COSL

CHINA OILFIELD SERVICES LIMITED

(STOCK CODE H-share : 2883 ; A-share : 601808)

2022 ANNUAL REPORT

STRIVING FOR EXCELLENCE AND INNOVATION

Company Profile

INTRODUCTION

China Oilfield Services Limited (the "Company", the "Group" or "COSL"), listed on Hong Kong Stock Exchange (HK stock code: 2883) and Shanghai Stock Exchange (Shanghai stock code: 601808), is one of the leading integrated oilfield services providers in the world. Its services cover each phase of oil and gas exploration, development and production.

OUR PERFORMANCE

In 2022, COSL provided clients with single, bundled, integrated and general contracting business services in each phase of exploration, development and production of oil and gas through business in four segments (drilling services, well services, marine support services and geophysical acquisition and surveying services). Furthermore, the Company's performance in some broaden operating aspects such as society and environment has also fulfilled its expectation (for details please refer to the Financial Statements and the Environmental, Social and Governance (ESG) Report).

PROSPECT

The Company has steady market share in China market and actively expands the overseas markets in the regions including Asia Pacific, Middle East, America, Europe and Africa, which provides a sturdy platform for continuous business development.

Oilfield service industry has made us facing challenges and risks varying from place to place, including uncertain political and legal environment as well as the risks coming from deepwater and overseas operation. COSL has rich experiences in oilfield services. With a better understanding on China market, and strict risk management policy, we believe that we will seize the opportunities and overcome the challenges.

STRATEGIC TARGET

COSL aims at becoming a world first-class energy services provider with Chinese characteristics. The Company has formulated five development strategies of technology-driven, cost leadership, integration, internationalization and regional development. To achieve this goal, the Company insists on working in a sustainable operating model, targets on balancing the development of economic, society and environment and endeavors to provide our clients with safe, high quality, effective and eco-friendly full life-cycle services, striving for a win-win benefit with our shareholders, clients, staff and business partners.

CORPORATE GOVERNANCE

Corporate governance of COSL includes not only those set out in the Corporate Governance Code of Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, the Company Law of the PRC and the Articles of Association of China Oilfield Services Limited, but also stricter and self-established standards.

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Business Overview

COSL not only provides services of single operation for the clients, but also offers integrated services and general contracting business services.

2022 PERFORMANCES

Total revenue: RMB 35,610.1 million	**Profit from operations:** RMB 2,723.4 million	**Profit for the year:** RMB 2,493.1 million
Basic earnings per share: RMB 49.3 cents/share	**Total assets:** RMB 77,184.1 million	**Total equity:** RMB 39,898.1 million

DOMESTIC

The Company maintains the leading position in China oilfield services market and provides drilling services, well services, marine support services and geophysical acquisition and surveying services for oilfield exploration and development.

INTERNATIONAL

In 2022, the Company achieved breakthroughs in exploring new businesses, markets and clients with the constant development of international business and the even growing regional markets.

Asia Pacific region: Businesses involve geophysical services, drilling, logging, directional drilling, cementing, drilling & completion fluids, well completion, work-over services, stimulation, marine support services, disposal service and product sales.

Middle East region: Businesses involve drilling, logging, directional drilling, cementing, drilling & completion fluids, well completion, work-over services, stimulation and product sales.

America region: Businesses involve drilling, cementing, drilling & completion fluids, logging, marine support services, integrated services of drilling and completion and product sales.

Europe region: Businesses involve drilling services and related services.

Africa region: Businesses involve integrated services of land drilling and completion, land wireline logging and perforation, land cementing and drilling & completion fluids services.

Financial Highlights

Unit: RMB million

	2022	2021	Change %
Revenue			
Domestic revenue	29,335.6	24,552.9	19.5
International revenue	6,274.5	4,615.6	35.9
Total	35,610.1	29,168.5	22.1
Operating expenses	(33,228.9)	(28,184.5)	17.9
Profit from operations	2,723.4	1,541.3	76.7
Profit before tax	2,981.5	1,089.6	173.6
Income tax expense	(488.4)	(767.5)	(36.4)
Profit for the year	2,493.1	322.1	674.0
Basic earnings per share (cent/share)	49.30	6.56	651.5
Net assets per share (RMB/share)	8.4	8.0	5.0
Ratio			
Return on equity (%)	6.4	0.8	
Return on asset (%)	3.3	0.4	
Gearing ratio (%)	43.6	42.3	
Price/Earnings ratio	17.2	85.1	
Dividend yield (%)	1.9	2.7	
Dividend payout ratio (%)	32.5	228.5	

Notes:

