in the People's Republic of China (the "PRC"). The registered office is No. 9, Jishikou Road, Chaoyang District, Beijing, the PRC and the headquarter address is No. 22, Chaoyangmen North Street, Chaoyang District, Beijing, the PRC. The name of the Company was changed from Sinopec Yizheng Chemical Fibre Company Limited to Sinopec Oilfield Service Corporation with effect from 20 March 2015.

The immediate and ultimate holding company of the Company is China Petrochemical Corporation (hereinafter referred to as the "Sinopec Group") which is a state wholly-owned enterprise established in the PRC.

Originally, the Company and its subsidiaries (hereinafter referred to as the "Group") were principally engaged in the production and sale of chemical fiber and chemical fiber raw materials in the PRC.

At the end of December 2014, the Company completed the material assets reorganisation by using of all its assets and liabilities at that time as consideration, to repurchase and then cancel the shares held by China Petroleum & Chemical Corporation. At the same time, the Company acquired 100% equity interest of 中石化石油工程技術服務有限公司 from Sinopec Group, which was satisfied by the issuance of shares to Sinopec Group (hereinafter collectively referred to as the "Reorganisation").

Upon completion of the Reorganisation, the principal activities of the Group changed to the provision of onshore and offshore oil, natural gas and other mineral prospecting, exploration, drilling and exploitation and provision of general contracting, design and construction services for the oil and gas and other types of construction projects.

On 31 December 2018, the Group completed acquisition of entire equity interests in Jiangsu Oilfield Service and Construction Corporation ("Jiangsu Oilfield"). As Jiangsu Oilfield is also ultimately controlled by Sinopec Group, the business combination was regarded as under common control. The consolidated financial statements of the Group have been prepared using the merger accounting basis as if the current group structure had been in existence throughout the periods presented. Refer to note 2.1 for the details.

These consolidation financial statements are presented in Renminbi ("RMB"), unless otherwise stated. These consolidation financial statements have been approved and authorised for issue by the Board of Directors on 25 March 2019.

1.2 Basis of presentation

As at 31 December 2018, the Group had net current liabilities of approximately RMB20,947,918,000 (2017 (Restated): RMB31,616,158,000) and capital commitments of approximately RMB136,467,000; and it had a net profit of RMB240,188,000 for the year then ended. The directors of the Company have performed an assessment that operating cash inflows in the next twelve months is expected, and most of the Group's borrowings are sourced from Sinopec Group and its subsidiaries, where the Group maintains ongoing good relationship with these companies, which enables the Group to secure sufficient financial support from these companies. In December 2018, the Group obtained a line of credit of RMB12 billion and USD0.9 billion (Total: approximately RMB 18.2billion), and line of credit promissory note of RMB 7 billion from the Sinopec Group's subsidiaries. The management and those charged with governance are satisfied that the Group is able to operate as a going concern with the line of credit. To obtain sufficient credits facilities, the Group will diversify its source of finance by exploring and developing good relationship with listed and state-owned financial institutions. The directors of the Company are in the opinion that the above measures are sufficient to meet with the expected liquidity, daily operation and capital requirements and considered that going concern basis is appropriate for the preparation of these consolidated financial statements.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of the consolidation financial statements are set out below.

2.1 Basis of preparation

The consolidation financial statements set out in this report have been prepared in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board (the "IASB"). These consolidation financial statements also comply with the applicable disclosure requirements of the Hong Kong Companies Ordinance and the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange (the "Listing Rules").

The consolidation financial statements have been prepared under the historical cost convention, as modified by the revaluation of financial assets at fair value through other comprehensive income, which are carried at fair value.

On 28 December 2018, Sinopec Oilfield Service Co., Ltd. ("SOSC"), a wholly-owned subsidiary of the Company, and Nanjing Weinuo Oil & Gas Well Logging Engineering Co., Ltd. ("Nanjing Weinuo") entered into an equity transfer agreement (the "Agreement"). Pursuant to the Agreement, SOSC agreed to acquire and Nanjing Weinuo agreed to dispose of the entire equity interest in Jiangsu Oilfield Service and Construction Corporation ("Jiangsu Oilfield") for a cash consideration of approximately RMB7,388,000. The acquisition was completed on 31 December 2018. As SOSC and Jiangsu Oilfield are ultimately controlled by Sinopec Group, the business combination was regarded as under common control. The consolidated financial statements of the Group have been prepared using the merger accounting basis as if the current group structure had been in existence throughout the periods presented. The comparative information in these consolidated financial statements has been restated accordingly under merger accounting basis. The details of the business combination under common control is disclosed in note 44.

The preparation of consolidation financial statements in conformity with IFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the accounting policies of the Group. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements. Please refer to note 4 for details.

2.2 Accounting for business combinations under common control and not under common control

(1) Business combination involving entities under common control

For the business combinations involving entities under common control, the assets and liabilities that are obtained in a business combination shall be measured at their original carrying amounts at the date of combination as recorded by the party being combined, except for the adjustments of different accounting policies. The difference between the carrying amount of the net assets obtained and the carrying amount of the consideration paid for the combination shall be adjusted to other capital reserve/share premium, if the other capital reserve/share premium is not sufficient to absorb the difference, any excess shall be adjusted against retained earnings.

(2) Business combination involving entities not under common control

For business combinations involving entities not under common control, the consideration for each combination is measured at the aggregate of the fair values, at the acquisition date, of assets given, liabilities incurred or assumed, and equity securities issued by the acquirer in exchange for control of the acquiree. At the acquisition date, the acquired assets, liabilities and contingent liabilities of the acquiree are measured at their fair values.

Where the cost of combination exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised as goodwill, and subsequently measured at costs less any accumulative impairment losses. Where the cost of combination is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised in profit or loss for the current period after reassessment.

Business combinations involving entities not under common control through step acquisition

In the consolidation financial statements, the combination cost is the sum of consideration paid at acquisition date and fair value of the acquiree's equity investment held prior to acquisition date; the cost of equity of the acquiree held prior to acquisition date shall be re-measured at the fair value at acquisition date, the difference between the fair value and the carrying amount shall be recognised as investment income or loss for the current period. Other comprehensive income and changes of investment equity related with acquiree's equity held prior to acquisition date shall be transferred to investment income or loss for current period at acquisition date, besides there is other comprehensive income incurred by the changes of net assets or net liabilities due to the re-measurement of defined benefit plan.

(3) Transaction fees attributed during the business combination

The intermediary and other relevant administrative expenses such as audit, legal and valuation advisory for business combinations are recognised in profit or loss when incurred. Transaction costs of equity or debt securities issued as the considerations of business combination are included in the initial recognition amounts.

2.3 Basis of preparation of the consolidated financial statements

(1) Scope of consolidation

The scope of consolidation financial statements is on the basis of control. Control refers to the power over investee of the Group, exposure or rights to variable returns in participating in the investee's related activities and the ability to use the power to affect those variable returns. A subsidiary is the entity controlled by the Group (including severable part of the investee and the enterprise, structured body controlled by the enterprise, etc.)

Subsidiaries

Subsidiaries are entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date that the Group ceases control.

Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method and are initially recognised at cost. The Group's investment in associates includes goodwill identified on acquisition, net of any accumulated impairment loss.

The Group's shares of its associates' post-acquisition profits or losses is recognised in the consolidated statement of comprehensive income and its share of post acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amounts of the investments. When the Group's share of losses in an associate equals or exceeds its interest in the associates (which includes any other unsecured receivables that, in substance, form part of the Group's net investment in the associate), the Group does not recognise further losses, unless the Group has incurred obligations or made payments on behalf of the associates.

Joint Arrangements

A joint arrangement is an arrangement of which two or more parties have joint control. The group's joint arrangement is divided into joint operation and joint venture.

(1) Joint operations

A joint operation is a joint arrangement whereby the group that has joint control of the arrangement has rights to the assets, and obligations for the

A joint operator shall recognise in relation to its interest in a joint operation:

- A. its assets, including its share of any assets held jointly;
- B. its liabilities, including its share of any liabilities incurred jointly;
- C. its revenue from the sale of its share of the output arising from the joint operation;
- D. its share of the revenue from the sale of the output by the joint operation;
- E. its expenses, including its share of any expenses incurred jointly.

(2) Joint ventures

A joint venture is a joint arrangement whereby the group that has joint control of the arrangement has rights to the net assets of the arrangement.

The accounting treatment is in accordance with the provisions of long-term investment under equity method.

2.3 Basis of preparation of the consolidated financial statements (Continued)

(2) Method of preparation of consolidated financial statements

The consolidated financial statements are based on the financial statements of the Company and its subsidiaries, and are prepared by the Company in accordance with other relevant information. In preparing the consolidated financial statements, the Company and its subsidiaries are required to apply consistent accounting policy and accounting period, intra-group transactions and balances shall be offset.

A subsidiary acquired through a business combination involving entities under common control in the reporting period shall be included in the scope of the consolidation from the beginning of the combination date, the subsidiary's income, expenses and profits are included in the consolidated results of operations, and cash flows are included in the consolidated statement of cash flow from the acquisition date.

Where a subsidiary has been acquired through a business combination involving entities not under common control, the subsidiary's income, expenses and profits are included in the consolidated results of operations, and cash flows are included in the consolidated statement of cash flow from the acquisition date to the end of the reporting date.

The portion of a subsidiary's equity that is not attributable to the parent is treated as non-controlling interests and presented in the consolidated statement of financial position within shareholders' equity. The portion of a subsidiary's profit or loss that is attributable to the non-controlling interests presented in the consolidated statement of comprehensive income as "non-controlling interests". The portion of a subsidiary's losses that exceeds to the beginning non-controlling interests in the shareholders' equity, the remaining balance still reduces the non-controlling interests.

Transactions that acquire the non-controlling interests of subsidiaries or dispose part of equity investment but not lose control of this subsidiary are accounted for equity transactions that adjust shareholders' equity attributable to the parent and non-controlling interests to reflect the changes of equity in subsidiaries. The difference between the adjustment of non-controlling interests and the fair value of consideration paid/received shall be adjusted to other capital reserve, if the other capital reserve is not sufficient to absorb the difference, any excess shall be adjusted against retained earnings.

(3) Treatment of loss of control of subsidiaries

When there is a loss of control over investee because of disposing part of equity investment or other reasons, the remaining part of the equity investment should be re-measured at fair value at the date when losing control over the investee; the cash received in disposal of the equity investment and the fair value of remaining part of the equity investment, deducting net assets proportion calculated by original share percentage since the acquisition date should be recorded in profit or loss for current period of disposal.

Other comprehensive income and changes of investment equity related with acquiree's equity held prior to acquisition date shall be transferred to investment income or loss for current period at acquisition date, besides there is other comprehensive income incurred by the changes of net assets or net liabilities due to the re-measurement of defined benefit plan.

2.4 Segment reporting

The Group has identified several reportable segments based on the internal structure, management requirements and internal reporting policy. The segment information is prepared based on the financial information of the Company's daily management requirements, which are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The Company's executive management reviews reportable segments' financial information regularly for the purposes of resources allocation and performance assessment.

2.5 Foreign currency transactions and translation of foreign currency statements

(1) Foreign currency transactions

When foreign currency transactions occur, they are translated into the reporting currency at spot exchange rate at the dates of the transactions.

At the reporting date, foreign currency monetary items are translated using the spot exchange rate at the reporting date. Exchange differences arising from the differences between the spot exchange rate prevailing at the reporting date and those spot rates used on initial recognition or at the previous reporting date are recognised in profit or loss in current period; foreign currency non-monetary items carried at historical cost continue to be measured at the amounts in functional currency translation using the spot exchange rates at the dates of the transactions; foreign currency non-monetary items carried at fair value are translated using the spot exchange rates at the date when the fair value was determined. Differences between the translated amount and the original amount of functional currency are included in profit or loss in current period.

2.5 Foreign currency transactions and translation of foreign currency statements (Continued)

(2) Translation of foreign currency statements

At the reporting date, when translating the foreign currency financial statements of overseas subsidiaries, the assets and liabilities of the statement of financial position are translated using the spot exchange rate at the reporting date; all items except "retained earnings/accumulated losses" of the shareholders' equity are translated at the spot exchange rate.

The revenue and expenses in the statement of profit or loss are translated using at spot rates with reasonable approximation of the exchange rates prevailing on the transaction dates.

All items in the statement of cash flows are translated using at spot rates with reasonable approximation of the exchange rates prevailing on the transaction dates. As an adjustment item, the impact of exchange rate changes on cash amount is reflected separately in the cash flow as "Effect of exchange rate changes on cash and cash equivalents".

Differences arising from the translation of consolidated financial statements are separately reflected in the "other comprehensive income" in the shareholders' equity of the consolidated statement of financial position.

When there is a loss of control in overseas operations, the exchange reserve related to overseas operations presented in the shareholders' equity in the consolidated statement of financial position shall be transferred to profit or loss in current period wholly or based on the percentage of overseas operations.

2.6 Property, plant and equipment

(1) Recognition and initial measurement of property, plant and equipment

The Group's property, plant and equipment are tangible assets that are held for use in production, render of services, rentals, or administrative purposes and have useful lives of more than one accounting year.

Property, plant and equipment shall be recognised only when it is probable that economic benefits associated with the asset will flow into the entity and the cost of the asset can be measured reliably.

Property, plant and equipment of the Group are initially stated at cost less accumulated depreciation and accumulated impairment loss.

(2) Depreciation methods of property, plant and equipment

The Group uses the straight-line method for depreciation. Depreciation of the property, plant and equipment begins when they achieved the condition for their intended use, and stop being depreciated when derecognised or classified as held for sale under non-current assets. For those property, plant and equipment without considering impairment provision, the Group's annual depreciation rates are shown as follows according to the category, expected useful lives and estimated net residual values rates.

Buildings 12 – 50 years

Oil engineering equipment and others

4 - 30 years

Among these, property, plant and equipment which have been impaired should deduct the cumulative amount of impairment provision to determine the depreciation rate.

The method of impairment test and impairment provision of property, plant and equipment set out in Note 2.9.

(3) Recognition and measurement of assets under finance leases

The leased property, plant and equipment of the Group shall be recognised as assets under finance lease if they meet the following one or more criteria:

- The ownership of leased assets can be transferred to the Group at the end of the lease period.
- The Group has the option to buy the leased assets at a purchase price estimated to be far below the fair value of leased assets when exercising the option. Thus, at the beginning date of lease period, it is reasonably determined that the Group will exercise the option.
- Even if the ownership of assets is not transferred, lease period accounts for most of the leased assets' useful life.
- The present value of minimum lease payment almost equals to the fair value of leased asset of the beginning date of lease period.
- Leased assets have special characteristics and they can be used by the Group only if they are not reconstructed.

At the beginning date of lease period, the Group will recognise the lower of the fair value of leased asset of the beginning date of lease period and the present value of minimum lease payment as the recorded value of the leased asset, their difference is recorded as unrecognised financing charges. Initial direct costs such as charges, legal fee, travelling expenses and stamp duty of the lease incurred during leasing negotiation and signing leasing contracts are recognised in leased assets' value. Unrecognised financing charges are measured at amortised cost using the effective interest method in the periods of leasing.

Assets financed by leasing are depreciated according to the policy of owned assets. If it can be reasonably determined that the ownership of the leased assets can be obtained at the end of the lease period, the leased assets are depreciated over their useful lives; otherwise, the leased assets are depreciated over the shorter of the lease terms and the useful lives of the leased assets.

2.6 Property, plant and equipment (Continued)

(4) Estimated useful lives, residual value and depreciation methods

The Group reviews the useful life and estimated net residual value of a property, plant and equipment and the depreciation method applied annually at each of the period end.

The useful lives of property, plant and equipment are adjusted if their expected useful lives are different from the original estimates; the estimated net residual values are adjusted if they are different from the original estimates.

(5) Overhaul costs

The overhaul costs occurred in regular inspection of property, plant and equipment are recognised in the cost of property, plant and equipment if there is undoubted evidence to confirm that they meet the recognition criteria of fixed assets, otherwise, the overhaul costs are recognised in profit or loss for the current period. Property, plant and equipment are depreciated during the intervals of the regular overhaul.

(6) Construction in progress

The cost of construction in progress is determined according to the actual expenditure incurred for the construction, including all necessary construction expenditures incurred during the construction period, borrowing costs that shall be capitalised before the construction reaches the condition for intended use and other relevant expenses.

Construction in progress is transferred to property, plant and equipment when the assets are ready for their intended use.

For provision for impairment of construction in progress, refer to Note 2.9.

2.7 Prepaid land leases

Prepaid land leases represent the prepayment of land use rights. Prepaid land leases are carried at historical cost less accumulated amortisation and impairment losses. Amortisation is calculated on straight-line basis over the respective periods of the rights.

2.8 Intangible assets

Intangible assets include software, etc.

The Group initially measures the intangible asset at cost, and analyses and judges its useful life when it is acquired. An intangible asset with a finite useful life is amortised using the method which can reflect the expected realisation of economic benefits related to the asset over its expected useful life since the asset is available for use; an intangible asset which expected realisation cannot be reliably measured is amortised using straight-line method; an intangible asset with an indefinite useful life is not amortised.

Amortisation of an intangible asset with finite useful life is as follows:

Software 5 years
Others 10 years

For an intangible asset with a finite useful life, the Group reviews the useful life and amortisation method at the end of each financial year, if it is different from the previous estimate, adjustment is made at previous estimates and accounted for according to changes in accounting estimates.

The carrying amount of an intangible asset should be transferred to profit or loss in current period when it is estimated that no further economic benefits can be brought to the Group as at the reporting date.

For the impairment method of intangible assets, refer to Note 2.9.

2.9 Impairment of non-financial assets

Assets that have an indefinite useful life (e.g. goodwill) are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non-financial assets other than goodwill that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

The impairment of non-financial assets such as subsidiaries, associates, joint arrangements, property, plant and equipment, construction in progress, intangible assets are determined as follows:

At the reporting date, the Group determines whether there may be evidence of impairment, the Group will estimate the recoverable amount for impairment and then perform impairment test if there is any such evidence. For goodwill arising from business combination, intangible assets with indefinite useful life and the intangible assets that have not yet ready for use are tested for impairment annually regardless of whether such evidence exists.

The recoverable amount of an asset is determined by the higher amount of fair value deducting disposal costs and net present value of future cash flows expected from the assets. The Group estimates the recoverable amount based on individual asset; for the recoverable amount of individual asset which is difficult to estimate, the recoverable amount of the asset group is determined based on the asset group which involved in the asset. The identification of the asset group is based on whether the cash flow generated from the asset group is independent of the major cash inflows from other assets or asset groups.

When the asset or asset group's recoverable amount is lower than its carrying amount, the Group reduces its carrying amount to its recoverable amount. The reduced amount is included in profit or loss, while the provision for impairment of assets is recognised.

2.10 Financial instruments

Policy applicable from 1 January 2018

Financial assets and financial liabilities are recognised in the consolidated statement of financial position when the Group becomes a party to the contractual provision of the financial instrument. Financial assets and financial liabilities are initially measured at fair value.

A financial asset or financial liability (unless it is a trade receivable without a significant financing component) is initially measured at fair value plus, for an item not at fair value through profit or loss ("FVTPL"), transaction costs that are directly attributable to its acquisition or issue. Transaction costs of financial assets carried at FVTPL are expensed in the consolidated statement of comprehensive income. A trade receivable without a significant financing component is initially measured at the transaction price.

(1) Classification and measurement of financial assets

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value through other comprehensive income ("FVTOCI") – debt investment; FVTOCI – equity investment; or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition, except if and in the period the Group changes its business model for managing financial assets.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

- (i) the asset is held within a business model whose objective is to hold assets 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.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortised cost or FVTOCI as described above are measured at FVTPL. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVTOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Financial assets: Business model assessment

The Group makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Group's continuing recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL.

2.10 Financial instruments (Continued)

Policy applicable from 1 January 2018 (Continued)

(1) Classification and measurement of financial assets (Continued)

Financial assets: Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, "principal" is defined as the fair value of the financial asset on initial recognition. "Interest" is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Group considers:

- (i) contingent events that would change the amount or timing of cash flows;
- (ii) terms that may adjust the contractual coupon rate, including variable rate features;
- (iii) prepayment and extension features; and
- (iv) terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse features).

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract. Additionally, for a financial asset acquired at a significant discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

Financial assets: Subsequent measurement and gains and losses

Financial assets at amortised cost

Notes and trade receivables, other receivables, restricted cash and cash and cash equivalents are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in the profit or loss. Any gain or loss on derecognition is recognised in the profit or loss.

Financial assets at FVTOCI

They are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the other comprehensive income reserve (non-recycling); and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, and will continue to be held in the other comprehensive income reserve (non-recycling).

Dividends on these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established in accordance with IFRS 9, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other income" line item in profit or loss.

(2) Derecognition of financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group enters into transactions whereby it transfers assets recognised on its consolidated statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets. In such cases, the transferred assets are not derecognised.

2.10 Financial instruments (Continued)

Policy applicable from 1 January 2018 (Continued)

(3) Impairment of financial assets

The Group recognises loss allowances for expected credit losses ("ECL") on financial assets measured at amortised cost.

The Group measures loss allowances at an amount equal to lifetime ECL. For notes and trade receivables, contract assets and retention receivables, the Group applies the simplified approach to providing for ECL prescribed by IFRS 9. The Group determines the ECL on these items by using a provision matrix, estimated based on historical credit losses experience based on the past due status of the debtors, adjusted as appropriate to reflect current conditions and estimates of future economic conditions.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

Lifetime ECL are the ECL that result from all possible default events over the expected life of a financial instrument.

12-month ECL are the portion of ECL that results from default events on a financial instrument that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

In all cases, the maximum period considered when estimating ECL is the maximum contractual period over which the Group is exposed to credit risk.

Measurement of ECL

ECL are a probability-weighted estimation of credit losses (i.e. the present value of all cash shortfalls) over the expected life of the financial assets.

The Group has the following types of assets that are subject to IFRS 9's new ECL model:

- notes and trade receivables
- contract assets
- cash and cash equivalents
- restricted cash
- long-term receivables
- other receivables

While cash and cash equivalents, restricted cash are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial.

For notes and trade receivables and contract assets, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the assets. The provision matrix is determined based on historical observed default rates over the expected life of the notes and trade receivables with similar credit risk characteristics and is adjusted for forward-looking estimates. At every reporting date the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

Impairment on other financial assets at amortised cost are measured as either 12-month ECL or lifetime ECL, depending on whether there has been a significant increase in credit risk since initial recognition. If a significant increase in credit risk of a receivable has occurred since initial recognition, then impairment is measured as lifetime ECL.