1. *Return on equity = Net profit for the year/(total equity at the beginning of the year + total equity at the end of the year)/2*
2. *Return on asset = Net profit for the year/Average total assets*
3. *Gearing ratio = Net debt at the end of the year/(total capital at the end of the year + net debt at the end of the year)*
4. *Price/Earnings ratio = Closing share price of H shares on the last trading day of the year/Earnings per share*
5. *Dividend yield = Dividends per share/Closing share price of H shares on the last trading day of the year*
6. *Dividend payout ratio = Dividends/Earnings attributable to ordinary equity holders of the Company during the year*

FIVE-YEAR FINANCIAL POSITION REVIEW

Unit: RMB million

Major financial data and indicators	2022	2021	Change over the same period last year (%)	2020	2019	2018
Revenue	35,610.1	29,168.5	22.1	28,925.3	31,075.8	21,886.6
Profit from operations	2,723.4	1,541.3	76.7	4,141.9	3,895.2	643.5
Profit for the year	2,493.1	322.1	674.0	2,718.3	2,528.0	88.7
Basic earnings per share (cent/share)	49.30	6.56	651.5	56.65	52.44	1.48

	As at the end of 2022	As at the end of 2021	Change over the end of the same period last year (%)	As at the end of 2020	As at the end of 2019	As at the end of 2018
Total equity	39,898.1	38,216.3	4.4	38,688.8	36,910.3	34,677.4
Total assets	77,184.1	73,311.7	5.3	75,942.3	76,101.8	74,687.0

Chairman's Statement

Dear Shareholders,

In 2022, in the context of the complicated and changeable economic situation and the industry background of accelerating transformation, the Board of the Company persisted in maintaining stability while seeking progress in stability, thoroughly implemented the five development strategies of "technology-driven", "cost leadership", "integration", "internationalization" and "regional development", and made concerted efforts to promote the Company's high-quality development and deliver satisfactory results to all shareholders.

I. THE OPERATION AND MANAGEMENT CAPABILITIES HAVE BEEN STEADILY ENHANCED, AND THE COMPANY'S RESULT HAS GROWN STEADILY

In 2022, the Company focused on building the core competitiveness to meet the development needs of the new era, and coordinated to promote the production and operation, reform and development as well as scientific and technological innovation and other work, thus the resource guarantee capacity and resource utilization efficiency has been significantly enhanced and the operating quality has been constantly improved.

Firstly, the profitability of the technology sector continued to improve. The Company adhered to taking the self-reliance of science and technology as the strategic support, and the scientific and technological innovation mechanism was more mature. The Company continued to optimize the ecology of scientific and technological innovation, and achieved leap-forward development. The coverage of mainstream technologies reached 95%, and the technologies such as logging, directional drilling, drilling fluids and cementing made great progress. The domestic market share of technology sectors was consolidated and improved, and the overseas market continued to expand. Secondly, important breakthroughs were made in the development of overseas market. The total amount of new overseas contracts/agreements signed by the Company in 2022 was the highest in history. The Company sold a total of 71 pieces of Multi Ultra-sonic imaging logging (the "MUIL") instruments to customers, setting a new record for the large-scale sales of single logging instruments of the Company. The development of the regional market achieved remarkable results. The Company won the bid for the general drilling contracting project of 32 wells in the south oil field of East Baghdad, Iraq and the daily cost project of work-over rig in the Al-Ahdab Oilfield, and obtained a large-scale integrated drilling and completion service contract in Canada. The production stimulation business achieved a major breakthrough in Indonesia, and the geophysical business returned to the Southeast Asian market. The Company started a new journey of full-service development in Indonesia. Thirdly, the long-term cost reduction mechanism was gradually improving. The Company adhered to building a systematic, structural, and long-term cost reduction mechanism, promoted the implementation of cost reduction measures such as "3p (per well, per rig, per project)" accounting management, profit/cost center division and deepening of the construction of strategic partners, effectively improving its profitability.

II. THE GOVERNANCE EFFICIENCY WAS SIGNIFICANTLY IMPROVED, AND THE RISK PREVENTION WAS HIGHLY EFFECTIVE

The Company deepened the reform of system and mechanism, continued to promote the "two systems and one contract" in depth, continued to improve the value-oriented distribution relationship and continuously enhanced organizational strength and vitality, achieving a new upgrade in the safety culture of all employees, realizing a new upgrade in the operation quality management and new improvement in the digitalization and informationization level.