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

The Group assesses on in particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- significant deterioration in external market indication of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

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 recognised, the reversal of the previously recognised impairment loss is recognised in profit or loss.

2.10 Financial instruments (Continued)

Policy applicable from 1 January 2018 (Continued)

(3) Impairment of financial assets (Continued)

Credit-impaired financial assets

At each reporting date, the Group assesses on a forward-looking basis whether financial assets carried at amortised cost are credit-impaired. A financial asset is "credit-impaired" when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- (i) significant financial difficulty of the borrower or issuer;
- (ii) a breach of contract such as a default or past due event;
- (iii) the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- (iv) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or
- (v) the disappearance of an active market for a security because of financial difficulties.

The Group recognises an impairment loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of notes and trade receivables, other receivables, contract assets, long-term receivables, restricted cash and cash and cash equivalents etc., where the corresponding adjustment is recognised through a loss allowance account. For investments in debt instruments that are measured at FVTOCI, the loss allowance is recognised in OCI and accumulated in the FVTOCI reserve without reducing the carrying amounts of these debt instruments/receivables.

Write-off

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

A write-off constitutes a derecognition event. Any subsequent recoveries are recognised in profit or loss.

(4) Classification and measurement of financial liabilities

The Group's financial liabilities include notes and trade payables, other payables, long term borrowings and short term borrowings. Financial liabilities are classified as measured at amortised cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognised in the profit or loss.

(5) Derecognition of financial liabilities

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire.

The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different. In this case, a new financial liability based on the modified terms is recognised at fair value. The difference between the carrying amount of the financial liability extinguished and the new financial liability with modified terms is recognised in the profit or loss.

2.10 Financial instruments (Continued)

Policy applicable from 1 January 2018 (Continued)

(6) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the consolidated statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

Income and expenses are presented on a net basis only when permitted under IFRS, or for gains and losses arising from a group of similar transactions.

Policy applicable before 1 January 2018

Classification

The Group classifies its financial assets in the following categories: loans and receivables and available-for-sale financial assets. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

(i) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months after the end of the reporting period, which are classified as non-current assets. The Group's loans and receivables primarily include "Notes and trade receivables", "Other receivables", "Long-term receivables", "Restricted cash" and "Cash and cash equivalents" in the consolidated statement of financial position.

(ii) Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless the investment matures or management intends to dispose of it within 12 months after the end of the reporting period.

Recognition and measurement

Regular purchases and sales of financial assets are recognised on trade-date - the date on which the Group commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership. Available-for-sale financial assets are subsequently carried at fair value. Loans and receivables are subsequently carried at amortised cost using the effective interest method.

For available-for-sale equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured, they are measured at cost less any identified impairment losses at the end of each reporting period subsequent to initial recognition. An impairment loss is recognised in the consolidated statement of comprehensive income when there is objective evidence that the asset is impaired. Such impairment losses will not reverse in subsequent periods.

Changes in the fair value of available-for-sale investments are recognised in other comprehensive income. When available-for-sale investments are sold or impaired, the accumulated fair value adjustments recognised in equity are included in the consolidated statement of profit or loss and other comprehensive income. Dividends on available-for-sale equity instruments are recognised in the consolidated statement of comprehensive income when the right of the Group to receive payments is established. Interest on available-for-sale securities calculated using the effective interest method is recognised in the consolidated statement of comprehensive income as part of other income.

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the case of equity securities classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered as an indicator that the securities are impaired. If any such evidence exists for available-for-sale investments, the cumulative loss — measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that investments previously recognised in the consolidated statement of comprehensive income — is removed from equity and recognised in the consolidated statement of comprehensive income. Impairment losses recognised in the consolidated statement of comprehensive income on equity instruments are not reversed through the consolidated statement of comprehensive income. Impairment loss on the available-for-sale investment is measured as the difference between the carrying amount of the investment and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of trade and other receivables is established when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation and default or delinquency in payments are considered indicators that the receivable is impaired. The amount of the provision is the difference between the carrying amount of the asset and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying amounts of the assets are reduced through the use of allowance accounts, and the amount of the provision is recognised in the consolidated statement of comprehensive income. When a receivable is uncollectible, it is written off against the allowance account for receivables. Subsequent recoveries of amounts previously written off are credited in the consolidated statement of comprehensive income.

2.10 Financial instruments (Continued)

Policy applicable before 1 January 2018 (Continued)

Impairment of financial assets

The Group determines the amount of impairment loss by assessing the carrying amount of financial assets other than financial assets at fair value through profit or loss at each reporting date, if there is objective evidence that the financial assets are impaired. Objective evidence of impairment of financial assets are the matters that occurred after the initial recognition of financial assets which has impact on the expected future cash flows of financial assets, and can be reliably measured by the Group.

The objective evidence of impairment of the financial assets is including but not limited to:

- 1. significant financial difficulty of the debtor or issuer;
- 2. a breach of contract by the debtor, such as a default or delay in interest or principal payments;
- 3. the Group has economic or legal consideration relating to the debtor, granting a concession to the debtor who has financial difficulty;
- 4. it is probable that the debtor will enter into bankruptcy or other financial restructuring;
- 5. the disappearance of an active market for that financial asset because of financial difficulties faced by the issuer;
- 6. upon an overall assessment of a group of financial assets, observable data indicates that there is a measurable decrease in the estimated future cash flows from the group of financial assets since the initial recognition of those assets, although the decrease cannot be identified by the individual financial assets in the group. Such observable data includes:
 - Adverse effects in the repayment of debtor in the group of financial assets;
 - Economic conditions of the country or region that the debtor located may lead to a failure of repayment of the financial assets;
- 7. significant changes with an adverse effect that have taken place in the technology, market, economic or legal environment in which the issuer operates, indicating that the cost of investment in an equity instrument may not be recovered by the investor;
- 8. a significant decline in the fair value of an investment in an equity instrument below its cost or a prolonged decline (i.e., fair value decline lasting 12 months); Prolonged decline represented the monthly average fair value of the equity instruments is lower than the initial investment cost continuously for 12 months;
- 9. other objective evidence that indicate any impairment of a financial asset.

Financial assets measured at amortised cost

If there's objective evidence that the financial assets are impaired, then the carrying amount of financial assets shall be reduced to the present value of estimated future cash flows (excluding future credit losses that have not been incurred), with the reduced amount recognised in profit or loss in current period. The present value of estimated future cash flows using the financial asset's original effective interest rate, and considers the value of collateral.

For a financial asset that is individually significant, the Group assesses the asset individually for impairment, if there is objective evidence that it has been impaired, the impairment loss is recognised in profit or loss for the current period. For a financial asset that is not individually significant, the Group assesses the asset by including the asset in a group of financial assets with similar credit risk characteristics and collectively assess them for impairment. For an individually assessed financial asset (whether the financial asset is individually significant or not individually significant), the Group again includes the asset in a group of financial assets with similar credit risk characteristics and collectively assessed for impairment. Asset for which an impairment loss is individually recognised is not included in a collective assessment of impairment.

If, after an impairment loss has been recognised on financial assets measured at amortised cost, there is objective evidence of a recovery in value of the financial asset which can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through profit or loss. A reversal of an impairment loss to the extent that will not result in the asset's carrying amount exceeding that which would have been determined had no impairment loss been recognised previously.

Available-for-sale financial assets

If there's objective evidence that available-for-sale financial assets are impaired, accumulated losses due to decreases in fair value previously recognised directly in other capital reserve are reversed and transferred to profit or loss in current period. The reversed accumulated losses are the asset's initial acquisition costs after deducting amounts recovered and amortised, current fair value and impairment losses previously recognised in profit or loss.

If, in a subsequent period, the fair value of previously impaired financial assets increases and the increase can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment losses are reversed and charged to profit or loss for the current period. The impairment losses of available-for-sale equity instruments shall not be reversed through profit or loss.

Financial assets measured at cost

For equity instruments that do not have an active market and their fair values cannot be measured reliably, or derivative financial assets which are linked to equity instrument that is settled by delivering such equity instrument. If there's objective evidence that the financial assets are impaired, the difference between the carrying amount and the present value discounted at the market rate of return on future cash flows of the similar financial assets shall be recognised as impairment loss in profit or loss in current period. The impairment loss recognised shall no longer be reversed.

Offsetting financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the statements of consolidated financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the financial asset and settle the financial liability simultaneously. The legal enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

2.11 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

A fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability or in the absence of a principal market, in the most advantageous market for the asset or liability. The Group shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

If an active market exists for the financial assets or financial liabilities, the Group uses the quotation on the active market at its fair value. For those in the absence of active market, the Group uses valuation technique to recognise its fair value.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

An entity shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, in priority to use relevant observable inputs and only use unobservable inputs when observable inputs cannot be obtained.

The fair value measurement of the assets and liabilities measured at fair value is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability.

At each reporting date, the Group reassesses the assets and liabilities measured at fair value to ensure any transfer between the levels of the fair value hierarchy.

2.12 Inventories

(1) Classification

Inventories include raw materials, work in progress, consumables, finished goods and issuing goods, etc.

(2) Determination of cost

Inventories are recognised at its actual cost when acquired. Inventories are calculated by weighted average method when issued.

(4) Recognition of the net realisable value and provision for impairment of inventories

Net realisable value is based on the estimated selling price deducting the estimated costs to be, the estimated selling expenses and related taxes amount incurred when it is completed. Recognition of the net realisable value is based on the verified evidences and considers the purpose of holding inventories and the effect of post balance sheet events.

At the reporting date, if the cost of inventory of the Group exceeds its net realisable value, provision for impairment of inventories is recognised. The Group normally recognises provision for impairment of inventories individually, if the factors caused the inventory previously written-down have disappeared, provision for impairment of inventories in the amount originally provided is reversed.

(4) Inventory system

The Group adopts perpetual inventory system.

(5) Amortisation methods of consumables

Consumables include low-value consumables that are amortised in full when used.

2.13 Contract assets and contract liabilities

The contract asset is the Group's right to consideration in the exchange for services that the Group has transferred to customer. The contract assets transferred to trade receivables when receipt of the consideration is conditional only on the passage of time.

The Group expects that contract assets have the same risk characteristics as notes and trade receivables.

The contract liabilities above are due to the non-refundable advance payment made by customers. Such liabilities fluctuated as a result of the terms of different projects. A contract liability is the Group's obligation to render to services to a customer for which the Group has received consideration from the customer. A contract liability is recognised by the Group when the customer pays consideration but before the Group recognised the related revenue.

For a single contract with the customer, either a net contract asset or a net contract liability is presented. For multiple contracts, contract assets and contract liabilities of unrelated contracts are not presented on a net basis.

2.14 Cash and cash equivalents

Cash comprises cash on hand and deposits that can be readily drawn on demand. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

2.15 Share capital

Ordinary Shares are reclassified as equity. Share capital is recognised at the amount of consideration of shares issued, after deducting any transaction costs associated with the issuing of shares (net of any related income tax benefit) to the extent they are incremental costs directly attributable to the equity transaction.

2.16 Borrowing costs

(1) Recognition principle of capitalisation of borrowing costs

For borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset, they shall be capitalised and included in the cost of related assets; other borrowing costs are recognised as expenses and included in profit or loss when incurred. Capitalisation of such borrowing costs can commence only when all of the following conditions are satisfied:

- 1) Capital expenditures for the asset are being incurred, which includes the expenditure in the form of cash payment, transfer of non-cash assets or the interest bearing liabilities for the purpose of acquiring or constructing assets eligible for capitalisation;
- 2) Borrowing costs are being incurred; and
- Activities relating to the acquisition, construction or production of the asset that are necessary to prepare the asset for its intended use or sale have commenced.

(2) Capitalisation period of borrowing costs

Capitalisation of such borrowing costs ceases when the qualifying assets being acquired, constructed or produced become ready for their intended use or sale. The borrowing cost incurred after that is recognised as an expense in the period in which they are incurred and included in profit or loss for the period incurred.

Capitalisation of borrowing costs is suspended during the periods in which the acquisition, construction or production of a qualifying asset is interrupted abnormally and when the interruption is for a continuous period of more than 3 months; the borrowing costs in the normally interrupted period continue to capitalise.

(3) Calculation of rate and amount of borrowing costs to be capitalised

Interest expenses for specific borrowings incurred in the period, less interest income of unused specific borrowings deposited with bank or investment income arising from temporary investment are capitalised. The capitalisation rate of the general borrowing is determined by reference to the weighted average effective interest rate of general borrowings. The amount of capitalisation of general borrowings is determined by reference to the weighted average of the excess of the amount of cumulative expenditures of the asset over the amount of specific borrowings and the capitalisation rate of general borrowings.

During the capitalisation period, any exchange differences arising from specific foreign currency borrowings are capitalised; exchange differences arising from general foreign currency borrowings are recognised in the profit or loss.

2.17 Deferred tax assets and deferred tax liabilities

Tax expense comprises current tax expense and deferred tax expense. Current tax and deferred tax are included in profit or loss for the current period as tax expense, except for deferred tax related to transactions or events that are directly recognised in shareholders' equity which are recognised directly in shareholders' equity, and deferred tax arising from a business combination, which is adjusted against the carrying amount of goodwill.

Temporary differences arising from the difference between the carrying amount of an asset or liability and its tax base are recognised as deferred tax using the balance sheet liability method.

All the taxable temporary differences are recognised as deferred tax liabilities except for those incurred in the following transactions:

- (1) The initial recognition of goodwill, and the initial recognition of an asset or liability in a transaction which is neither a business combination nor affects accounting profit or taxable profit (or deductible loss) when the transaction occurs;
- (2) The taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, and the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The Group recognised deductible temporary differences, deductible tax losses as deferred tax assets to the extent that they are available for set-off future taxable income unless such timing difference was arised from the following transactions:

- (1) The transaction is neither a business combination nor affects accounting profit or taxable profit (or deductible loss) when the transaction occurs;
- (2) The deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, the corresponding deferred tax asset is recognised when both of the following conditions are satisfied: it is probable that the temporary difference will reverse in the foreseeable future, it is probable that taxable profits will be available in the future, against which the temporary difference can be utilised.

At the reporting date, deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, and their tax effect is reflected.

At the reporting date, the Group reviews the carrying amount of a deferred tax asset. If it is probable that sufficient taxable profits will not be available in future periods to allow the benefit of the deferred tax asset to be utilised, the carrying amount of the deferred tax asset is reduced. Any such reduction in amount is reversed when it becomes probable that sufficient taxable profits will be available.

2.18 Employee Benefits

(1) Scope of employee benefits

Employee benefits are all forms of consideration and compensation given by the Group in exchange for service rendered by employees or the termination of employment. Employee benefits include short term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits. Employee benefits include benefits provided to employees' spouses, children, other dependants, survivors of the deceased employees or to other beneficiaries.

(2) Short term employee benefits

Wages, bonuses, contribution to the social welfares (including medical insurance, injury insurance, birth insurance, etc.) and house funding are recognised as liability and to the profit of loss or cost of related assets in the period of relevant costs being incurred. If related liabilities in which the employees render their services are not expected to be wholly payable within twelve months after the financial period of relevant expenses being incurred and the financial impact is significant, relevant liabilities will be measured at discounted values.

(3) Post employment benefits

Post-employment comprised of defined contribution plan. The Group's obligations under the defined contribution plan are limited to the fixed amount of contribution to the independent trustee.

Defined contribution plans

Defined contribution plans include the basic pension insurance, unemployment insurance and annuity scheme.

In addition to the basic social pension insurance, the Group sets up annuity scheme according to the relevant policies of annuity system, employees may voluntarily participate in the annuity scheme. The Group has no other significant commitments of social security of employees.

The Group recognised the contribution payable under the defined contribution plan as liabilities with corresponding amount recognised in the profit or loss of the financial period of services rendered by employees.

(4) Termination benefits

The Group recognises termination benefits liabilities and profit or loss in the period in the earlier date of the followings: (i) The Group cannot unilaterally withdraws the termination plan or reduce the termination benefits under the proposal, or (ii) The Group recognises the payment of the termination benefits costs and expenses.

For the implementation of internal retirement plan for employees, the economic compensation before the official retirement date is termination benefit. From the date when the employee stops providing the service to the normal retirement date, the amount for wages and social insurance expenses to be paid for the internal retired employee would be recognised in profit or loss when incurred.

(5) Other long-term employee benefits

Other long-term employee benefits provided by the Group to its employees who meet with the conditions of defined contribution plan were treated in accordance with the relevant provisions of defined contribution plans as set out above.

2.19 Share-based payment and equity instruments

(1) Category of share-based payment

The term "share-based payment" refers to equity-settled share-based payment and cash-settled share-based payment. The Group's share option incentive plans are equity-settled share-based payments.

(2) Fair value of equity instrument

For the existence of an active market for options and other equity instruments granted by the group, the fair value is determined at the active market quotations. For options and other equity instruments with no active market, option pricing model shall be used to estimate the fair value of the equity instruments. Factors as follows shall be taken into account using option pricing models: (a) the exercise price of the option (b) the validity of the option (c) the current market price of the share (d) the expected volatility of the share price (e) predicted dividend of the share (f) risk-free rate of the option within the validity period.

(3) Recognition of vesting of equity instrument based on the best estimate

During the vesting period at each reporting period, the Group shall make the best available estimate of the number of equity instruments expected to vest and shall revise that estimate, if necessary, if subsequent information indicates that the number of equity instruments expected to vest differs from previous estimates. On vesting date, the entity shall revise the estimate to equal the number of equity instruments that ultimately vested.

2.19 Share-based payment and equity instruments (Continued)

(4) Accounting treatment of implementation, modification and termination of share-based payment

Equity-settled share-based payment is measured at the fair value of the equity instruments granted to employees. For the shares exercise immediately after the grant, the fair value of equity instrument at the grant date included in the relevant costs or expenses and increase in other capital reserve accordingly. Within the vesting period, it will recognise the received service-related costs or expense and other capital reserves for each reporting date based on the best estimate of the number of vested equity instruments on the grant date of the equity instruments value. After the vesting period, relevant costs or expenses and total shareholders' equity has been confirmed and will not be adjusted.

Cash-settled share-based payment calculates the fair value of liabilities assumed in accordance with the Group's shares or other equity instruments. For those exercised immediately after the grant, the fair value of the liability included in the relevant costs or expenses cause a corresponding increase in liabilities. For each reporting date in the vesting period, the best estimate of the vesting conditions in accordance with the Group is committed to the fair value of the amount of debt service will recognise the received costs or expenses and the corresponding liabilities. At each reporting date and the settlement date prior to the settlement of liabilities, the fair value of the liability is re-measured through profit or loss.

When there is changes in Group's share-based payment plans, if the modification increases the fair value of the equity instruments granted, corresponding recognition of service increase in accordance with the increase in the fair value of the equity instruments; if the modification increases the number of equity instruments granted, the increase in fair value of the equity instruments is recognised as a corresponding increase in service achieved. Increase in the fair value of equity instruments refer to the difference between the fair values of the modified date. If the modification reduces the total fair value of shares paid or not conductive to the use of other employees share-based payment plans to modify the terms and conditions of service, it will continue to be accounted for in the accounting treatment, as if the change had not occurred, unless the Group cancelled some or all of the equity instruments granted.

During the vesting period, if the cancelled equity instruments (except for failure to meet the conditions of the non-market vesting conditions, such as length of service performance conditions or market conditions are cancelled) granted by the Group to cancel the equity instruments granted amount treated as accelerated vesting of the remaining period should be recognised immediately in profit or loss, while recognizing the other capital reserve. Employees or other parties can choose to meet non-vesting conditions but are not met in the vesting period, the Group will treat it as canceled equity instruments granted.

2.20 Provision

An obligation for additional losses of investees related to a contingency is recognised as a provision when all of the following conditions are satisfied:

- 1. The obligation is a present obligation of the Group;
- 2. It is probable that an outflow of economic benefits will be required to settle the obligation;
- 3. The amount of the obligation can be measured reliably.

Provisions are initially measured at the best estimate of the payment to settle the associated obligations and consider the relevant risk, uncertainty and time value of money. If the impact of time value of money is significant, the best estimate is determined as its present value of future cash outflow. The Group reviews the carrying amount of provisions at the reporting date and adjusts the carrying amount to reflect the best estimate.

If the expenses for clearing of predictive liability is fully or partially compensated by a third party, and the compensated amount can be definitely received, it is recognised separated as asset. The compensated amount shall not be greater than the carrying amount of the predictive liability.

2.21 Research and development expenditure

Expenditure on an internal research and development project is classified into expenditure on the research phase and expenditure on the development phase.

Expenditure on the research phase is related to theories of oil-gas exploration and development, oil-gas exploration and development experiments, pilot tests for oil-gas exploration, researches of softwares, etc; Expenditure on the development phase is related to applications of oil-gas exploration and development technology, pilot tests of oil-gas development, adaptability of technologies in a development process, software developments, etc.

Expenditure on the research phase is recognised in profit or loss when incurred.

Expenditure on the development phase is capitalised only when the Group can satisfy all of the following conditions: the technical feasibility of completing the intangible asset so that it will be available for use or sale; its intention to complete the intangible asset is to use or sell it; how the intangible asset will generate economic benefits. Among other things, the Group can demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset; the availability of adequate technical, financial and other resources to complete the development and the ability to use or sell the intangible asset; its ability to measure reliably the expenditure attributable to the intangible asset during its development phase. Otherwise, it is charged to profit or loss.

The research and development projects of the Group will enter into the development stage after meeting the above conditions and passing through the technical feasibility and economic feasibility studies and the formation of the project.

Capitalised expenditure on the development phase is presented as "development costs" in the statement of financial position and shall be transferred to intangible assets when the project is completed to its intended use state.

2.22 Government grants

Grants from the government are recognised only when there is a reasonable assurance that the grant will be received and the Group can comply with the attached conditions.

If a government grant is in the form of a transfer of a monetary asset, the item is measured at the amount received or receivable. Where there is undoubted evidence that the grants can meet the relevant conditions of financial support policy and is expected that the financial support fund is receivable, they can be measured in accordance with the receivable amount, otherwise, they shall be measured according to the amount actually received. If a government grant is in the form of a transfer of a non-monetary asset, the item is measured at fair value. When fair value is not reliably determinable, the item is measured at nominal amount.

Government grant related to assets represents the government grant received for acquisition, construction and other ways of form of long term assets. Except for these, all are government grant related to income.

Regarding to the government grant not clearly defined in the official documents and can form long term assets, the part of government grant which can be referred to the value of the assets is classified as government grant related to assets and the remaining part is government grant related to income. For the government grant that is difficult to distinguish, the entire government grant is classified as government grant related to income.

A government grant related to an asset is recognised as deferred income, and evenly amortised to profit or loss over the useful life of the related asset. For a government grant related to income, if the grant is a compensation for related expenses or losses already incurred, the grant is recognised immediately in profit or loss for the current period; if the grant is a compensation for related expenses or losses to be incurred in subsequent periods, the grant is recognised as deferred income, and then recognised in profit or loss over the periods in which the costs are recognised. Government grants measured at nominal amounts are directly recognised in through profit or loss.

When recognised government grants need to be returned, the balance of deferred income is offset against book balance of deferred income and the excess is recognised in profit or loss for the current period; if there is no related deferred income, it is directly recognised in profit or loss for the current period.

2.23 Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the construction contracts and sale of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value-added tax and returns after eliminating sales within the Group.

To determine whether to recognise revenue, the Group follows a 5-step process:

- 1. Identifying the contract with a customer
- 2. Identifying the performance obligations
- 3. Determining the transaction price
- 4. Allocating the transaction price to the performance obligations
- 5. Recognising revenue when/as performance obligation(s) are satisfied

In all cases, the total transaction price for a contract is allocated amongst the various performance obligations based on their relative stand-alone selling prices. The transaction price for a contract excludes any amounts collected on behalf of third parties.

Revenue is recognised either at a point in time or over time, when (or as) the Group satisfies performance obligations by transferring the promised goods or services to its customers.

Where the contract contains a financing component which provides a significant financing benefit to the customer for more than 12 months, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction with the customer, and interest income is accrued separately under the effective interest method. Where the contract contains a financing component which provides a significant financing benefit to the Group, revenue recognised under that contract includes the interest expense accreted on the contract liability under the effective interest method.

Further details of the Group's revenue and other income recognition policies are as follows:

(1) Sales of products

Revenue from sales of products is recognised when i) control of the products has transferred, being when the products are delivered to the customers and there is no unfulfilled obligation that could affect the customer's acceptance of the products; and ii) collectability of the related receivables is reasonably assured.

(2) Revenue from construction and service contracts

When the outcome of construction and service contracts of drilling engineering, geophysics and engineering construction can be reasonably measured, revenue from the contracts are recognised progressively over time using the output method, based on the measurement of the total value of contract work performed, provided that the value of contract work performed can be measured reliably. Variations in contract work are recognised as contract revenue to the extent that the modification has been approved by the parties to the contracts and it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur.

The contract revenue from provision of services in special downhole operation and logging and mud logging is recognised when services are rendered.

When the outcome of the contract cannot be reasonably measured, revenue is recognised only to the extent of contract costs incurred that are expected to be recovered.

Revenue for construction contracts was recognised on a similar basis in the comparative period under IAS 11.

(3) Dividend income

Dividend income is recognised when the right to receive payment is established.

2.23 Revenue recognition (Continued)

(4) Interest income

Interest income is recognised on a time-proportion basis using the effective interest method. When a loan and receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flow discounted at the original effective interest rate of the instrument, and continues unwinding the discount as interest income. Interest income on impaired loan and receivables is recognised using the original effective interest rate.

2.24 Operating leases and finance leases

Assets that are held by the Group under leases which transfer to the Group substantially all the risks and rewards of ownership are classified as being held under finance leases. Leases which do not transfer substantially all the risks and rewards of ownership to the Group are classified as operating leases.

(1) As lessor

In finance leases, at the beginning date of lease period, the Group will recognise the sum of minimum lease collection and initial direct costs as the recorded value of finance leases receivable and meanwhile is recorded as unguaranteed residual value; the difference between the sum of minimum lease collection, initial direct costs and unguaranteed residual value and their present value is recorded as unrecognised financing income. Unrecognised financing income are measured at amortised cost using the effective interest method in the periods of leasing and recognised in financing income for the current period.

Rental income receivable from operating leases is recognised in profit or loss on a straight-line basis over the periods covered by the lease term.

(2) As lessee

In finance leases, at the beginning date of lease period, the Group will recognise the lower of the fair value of leased asset of the beginning date of lease period and the present value of minimum lease payment as the recorded value of the leased asset, their difference is recorded as unrecognised financing charges. Initial direct costs are recognised in leased assets' value. Unrecognised financing charges are measured at amortised cost using the effective interest method in the periods of leasing and recognised in financing charges for the current period. The Group depreciates the leased assets by adopting the depreciation policy consistent with self-owned fixed assets.

Lease from operating leases is recognised in the cost of relevant assets or profit or loss on a straight-line basis over the lease term. The initial direct costs incurred are recognised in profit or loss for the current period.

2.25 Shares repurchase

Prior to the cancellation or transfer of repurchased shares, the repurchased shares were classified as treasury shares. Costs of treasury shares comprised of cost incurred for the repurchase of shares. Costs incurred for repurchase of shares were deducted from equity and no profit or loss will be recognise upon repurchase or cancellation of shares.

Upon transfer of treasury shares, the differences between the considerations received and the nominal value of treasury shares were deducted from other capital reserve and share premium, any differences will be deducted from surplus reserves and retained earnings. Upon cancellation of treasury shares, share capital will be deducted by reference to number of shares and its nominal value, any difference between the nominal value of treasury shares will be deducted from the other capital reserve and share premium, any differences will be deducted from surplus reserves and retained earnings.

2.26 Related parties

For the purposes of these consolidated financial statements, a party is considered to be related to the Group if:

- (a) the party is a person or a close member of that person's family and if that person:
 - (i) has control or joint control over the Group;
 - (ii) has significant influence over the Group; or
 - (iii) is a member of the key management personnel of the Group or of a parent of the Group.
- (b) the party is an entity and if any of the following conditions applies:
 - $\hbox{(i)} \qquad \hbox{the entity and the Group are members of the same group;}\\$
 - (ii) one entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member);
 - (iii) the entity and the Group are joint ventures of the same third party;
 - (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;
 - (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group (if the Group is itself such a plan) and the sponsoring employers are also related to the Group;
 - (vi) the entity is controlled or jointly controlled by a person identified in (a);
 - (vii) a person identified in (a) (i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); or
 - (viii) the entity, or any member of a group of which it is a part, provide key management personnel services to the Group or to the parent of the Group.

Close members of the family or a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

2.27 Other non-current assets

Cost of other non-current assets, such as specific drilling equipment, logging equipment and tools and cables etc., were amortised over their estimated useful life or unit of production. Non-current assets that cannot generate future benefits are recognised in the profit or loss in the period of relevant cost being incurred.

Impairment of other non-current assets is set out in Note 2.9.

3 NEW AND AMENDED IFRS

The IASB has issued a number of new and amended IFRS. The Group has adopted all these new and amended IFRS, which are relevant to the Group's operations and effective for the Group's consolidated financial statements for the accounting period beginning on or after 1 January 2018:

Amendments to IFRS 2 Amendments to IFRS 4

IFRS 9 IFRS 15

Amendments to IFRS 15

Amendments to a number of IFRSs

Amendments to International Accounting Standard ("IAS") 40

IFRIC - Int 22

Classification and Measurement of Share-based Payment Transactions Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts

Financial Instruments

Revenue from Contracts with Customers

Clarifications to IFRS 15 Revenue from Contracts with Customers

Annual Improvements to IFRSs 2014-2016 Cycle

Transfers of Investment Property

Foreign Currency Transactions and Advance Consideration

Other than as noted below, the adoption of the new and amended IFRSs had no material impact on how the results and financial position for the current and prior periods have been prepared and presented.

IFRS 9 Financial Instruments

IFRS 9 replaces IAS 39 "Financial Instruments: Recognition and Measurement". It makes major changes to the previous guidance on the classification and measurement of financial assets and introduces an "ECL model" for the impairment of financial assets.

When adopting IFRS 9, the Group has applied the standard retrospectively to items that existed at 1 January 2018 in accordance with the transition requirement and also applied transitional relief and opted not to restate prior periods. Differences arising from the adoption of IFRS 9 in relation to classification, measurement, and impairment are recognised in accumulated losses.

The adoption of IFRS 9 has impacted the following areas:

Classification and measurement of financial assets

Trade receivables arising from contracts with customers are initially measured in accordance with IFRS 15.

All recognised financial assets that are within the scope of IFRS 9 are subsequently measured at amortised cost or fair value, including unquoted equity investments measured at cost less impairment under IAS 39.

Debt instruments that meet the following conditions are subsequently measured at amortised cost:

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

3 NEW AND AMENDED IFRS (Continued)

IFRS 9 Financial Instruments (Continued)

Classification and measurement of financial assets (Continued)

Financial assets designated as at fair value through other comprehensive income

At the date of initial application/initial recognition, the Group may make an irrevocable election (on an instrument-by-instrument basis) to designate investments in equity instruments as at fair value through other comprehensive income ("FVTOCI").

Investments in equity instruments at FVTOCI are initial measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income; and are not subject to impairment assessment. The cumulative gain or loss accumulated in fair value through other comprehensive income reserve will not be reclassified to profit or loss on disposal of the equity investments, and will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established in accordance with IFRS 9, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other income" line item in profit or loss.

The Group elected to present in other comprehensive income for the fair value changes of all equity investments previously classified as available-for-sale financial assets at costs less impairment loss. The investments are not held for trading and not expected to be sold in the foreseeable future. At the date of initial application of IFRS 9, RMB24,389,000 were reclassified from available-for sale financial assets to financial assets at FVTOCI.

The following adjustments were made to the amounts recognised in the consolidated statement of financial position at 1 January 2018. Line items that were not affected by the changes have not been included.

	Carrying amount as at 31 December 2017 under IAS 39 RMB'000	Reclassification	Carrying amount as at 1 January 2018 under IFRS9 RMB'000
Non-current assets			
Financial assets at FVTOCI (note)	_	24,389	24,389
Available-for-sale financial assets	24,389	(24,389)	_
	24,389	_	24,389

Note:

The fair value of the unlisted equity securities is measured using valuation techniques with reference to the net asset value, which is categorised as level 3 of fair value hierarchy.

The directors believe that the change in fair value (which is included in other comprehensive income) derived from the valuation technique is reasonable and is the most appropriate value at the end of the reporting period. At 1 January 2018, the difference between fair value and the cost of the unlisted equity securities is minimal and there was no impact on accumulated losses at 1 January 2018.

Except as described above, the adoption of IFRS 9 does not have a significant impact to the Group's results and financial position for the current or prior periods.

Impairment of financial assets

IFRS 9 replaces the "incurred loss" model in IAS 39 with the ECL model. The ECL model requires an ongoing measurement of credit risk associated with a financial asset and therefore recognises ECL earlier than under the "incurred loss" accounting model in IAS 39.

The Group applies the new ECL model to the following items:

- financial assets measured at amortised cost (including restricted cash, cash and cash equivalents, notes and trade receivables, other receivables and long term receivables);
- · contract assets as defined in IFRS 15; and
- financial guarantee contracts.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses ("ECL") which uses a lifetime expected loss allowance for trade receivable and contract assets. The ECL on these assets are assessed collectively using a provision matrix with appropriate groupings based on debtors' aging.

For all other instruments, the Group measures the loss allowance equal to 12-month ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

The credit losses calculated pursuant to the new requirements are not significantly different from the amount recognised under the current practices. Therefore, the Group considered no adjustment is necessary upon the initial adoption of the standard.

Classification and measurement of financial liabilities

There have been no changes to the classification or measurement of financial liabilities as a result of the application of IFRS 9.

3 NEW AND AMENDED IFRS (Continued)

IFRS 15 Revenue from contracts with customers

IFRS 15 "Revenue from contracts with customers" and "Clarifications to IFRS 15 Revenue from Contracts with Customers" (collectively refer to as "IFRS 15") replaces the previous revenue standards IAS 18 "Revenue", IAS 11 "Construction Contracts", and several revenue-related Interpretations.

IFRS 15 provides a single model for accounting for revenue arising from contracts with customers, focusing on the identification and satisfaction of performance obligations. The standard specifies that revenue is to be recognised when control over the goods or services is transferred to the customer, moving from the transfer of risk and rewards.

IFRS 15 requires entities to exercise judgment, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract. In addition, the standard requires extensive disclosures.

The Group has elected to use the cumulative effect transition method, with the cumulative effect of initial application recognised as an adjustment to the opening balance of accumulated losses at 1 January 2018. Therefore, comparative information has not been restated and continues to be reported under IAS 11 and IAS 18.

The adoption of IFRS 15 has impacted the following areas:

Timing of revenue recognition

The Group recognises revenue from the following major sources:

- Sales of goods
- · Rendering of drilling engineering, geophysics, engineering construction, special downhole operations and logging and mud logging

IFRS 15 identifies three situations where control of the promised goods or services is regarded as being transferred over time:

- (1) When the customer simultaneously receives and consumes the benefits provided by the entity's performance, as the entity performs;
- (2) When the entity's performance creates or enhances an asset (for example work in progress) that the customer controls as the asset is created or enhanced:
- (3) When the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

If the contract terms and the entity's activities do not fall into any of these 3 situations, then under IFRS 15 the Group recognises revenue for the sale of that good or service at a single point in time, being when control has passed. Transfer of risks and rewards of ownership is only one of the indicators that is considered in determining when the transfer of control occurs.

The expected impact arising from the adoption of IFRS 15 on the Group are summarised as follows:

Construction and service contracts

At report date, the revenue recognition of rendering construction and service contracts in the drilling engineering, geophysics and engineering construction, is based on the progress towards complete satisfaction of a performance obligation, which is measured at the percentage of completion and recognised revenue by output method.

The revenue from provision of services in special downhole operation and logging and mud logging is recognised when services are rendered.

The Group has determined that there is no material impact on the Group's financial statements when IFRS 15 is adopted in accounting for the Group's revenue from the construction and services contracts not yet completed as at 1 January 2018. This is because the current accounting treatments of such contracts are largely consistent with the requirements of IFRS 15.

Presentation of contract assets and liabilities

Under IFRS 15, a receivable is recognised only if the Group has an unconditional right to consideration. If the Group recognises the related revenue (note 2.23) before being unconditionally entitled to the consideration for the promised goods and services in the contract, then the entitlement to consideration is classified as a contract asset. Similarly, a contract liability, rather than a payable, is recognised when a customer pays consideration, or is contractually required to pay consideration and the amount is already due, before the Group recognises the related revenue.

Previously, contract balances relating to construction contracts in progress were presented in the consolidated statement of financial position under "Amounts due from customers for contract works" and "Amounts due to customers for contract works" respectively.

To follow the terminology used under IFRS 15, the Group has made the following adjustments at 1 January 2018:

- (1) "Amounts due from customers for contract works" under "Contract work-in-progress" (Note 24(a)) amounting to RMB6,883,350,000 had been reclassified as "Contract assets" (Note 24(b));
- (2) "Amounts due to customers for contract work" under "Contract work-in-progress" (Note 24(a)) amounting to RMB6,788,227,000 had been reclassified as "Contract liabilities" (Note 24(c));
- (3) "Receipt in advance from customers" in relation to deposits or payment received in advance for services not yet delivered to customers under "Deposits received and other payables" (Note 34) amounting to RMB1,773,584,000 had been reclassified as "Contract liabilities" (Note 24(c)); and
- (4) "Expected loss on contracts" in relation to provision for onerous contract under "Contract work-in-progress" (Note 24(a)) amounting to RMB259,048,000 has been reclassified as "Provisions" (Note 39).

3 NEW AND AMENDED IFRS (Continued)

IFRS 15 Revenue from contracts with customers (Continued)

Presentation of contract assets and liabilities (Continued)

The following adjustments were made to the amounts recognised in the consolidated statement of financial position at 1 January 2018. Line items that were not affected by the changes have not been included.

	Carrying amounts previously reported under IAS11 and IAS18 at 31 December 2017 RMB'000	Reclassification RMB'000	Carrying amounts under IFRS 15 at 1 January 2018 RMB'000
Current assets			
Amounts due from customers for contract works	6,624,302	(6,624,302)	_
Contract assets	_	6,883,350	6,883,350
Current liabilities			
Receipt in advance and other payables	9,443,884	(1,773,584)	7,670,300
Amounts due to customers for contract works	6,788,227	(6,788,227)	_
Contract liabilities	_	8,561,811	8,561,811
Provisions	_	259,048	259,048

The new and amended accounting standards issued but not yet effective for the accounting period ended 31 December 2018 which are relevant to the Group but the Group has not early adopted are set out below:

IFRS 16 IFRS 17

Amendments to IAS 1 and IAS 8
Amendments to IFRS 3
Amendments to IFRS 9

Amendments to IFRS 10 and IAS 28

Amendments to IAS 19 Amendments to IAS 28

IFRIC 23

Amendments to a number of IFRSs

Leases1

Insurance Contracts³
Definition of Material²
Definition of a Business⁵

Prepayment Features with Negative Compensation¹

Sale or Contribution of Assets between an Investor and its Associate or

Joint Venture⁴

Plan Amendment, Curtailment or Settlement¹ Long-term Interests in Associates and Joint Ventures¹

Uncertainty over Income Tax Treatments¹
Annual Improvements to IFRSs 2015-2017 Cycle¹

1 Accounting periods beginning on or after 1 January 2019

- 2 Accounting periods beginning on or after 1 January 2020
- 3 Accounting periods beginning on or after 1 January 2021
- 4 Effective date not yet been determined
- 5 Effective for business combinations and asset acquisitions for which the acquisition date is on or after the beginning of the first annual period beginning on or after 1 January 2020

The directors of the Company anticipate that, except as described below, the application of other new and amended IFRSs will have no material impact on the results and the financial position of the Group.

3 NEW AND AMENDED IFRS (Continued)

IFRS 16 Leases

IFRS 16 replaces IAS 17 "Leases", IFRIC 4 "Determining whether an Arrangement contains a Lease", SIC- 15 "Operating Leases – Incentives" and "SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease". The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to recognise assets and liabilities for most leases. The standard includes two elective recognition exemptions for lessees – leases of low-value assets and short-term leases. At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). The right-of-use asset is subsequently measured at cost less accumulated depreciation and any impairment losses unless the right-of-use asset meets the definition of investment property in IAS 40. The lease liability is subsequently increased to reflect the interest on the lease liability and reduced for the lease payments. Lessees will be required to separately recognise the interest expense accrued on the outstanding balance of lease liability and the depreciation expense on the right-of-use asset. Lessees will also be required to remeasure the outstanding balance of lease liability upon the occurrence of certain events, such as change in the lease term and change in future lease payments resulting from a change in an index or rate used to determine those payments. Lessees will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset. IFRS 16 also requires lessees and lessors to make more extensive disclosures than under IAS 17.

Lessor accounting under IFRS 16 is substantially unchanged from the accounting under IAS 17. Lessors will continue to classify all leases using the same classification principle as in IAS 17 and distinguish between operating leases and finance leases.

IFRS 16 is effective for annual periods beginning on or after 1 January 2019. As allowed by IFRS 16, the Group plans to use the practical expedient to grandfather the previous assessment of which existing arrangements are, or contain, leases. The Group will therefore apply the new definition of a lease in IFRS 16 only to contracts that are entered into on or after the date of initial application. In addition, the Group plans to elect the practical expedient for not applying the new accounting model to short-term leases and leases of low-value assets.

The Group plans to elect to use the modified retrospective approach for the adoption of IFRS 16 and will recognise the cumulative effect of initial application as an adjustment to the opening balance of equity at 1 January 2019 and will not restate the comparative information. As disclosed in note 37(b), as at 31 December 2018 the Group's future minimum lease payments under non-cancellable operating leases amounted to RMB382,990,000 for residential properties, office and equipment, a portion of which is payable between 1 and 5 years after the reporting date.

IFRS 16 provides new provisions for the accounting treatment of leases and will in the future no longer allow lessees to recognise certain leases outside of the consolidated statement of financial position. Instead, all non-current leases must be recognised in the form of a right-of-use asset and a lease liability. Thus each lease will be mapped in the Group's consolidated statement of financial position. Short-term leases of less than twelve months and leases of low-value assets are exempt from the reporting obligation. The new standard will therefore result in an increase in a right-of-use asset and an increase in a lease liability in the consolidated statement of financial position. In the consolidated statement of comprehensive income, leases will be recognised in the future as capital expenditure on the purchasing side and will no longer be recorded as an operating expense. As a result, the operating expense under otherwise identical circumstances will decrease, while depreciation and amortisation and the interest expense will increase.

4 CRITICAL ACCOUNTING JUDGEMENT AND ESTIMATES

The Group continually evaluates the critical accounting estimates and key assumptions based on its historical experience and other factors, including expectation of future events that are believed to be reasonable under the circumstances.

The critical accounting estimates and key assumptions that are likely to have significant risks of causing material adjustments to the carrying amounts of assets and liabilities in the next financial year are set out as below:

(1) Classification of financial assets

The Group's critical judgements on determining the classification of financial assets include business model and analysis of contractual cash flow characteristics.

The Group's assessment of the business model is performed on a financial assets portfolio basis, taking into consideration of the way for how the performance of the financial assets are evaluated and reported to the Group's key management personnel, the way for how the risks for being affected by the performance of the financial assets are evaluated and managed, and the way for how managers of are compensated and etc.

The Group's critical judgements on whether the cash flows are consistent with the loan arrangement include whether principal amount may change (including future cash flow and amount) the over the life of the financial asset (for example, if there are early repayments of principal) and whether interest only consists of consideration for the time value of money, for the credit risk, and for other basic lending risks and costs, as well as a profit margin. For examples, whether the amount for early repayment solely reflects the outstanding principal and related interest and the reasonable compensation for the early termination of agreement.

(2) Provision for ECL of trade receivables and contract assets

Before the adoption of IFRS 9, the Group determines the provision for impairment on trade receivables (Note 22) and contract assets (Note 24(b)). This estimate is based on the credit history of the customers and the current market condition. Management reassesses the adequacy of provision on a regular basis by reviewing the individual account based on past credit history and any prior knowledge of debtor insolvency or other credit risk which might not be easily accessible public information and market volatility might bear a significant impact which might not be easily ascertained.

Since the initial adoption of IFRS 9, the Group makes allowances on trade receivables and contract assets based on assumptions about risk of default and expected loss rates. The Group applies judgment in making these assumptions and selecting the inputs to the ECL calculation, based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period. During the year ended 31 December 2018, the ECL allowance on trade receivables and contract assets are RMB27,221,000 (2017: the provision for impairment is RMB1,164,308,000) and RMB26,525,000 (2017: Nil) respectively.

4 CRITICAL ACCOUNTING JUDGEMENT AND ESTIMATES (Continued)

(3) Provision for decline in value of inventories

The Group regularly reviews the net realisable value of inventories and the provision for decline in value of inventories is recognised at the excess of the carrying amounts of inventories over their net realisable value. When making estimation of the net realisable value of inventories, the Group considers the purpose of the inventories held on hand and other information available to form the underlying assumptions, including the market prices of inventories and the Group's historical operating costs. The actual selling price, costs of completion, selling expenses and taxes may vary according to the changes in market conditions, manufacturing technology or the actual use of the inventories, resulting in the changes in provision for decline in value of inventories. The profit or loss for the period will be affected by the adjustment of the provision for decline in value of inventories. The carrying amount of inventories is set out in Note 25.

(4) Impairment of non-financial assets

As at the reporting date, the Group assess the impairment of non-financial assets to ensure whether the asset's carrying amount exceeds its recoverable amount. In circumstances indicate that the carrying amount may not be recoverable, relevant assets will be impaired and relatively recognised to impairment loss.

The recoverable amount is the higher of an asset's (or a group of assets') fair value less costs to sell and estimated future cash flow. The Group cannot estimate the accurate fair value since no reliable open market value of the assets can be obtained. The Group determines critical judgements on the product quantity, selling price, gross profit, related operating cost and the discount rate in assessing the present value of estimated future cash flow. The Group assesses the recoverable value in reference to the relevant information including the estimates according to reasonable assumptions on the production quantity, selling price, gross profit and related operating cost. The Group will increase the provision of impairment on the non-financial assets if there is material adverse effect on the related assumptions and estimates. Carrying amount of non-financial assets is set out in Notes 17, 18, 19 and 20.

(5) Research and development costs

Research costs are expensed as incurred. Costs incurred on development projects relating to the design and testing of new or improved products are recognised as an intangible asset where the technical feasibility and intention of completing the product under development has been demonstrated and the resources are available to do so, costs are identifiable and there is an ability to sell or use the asset that will generate probable future economic benefit. Significant judgement is required in determining the capitalisation of development costs. Development costs that are recognised as assets are amortised on the straight-line basis to reflect the pattern in which the related economic benefits are recognised. Development costs that do not meet the above criteria are expensed as incurred.

(6) Depreciation and amortisation of property, plant and equipment, intangible assets and other non-current assets

The Group takes into account of residual value before calculating the depreciation and amortisation of property, plant and equipment, intangible assets and other non-current assets. The Group regularly review the estimated useful lives of the assets to determine the depreciation and amortisation charged in each reporting period. The useful lives of the assets are determined based on historical experiences of similar assets and the estimated technical changes, the amortisation periods for other non-current assets are determined by the Group in accordance with the expected benefit period of each assets. Depreciation and amortisation charges is revised if there is material adverse effect on the previous estimation.

Carrying amount of property, plant and equipment and intangible assets is set out in Notes 17 and 19.

(7) Revenue recognition

The contract revenue petroleum engineering and technical services provided by the Group is recognised over time. The contract revenue and profit recognition of related service depends on the total budgeted contract revenue and the estimation of progress towards satisfaction of a performance obligation by the Group. The management of the Group adopts either the expected value or most likely amount method according to the contract to estimate the total budgeted contract revenue, and evaluates the total budgeted contract costs according to historical information and construction plan. In view of the fact that the construction service contract cycle may span multiple accounting periods, the Group will continuously and periodically review and revise the budgeted contract revenue and contract costs during the progress of the contracts. If the total contract revenue and contract costs are actually higher or lower the management's estimated value, the Group's amount of revenue and profit recognition will be affected in the future.

(8) Provision for litigation claims

For the legal proceedings and claims, the Group derives the best estimate of committed losses to the related current obligations based on the legal advices consulted and according to the process and solutions of the legal proceedings and claims. The estimated losses will change according to the progress of the legal proceedings. The related information is set out in Note 40.

(9) Deferred tax assets

Deferred tax assets are recognised for all unused tax losses when the Group is likely to have sufficient taxable profits to offset losses. The management needs significant judgment to estimate the time in relation to the future taxable profits and tax planning strategy to recognise the appropriate amount of deferred income tax assets. If the tax payable in future accounting period is lower than the expected amount or the actual tax rate is higher than the expected tax rate, the deferred tax assets recognised will be reversed and included in the statements of profit or loss. The related information is set out in Note 36.

4 CRITICAL ACCOUNTING JUDGEMENT AND ESTIMATES (Continued)

(10) Taxation

There are various uncertainties on interpretation of the complicated tax jurisdictions (including related tax incentive regulations) and time and extent of the future taxable revenue. Regarding to various international business relationship and complexity of current contract, there may be adjustment to the recognised taxable income and expenses in the future due to the differences arising from actual operating results and its assumptions or estimated changes in the future. The Group has reasonably estimated the provision of taxation from the possible results of the tax authorities in the countries where the Group operates. Such provision of taxation is based on different factors, such as previous tax audit experience and the tax jurisdiction interpretation from taxable entity and related tax authorities. Since the Group operates in different tax regions, different interpretations may be resulted from various events. Relevant information is set out in Notes 12 and 40(c).

5 REVENUE AND SEGMENT INFORMATION

The Group's revenue is as follows:

	2018	2017
	RMB'000	RMB'000 (Restated)
Geophysics	5,132,418	3,980,166
Drilling engineering	30,086,180	24,821,489
Logging and mud logging	2,044,752	1,823,517
Special downhole operations	5,671,037	4,193,964
Engineering construction	13,242,985	11,920,110
Others	2,231,706	1,854,702
	58,409,078	48,593,948

Segment information

The Group identifies its operating segments based on the internal organisation structure, senior executive management requirements and internal reporting system. The Group has identified five operating segments including geophysics, drilling engineering, logging and mud logging, special downhole operations and engineering construction. These operating segments are identified based on the regular internal financial information reported to the senior executive management. Senior executive management of the Company regularly reviews the segment information for their decision about the resources allocation and performance assessment.

Five reportable operating segments are as follows:

- Geophysics, which provides terrestrial and marine geophysical exploration, development and technical services;
- Drilling engineering, which provides customers with land and ocean drilling design, construction, technical services and drilling instrumentation;
- Logging and mud logging, which provides land and ocean project contracting and technical services for collection, monitoring, transmission, processing and interpretation and evaluation of wellbore oil and gas, geology and engineering information;
- Special downhole operations, which provides oil engineering technical and construction, including oil (gas) testing, well repair, lateral drilling, fracturing, acidising and oil assignments; and
- Engineering construction, which provides a package of services, including feasibility studies, design, procurement, construction for projects of onshore and offshore oil and gas fields, long-distance pipeline projects, oil and gas transporting process projects, storage and transportation projects, petrochemical supporting projects, building construction, water resources and hydropower, ports and waterways, electricity transmission and distribution projects, manufacturing of pressure vessels, LNG projects, coal chemical engineering, geothermal utilisation, energy saving and municipal roads and bridges.

Inter-segment transfers are measured by reference to market price. The assets are allocated based on the operations of the segment and the physical location of the asset.

All assets are allocated to reportable segments other than certain property, plant and equipment, certain prepaid land leases, certain intangible assets, certain other non-current assets, certain inventories, certain contract assets, certain notes and trade receivables, certain prepayment and other receivables, certain cash and cash equivalents, and certain deferred tax assets.

All liabilities are allocated to reportable segments other than certain borrowings, certain deferred income, certain deferred tax liabilities, certain notes and trade payables, certain deposits received and other payables, certain contract liabilities, and certain tax payable.

The resources related to interest income, interest expenses, interests in joint venture, interests in associates, gain on investment, income tax expense as well as shared assets of all segments are centrally managed and accounted for by the Company, and thus are not allocated among segments.

Segment information of each reportable segment were reported and disclosed to the senior executive management in accordance with the accounting policies and the respective measurement bases. These accounting policies and measurement bases were the same as those used in for the preparation of the consolidated financial statements.

5 REVENUE AND SEGMENT INFORMATION (Continued)

Segment information (Continued)

Information regarding each reportable segment provided to the senior executive management was as follows:

(a) Segment results, assets and liabilities

For the year ended 31 December 2018 and as at that date, the segment results, assets and liabilities were as follows:

	Geophysics	Drilling engineering	Logging and mud logging	Special downhole operations	Engineering construction	Unallocated	Eliminated	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
During the year ended 31 December 2018								
Segment revenue and results				·		·		
Revenue from external customers	5,132,418	30,086,180	2,044,752	5,671,037	13,242,985	2,231,706	_	58,409,078
Inter-segment income	_	183,139	819,793	441,421	80,190	332,146	(1,856,689)	_
Segment revenue	5,132,418	30,269,319	2,864,545	6,112,458	13,323,175	2,563,852	(1,856,689)	58,409,078
Reportable segment revenue/(loss)	36,015	632,486	(289,656)	232,278	(105,231)	(288,791)	_	217,101
Other income	38,644	343,983	21,246	47,141	607,719	140,879	_	1,199,612
Other expenses	(30,630)	(39,439)	(3,543)	(8,467)	(520,938)	(199,927)	_	(802,944)
Profit/(Loss) before income tax	44,029	937,030	(271,953)	270,952	(18,450)	(347,839)	_	613,769
Income tax expense								(373,581)
Profit for the year			<u>,</u>	,			<u> </u>	240,188

	Geophysics	Drilling engineering	Logging and mud logging	Special downhole operations	Engineering construction	Unallocated	Eliminated	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
During the year ended 31 December 2018								
Supplementary information								
Depreciation and amortisation								
- Property, plant and equipment	411,210	1,633,206	168,281	393,311	197,061	271,399	_	3,074,468
- Other non-current assets	43,064	1,189,025	34,327	122,600	11,437	159,356	_	1,559,809
- Prepaid land leases	_	444	415	1,895	507	_	_	3,261
- Intangible assets	326	52,083	1,145	630	5,790	6,005	_	65,979
Capital expenditure								
- Property, plant and equipment	126,784	939,401	77,042	111,271	227,294	19,130	_	1,500,922
- Prepaid land leases	_	101	_	1,661	_	_	_	1,762
- Intangible assets	_	660	2,979	67	9,382	_	_	13,088
Provision/(Reversal of provision) for ECL on trade receivables, net	35,872	148,547	7,129	(5,520)	(155,526)	(3,281)	_	27,221
Provision/(Reversal of provision) for ECL on other receivables, net	(509)	(7,064)	13	1,863	1,290	(12,271)	_	(16,678)
Provisions - loss on judicial reorganisation	_	_	_	_	475,276	_	_	475,276
ECL on contract assets	1,666	7,633	23	449	16,749	5	_	26,525
As at 31 December 2018								
Assets								
Segment assets	5,155,309	35,314,230	2,124,388	5,471,270	23,430,227	27,336,770	(37,927,479)	60,904,715
Liabilities								
Segment liabilities	4,004,200	28,583,953	1,527,149	2,833,859	23,366,680	32,737,943	(37,927,479)	55,126,305

5 REVENUE AND SEGMENT INFORMATION (Continued)

Segment information (Continued)

(a) Segment results, assets and liabilities (Continued)

For the year ended 31 December 2017 and as at that date, the segment results, assets and liabilities were restated as follows:

	Geophysics RMB'000	Drilling engineering RMB'000	Logging and mud logging	Special downhole operations RMB'000	Engineering construction	Unallocated RMB'000	Eliminated RMB'000	Total RMB'000
During the year ended 31 December 2017								
Segment revenue and results								
Revenue from external customers	3,980,166	24,821,489	1,823,517	4,193,964	11,920,110	1,854,702	_	48,593,948
Inter-segment income	5,179	181,418	614,795	211,021	217,396	179,601	(1,409,410)	_
Segment revenue	3,985,345	25,002,907	2,438,312	4,404,985	12,137,506	2,034,303	(1,409,410)	48,593,948
Reportable segment loss	(283,140)	(5,418,639)	(769,873)	(1,575,487)	(2,175,958)	(157,071)		(10,380,168)
Other income	29,727	238,152	8,153	45,848	101,216	79,369	_	502,465
Other expenses	(79,382)	(309,788)	(9,618)	(7,769)	(28,522)	(11,395)	_	(446,474)
Loss before income tax	(332,795)	(5,490,275)	(771,338)	(1,537,408)	(2,103,264)	(89,097)	_	(10,324,177)
Income tax expense								(239,034)
Loss for the year								(10,563,211)

	Geophysics	Drilling engineering	Logging and mud logging	Special downhole operations	Engineering construction	Unallocated	Eliminated	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
During the year ended 31 December 2017								
Supplementary information								
Depreciation and amortisation								
- Property, plant and equipment	476,755	1,832,594	194,605	458,709	208,577	118,047		3,289,287
- Other non-current assets	52,372	1,824,144	47,134	97,103	26,164	41,806		2,088,723
- Prepaid land leases	_	427	417	1,805	507	_	_	3,156
- Intangible assets	530	66,382	559	931	6,428	5,977		80,807
Capital expenditure								
- Property, plant and equipment	142,746	653,396	42,150	61,983	55,412	74,973		1,030,660
- Prepaid land leases		495	3,790	_	2,551		_	6,836
Impairment loss on trade receivables, net	38,509	92,645	20,696	811,349	196,887	4,222	_	1,164,308
Impairment loss on/(Reversal of) other receivables, net	2,058	4,555	(51)	2,618	103,834	(8,454)	_	104,560
Expected loss on contracts work-in-progress	_	_	_	_	245,039	_	_	245,039
Write down of inventories to net realisable value	3,052	69,404	_	_	_	_	_	72,456
Impairment loss on property, plant and equipment	5,677	877,930	160,404	97,523	_	7,960	_	1,149,494
As at 31 December 2017								
Assets								
Segment assets	5,318,569	34,807,136	2,007,167	6,394,501	7,075,014	22,703,276	(16,216,348)	62,089,315
Liabilities								
Segment liabilities	4,602,485	29,309,833	1,568,472	3,830,778	15,701,754	25,393,659	(16,216,348)	64,190,633

5 REVENUE AND SEGMENT INFORMATION (Continued)

Segment information (Continued)

(b) Geographical information

The following table sets out information about the geographical location. Revenue is based on the location in which revenue were derived. Specified non-current assets include property, plant and equipment, other non-current assets, prepaid land leases, intangible assets, interests in joint ventures and interests in associates, which are based on the physical location of the assets.

	Revenue from external customers		
	2018	2017	
	RMB'000	RMB'000 (Restated)	
The PRC	45,268,611	35,607,732	
Middle East	7,362,296	7,913,339	
Other countries	5,778,171	5,072,877	
	58,409,078	48,593,948	

	Specified non-current assets		
	2018	2017	
	RMB'000	RMB'000 (Restated)	
The PRC	24,470,738	26,496,177	
Other countries	3,860,044	2,958,083	
	28,330,782	29,454,260	

(c) Major customer

For the years ended 31 December 2018 and 2017, revenue from customers which individually contributed over 10% of the Group's revenue is as follows:

	2018	2017
	RMB'000	RMB'000 (Restated)
Customer A	36,885,294	28,333,921

Revenue from this customer was derived from the operating segments of geophysics, drilling engineering, logging and mud logging, special downhole operations, engineering construction and accounted for more than 50% of the Group's revenue.

(d) Analysis on revenue from contracts

For the year ended 31 December 2018, the Group derives revenue from the transfer of goods and service at a point in time and over time in the following customers' segment for geophysics, drilling engineering, logging and mud logging, special downhole operations, engineering construction service:

	Geophysics	Drilling engineering	Logging and mud logging	Special downhole operations	Engineering construction	Unallocated	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Timing of revenue recognition:							
- At a point in time	_	25,886	594	26,755	81,577	274,882	409,694
- Over time	5,132,418	30,060,294	2,044,158	5,644,282	13,161,408	1,956,824	57,999,384
Total	5,132,418	30,086,180	2,044,752	5,671,037	13,242,985	2,231,706	58,409,078

6 FINANCE EXPENSES- NET

	2018	2017
	RMB'000	RMB'000 (Restated)
Finance income		
Interest income from entrusted loans		
- Sinopec Group's subsidiaries	_	67
Interest income		
- Sinopec Group's subsidiaries	1,878	524
- Third-party banks and other financial institutions	86,008	18,858
	87,886	19,449
Finance expenses		
Interest expenses on borrowings wholly repayable within 5 years		
- Sinopec Group and its subsidiaries	(582,557)	(639,109)
- Third-party banks and other financial institutions	(49,732)	(6,908)
Interest expenses on finance lease		
- Sinopec Group's associates and joint ventures	(30,154)	_
Capitalisation of interest expenses for qualifying assets (note)	_	11,360
Exchange gains, net	173,931	116,166
Bank and other charges	(40,564)	(80,942)
	(529,076)	(599,433)
	(441,190)	(579,984)

Note:

For the year ended 31 December 2018, no interest expense has been capitalised for qualifying assets represented as property, plant and equipment (2017: Qualifying assets represent property, plant and equipment, its related interest expenses had been capitalised at rates 3.92% per annum).

7 EXPECTED CREDIT LOSS AND IMPAIRMENT LOSSES ON ASSETS

	2018	2017
	RMB'000	RMB'000 (Restated)
ECL/Impairment loss on trade and other receivables, net	10,543	1,268,868
ECL on contract assets	26,525	_
Expected losses on contracts work-in-progress	_	245,039
Write down of inventories to net realisable value	_	72,456
Impairment loss on property, plant and equipment (Note 17)	_	1,149,494
	37,068	2,735,857

8 INVESTMENT INCOME

	2018	2017
	RMB'000	RMB'000 (Restated)
Investment income from available-for-sale financial assets	_	600
Investment income from financial assets at FVTOCI	600	_

9 OTHER INCOME

	2018	2017
	RMB'000	RMB'000 (Restated)
Gain on disposal of other non-current assets, net	7,447	_
Gain on debt restructuring	395,916	49,849
Government grants (note)	730,048	372,433
Waived payables	29,969	35,791
Penalty income	3,566	26,852
Compensation received	581	4,598
Insurance claims	11,451	5,930
Asset surplus	5,534	2
Others	15,100	7,010
	1,199,612	502,465

Note:

For the years ended 31 December 2018 and 2017, government grants primarily represent financial appropriation income and non-income tax refunds received from respective government agencies without conditions or other contingencies attached to the receipts of the grants.

10 OTHER EXPENSES

	2018	2017
	RMB'000	RMB'000 (Restated)
Loss on disposal of property, plant and equipment, net	7,446	156,144
Loss on disposal of other non-current assets, net	_	16,431
Discount of trade receivables	655	35,368
Loss on scraps of assets	8,837	55
Penalty	13,593	29,019
Donation	610	1,040
Compensation	8,227	162,882
Expected loss on pending litigations	10,241	13,500
Expected loss on judicial reorganisation (Note 39)	475,276	_
Others	278,059	32,035
	802,944	446,474

11 PROFIT/(LOSS) BEFORE INCOME TAX

Profit/(Loss) before income tax is stated after charging/(crediting) the followings:

	2018	2017
	RMB'000	RMB'000 (Restated)
Staff costs, including directors and supervisors emoluments (Note 16)	15,005,096	14,325,621
Retirement benefit plan contribution (included in the above mentioned staff costs)		
- Municipal retirement scheme costs	1,266,328	1,220,611
- Supplementary retirement scheme costs	338,736	322,312
Share options granted to directors and employees (included in the above mentioned staff costs)	_	10,636
Changes in inventories of finished goods and work in progress	49,769	(118,582)
Raw materials and consumables used	15,237,065	12,067,738
Depreciation and amortisation		
- Property, plant and equipment	3,074,468	3,289,287
- Other non-current assets	1,559,809	2,088,723
- Prepaid land leases	3,261	3,156
- Intangible assets	65,979	80,807
Operating lease expenses		
- Property, plant and equipment	1,982,429	1,627,403
ECL/Provision for impairment, net		
- Trade and other receivables	10,543	1,268,868
- Contract assets	26,525	_
Impairment losses on assets		
- Expected loss on contracts work-in-progress	_	245,039
- Write down of inventories to net realisable value	_	72,456
- Property, plant and equipment	_	1,149,494
Rental income from property, plant and equipment less relevant expenses	(54,043)	(27,537)
Losses on disposal/write-off of property, plant and equipment, net	7,446	156,144
(Gains)/Losses on disposal/write-off of other non-current assets, net	(7,447)	16,431
Auditors' remuneration	6,988	7,139
Exchange gains, net		

12 INCOME TAX EXPENSE

	2018	2017
	RMB'000	RMB'000 (Restated)
Current tax		
PRC enterprise income tax	28,480	32,261
Overseas enterprise income tax	369,522	498,810
	398,002	531,071
Deferred tax		
Origination and reversal of temporary difference (Note 36)	(24,421)	(292,037)
Income tax expense	373,581	239,034

12 INCOME TAX EXPENSE (Continued)

According to the Corporate Income Tax Law of the PRC, the applicable income tax of the years ended 31 December 2018 and 2017 is 25%.

According to the normal statutory PRC corporate income tax and relevant rules, apart from a certain subsidiaries of the Company subjected to the relevant development zone policy or participation in technology development and the PRC's western development project can enjoy 15% preferential tax rate during the period, for the years ended 31 December 2018 and 2017, the majority of the companies of the Group are subject to 25% income tax rate.

Taxes in other countries are calculated according to the tax laws where the related companies of the Group operate.

Reconciliation between income tax expenses and profit/(loss) before income tax calculated at the statutory tax rate is as follows:

	2018	2017
	RMB'000	RMB'000 (Restated)
Profit/(Loss) before income tax	613,769	(10,324,177)
Taxation calculated at the statutory tax rate	153,442	(2,581,044)
Income tax effects of:		
Difference in overseas profits tax rates	255,179	335,235
Non-deductible expenses	74,355	590,402
Effect of utilisation of unrecognised tax losses and deductible temporary differences	(220,689)	(43,578)
Effect of unrecognised tax losses and deductible temporary differences	210,514	1,972,463
Adjustments of current tax in previous years	3,719	16,047
Equity method accounting for the joint ventures and associates' profit or loss	(6,730)	3,609
Effect on opening deferred tax balances arising from change in tax rates during the year	(368)	_
Tax effect on research and development expenses	(95,841)	(54,854)
Others	_	754
Income tax expense	373,581	239,034

13 EARNINGS/(LOSS) PER SHARE

(a) Basic

For the years ended 31 December 2018 and 2017, the basic earnings/(loss) per share is calculated by dividing the profit/(loss) attributable to owners of the Company.

	2018	2017 (Restated)
Profit/(Loss) for the year attributable to owners of the Company (RMB'000)	240,188	(10,563,115)
Weighted average number of ordinary shares in issue (Shares)	18,670,882,354	14,142,660,995
Basic earnings/(loss) per share (RMB)	0.013	(0.747)

(a) Diluted

For the year ended 31 December 2018, the diluted earnings per share was the same as the basic earnings per share as the exercise price of those share options is higher than the average market price for shares in the current year.

For the year ended 31 December 2017, the calculation of diluted loss per share did not take into account of exercise of the share options which are potential ordinary shares because of antidilutive effects, hence, the diluted loss per share were the same as the basic loss per share.

14 DIVIDENDS

The Board of Directors of the Company do not recommend the payment of any dividend for the year ended 31 December 2018 (2017: Nil).

15 DIRECTORS', SUPERVISORS', AND FIVE HIGHEST INDIVIDUALS' EMOLUMENTS

Directors', supervisors' and highest individuals' emoluments, disclosed pursuant to the Listing Rules and the Hong Kong Companies Ordinance is as follows:

(a) Directors' and supervisors' emoluments

Details of directors and supervisors of the Company are as follows:

(i) For the year ended 31 December 2018

	Fee	Salary, allowance and bonus	Contributions to pension plans	Share-based payment	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Executive directors:					
ZHOU Shiliang (i)	_	55	4	_	59
CHEN Xikun (ii)	_	641	55	_	696
SUN Qingde	_	679	55	_	734
	_	1,375	114	_	1,489
Non-executive directors:					
JIAO Fangzheng (iii)	_	_	_	_	_
LI Lianwu (i)	_	_	_	_	_
YE Guohua (iv)	_	_	_	_	_
LU Baoping (ii)	_	_	_	_	_
FAN Zhonghai (ii)	_	_	_	_	_
LIU Zhongyun (v)	_	_	_	_	_
WEI Ran (vi)	_	_	_	_	_
	_	_	_	_	_
Independent non-executive directors:	-				
JIAO Bo	200	_	_	_	200
ZHANG Huaqiao (vii)	100	_	_	_	100
CHEN Weidong (viii)	100	_	_	_	100
DONG Xiucheng (vi)	100	_	_	_	100
PAN Ying	200	_	_	_	200
	700	_	_	_	700
Supervisors:					
ZOU Huiping	_	_	_	_	_
ZHANG Qin	_	_	_	_	_
DU Jiangbo	_	_	_	_	_
HUANG Songwei (viii)	_	551	53	_	604
LI Wei	_	541	55	_	596
Zhang Hongshan	_	734	38	_	772
Zhang Jianbo (ii)	_	_	_	_	_
	_	1,826	146	_	1,972
	700	3,201	260	_	4,161
	·				

Notes:

- (i) Resigned on 8 February 2018.
- (ii) Appointed on 8 February 2018.
- (iii) Resigned on 7 June 2018.
- (iv) Appointed on 8 February 2018 and resigned on 23 August 2018.
- (v) Appointed on 24 December 2018.
- (vi) Appointed on 20 June 2018.
- (vii) Resigned on 20 June 2018.
- (viii) Resigned on 11 December 2018.

For the year ended 31 December 2018, Mr. SUN Qingde is also the general manager of the Company and his emoluments disclosed above included his remuneration of serving as the general manager.

15 DIRECTORS', SUPERVISORS', AND FIVE HIGHEST INDIVIDUALS' EMOLUMENTS (Continued)

(a) Directors' and supervisors' emoluments (Continued)

Details of directors and supervisors of the Company are as follows: (Continued)

(ii) For the year ended 31 December 2017

,					
	Fee	Salary, allowance and bonus	Contributions to pension plans	Share-based payment	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Executive directors:					
ZHOU Shiliang	_	571	51	46	668
SUN Qingde	_	571	51	46	668
	_	1,142	102	92	1,336
Non-executive directors:					
JIAO Fangzheng	_	_	_	_	_
LI Lianwu (vi)	_	_	_	_	_
ZHANG Hong (ii)	_	_	_	_	_
	_	_	_	_	_
Independent non-executive directors:					
JIAO Bo	200	_	_	_	200
ZHANG Huaqiao	200	_	_	_	200
PAN Ying	200	_	_	_	200
	600	_	_	_	600
Supervisors:					
ZOU Huiping	_	_	_	_	_
ZHANG Qin	_	_	_	_	_
CONG Peixin (iii)	_	_	_	_	_
XU Weihua (i)	_	105	6	_	111
DU Guangyi (iii)	_	275	14	_	289
HU Guoqiang (iii)	_	243	24	_	267
DU Jiang-bo	_	_	_	_	_
HUANG Songwei (iv)	_	503	50	39	592
LI Wei (iv)		243	26	_	269
Zhang Hongshan (v)		523	32	_	555
	_	1,892	152	39	2,083
	600	3,034	254	131	4,019

Notes:

- (i) Resigned on 22 February 2017
- (ii) Resigned on 15 June 2017.
- (iii) Resigned on 27 June 2017.
- (iv) Appointed on 27 June 2017.
- (v) Appointed on 23 February 2017.

For the year ended 31 December 2017, Mr. SUN Qingde is also the general manager of the Company and his emoluments disclosed above included his remuneration of serving as the general manager.

15 DIRECTORS', SUPERVISORS', AND FIVE HIGHEST INDIVIDUALS' EMOLUMENTS (Continued)

(b) Five highest paid individuals

The number of director or supervisor and non-director or supervisor included in the five highest paid individuals for the years ended 31 December 2018 and 2017 are as follows:

	2018	2017
Director or supervisor	3	3
Non-director or supervisor	2	2
	5	5

The aggregate of the emoluments in respect of the highest paid non-director or supervisor are as follows:

	2018	2017
	RMB'000	RMB'000
Salaries, allowances and bonus	1,308	1,089
Contributions to pensions plans	111	101
Share-based payments	_	80
	1,419	1,270

The emoluments of the two (2017: two) highest paid individuals who are non-director or supervisor are within the following bands:

	2018	2017
Nil to HK\$1,000,000	2	2

16 EMPLOYMENT BENEFITS

	2018	2017
	RMB'000	RMB'000 (Restated)
Salaries, wages and other benefits	13,400,032	12,772,062
Contribution to pension plans (note)		
- Municipal retirement scheme costs	1,266,328	1,220,611
- Supplementary retirement scheme costs	338,736	322,312
Share options granted to directors and employees (Note 31)	_	10,636
	15,005,096	14,325,621

Note:

Retirement benefits

As stipulated by the regulations of the PRC, the Group participates in basic defined contribution retirement schemes organised by respective municipal government under which it is governed. As at 31 December 2018, the Group and its employees pay 20% and 8% (2017: 20% and 8%) of salaries respectively to basic defined contribution plan.

In addition, the Group provides a supplementary defined contribution retirement plan for its staff at rates not exceeding 5% of the salaries. Employees who have served the Group for one year or more are entitled to participating in this plan. The funds of this plan are held separately from the Group in an independent fund administered by a committee consisting of representatives from the employees and the Group.

Those employees who involved supplementary retirement scheme are entitled to receive the pension in accordance with a certain percentage of the pre-retirement salary after retirement. The Group has no other material obligation for the payment of retirement benefits associated with these plans beyond Municipal retirement scheme and Supplementary retirement scheme.

17 PROPERTY, PLANT AND EQUIPMENT

For the year ended 31 December 2018

	Buildings	Oil engineering equipment and others	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000
Cost				
At 1 January 2018 (Restated)	1,416,882	58,813,415	309,372	60,539,669
Additions	3,230	852,878	575,302	1,431,410
Acquisition (note (iii))	74,872	54,064	_	128,936
Disposals/Write-off	(25,456)	(863,729)	_	(889,185)
Reclassification	_	_	(8,837)	(8,837)
Transferred from construction in progress	76,353	362,336	(438,689)	_
At 31 December 2018	1,545,881	59,218,964	437,148	61,201,993
Accumulated depreciation				
At 1 January 2018 (Restated)	447,942	32,725,026	_	33,172,968
Depreciation	48,598	3,025,870	_	3,074,468
Disposals/write-off	(11,240)	(749,571)	_	(760,811)
Acquisition (note (iii))	15,217	41,304	_	56,521
At 31 December 2018	500,517	35,042,629	_	35,543,146
Accumulated impairment loss				
At 1 January 2018 (Restated)	8,436	1,388,281	71,734	1,468,451
Disposals/write-off	_	(18,679)	_	(18,679)
Acquisition (note (iii))	_	2,903	_	2,903
At 31 December 2018	8,436	1,372,505	71,734	1,452,675
Carrying amounts				
At 31 December 2018	1,036,928	22,803,830	365,414	24,206,172

17 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

For the year ended 31 December 2017 (Restated)

	Buildings	Oil engineering equipment and others	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000
Cost				
At 1 January 2017	1,416,825	59,246,337	962,110	61,625,272
Additions	9,394	548,685	472,581	1,030,660
Disposals/Write-off	(5,489)	(1,909,783)	(23,530)	(1,938,802)
Reclassification	(17,643)	_	(159,818)	(177,461)
Transferred from construction in progress	13,795	928,176	(941,971)	_
At 31 December 2017	1,416,882	58,813,415	309,372	60,539,669
Accumulated depreciation				
At 1 January 2017	405,683	31,091,898	_	31,497,581
Depreciation	52,371	3,236,916	_	3,289,287
Disposals/write-off	(5,926)	(1,603,788)	_	(1,609,714)
Reclassification	(4,186)	_	_	(4,186)
At 31 December 2017	447,942	32,725,026	_	33,172,968
Accumulated impairment loss				
At 1 January 2017	8,436	270,625	95,264	374,325
Impairment loss	_	1,149,494	_	1,149,494
Disposals/write-off	_	(31,838)	(23,530)	(55,368)
At 31 December 2017	8,436	1,388,281	71,734	1,468,451
Carrying amounts				
At 31 December 2017	960,504	24,700,108	237,638	25,898,250

Notes:
(i) Recognised depreciation is analysed as follows:

(i) necognised depreciation is analysed as follows.		
	2018	2017
	RMB'000	RMB'000 (Restated)
Cost of sales	3,034,259	3,258,080
Selling expenses	366	549
General and administrative expenses	16,544	22,795
Research and development expenses	23,299	7,863
	3,074,468	3,289,287

As at 31 December 2018, assets under finance leases with carrying amounts of RMB71,599,000 (2017: RMB80,172,000) are included in "Oil engineering (ii) equipment and others" of property, plant and equipment.

During the year ended 31 December 2018, the Group has acquired certain property, plant and equipment from a related party (Note 41).

17 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

For the year ended 31 December 2018, there is no impairment loss has been recognised.

During the year ended 31 December 2017, due to low level of oil price, the services prices and utilization rates of the plant and equipment decreased. The management carried out the review of the recoverable amounts of the Group's property, plant and equipment.

The assets of "Oil engineering equipment and others" are used in the Group's geophysics segment, drilling engineering segment, logging and mud logging segment and special downhole operations segment. The review led to the recognition of an impairment loss on property, plant and equipment of RMB1,149,494,000, which has been recognised in profit or loss for the year ended 31 December 2017. The impairment losses have been classified under the geophysics segment, drilling engineering segment, logging and mud logging segment and special downhole operations segment.

The recoverable amounts of the relevant assets are determined by higher of fair value less costs of disposal and value in use. The fair value less costs of disposal is arrived at the basis of valuation carried out by an independent qualified professional valuer ZhongHe Appraisal Co., Ltd., in which the fair value of relevant assets is determined by market approach. The reasonableness of the assumptions and range of estimates adopted in by the valuation were considered by the Group. The measure of fair value is categorised as a Level 3 measurement, using significant unobservable inputs. The market approach is by reference to the value that would be received from selling the asset in an orderly transaction between market participants at the measurement date. As at 31 December 2017, the recoverable amounts of the relevant assets were RMB29,879,000.

18 PREPAID LAND LEASES

	2018	2017
	RMB'000	RMB'000 (Restated)
At 1 January	120,167	109,866
Additions	1,762	_
Reclassification	(333)	13,457
Amortisation	(3,261)	(3,156)
At 31 December	118,335	120,167

Prepaid land leases represent prepayments made by the Group for the prepaid land leases located in the PRC which are held on leases term between 20 years to 50 years.

Recognised amortisation is analysed as follows:

	2018	2017
	RMB'000	RMB'000 (Restated)
Cost of sales	2,078	171
General and administrative expenses	1,168	2,985
Research and development expenses	15	_
	3,261	3,156

19 INTANGIBLE ASSETS

For the year ended 31 December 2018

	Computer softwares	Others	Total
	RMB'000	RMB'000	RMB'000
Cost			
At 1 January 2018	146,826	233,888	380,714
Additions	13,088	_	13,088
Reclassification	_	8,837	8,837
At 31 December 2018	159,914	242,725	402,639
Accumulated amortisation			
At 1 January 2018	106,029	111,691	217,720
Amortisation	12,523	53,456	65,979
At 31 December 2018	118,552	165,147	283,699
Carrying amounts			
At 31 December 2018	41,362	77,578	118,940
For the year ended 31 December 2017			
	Computer softwares	Others	Total
	RMB'000	RMB'000	RMB'000
Cost			
At 1 January 2017	141,972	74,070	216,042
Additions	6,836	_	6,836
Reclassification	_	159,818	159,818
Disposals/write-off	(1,982)	_	(1,982)
At 31 December 2017	146,826	233,888	380,714
Accumulated amortisation			
At 1 January 2017	94,774	44,121	138,895
Amortisation	13,237	67,570	80,807
Disposals/write-off	(1,982)	_	(1,982)
At 31 December 2017	106,029	111,691	217,720
Carrying amounts			
At 31 December 2017	40,797	122,197	162,994
Recognised amortisation is analysed as follows:			
		2018	2017
		RMB'000	RMB'000
Cost of sales		57,654	72,374
General and administrative expenses		7,227	7,920
Research and development expenses		1,098	513
		65,979	80,807

20 INTERESTS IN JOINT VENTURES AND ASSOCIATES

(a) Interests in joint ventures

	2018	2017
	RMB'000	RMB'000
At 1 January	194,465	209,444
Share of total comprehensive income/(expense)	24,348	(14,791)
Dividend paid	_	(188)
At 31 December	218,813	194,465

The interests in each joint venture are as follows:

	2018	2017
	RMB'000	RMB'000
Qianjiang HengYun Comprehensive Vehicle Performance Inspecting Company Limited ("Qianjiang HengYun")	1,547	1,135
Sinopec Gulf Petroleum Engineering Services, LLC ("Gulf Petroleum Engineering")	13,383	13,383
Zhong Wei Energy Service Co. Limited ("Zhong Wei")	8,962	11,825
SinoFTS Petroleum Services Limited ("SinoFTS")	194,921	168,122
	218,813	194,465

The details of joint ventures, unlisted and established as limited companies, of the Group are as follows:

RMB'000	Name	Place of incorporation/ registration	Registered capital		Actual interest held indirectly	Principal activities and place of operation
Coltr: 2,100 Coltr: 49.10%			RMB'000	USD'000		
Zhong Wei The PRC 305,000 (2017: 305,000) — 50.00% (2017: 50.00%) Oilfield technical service/The PRC SinoFTS The PRC — 55,000 Fetroleum technical service/The PRC	Qianjiang HengYun	The PRC		_		Transportation services/The PRC
(2017: 305,000) (2017: 50.00%) SinoFTS The PRC 55,000 55.00% Petroleum technical service/The PRC	Gulf Petroleum Engineering	Kuwait		_		Oilfield service/Kuwait
	Zhong Wei	The PRC		_		Oilfield technical service/The PRC
(2017. 33,000) (2017. 33.00 /0)	SinoFTS	The PRC	_	55,000 (2017: 55,000)	55.00% (2017: 55.00%)	Petroleum technical service/The PRC

The above joint ventures are accounted for using equity method.

Notes:

(ii) Commitments and contingent liabilities of the joint ventures
As at 31 December 2018 and 2017, there is no material contingent liability and commitment between the Group and its joint ventures or the joint ventures itself.

⁽i) The decision of financial and operating strategies requires unanimous consent from the Group and other ventures as stated in the contracts signed by the both parties. The equities of joint ventures are measured by the joint ventures.

20 INTERESTS IN JOINT VENTURES AND ASSOCIATES (Continued)

(a) Interests in joint ventures (Continued)

The detailed financial information of the major joint venture (SinoFTS) of the Group is as follows:

	2018	2017
	RMB'000	RMB'000
Cash and cash equivalents	75,772	47,991
Current assets	239,569	117,204
Non-current assets	208,933	225,684
Total assets	448,502	342,888
Current liabilities	(91,617)	(34,730)
Total liabilities	(91,617)	(34,730)
Net assets	356,885	308,158
Share of equity by the Group (55.00%) (2017: 55.00%)	196,287	169,487

	2018	2017
	RMB'000	RMB'000
Revenue	246,104	92,664
Depreciation and amortisation	21,260	21,159
Interest income	68	105
Interest expense	312	1,207
Income tax expense	2,555	_
Profit/(Loss) for the year and total comprehensive income/(expense) for the year	48,727	(17,108)
Share of total comprehensive income/(expense) (55.00%) (2017: 55.00%)	26,800	(9,409)

The summarised financial information of other non-major joint ventures of the Group is as follows:

	2018	2017
	RMB'000	RMB'000
Loss for the year and total comprehensive expense for the year	(4,889)	(10,755)

(b) Interests in associates

	2018	2017
	RMB'000	RMB'000
At 1 January	12,581	11,885
Decrease in investments	_	(28)
Share of total comprehensive income	2,135	1,213
Dividend paid	(706)	(489)
At 31 December	14,010	12,581

20 INTERESTS IN JOINT VENTURES AND ASSOCIATES (Continued)

(b) Interests in associates (Continued)

The details of associate, unlisted and established as limited companies, of the Group are as follows:

Name	Place of incorporation/ registration	n/ Registered capital		Actual interest held indirectly	Principal activities and place of operation
		RMB'000	USD'000		
Ordos North China Ruida Oil Service Company Limited ("Ordos North")	The PRC	10,000 (2017: 10,000)	_	35.00% (2017: 35.00%)	Oil and natural gas exploration/The PRC
Xinjiang North China Tianxiang Oil Service Company Limited ("Xinjiang North")	The PRC	10,000 (2017:10,000)	_	20.00% (2017: 20.00%)	Oil and natural gas exploration/The PRC
Zhenjiang Huajiang Oil Service Company Limited ("Huajiang Oil")	The PRC	5,000 (2017: 5,000)	_	37.00% (2017: 37.00%)	Oil and natural gas exploration/The PRC
Henan Zhongyuan Petroleum Technology Service Company Limited ("Henan Zhongyuan")	The PRC	10,000 (2017:10,000)	_	20.00% (2017:20.00%)	Oil and natural gas exploration/The PRC
Henan Zhongyou Petroleum Technology Service Company Limited ("Henan Zhongyou")	The PRC	10,000 (2017:10,000)	_	20.00% (2017:20.00%)	Oil and natural gas exploration/The PRC

The above associates are accounted for using equity method.

Note:

Commitments and contingent liabilities of the associates

Equity securities - the PRC

As at 31 December 2018 and 2017, there is no material contingent liability and commitment between the Group with its associates or associates themselves.

21 FINANCIAL ASSETS AT FVTOCI/AVAILABLE-FOR-SALE FINANCIAL ASSETS

Upon the initial application of IFRS 9 at 1 January 2018, available-for-sale financial assets were reclassified to financial assets at FVTOCI (non-recycling), see note 3 in details.

	2018	2017
	RMB'000	RMB'000
Financial assets at FVTOCI (non-recycling)	39,011	_
Available-for-sale financial assets	_	24,389
At 31 December	39,011	24,389
Financial assets at FVTOCI/available-for-sale financial assets include the following:		
	2018	2017
	RMB'000	RMB'000
Unlisted securities:		

Unlisted investments represent the Groups' equity interests in the unlisted entities in the PRC. They are mainly engaged in drilling and technical services operations.

The Group designated its investment in unlisted investment as financial assets at FVTOCI (non-recycling), as the investment is held for strategic purpose.

Unlisted equity securities are valued at fair value based on their asset values. Please refer to note 42.4 for further explanation.

All financial assets at FVTOCI/Available-for-sale financial assets are denominated in RMB.

39.011

24,389

22 NOTES AND TRADE RECEIVABLES

	2018	2017
	RMB'000	RMB'000 (Restated)
Trade receivables		
- Sinopec Group and its subsidiaries	7,539,486	9,082,346
- Joint ventures	14,854	14
- Sinopec Group's joint ventures and associates	128,187	122,450
- Third parties	10,472,668	10,100,333
	18,155,195	19,305,143
Less: ECL allowance/Provision for impairment	(2,525,191)	(2,331,815)
Trade receivables - net	15,630,004	16,973,328
Notes receivables	481,196	1,218,029
Notes and trade receivables - net	16,111,200	18,191,357

As at 31 December 2018 and 2017, the Group's notes and trade receivables were approximately their fair values.

All notes receivables of the Group are bank's acceptance bills and commercial acceptance bills and usually collected within six months from the date of issue.

As at 31 December 2018 and 2017, none of the Group's notes receivables were pledged as collateral or overdue.

The Group usually provides customers with credit term in the range of 90 to 180 days. For the settlement of trade receivables from provision of services, the Group usually reaches an agreement on the term of each payment with the customer by taking into account factors such as, among other things, the credit history of the customer, its liquidity position and the Group's working capital needs, which varies on a case-by-case basis that requires the judgment and experience of the management. The Group does not hold any collateral as security.

Ageing analysis of notes and trade receivables net of ECL allowance/net of provision for impairment based on invoice date is as follows:

	2018	2017
	RMB'000	RMB'000 (Restated)
Within 1 year	14,438,847	13,449,041
1 to 2 years	1,098,807	3,631,272
2 to 3 years	377,106	821,310
Over 3 years	196,440	289,734
	16,111,200	18,191,357

22 NOTES AND TRADE RECEIVABLES (Continued)

The movements of ECL allowance (2017: provision for impairment) on trade receivables are as follows:

	2018	2017
	RMB'000	RMB'000 (Restated)
Balance at the beginning of the year calculated under IAS 39 and IFRS 9	2,331,815	1,188,241
Acquisition (note)	167,766	_
ECL allowance/Provisions	517,168	1,257,214
Reversal	(489,947)	(92,906)
Receivables write-off as uncollectible	(1,611)	(20,734)
At 31 December	2,525,191	2,331,815

Note:

During the year ended 31 December 2018, the Group has acquired certain bills receivables and trade receivables from a related party (note 41).

23 PREPAYMENTS AND OTHER RECEIVABLES

	2018	2017
	RMB'000	RMB'000 (Restated)
Prepayments (note (i))	460,949	445,831
Other receivables (note (ii))		
Petty cash funds	22,440	34,523
Guarantee deposits	668,383	846,193
Disbursement of funds	676,630	641,003
Temporary payment	622,173	759,129
Escrow payments	9,738	9,733
Deposits	40,709	42,944
Export tax refund receivables	28,671	5,261
Excess value-added tax paid	827,769	651,200
Value-added tax to be certified	29,772	24,043
Prepaid value-added tax	353,291	205,916
Prepaid income tax	7,203	4,314
Others	311,489	290,735
	4,059,217	3,960,825
Less: ECL allowance/Provision for impairment	(614,716)	(630,225)
Prepayments and other receivables - net	3,444,501	3,330,600

23 PREPAYMENTS AND OTHER RECEIVABLES (Continued)

Notes:

- (i) As at 31 December 2018, prepayments included related party balances: Sinopec Group and its subsidiaries amounting to RMB28,064,000 (2017: RMB30,088,000), nil for the associates and joint ventures of the Group (2017: RMB72,000) and nil for the joint ventures and associates of Sinopec Group (2017: RMB3,000).
- (ii) As at 31 December 2018, other receivables included related party balances: Sinopec Group and its subsidiaries amounting to RMB162,000,000 (2017: RMB337,713,000), the joint ventures of the Group amounting to RMB11,015,000 (2017: RMB10,443,000) and the associates and joint ventures of Sinopec Group amounting to RMB15,510,000 (2017: RMB12,137,000).
- (iii) The amounts due from related parties are unsecured, interest free and repayable on demand.
- (iv) The carrying amounts of the Group's prepayments and other receivables as at 31 December 2018 and 2017 approximate their fair values.

The movements of ECL allowance (2017: provision for impairment) on prepayments and other receivables are as follows:

	2018	2017
	RMB'000	RMB'000 (Restated)
Balance at the beginning of the year calculated under IAS 39 and IFRS 9	630,225	525,665
Acquisition (note)	7,057	_
ECL allowance/Provisions	203,867	141,743
Reversal	(220,545)	(37,183)
Written off	(5,888)	_
At 31 December	614,716	630,225

Note:

During the year ended 31 December 2018, the Group has acquired certain prepayments and other receivables from a related party (Note 41).

24 CONTRACT WORK-IN-PROGRESS/CONTRACT ASSETS AND CONTRACT LIABILITIES

(a) Contract work-in-progress

(4)		
	2018	2017
	RMB'000	RMB'000 (Restated)
Amounts due from customers for contract works	_	6,883,350
Less: Expected loss on contracts	_	(259,048)
	_	6,624,302
Amounts due to customers for contract works	_	(6,788,227)
	_	(163,925)
Contract cost incurred plus recognised profit less recognised losses	_	60,509,097
Less: Expected loss on contracts	_	(259,048)
Less: Progress billings	_	(60,413,974)
	_	(163,925)

Note:

- (1) The Group has initially applied IFRS 15 using the cumulative effect method and adjusted the opening balance at 1 January 2018.
- (2) Upon the adoption of IFRS 15, "Amounts due from customers for contract work" has been reclassified to "Contract assets" and disclosed in note 24(b).
- (3) Upon the adoption of IFRS 15, "Amounts due to customers for contract work" has been reclassified to "Contract liabilities" and disclosed in note 24(c).
- (4) Upon the adoption of IFRS 15, "Expected loss on contracts" under "Contract work-in-progress" in relation to provision for onerous contracts, has been reclassified to "Provisions". Please refer to note 39 for details.

24 CONTRACT WORK-IN-PROGRESS/CONTRACT ASSETS AND CONTRACT LIABILITIES (Continued)

(b) Contract assets

	2018	2017
	RMB'000	RMB'000
Contract assets arising from construction and service contracts	9,092,544	_
Less: ECL allowance	(26,525)	_
	9,066,019	_

Note:

The Group has initially applied IFRS 9 and IFRS 15 using the cumulative effect transition method and adjusted the opening balances as at 1 January 2018.

Upon the adoption of IFRS 15:

- (1) amounts previously included as "Amounts due from customers for contract work" has been reclassified to "Contract assets"; and
- (2) the provision for lifetime ECL on contract assets is RMB 26,525,000.

Typical payment terms which impact on the amount of contract assets recognised are as follows:

The Group's construction and service contracts include payment schedules which require progress payments over the construction period once certain specified milestones are reached. Approximate 5% of progress billings of engineering construction service would be retained as quality guarantee. This amount is included in contract assets and the Group's entitlement to this final payment until the end of guarantee period

The amount of contract assets that is expected to be recovered after more than one year is RMB218,966,000 (2017: RMB 202,615,000)

(c) Contract liabilities

	2018	2017
	RMB'000	RMB'000
Contract liabilities arising from construction and service contracts	4,390,293	_

Note:

The Group has initially applied IFRS 9 and IFRS 15 using the cumulative effect transition method and adjusted the opening balances as at 1 January 2018. Upon the adoption of IFRS 15, amounts previously included as "Amounts due to customers for contract work" and "Receipt in advance from customers" have been reclassified to "Contract liabilities".

When the Group receives a deposit before the production activity commences, this will give rise to contract liabilities at the start of a contract until the revenue recognised on the project exceeds the amount of the deposit.

The balance of contract liabilities as at 1 January 2018 is RMB8,561,811,000, in which RMB7,640,727,000 was recognised as revenue during the year.

Unsatisfied performance obligation:

The group has signed engineering service contracts with several customers to provide petroleum engineering and technical service and construction engineering contracts, which will be completed within the agreed period and regarded as a single performance obligation as a whole. As at 31 December 2018, part of the Group's petroleum engineering and technical service and construction engineering contracts were still in the process, and the total transaction price apportioned to the unsatisfied performance obligation was RMB16.95 billion, the amount of which were related to the progress of the performance of each contract, and will be recognised as revenue in accordance with the percentage of work performed in the future, which is expected to be completed in the coming 60 months.

25 INVENTORIES

	2018	2017
	RMB'000	RMB'000 (Restated)
Raw materials	1,136,487	1,182,524
Finished goods	124,201	86,134
Work in progress	11,986	2,887
Turnover materials	8,734	10,151
Others	_	1,947
	1,281,408	1,283,643
Less: Provision for impairment/write off	(64,085)	(72,456)
	1,217,323	1,211,187

For the years ended 31 December 2018 and 2017, cost of inventories recognised as expenses and included in "cost of sales" amounting to RMB15,286,834,000 and RMB11,949,156,000 respectively. For the year ended 31 December 2018, no provision for inventories (2017:RMB72,456,000) was made to write down inventories to their net realisable values and the inventories were written off of RMB8,371,000 (2017: RMB7,724,000).

26 RESTRICTED CASH

	2018	2017
	RMB'000	RMB'000
Letter of credit guarantee deposits	2,162	2,108
Guarantee deposits	27,699	12,430
	29,861	14,538

As at 31 December 2018 and 2017, restricted cash represents the deposits in banks with initial maturity due for six months which are letter of credit guarantee deposits and guarantee deposits.

As at 31 December 2018 and 2017, the annual interest rates on restricted cash range from one to six months and are determined in accordance with the annual interest rates of bank current account.

At the end of the respective reporting periods, the maximum exposure to credit risk approximates to carrying amounts of the Group's restricted cash.

27 CASH AND CASH EQUIVALENTS

	2018	2017
	RMB'000	RMB'000 (Restated)
Cash on hand	8,114	8,180
An initial term less than three months:		
- Sinopec Finance Company Limited	53,605	152,155
- Sinopec Century Bright Capital Investment Company Limited	1,005,234	898,594
- China CITIC Bank	1	_
- Third party banks and other financial institutions	1,106,626	1,474,508
	2,173,580	2,533,437

As at 31 December 2018 and 2017, the annual interest rates on cash at bank are determined in accordance with the annual interest rates of bank current account.

At the end of the respective reporting periods, the maximum exposure to credit risk approximates the carrying amounts of the Group's cash and cash equivalents.

28 SHARE CAPITAL

	2018		2017	
	Number of shares	Share capital	Number of shares	Share capital
	Share	RMB'000	Share	RMB'000
Registered, issued and paid:				
 Domestic non-public legal person shares of RMB1.00 each 	11,786,045,218	11,786,046	10,259,327,662	10,259,328
- Social public A shares of RMB1.00 each	1,783,333,333	1,783,333	1,783,333,333	1,783,333
- H shares of RMB1.00 each	5,414,961,482	5,414,961	2,100,000,000	2,100,000
	18,984,340,033	18,984,340	14,142,660,995	14,142,661

	Number of	Share capital
	Share	RMB'000
As at 1 January	14,142,660,995	14,142,661
Issue of shares (note)	4,841,679,038	4,841,679
At 31 December 2018	18,984,340,033	18,984,340

Note

According to the China Securities Regulatory Commission's license [2018] No. 142 "Approving the non-public issuance of shares by Sinopec Oilfield Service Corporation", the Company had issued 1,526,717,556 A shares at non-public issuance at RMB2.62 per share, to the China Petrochemical Corporation and Changjiang Pension Insurance Co., Ltd. - Changjiang Shengshi Huazhang No.2 Community Pension Management Fund; According to the China Securities Regulatory Commission's license [2018] No. 130 "Approving the issuance of additional overseas listed foreign shares by Sinopec Oilfield Service Corporation", the Company had issued 3,314,961,482 H shares at non-public issuance at HKD1.35 per share to the two designated investors - Sinopec Century Bright Capital Investment Limited and China Structural Reform Fund Corporation Limited. After deduction of share issuance expenses of RMB20,783,000, the net proceeds from issuance of share is RMB7,637,715,000.

29 THE STATEMENT OF FINANCIAL POSITION AND THE STATEMENT OF CHANGES IN EQUITY OF THE COMPANY

(i) The statement of financial position of the Company

	2018	2017
	RMB'000	RMB'000
Assets		
Non-current assets		
Interests in subsidiaries	27,891,662	20,215,327
Total non-current assets	27,891,662	20,215,327
Current assets		
Other receivables	4,357,230	5,313,186
Cash and cash equivalents	58,679	236,745
Total current assets	4,415,909	5,549,931
Total assets	32,307,571	25,765,258
Equity		
Share capital	18,984,340	14,142,661
Reserves	13,295,325	10,469,203
Total equity	32,279,665	24,611,864
Liabilities		
Current liabilities		
Tax payables	26,371	_
Trade payables	1,535	_
Other payables	_	1,153,394
Total current liabilities	27,906	1,153,394
Total liabilities	27,906	1,153,394
Total equity and liabilities	32,307,571	25,765,258
Net current assets	4,388,003	4,396,537
Total assets less current liabilities	32,279,665	24,611,864

Approved and authorised for issue by the board of directors on 25 March 2019.

Chairman of the Board: LIU Zhongyun

Vice Chairman of the Board, General Manager: SUN Qingde

29 THE STATEMENT OF FINANCIAL POSITION AND THE STATEMENT OF CHANGES IN EQUITY OF THE COMPANY (Continued)

(ii) The statement of changes in equity of the Company

	Share capital	Share premium	Other capital reserve	Surplus reserve	Accumulated losses	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		(Note 30(i))		(Note 30(ii))		
At 1 January 2017	14,142,661	11,123,358	31,355	200,383	(839,797)	24,657,960
Total comprehensive expense	_	_	_	_	(56,732)	(56,732)
Total transactions with owners:						
- Equity settled share-based transaction (note 31)	_	_	10,636	_	_	10,636
At 31 December 2017 and 1 January 2018	14,142,661	11,123,358	41,991	200,383	(896,529)	24,611,864
Total comprehensive income	_	_	_	_	30,086	30,086
Total transactions with owners:						
- Issuance of shares (note 28)	4,841,679	2,796,036	_	_	_	7,637,715
At 31 December 2018	18,984,340	13,919,394	41,991	200,383	(866,443)	32,279,665

The distributable profits of the Company are as follows:

	2018	2017
	RMB'000	RMB'000
Distributable profits	_	_

30 RESERVES

(i) Share premium and other capital reserve

In accordance with the relevant laws and regulations of the PRC, on this restructuring, the surplus of related asset revaluation, transaction with Sinopec Group, issue of share capital and share repurchases are reflected in this reserves. Other capital reserve includes the fair value of recongised share options (refer to note 2.19 to the consolidated financial statements for the accounting policies).

(ii) Surplus reserve

In accordance with the relevant laws and regulations of the PRC and the articles of association of the Company, it is required to appropriate 10% of its net profit to the statutory surplus reserve. When the balance of such a reserve reaches 50% of the respective companies registered capital, any further appropriation is optional. The statutory surplus reserve can be used to offset losses, if any, and may be converted into share capital by issuing new shares.

(iii) Specific reserve

Pursuant to certain regulations issued by the State Administration of Work Safety of the PRC, the Group is required to set aside an amount to a safety fund for its oil construction business. The fund can be used for improvements of safety at the worksite, and is not available for distribution to shareholders. Upon incurring qualifying safety expenditures, an equivalent amount is transferred from safety fund to retained earnings.

(iv) Other comprehensive income reserve (non-recycling)

Other comprehensive income reserve (non-recycling) includes net accumulated movement in fair value of equity investment at FVTOCI (refer to note 2.10 to the consolidated financial statements for the accounting policies).

31 SHARE-BASED PAYMENTS

Pursuant to the resolution of the fourteen meeting of the eighth session of the Board of Directors of the Company on 1 November 2016, the proposal regarding "the Adjustment of the List of Participants and the Number of the Share Options under the Proposed Grant of the Share Option Incentive Scheme" and the proposal regarding "the Proposed Grant under Share Option Incentive Scheme" was approved.

According to the Company's share option incentive scheme, the grant date of share options was 1 November 2016, and there were a total of 49,050,000 share options granted to 477 participants (0.3469% of the total ordinary share capital issued). Each share option has a right to purchase an ordinary A share listed in PRC on vesting date at an exercise price of RMB5.63 under vesting conditions. The options are exercisable starting two years from the grant date, subject to the following vesting conditions:

- (i) achieving Compound annual growth rate of no less than 6% in profit before income tax for 2017, 2018 and 2019, respectively based on the profit before income tax of 2015:
- (ii) ratio of earnings before interest, tax, depreciation and amorisation to net asset of the Group should be no less than 32% for 2017, 2018 and 2019 in respect to the three vesting periods;
- (iii) the above (i) and (ii) conditions should be no lower than the 75% level of peer companies; and
- (iv) the performance of the indicator for economic value added has reached the target set by the Sinopec Group for 2017, 2018 and 2019, and the changes of economic value added should be large than zero.

As at 31 December 2018, the outstanding share options which will expire in twelve months after the vesting dates and their exercise prices are as follows:

	Exercise price	
Vesting date	(per share in RMB)	Outstanding shares
1 November 2020	5.63	19,620,000

The total fair value of share options at the grant date was RMB54,229,200 for 49,050,000 share options, which has been valued by an external valuation expert using Black-Scholes valuation model. At 31 December 2018, 19,620,000 share options with the total fair value of RMB25,343,000 at the grant date has not been exercised.

The movement of share options are as follows:

	No. of share options
Outstanding shares at 31 December 2017 and 1 January 2018	34,335,000
Lapsed during the year	(14,715,000)
Outstanding shares at 31 December 2018	19,620,000

The significant inputs into the model were as follows:

	Granting date
Spot share price	RMB3.96
Exercise price	RMB5.63
Expected volatility	46.17%
Maturity (years)	3-5 years
Risk-free interest rate	2.34% - 2.45%
Expected dividend yield	0%

No share option expenses have been recognised in the consolidated statement of comprehensive income for the year ended 31 December 2018 (2017: RMB10,636,000). As at 31 December 2018, no share option had been exercised yet.

At 31 December 2018, under the current capital structure, fully exercise of the outstanding shares will lead to issue of 19,620,000 (2017: 34,335,000) extra ordinary A share and increase in share capital of RMB19,620,000 (2017: RMB34,335,000), before issue expenses.

32 DEFERRED INCOME

	2018	2017
	RMB'000	RMB'000
At 1 January	136,312	112,171
Government grants received during the year	733,330	396,574
Recognised in the statement of comprehensive income for the year	(730,048)	(372,433)
At 31 December	139,594	136,312

Deferred income mainly related to income from the national special research government grants.

33 NOTES AND TRADE PAYABLES

	2018	2017
	RMB'000	RMB'000 (Restated)
Trade payables		
- Sinopec Group and its subsidiaries	1,208,415	1,150,292
- Joint ventures	14,950	49,643
- Sinopec Group's joint ventures and associates	75,055	47,623
- Third parties	21,963,342	25,253,066
	23,261,762	26,500,624
Notes payables	3,797,742	3,045,393
	27,059,504	29,546,017

As at 31 December 2018 and 2017, the carrying amounts of the Group's notes and trade payables were approximately their fair values.

Ageing analysis of notes and trade payables based on invoice date is as follows:

	2018	2017
	RMB'000	RMB'000 (Restated)
Within 1 year	22,716,227	20,551,328
1 to 2 years	2,564,414	5,007,071
2 to 3 years	752,327	1,799,618
Over 3 years	1,026,536	2,188,000
	27,059,504	29,546,017

34 DEPOSITS RECEIVED AND OTHER PAYABLES

	2018	2017
	RMB'000	RMB'000 (Restated)
Deposits received (note (i) & (iv))		
Advances for construction and service	_	1,773,584
Salaries payables	510,507	381,275
Other tax payables	791,724	830,816
Output value-added tax to be certified	917	11,744
Interest payables (note (ii))	12,893	10,927
Other payables (note (iii))		
Guarantee deposits	724,468	670,463
Deposits	64,712	164,697
Disbursement of funds	601,140	473,452
Temporary receipts	458,704	743,062
Escrow payments	66,355	44,850
Withheld payments	48,657	67,641
Sinopec Group capital restructuring funds	_	2,600,000
Payable of profit arising during major assets restructuring	_	1,118,902
Others	243,671	552,468
	3,523,748	9,443,881

Notes:

- (i) As at 31 December 2017, deposits received included related party balances: Sinopec Group and its subsidiaries amounting to RMB423,073,000 and the joint ventures and associates of Sinopec Group amounting to RMB5,179,000.
- (ii) As at 31 December 2018 and 2017, interest payables above are related party balance with Sinopec Group and its subsidiaries.
- (iii) As at 31 December 2018, the other payables include related party balances: Sinopec Group and its subsidiaries amounting to RMB41,249,000 (2017: RMB3,767,038,000).
- (iv) The Group has initially applied IFRS 15 using the cumulative effect method and adjusted the opening balance at 1 January 2018. Upon the adoption of IFRS 15, "Advances for construction and service" has been reclassified as "Contract liabilities" and disclosed in note 24(c).
- (v) Amounts due to related parties are unsecured, interest free and repayable on demand.

35 BORROWINGS

	2018	2017
	RMB'000	RMB'000
Current liabilities		
Loans from Sinopec Finance Company Limited (note (i))	9,600,000	6,995,000
Loans from Sinopec Century Bright Capital Investment Company Limited (note (i))	3,006,082	8,015,830
Loans from Sinopec Group (note (i))	5,000,000	2,500,000
Finance lease liabilities (note (ii))	149,022	28,844
	17,755,104	17,539,674
Non-current liabilities		
Loans from Sinopec Century Bright Capital Investment Company Limited (note (i))	536,291	455,826
Finance lease liabilities (note (ii))	841,618	53,037
	1,377,909	508,863
	19,133,013	18,048,537
Notes: (i) Loans from related parties The loans from related parties of the Group are repayable as follows:		
	2018	2017
	RMB'000	RMB'000
Within 1 year	17,606,082	17,510,830
1 to 2 years	536,291	455,826
	18,142,373	17,966,656

As at 31 December 2018, loans from related parties are unsecured and their annual interest rates are in the range of 3.30% to 8.80% (2017: 1.70% to 7.90%).

35 BORROWINGS (Continued)

(ii) Finance lease liabilities

The analysis of the Group's obligations under finance leases is as follows:

	2018	2017
	RMB'000	RMB'000
Total minimum lease payments		
- Within 1 year	187,009	34,200
- 1 to 2 years	167,636	27,223
- 2 to 5 years	455,543	32,193
- over 5 years	330,199	_
	1,140,387	93,616
Future finance charges on finance leases	(149,747)	(11,735)
Present value of finance lease liabilities	990,640	81,881
	2018	2017
	RMB'000	RMB'000
Present value of minimum lease payments:		
- Within 1 year	149,022	28,844
- 1 to 2 years	135,899	23,919
- 2 to 5 years	393,219	29,118
- over 5 years	312,500	_
	990,640	81,881
Less: Portion due within one year included under current liabilities	(149,022)	(28,844)
Portion due after one year included under non-current liabilities	841,618	53,037

At 31 December 2018, the Group leased certain oil engineering equipment for its business operations in finance lease arrangement. The remaining lease term are from 1 to 7 years. (2017: 2 to 5 years).

At 31 December 2018, finance lease liabilities included related party balances: the joint ventures and associates of Sinopec Group amounted to RMB 959,900,000. (2017: RMB28,000).

36 DEFERRED TAX

Deferred tax assets and liabilities recognised:

The analysis of deferred tax assets and liabilities is as follows:

,		
	2018	2017
	RMB'000	RMB'000
Deferred tax assets	492,438	472,184
Deferred tax liabilities	(22,658)	(23,879)
Deferred tax assets, net	469,780	448,305
The movement of the deferred tax account is as follows:	2018	2017
	RMB'000	RMB'000
At 1 January	448,305	156,268
Credited to profit or loss (Note 12)	24,421	292,037
Debited to other comprehensive income	(2,946)	_
At 31 December	469.780	448.305

The movement of deferred tax assets/(liabilities) during the years ended 31 December 2018 and 2017, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Deferred tax assets

	Deferred income	Provision for impairment on assets	Total
	RMB'000	RMB'000	RMB'000
At 1 January 2017		183,548	183,548
Debited to:			
Profit or loss	15,308	273,328	288,636
At 31 December 2017 and 1 January 2018	15,308	456,876	472,184
(Credited)/Debited to:			
Profit or loss	(35)	20,289	20,254
At 31 December 2018	15,273	477,165	492,438

Deferred tax liabilities

	Accelerated depreciation allowance	Revaluation on assets	Net movement in fair value of financial assets at FVTOCI	Total
	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2017	351	26,929	_	27,280
Debited/(Credited) to:				
Profit or loss	490	(3,891)	_	(3,401)
At 31 December 2017 and 1 January 2018	841	23,038	_	23,879
Debited/(Credited) to:				
Profit or loss	(331)	(3,836)	_	(4,167)
Other comprehensive income	_	_	2,946	2,946
At 31 December 2018	510	19,202	2,946	22,658

36 DEFERRED TAX (Continued)

Deferred tax liabilities (Continued)

Deferred tax assets represent the recognised tax losses carried forward to the extent that the realisation of the related income tax benefits through the future taxable profits is probable. In accordance with the PRC tax law applicable to those companies in their respective jurisdictions, tax losses may be carried forward against future taxable income. Tax losses not recognised as deferred intax assets in the Group is as follow:

	2018	2017
	RMB'000	RMB'000
Tax losses not recognised as deferred tax assets	19,576,148	23,534,199

The Group did not recognise the above tax losses as deferred tax assets as the management believes that it is less likely such tax losses would be realised before its expiry date. The said tax losses not recognised as deferred tax assets would be expired within five years.

37 COMMITMENTS

(a) Capital commitments

Capital commitments for the purchase of property, plant and equipment outstanding at 31 December 2018 and 2017 not provided for in the financial statements are as follows:

	2018	2017
	RMB'000	RMB'000
Contracted but not provided for	136,467	130,116

(b) Operating lease commitments

The future aggregate minimum lease payments under non-cancellable operating leases at 31 December 2018 and 2017 are as follows:

	2018	2017
	RMB'000	RMB'000
Within 1 year	322,639	291,189
1 to 2 years	16,633	32,746
2 to 3 years	14,187	11,775
Over 3 years	29,531	21,130
Total	382,990	356,840

The Group leases various residential properties, office and equipment under non-cancellable operating lease agreements. The leases run for an initial period of 1 to 24 years (2017: 1 to 24 years), with an option to renew the leases and renegotiate the terms at the expiry date or at dates mutually agreed between the Group and respective landlords/lessors. None of the leases include contingent rentals.

(b) Investment commitments

As at 31 December 2018, the Group has outstanding commitments of RMB129,625,000 in respect of its investment in joint ventures (2017: RMB129,625,000).

(c) Fulfillment of commitments for the previous period

The Group has fulfilled the capital and operating lease commitments as at 31 December 2018.

38(a) CASH (USED IN)/GENERATED FROM OPERATIONS

	2018	2017
	RMB'000	RMB'000 (Restated)
Profit/(Loss) before income tax	613,769	(10,324,177)
Adjustments for:		
- Depreciation of property, plant and equipment	3,074,468	3,289,287
- Impairment loss on property, plant and equipment	_	1,149,494
- Losses on write-off/disposal of property, plant and equipment	7,446	156,144
- Amortisation of other non-current assets	1,559,809	2,088,723
- (Gains)/Losses on write-off/disposal of other non-current assets	(7,447)	16,431
- Amortisation of prepaid land leases	3,261	3,156
- Amortisation of intangible assets	65,979	80,807
- Interest income	(87,886)	(19,449)
- Interest expense	662,443	634,657
- Share of (profit)/loss from joint ventures	(24,348)	14,791
- Share of profit from associates	(2,135)	(1,213)
- Provision for ECL/impairment on trade receivables, net	27,221	1,164,308
- Provision for ECL/impairment on other receivables, net	(16,678)	104,560
- Write down of inventories to net realisable value	_	72,456
- Expected loss on contracts work-in-progress	_	245,039
- ECL allowance on contract assets	26,525	_
- Investment income from available-for-sale financial assets	_	(600)
- Investment income from financial assets at FVTOCI	(600)	_
- Share-based payment	_	10,636
Cash flows generated from/(used in) operating activities before changes in working capital	5,901,827	(1,314,950)
Changes in working capital:		
- Other non-current assets	(2,158,735)	(1,162,862)
- Long-term receivables	233,061	(255,041)
- Inventories	(6,136)	170,086
- Notes and trade receivables	2,138,276	4,483,784
- Prepayments and other receivables	(106,011)	(51,463)
- Restricted cash	(15,323)	(11,771)
- Provisions	595,742	_
- Contract assets	(2,468,242)	_
- Contract liabilities	(2,397,934)	_
- Contract work-in-progress	_	(1,215,129)
- Deferred income	3,282	24,141
- Notes and trade payables	(2,706,262)	(413,051)
- Deposits received and other payables	(1,701,191)	551,703
Cash (used in)/generated from operations	(2,687,646)	805,447

38(b) RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

As at 31 December 2018, the details changes in the Group's liabilities arising from financing activities are as below:

	Loans	Finance lease liabilities	Total
	RMB'000	RMB'000	RMB'000
At 1 January 2018	17,966,656	81,881	18,048,537
Changes from financing cash flows:			
Proceeds from borrowings	35,585,650	500,000	36,085,650
Repayments of borrowings	(35,608,897)	(117,546)	(35,726,443)
Total changes from financing cash flows	(23,247)	382,454	359,207
Other changes:			
Transferred from deposits received and other payables	_	526,305	526,305
Exchange difference	198,964	_	198,964
Total other changes	198,964	526,305	725,269
At 31 December 2018	18,142,373	990,640	19,133,013

As at 31 December 2017, the details changes in the Group's liabilities arising from financing activities are as below:

	Loans	Finance lease liabilities	Total
	RMB'000	RMB'000	RMB'000
At 1 January 2017	18,000,349	50,924	18,051,273
Changes from financing cash flows:			
Proceeds from borrowings	37,753,867	28,000	37,781,867
Repayments of borrowings	(36,256,236)	(29,190)	(36,285,426)
Total changes from financing cash flows	1,497,631	(1,190)	1,496,441
Other changes:			
Purchases of property, plant and equipment	_	32,147	32,147
Deposits received and other payables	(500,000)	_	(500,000)
Exchange difference	(1,031,324)	_	(1,031,324)
Total other changes	(1,531,324)	32,147	(1,499,177)
At 31 December 2017	17,966,656	81,881	18,048,537

39 PROVISIONS

	Provision for onerous contracts	Provision for loss on judicial reorganisation	Total
	RMB'000 (Note (i), (iii))	RMB'000 (Note (ii))	RMB'000
At 31 December 2017 and 1 January 2018	259,048	_	259,048
Provision during the year	_	475,276	475,276
Realisation during the year	(138,582)	_	(138,582)
At 31 December 2018	120,466	475,276	595,742

Notes:

- (i) As at 31 December 2018, the Group had a provision of approximately RMB120,466,000 for onerous contract, of which the expected unavoidable costs of meeting the performance obligation as stated in construction contracts have exceeded the economic benefits expected to be received. The provision was recognised for the contract based on the estimated minimum net cost of completing the contract.
- (ii) On 16 August 2018, Sinopec (Brazil) Co., Ltd., an indirectly wholly-owned subsidiary of the Company (the "Brazil Subsidiary") applied for judicial reorganisation to the Third State Court of Commercial Enterprises in Rio de Janeiro, Brazil (the "Court of Rio") according to the relevant local laws in Brazil. On 31 August 2018, the Brazil Subsidiary received ruling from Court of Rio, which approved Brazil subsidiary's entered into judicial reorganisation and Nascimento & Rezende Advogados, the law firm, was appointed as the judicial reorganisation manager by Court of Rio.

According to relevant laws of Brazil, the Brazil Subsidiary is required to prepare a reorganisation plan upon the court of Rio has approved that the Brazil Subsidiary is allowed to implement the legal reorganisation procedure. Such legal reorganisation is conditional upon the approval of the reorganisation plan from the creditors' meeting and the court of Rio.

For the purpose of obtaining approval from creditors' meeting and the court of Rio in Brazil, the Brazil Subsidiary's reorganisation plan shall include fully settlement of the amount due to employees in respect of the project, repayment of a proportion of debts due to suppliers, service providers and subcontractors, and payment of legal fees, fees on judicial authorities and other service fees in relation to the implementation of the legal reorganisation procedure. The management assessed that provision for loss on judicial reorganisation amounting to approximately RMB475,276,000 was made.

(iii) The Group has initially applied IFRS 15 using the cumulative effect method and adjusted the opening balance at 1 January 2018. Upon the adoption of IFRS 15, "Expected loss on contracts" under "Contract work-in-progress" (note 24(a)) in relation to provision for onerous contracts has been reclassified as "Provisions".

40 CONTINGENCIES

(a) Contingent liabilities and financial impacts due to pending litigation

The Group is the defendant of certain lawsuits and also the third party or the designated party of other proceedings arising in the ordinary course of business. Management has assessed the possibility of adverse results of these contingencies, lawsuits or other proceedings and believes that any resulting liabilities will not have significant negative impact on the financial position, operating results or cash flow of the Group. Therefore, the management does not make provision for the foresaid matters.

China National Chemical Engineering No. 11 Construction Co., Ltd. (the "Applicant") and Sinopec International Petroleum Services Corporation ("International services Corporation" or the "Respondent"), a wholly-owned subsidiary of the Group, has entered into the "Works Contract for the Package C Construction of the Saudi Yanbu-Medina Phase III Pipeline Project" (the "Construction Works Contract") with International Services Corporation on 16 August 2012. Pursuant to the Construction Works Contract, International Services Corporation subcontracted to the Applicant the construction of the "Package C Project" of the "Saudi Yanbu-Medina Phase III Pipeline Project". On 29 May 2018, the Applicant submitted to the China International Economic and Trade Arbitration Commission in Beijing the "Application for Arbitration" in respect of the contract dispute between the Applicant and the Respondent during the performance of the Construction Works Contract, requesting the Respondent to pay approximately RMB456,810,000 for the project fee and the accrued interest, approximately RMB145,968,000 for the loss due to stoppage of work and the accrued interest, approximately RMB38,018,000 for the advance payment under the letter of guarantee and the accrued interest, and approximately RMB500,000 for attorney fee and the arbitration fee for the case (the "Arbitration"). The China International Economic and Trade Arbitration Commission accepted the case on 15 June 2018 and issued the "Notice of Arbitration for the Dispute Case of Project Contract No. P20180585 ([2018] China Trade Zhongjing Zi No. 048223)".

As the case is still under trial, the Group does not make provision for the pending litigation since the management considered that the outcome of the litigation cannot be reasonably estimated and cannot determine its impact on the Group's financial position and operation result.

(b) Contingent liabilities and financial impacts from guarantee provided for other entities

As at 31 December 2018, there is no material contingency from guarantee provided for other entities (2017: none).

(c) Foreign tax penalties

On 7 February 2014, Federal Tax Administration of Rio de Janeiro conducted a tax audit on the Brazilian subsidiary of International Engineering. On 11 February 2014, the Brazilian subsidiary of International Engineering received a notice of the tax payments and penalties from Federal Tax Administration of Rio de Janeiro with total amount of BRL 80,459,100 (equivalent to USD 24,289,800, including tax of BRL 36,467,100, interest of BRL 13,929,800 and tax penalties of BRL 30,062,200. According to the legal opinion of the Brazilian subsidiary of International Engineering, on 10 March 2014, the Brazilian subsidiary of International Engineering has administratively replied to such tax penalties and no final results can be predicted up to the accountant's report date. Even if Federal Tax Administration of Rio de Janeiro has made unfavorable decision against the Brazilian subsidiary of International Engineering, the Brazilian subsidiary of International Engineering still has the right for the administrative legal proceedings to the local court. Since the tax penalties are not predictable, the Group did not provide the provision of such incident.

(d) Other contingent liabilities

With respect to uncertainties about enterprise income tax differences arising from 2006 and before as originated from a tax circular (Circular [2007] No.664) issued by the State Administrative of Taxation in June 2007, the Group has been informed by the relevant tax authority to settle the enterprise income tax ("EIT") for 2007 at a rate of 33%. Up to date, the Group has not been requested to pay additional EIT in respect of any years prior to 2007. There is no further development of this matter during the year ended 31 December 2018. No provision has been made in the financial statements for this uncertainty for tax years prior to 2007 because management believes it cannot reliably estimate the amount of the obligation, if any, which might exist.

41 SIGNIFICANT RELATED PARTY TRANSACTIONS

Related parties are those parties that have the ability to control the other party or exercise significant influence in making financial and operation decisions. Parties are also considered to be related if they are subject to common control. The Group is subject to the control of the PRC government which also controls a significant portion of the productive assets and entities in the PRC (collectively known as the "state-owned enterprises").

In accordance with IAS 24 "Related party disclosures", other state-owned enterprises and their subsidiaries, directly or indirectly controlled by the PRC government are regarded as related parties of the Group ("other state-owned enterprises"). For the purpose of related party disclosures, the Group has in place procedures to identify the immediate ownership structure of its customers and suppliers to determine whether they are state-owned enterprises. Many state-owned enterprises have multi-layered corporate structure and the ownership structures change over time as a result of transfers and privatisation programs. Nevertheless, management believes that meaningful information relating to related party transaction has been adequately disclosed

In addition to the related party transactions and balances shown elsewhere in this report, the following is a summary of significant related party transactions entered into in the ordinary course of business between the Group and its related parties, including other state-owned enterprises, during the years ended 31 December 2018 and 2017.

The transactions with related parties are carried out on pricing and settlement terms agreed with counter parties in the ordinary course of business.

The majority of these significant related party transactions with Sinopec Group and its fellow subsidiaries also constitute continuing connected transactions as defined under Chapter 14A of the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange.

(a) Significant related party transactions arising with Sinopec Group and its subsidiaries and fellow subsidiaries:

	2018	2017
	RMB'000	RMB'000 (Restated)
Purchases of materials		
- Sinopec Group and its subsidiaries	8,097,321	5,797,473
Sales of products		
- Sinopec Group and its subsidiaries	111,870	85,984
Rendering of engineering services		
- Sinopec Group and its subsidiaries	36,501,508	27,982,159
Receiving of engineering services		
- Sinopec Group and its subsidiaries	394,110	_
Receiving of community services		
- Sinopec Group and its subsidiaries	1,002,930	1,583,799

41 SIGNIFICANT RELATED PARTY TRANSACTIONS (Continued)

(a) Significant related party transactions arising with Sinopec Group and its subsidiaries and fellow subsidiaries: (Continued)

	0040	2017
	2018	
	RMB'000	RMB'000 (Restated)
Receiving of integrated services		
- Sinopec Group and its subsidiaries	325,003	293,071
Rendering of technology development services		
- Sinopec Group and its subsidiaries	271,345	265,207
Rental income		
- Sinopec Group and its subsidiaries	571	571
Rental expenses - land and buildings		
- Sinopec Group and its subsidiaries	150,425	117,136
Rental expenses - equipment and vehicles		
- Sinopec Group's subsidiaries	57,526	14,811
Deposits interest income		
- Sinopec Group's subsidiaries	1,877	524
Interest income from entrusted loans		
- Sinopec Group's subsidiaries	_	67
Loans interest expenses		
- Sinopec Group and its subsidiaries	582,557	639,109
Borrowings obtained		
- Sinopec Group and its subsidiaries	35,585,650	37,416,244
Borrowings repaid		
- Sinopec Group and its subsidiaries	35,608,897	36,929,663
Safety and insurance fund expenses		
- Sinopec Group	81,630	79,326
Safety and insurance fund refund		
- Sinopec Group	171,495	87,111
Receiving of transferred assets		
- Sinopec Group's subsidiaries	75,024	

(b) Significant related party transactions arising with the associates and joint ventures of the Group:

	2018	2017
	RMB'000	RMB'000 (Restated)
Rendering of engineering services		
- Associates and joint ventures of the Group	22,580	_
Receiving of engineering services		
- Associates and joint ventures of the Group	2,065,450	901,953

41 SIGNIFICANT RELATED PARTY TRANSACTIONS (Continued)

(c) Significant related party transactions arising with Sinopec Group's associates and joint ventures:

	2018	2017
	RMB'000	RMB'000 (Restated)
Rendering of engineering services		
- Sinopec Group's associates and joint ventures	312,970	128,499
Rental expenses - equipment		
- Sinopec Group's associates and joint ventures	62,524	_
Interest expenses on finance lease		
- Sinopec Group's associates and joint ventures	30,154	_

(d) Remuneration of key management personnel

Key management includes directors (executive and non-executive), supervisors, president, vice presidents, chief financial officer and secretary to the Board of Directors. The compensation paid or payable to key management form employee services is shown below:

	2018	2017
	RMB'000	RMB'000
Fee	700	600
Salaries, allowances and bonus	6,082	5,768
Contributions to pension plans	538	532
Share-based payments	_	360
	7,320	7,260

Senior management, excluding directors and supervisors, whose remuneration fell within the following bands is as follows:

	2018	2017
	Number of individuals	Number of individuals
RMB0 to RMB500,000	4	9
RMB500,001 to RMB1,000,000	1	2
	5	11

(e) Related party guarantee

At 31 December 2018, Sinopec Group has not provided performance guarantee to the Group. (31 December 2017: USD210,000,000).

42 FINANCIAL AND CAPITAL RISKS MANAGEMENT

The Group established certain risk management policies to recognise and analyse the potential risk of the Group. The Group designed an internal control procedure according to proper acceptable risk level in order to monitor the risk position of the Group. Both risk management policies and related internal control system will be reviewed regularly to adapt the market condition or changes in operating activities of the Group. The implementation of internal control system will be reviewed regularly or randomly by the internal audit department in accordance to the risk management policies.

42.1 Category of financial assets and liabilities

	2018	2017
	RMB'000	RMB'000 (Restated)
Financial assets		
Financial assets at FVTOCI (non-recycling))		
- Unlisted equity investments	39,011	_
Available-for-sale financial assets		
- Unlisted equity investments	_	24,389
Financial assets measured at amortised cost/Loans and receivables		
- Restricted cash and cash equivalents	2,203,441	2,547,975
- Notes and trade receivables	16,111,200	18,191,357
- Other receivables	2,971,087	2,885,452
- Long-term receivables	_	233,061
	21,285,728	23,857,845
	21,324,739	23,882,234
Financial liabilities		
Financial liabilities measured at amortised cost		
- Notes and trade payables	27,059,504	29,546,017
- Other payables	3,785,501	7,874,077
- Borrowings	19,133,013	18,048,537
	49,978,018	55,468,631

42.2 Financial risk factors

The Group's financial instrument risks mainly include interest rate risk, currency risk, credit risk and liquidity risk. The Group's objective in risk management is to obtain an appropriate equilibrium between risk and return. It also focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

(a) Market risk

Market risk includes interest rate risk and currency risk, refers to the risk that the fair value or future cash flow of a financial instrument will be fluctuated due to the changes in market price.

(i) Interest rate risk

Interest rate risk refers to the risk that the fair value or future cash flow of a financial instrument will be fluctuated due to the floating rate. Interest rate risk arises from recognised interest-bearing financial instrument and unrecognised financial instrument (e.g. loan commitments).

The Group's interest rate risk arises from cash and cash equivalents, borrowings and interest-bearing liabilities. Financial liabilities issued at floating rate expose the Group to cash flow interest rate risk. Financial liabilities issued at fixed rate expose the Group to fair value interest rate risk. The Group determines the relative proportions of its fixed rate and floating rate contracts depending on the prevailing market conditions and to maintain an appropriate combination of financial instruments at fixed rate and floating rate through regular reviews and monitors.

The Group's finance department continuously monitors the interest rate position of the Group. Increase in interest rates will increase the cost of new borrowing and the interest expenses with respect to the Group's outstanding floating rate interest-bearing borrowings, and therefore could have a material adverse effect on the Group's financial result. The management will make adjustments with reference to the latest market conditions. These adjustments may include enter into interest swap agreement to mitigate its exposure to the interest rate risk. For the year ended 31 December 2018 and 2017, the Group did not enter into any interest rate swap arrangements. The fair value interest rate risk of the deposit with bank was not significant because the fixed term deposits are short-term deposits.

42.2 Financial risk factors (Continued)

(a) Market risk (Continued)

(i) Interest rate risk (Continued)

Interest-bearing financial instruments held by the Group are as below:

	2018		2017	
	%	RMB'000	%	RMB'000
Fixed rate financial instruments				
Restricted cash and cash and cash equivalents (Notes 26 and 27)	1.30% - 2.00%	161,363	1.35%-2.75%	311,176
Other receivables/Long-term receivables	2.00%	40,477	2.00%	233,061
Borrowings (Note 35)	3.30%-7.00%	15,590,640	3.30% - 7.50%	9,576,881
Floating rate financial instruments				
Restricted cash and cash and cash equivalents (Notes 26 and 27)	0.3%-0.35%	2,042,078	0.3%-0.35%	2,236,799
Borrowings (Note 35)	3.51%-8.80%	3,542,373	1.70%-7.90%	8,471,656

As at 31 December 2018, it is estimated that a general increase of 50 basis points in the borrowings with variable interest rates, with all other variables held constant, would decrease the Group's net profit and decrease the shareholder's equity for the year by approximately RMB13,284,000 (2017: increase the Group's net loss and decrease the shareholder's equity for the year by approximately RMB31,769,000).

As at 31 December 2018, a general decrease of 50 basis points in variable interest rates as at 31 December 2018 would have had the same magnitude but of opposite effect on the above borrowings, on the basis that all other variables remain constant.

The financial instruments held by the Group at the reporting date expose the Group to fair value interest rate risk. This sensitivity analysis as above has been determined assuming that the change in interest rates had occurred at the reporting date and arised from the recalculation of the above financial instrument issued at new interest rates. The non-derivative tools issued at floating interest rate held by the Group at the reporting date expose the Group to cash flow interest rate risk. The effect to the net profit and shareholder's equity illustrated in the sensitivity analysis as above is arised from the effect to the annual estimate amount of interest expenses or revenue at the floating interest rate. The analysis is performed on the same basis for last year.

(ii) Currency risk

Currency risk refers to the risk that the fair value or future cash flows of a financial instrument will be fluctuated due to the changes in foreign currency rates. Foreign currency risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured.

The Group's major operational activities are carried out in the PRC and a majority of the transactions are denominated in RMB. The Group is exposed to foreign currency risk arising from the recognised assets and liabilities, and future transactions denominated in foreign currencies, primarily denominated in US Dollars, Saudi Riyals, Kuwait Dinars and Brazil Reals.

The foreign currency assets and liabilities include restricted cash, cash and cash equivalents, trade and other receivables, trade and other payables and borrowings which are denominated in foreign currencies.

The following table details the financial assets and liabilities held by the Group which denominated in foreign currencies and amounted to RMB are as follows:

As at 31 December 2018	USD	SAR	KWD	BRL	Others
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Restricted cash and cash and cash equivalents	1,183,657	195,042	139,061	211	348,346
Trade and other receivables	5,247,132	662,220	581,071	56,073	574,700
Trade and other payables	(1,230,026)	(490,601)	(94,834)	(43,638)	(304,073)
Borrowings	(3,542,372)	_	_	_	_
Net exposure in RMB	1,658,391	366,661	625,298	12,646	618,973

As at 31 December 2017	USD	SAR	KWD	BRL	Others
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Restricted cash and cash and cash equivalents	1,159,343	85,272	68,103	457	448,358
Trade and other receivables	5,187,902	681,622	768,699	61,321	552,618
Long-term receivables	233,061	_	_	_	
Trade and other payables	(1,325,873)	(484,209)	(112,209)	(48,524)	(175,527)
Borrowings	(8,471,656)	_	_	_	_
Net exposure in RMB	(3,217,223)	282,685	724,593	13,254	825,449

42.2 Financial risk factors (Continued)

(a) Market risk (Continued)

(ii) Currency risk (Continued)

The Group's finance department is responsible for monitoring the amount of assets and liabilities, and transactions denominated in foreign currencies in order to minimise foreign exchange risk. The Group may sign a forward exchange contracts or currency swap contracts to mitigate the foreign exchange risk. In 2018 and 2017, the Group did not enter into any forward exchange contracts or currency swap contracts to mitigate the foreign currency risk.

The following table illustrates the effect on the Group's net profit/net loss in regard to a 5% appreciation in RMB against the following currencies, with other variables were held constant as at 31 December 2018 and 2017:

	2018	2017
	RMB'000	RMB'000 (Restated)
(Decrease in net profit)/Increase in net profit (2017: Decrease in net loss/(Increase in net loss))		
- USD	(62,190)	120,646
- SAR	(13,750)	(10,601)
- KWD	(23,449)	(27,172)
- BRL	(474)	(497)

As at 31 December 2018 and 2017, the same 5% depreciation in RMB against the respective foreign currencies would have the same magnitude but of opposite effect, on the basis that all other variables remain constant.

(b) Credit risk

Credit risk refers to the risk that the counterparty to a financial instrument would fail to discharge its obligation under the terms of the financial instrument and cause a financial loss to the Group. The Group's exposure to credit risk mainly arises from restricted cash, cash and cash equivalent, notes and trade receivables, contract assets, other receivables and long-term receivables.

In order to minimise credit risk, the Group has developed and maintains the Group's credit risk gradings to categorise exposures according to their degree of risk of default. The credit rating information is based on the Group's own trading records to rate its major customers and other debtors. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties.

For receivables, the Group has policies to limit the credit risk exposure. The Group assesses the credit quality of and sets credit limits on its customers by taking into account their financial position, the availability of guarantee from third parties, their credit history and other factors such as current market conditions. The credit history of the customers is regularly monitored by the Group. In respect of customers with a poor credit history, the Group will use written payment reminders, shorten or cancel credit periods, to ensure the overall credit risk is limited to a controllable extent.

The Group has certain concentration of credit risk in respect of trade receivables as 58.64% (2017 (Restated): 57.13%) of the total trade receivables was due from the Group's five largest customers.

For financial assets at amortised cost and contract assets, the exposures to credit risk are monitored such that any outstanding debtors are reviewed and followed up on an ongoing basis. The Group does not hold any collateral from its debtors.

Impairment assessment under ECL model

The Group's current credit risk grading framework comprises the following categories:

Category	Description	Basis for recognising ECL
Performing	The counterparty has a low risk of default and does not have any past-due amounts	12-month ECL
Doubtful	There has been a significant increase in credit risk since initial recognition	Lifetime ECL – not credit-impaired
In default	There is evidence indicating the asset is credit-impaired	Lifetime ECL – credit-impaired
Write-off	There is evidence indicating that the debtor is in severe financial difficulty and the Group has no realistic prospect of recovery	Amount is written off

Trade receivables and contract assets

As set out in note 2.10, the Group assesses ECL under IFRS 9 on trade receivables and contract assets based on provision matrix, the expected loss rates are based on the payment profile for sales in the past 5 years as well as the corresponding historical credit losses during that period. The historical rates are adjusted to reflect current and forwarding looking macroeconomic factors affecting the customer's ability to settle the amount outstanding. At each reporting date, the historical default rates are updated and changes in the forward-looking estimates are analysed.

Based on the Group's assessment of historical credit loss experience of the existing debtors and all available forward looking information, for trade receivables and contract assets, the Group used estimated loss rates based on aging for classes with different credit risk characteristics and exposures.

42.2 Financial risk factors (Continued)

(b) Credit risk (Continued)

Impairment assessment under ECL model (Continued)

Other receivables

The Group measures the loss allowance equal to 12-month ECL of other receivables. There is no significant increase in credit risk since initial recognition, the Group apply lifetime ECL based on aging for classes with different credit risk characteristics and exposures.

Restricted cash and cash and cash equivalents

The Group's bank deposits are mainly deposited in state-owned banks and other large and medium-sized listed banks, and the Group considers the credit risk to be insignificant that the losses due to the breach of contract is minimal.

The Group's maximum exposure to credit risk is the carrying amount of each financial asset in the statement of financial position as stated in note 42.1. The Group did not provide any other guarantees that may pose credit risk to the Group.

(c) Liquidity risk

Liquidity risk refers to the risks that the Group will not be able to meet its obligations associated with its financial liabilities that are settled by delivering cash or other financial assets.

Regarding to the management of liquidity risk, the Group's management monitors cash and cash equivalents to meet operational needs and reduce the effect of floating cash flow. The Group's management monitors the usage of bank loan so that the Group does not breach borrowing limits or covenants while maintaining sufficient commitment on reserve fund from major financial institute to meet needs of short-term and long-term liquidity. Besides, to improve the cash flow position, the Group also considers to negotiate with suppliers with a view to lower the amount due.

The Group raised working capital through its operations, bank and other borrowings. As at 31 December 2018, the Group's unused line of credit was RMB5,773,675,000 (2017: RMB4,262,127,000).

The financial assets and liabilities of the Group at the reporting date are analysed by their maturity date as below at their undiscounted contractual cash flows:

	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total undiscounted cash flows	Carrying amount
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
As at 31 December 2018						
Restricted cash and cash and cash equivalents	2,203,441	_	_	_	2,203,441	2,203,441
Notes and trade receivables	16,111,200	_	_	_	16,111,200	16,111,200
Other receivables	2,971,087	_	_	_	2,971,087	2,971,087
Notes and trade payables	(27,059,504)	_	_	_	(27,059,504)	(27,059,504)
Other payables	(3,785,501)	_	_	_	(3,785,501)	(3,785,501)
Borrowings	(17,793,514)	(703,957)	(455,543)	(330,199)	(19,283,213)	(19,133,013)
	(27,352,791)	(703,957)	(455,543)	(330,199)	(28,842,490)	(28,692,290)
As at 31 December 2017 (Restated)						
Restricted cash and cash and cash equivalents	2,547,975	_	_	_	2,547,975	2,547,975
Notes and trade receivables	18,191,357	_	_	_	18,191,357	18,191,357
Other receivables	2,885,452	_	_	_	2,885,452	2,885,452
Long-term receivables	4,661	237,722	_	_	242,383	233,061
Notes and trade payables	(29,546,017)	_	_	_	(29,546,017)	(29,546,017)
Other payables	(7,874,077)	_	_	_	(7,874,077)	(7,874,077)
Borrowings	(17,684,137)	(485,446)	(32,193)	_	(18,201,776)	(18,048,537)
	(31,474,786)	(247,724)	(32,193)	_	(31,754,703)	(31,610,786)

42.3 Capital risk management

The objectives of the Group's capital risk management is to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or disposes assets to reduce its liabilities.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net liabilities divided by total capital. Net liabilities are calculated as total borrowings (including "current and non-current borrowings" as shown in the consolidated statement of financial position) less cash and cash equivalents. Total capital is the sum of total equity and net liabilities as shown in the consolidated statement of financial position. Total equity includes the equity attributable to shareholders of the parent and non-controlling interests.

At the reporting date, the gearing ratio is set out as below:

	2018	2017
	RMB'000	RMB'000 (Restated)
Total borrowings (Note 35)	19,133,013	18,048,537
Less: Cash and cash equivalents (Note 27)	(2,173,580)	(2,533,437)
Net debts	16,959,433	15,515,100
Total equity/(Capital deficiencies)	5,778,410	(2,101,318)
Total capital	22,737,843	13,413,782
Gearing ratio	75%	116%

42.4 Fair value estimation

Fair value measurements

Other than noted as below, the carrying value of the Group's financial assets and liabilities stated at the consolidated statement of financial positon are not materially different from their fair values.

Fair value is the price that would be received to sell assets or paid to transfer liabilities in an orderly transaction between market participants at the measurement date. The Group discloses fair value measurements of financial instruments by level of the following fair value measurement hierarchy:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1).
- Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly (level 2).
- Inputs for the asset or liability that are not based on observable market data (i.e. unobservable inputs) (level 3).

42.4 Fair value estimation (Continued)

(a) Recurring fair value measurement of the Group's financial assets measured at fair value

The financial assets measured at fair value in the consolidated statement of financial position on a recurring basis are grouped into the fair value hierarchy as follows:

	As at 31 December 2018
	Level 3
Items	RMB'000
Financial assets at FVTOCI	
- unlisted equity investments	39,011

	Financial assets at FVTOCI
	As at 31 December 2018
	RMB'000
At 1 January	_
Adjustment on initial application of IFRS 9 (Note 3)	24,389
Net movement in fair value recognised in other comprehensive income	14,622
At 31 December	39,011

The fair value of the unlisted equity securities is measured using valuation techniques with reference to the net asset value. The Directors believe that the change in fair value (which is included in other comprehensive income) derived from the valuation technique is reasonable and is the most appropriate value at the end of the reporting period.

There have been no transfers into or out of Level 3 during the year ended 31 December 2018 (2017: Nil).

(b) Fair values of financial assets and liabilities carried at other than fair value

The carrying value of the Group's financial instruments carried at cost or amortised cost are not materially different from fair value as at 31 December 2018 and 31 December 2017.

43 POST BALANCE SHEET EVENTS

As at 25 March 2019, there are no other material events after reporting date to be disclosed.

44 BUSINESS COMBINATION UNDER COMMON CONTROL

As mentioned in note 2 to the consolidated financial statements, the Group adopts merger accounting for common control combination in respect of the acquisition of Jiangsu Oilfield ("the acquired company"). The effects of the application of merger accounting for business combination under common control occurred during the year ended 31 December 2018 on the Group's financial position as at 31 December 2017 and 1 January 2017 and the results for the year ended 31 December 2017 are summarised as follows:

(a) The effects of consolidated statement of comprehensive income for the year ended 31 December 2017:

	As previously reported	The acquired company	Adjustments	Restated
	RMB'000	RMB'000	RMB'000	RMB'000
Revenue	48,485,788	149,672	(41,512)	48,593,948
Cost of sales and business taxes and surcharges	(51,332,737)	(153,665)	37,683	(51,448,719)
Gross loss	(2,846,949)	(3,993)	(3,829)	(2,854,771)
Selling expenses	(59,615)	_	_	(59,615)
General and administrative expenses	(3,616,774)	(2,590)	_	(3,619,364)
Research and development expenses	(517,599)	_	_	(517,599)
Finance income/(expenses) - net	(580,012)	28	_	(579,984)
Impairment losses on assets	(2,735,857)	_	_	(2,735,857)
Investment income	600	_	_	600
Share of loss from joint ventures	(14,791)	_	_	(14,791) 1,213 (10,380,168)
Share of profit from associates	1,213	_	_	
Operating loss	(10,369,784)	(6,555)	(3,829)	
Other income	498,600	68	3,797	502,465
Other expenses	(446,489)	(17)	32	(446,474)
Loss before income tax	(10,317,673)	(6,504)	_	(10,324,177)
Income tax expense	(238,555)	(479)	_	(239,034)
Loss for the year	(10,556,228)	(6,983)	_	(10,563,211)
Total comprehensive expense for the year attributable to:				
Owners of the Company	(10,556,132)	(6,983)	_	(10,563,115)
Non-controlling interests	(96)	_	_	(96)
Total comprehensive expense for the year	(10,556,228)	(6,983)	_	(10,563,211)
	RMB	RMB	RMB	RMB
Loss per share for loss attributable to owners of the Company (presented in RMB per share)				
Basic and diluted	(0.746)	_	_	(0.747)

44 BUSINESS COMBINATION UNDER COMMON CONTROL (Continued)

(b) The effects of consolidated statement of financial position at 31 December 2017:

	As previously reported	The acquired company	Adjustments	Restated
	RMB'000	RMB'000	RMB'000	RMB'000
Assets				
Non-current assets				
Property, plant and equipment	25,820,147	78,103	_	25,898,250
Other non-current assets	3,065,771	32	_	3,065,803
Long-term receivables	233,061	_	_	233,061
Prepaid land leases	118,540	1,627	_	120,167
Intangible assets	162,994	_	_	162,994
Interests in joint ventures	194,465	_	_	194,465
Interests in associates	12,581	_	_	12,581
Available-for-sale financial assets	24,389	_	_	24,389
Deferred tax assets	472,184	_	_	472,184
Total non-current assets	30,104,132	79,762	_	30,183,894
Current assets				
Inventories	1,193,039	18,148	_	1,211,187
Notes and trade receivables	18,171,083	139,889	(119,615)	18,191,357
Prepayments and other receivables	3,326,446	11,305	(7,151)	3,330,600
Amounts due from customers for contract works	6,610,035	14,267	_	6,624,302
Restricted cash	14,538	_	_	14,538
Cash and cash equivalents	2,523,356	10,081	_	2,533,437
Total current assets	31,838,497	193,690	(126,766)	31,905,421
Total assets	61,942,629	273,452	(126,766)	62,089,315
Equity				
Share capital	14,142,661	_		14,142,661
Reserves	(16,245,289)	2,682	_	(16,242,607)
Equity attributable to owners of the Company	(2,102,628)	2,682		(2,099,946)
Non-controlling interests	(1,372)	_	_	(1,372)
(Capital deficiencies)/Total equity	(2,104,000)	2,682		(2,101,318)
Liabilities				
Non-current liabilities				
Long term borrowings	508,863	_		508,863
Deferred income	136,312			136,312
Deferred tax liabilities	23,879			23,879
Total non-current liabilities	669,054	_		669,054
Current liabilities				
Notes and trade payables	29,487,875	177,757	(119,615)	29,546,017
Deposits received and other payables	9,380,867	70,165	(7,151)	9,443,881
Amounts due to customers for contract works	6,765,375	22,852	_	6,788,227
Short term borrowings	17,539,674	_		17,539,674
Current income tax payable	203,784	(4)	_	203,780
Total current liabilities	63,377,575	270,770	(126,766)	63,521,579
Total liabilities	64,046,629	270,770	(126,766)	64,190,633
Total equity and liabilities	61,942,629	273,452	(126,766)	62,089,315
Net current liabilities	(31,539,078)	(77,080)		(31,616,158)
Total assets less current liabilities	(1,434,946)	2,682	_	(1,432,264)

44 BUSINESS COMBINATION UNDER COMMON CONTROL (Continued)

(c) The effects of consolidated statement of financial position at 1 January 2017:

	As previously reported	The acquired company	Adjustments	Restate
	RMB'000	RMB'000	RMB'000	RMB'00
Assets				
Non-current assets				
Property, plant and equipment	29,674,103	79,264	_	29,753,36
Other non-current assets	4,048,981	243	_	4,049,22
Prepaid land leases	108,178	1,688	_	109,8
Intangible assets	77,147	_	_	77,1
Interests in joint ventures	209,444	_	_	209,4
Interests in associates	11,885	_	_	11,8
Available-for-sale financial assets	24,389	_	_	24,3
Deferred tax assets	183,548	_	_	183,5
Total non-current assets	34,337,675	81,195	_	34,418,8
Current assets				
Inventories	1,453,729	_	_	1,453,7
Notes and trade receivables	24,759,158	230,570	(113,021)	24,876,7
Prepayments and other receivables	3,628,021	21,897	(3,010)	3,646,9
Amounts due from customers for contract works	7,864,648	58,749	_	7,923,3
Restricted cash	3,012	_	_	3,0
Cash and cash equivalents	2,446,923	25,123	_	2,472,0
Total current assets	40,155,491	336,339	(116,031)	40,375,7
Total assets	74,493,166	417,534	(116,031)	74,794,6
Equity				
Share capital	14,142,661	_	_	14,142,6
Reserves	(5,699,793)	9,665	_	(5,690,1
Equity attributable to owners of the Company	8,442,868	9,665	_	8,452,5
Non-controlling interests	(1,276)	_	_	(1,2
Total equity	8,441,592	9,665	_	8,451,2
Liabilities				
Non-current liabilities				
Long term borrowings	796,634	_	_	796,6
Deferred income	112,171	_	_	112,1
Deferred tax liabilities	27,280	_	_	27,2
Total non-current liabilities	936,085	_	_	936,0
Current liabilities				
Notes and trade payables	30,310,227	222,466	(113,021)	30,419,6
Deposits received and other payables	8,473,882	111,955	(3,010)	8,582,8
Amounts due to customers for contract works	8,983,973	73,439	_	9,057,4
Short term borrowings	17,254,639	_	_	17,254,6
Current income tax payable	92,768	9	_	92,7
Total current liabilities	65,115,489	407,869	(116,031)	65,407,3
Total liabilities	66,051,574	407,869	(116,031)	66,343,4
Total equity and liabilities	74,493,166	417,534	(116,031)	74,794,6
Net current liabilities	(24,959,998)	(71,530)	_	(25,031,5
Total assets less current liabilities	9,377,677	9,665	_	9,387,3

45 PARTICULARS OF PRINCIPAL SUBSIDIARIES

As at 31 December 2018 and 2017, the Group has direct and indirect interests in the following principal subsidiaries:

			Actual interest held		
Name	Establishment/Place of incorporation and type of legal entity	Registered capital	Direct held	Indirect held	Principal activities and place of operation
		RMB'000			
Sinopec Oilfield Service Co., Ltd.	The PRC/Limited Company	4,000,000	100%	_	Petroleum engineering and technical services/The PRC
Sinopec Shengli Oil Engineering Company Limited *	The PRC/Limited Company	700,000	_	100%	Petroleum engineering and technical services/The PRC
Sinopec Zhongyuan Oil Engineering Company Limited *	The PRC/Limited Company	450,000	_	100%	Petroleum engineering and technical services/The PRC
Sinopec Jianghan Oil Engineering Company Limited *	The PRC/Limited Company	250,000	_	100%	Petroleum engineering and technical services/The PRC
Sinopec East China Oil Engineering Company Limited *	The PRC/Limited Company	864,297	_	100%	Petroleum engineering and technical services/The PRC
Sinopec North China Oil Engineering Company Limited *	The PRC/Limited Company	886,300	_	100%	Petroleum engineering and technical services/The PRC
Sinopec Southwest Oil Engineering Company Limited *	The PRC/Limited Company	300,000	_	100%	Petroleum engineering and technical services/The PRC
Sinopec Oil Engineering Geophysical Company Limited *	The PRC/Limited Company	300,000	_	100%	Petroleum engineering and technical services/The PRC
Sinopec Oil Engineering and Construction Corporation *	The PRC/Limited Company	500,000	_	100%	Engineering and Construction/The PRC
Sinopec Shanghai Offshore Oil Engineering Company Limited *	The PRC/Limited Company	2,000,000	_	100%	Offshore Oil engineering and technical services/The PRC
Sinopec International Oil Engineering Company Limited *	The PRC/Limited Company	700,000		100%	Petroleum engineering and technical services/The PRC

^{*} The Company holds shares through Sinopec Oilfield Service Co., Ltd..

The above table lists the subsidiaries of the Company which, in the opinion of the directors, principally affected the results for the year or formed a substantial portion of the net assets of the Group. To give details of other subsidiaries would, in the opinion of the directors, results in particulars of excessive length.

Section XII Documents Available for Inspection

The following documents are available for inspection at the legal address of the Company from 26 March 2019 (Tuesday) upon requests by related supervisory institute and shareholders in accordance with the Articles of Association of the Company and relevant regulations:

- 1. The original copy of the annual report signed by the Chairman and the General Manager of the Company;
- 2. The financial statements signed by the Chairman, General Manager, Chief Financial Officer and the Head of the Accounting Department;
- 3. The original reports of the auditors and the accounts prepared in accordance with the PRC Accounting Standards for Business Enterprises signed by the Certified Public Accountants, registered the PRC under the seal of Grant Thornton (Special General Partnership); The original reports of the auditors and the financial statements prepared in accordance with IFRSs signed by Grant Thornton Hong Kong Limited;
- 4. Documents and Announcements disclosed in the reporting period;
- 5. The Article of Associations of the Company;
- 6. Copies of the Annual Reports and Interim Reports from 1993 to 2018 and the First Quarter Report and the Third Quarter Report from 2002 to 2018 of the Company.

This Annual Report has been drafted in both English and Chinese. In the event that different interpretation occurs, except the financial statements prepared in accordance with IFRSs and its related reports of the auditors, the Chinese version is considered to be more accurate.