The governance system of the Board of Directors has been improved. The Company further clarified the responsibilities, authority and deliberation procedures of the Board of Directors by formulating the Implementation Plan for Implementing the Functions and Powers of the Board of Directors, relevant supporting systems and a list of authorized decision-making matters, and improved the decision-making quality and governance efficiency of the Board of Directors. The members of the Board of Directors were diversified, and the Company fully considered the factors such as educational background, professional, experience, gender and specialty when nominating candidates for directors. The Company performed duties to provide support for external directors, and organized targeted surveys on the Company's "Xuanji" system, high-temperature drilling and completion fluids, cementing technology system, and heavy oil thermal recovery technology system. The independent directors carefully studied issues in the decision-making process, provided views and opinions for different fields, and ensured the standardized and efficient operation of the Board of Directors. The Company's senior management were diligent and conscientious, fully implemented the resolutions of the general meeting and the Board meetings, and ensured the Company's compliance operation. In the face of the challenges brought by the transformation of the oilfield service industry and the severe situation of significantly increasing uncertainty, the Board of Directors regularly debriefed on the comprehensive risk management reports, realized the infinite loop management of major risks through the risk identification, assessment, response and evaluation, and strictly implemented the operational safety regulations. With the outstanding corporate governance, the Company won the "2022 China Business Top 100 Best Management and Operation Award" of the China Business Top 100 Listed Companies Summit and other honors.

III. THE COMPANY FOCUSED ON GREEN AND LOW-CARBON DEVELOPMENT, AND MAINTAINED A SOUND TREND OF THE SUSTAINABLE DEVELOPMENT

The Company fully complied with the ten principles of the United Nations Global Compact and the latest requirements of the regulatory authorities, and actively implemented the goal of "carbon peaking and carbon neutrality", and injected strong driving force into the Company's sustainable development by exploring new energy fields, green transformation of equipment and other channels.

The Company focused on clean fuel and promoted 12 LNG-powered vessels to rapidly enter service, making the Company the largest LNG-powered standby fleet in the world. The Company actively developed offshore oil fields in a green way, independently researched and developed an environment-friendly drilling fluid system with extremely low toxicity and good biodegradability, and accelerated the EPS environmental protection business. The Company actively laid out the CCUS business, and built a CCUS integrated technical service chain, and its service capability was rapidly improved. The Company actively explored the new energy field, deepened the strategic cooperative relationships with new energy enterprises, and relied on the advantages of the entire industrial chain to expand the customers from the traditional energy field to the new energy field. The Company's ESG governance won several honors and was selected as the "Constituent of Heng Seng (China A) Corporate Sustainability Benchmark Index" for eleven consecutive years. The Company was awarded the "Outstanding Brand Image Award 2022" issued by the China Finance Summit, was selected as the "Governance Pioneer" of the 2022 ESG Golden Bull Award issued by the China Social Responsibility 100 Forum, and was selected as the "Central Enterprises ESG • Vanguard 50 Index", the "Central Enterprises ESG • Social Value Vanguard 50 Index" and the "Central Enterprises ESG • Risk Management Vanguard 50 Index" published by the SASAC of the State Council and the CSR Cloud Research Institute.

In 2023, the Company will continue to improve the governance system, continuously improve the efficiency of governance, and provide strong support for the Company's standardized operation. The Company will further implement the strategy of "internationalization" and "regional development", make greater efforts on the overseas market expansion, give full play to the advantages of integration, continue to reduce the operating costs, and systematically strengthen the international operation capability. The Company will implement the "Science and Technology Innovation Strengthening Foundation Project" in depth, promote to make new breakthroughs in tackling key core technologies, achieve new results in the digital transformation and construction, and achieve a new leap in core competitiveness. The Company will strengthen risk prevention and internal control to avoid various risks such as insider information, safety and environmental protection, operation and management. The Company will conform to the low-carbon development trend of the energy industry, accurately grasp the rhythm of oilfield services and green transformation, and unswervingly promote the green and low-carbon development.

With the strong support of shareholders, customers, partners and all sectors of society, and with the joint efforts of the Board of Directors, the Supervisor Committee, the management and all employees, COSL will focus on "Six Aspects", i.e. the scientific research and development, cost control, technical marketing, talent team, brand image and organizational efficiency, make plan on and vigorously promote the effective implementation of the main work of the "Four Beams and Eight Pillars" in the Company's development direction, and creat greater value for shareholders, customers and society in the journey of building a world first-class energy service company with Chinese characteristics.

Zhao Shunqiang
Chairman and Chief Executive Officer
23 March 2023

Management Discussion and Analysis

INDUSTRY DEVELOPMENT OVERVIEW FOR 2022

In 2022, under the influence of multiple factors such as the frequent geopolitical conflicts, deep adjustment of the global supply chain, fluctuations in the international oil and gas industry, and accelerated transformation of the energy industry, international oil companies increased their investments in oil and gas exploration and development, the development trend of the international oilfield service market continued to improve, and the competition in the international oilfield service market remained fierce. Driven by climate emission reduction, oilfield service companies all over the world began to adopt new production methods and new technical services, and gradually carry out green and low-carbon transformation. The main ways of transformation include: first, divest the non-core businesses and focus on the main business; second, speed up the digitalization and intelligence of traditional service industries, empower the traditional industries with digital technology, and improve the production efficiency; third, business diversification under the background of low-carbon transformation, mainly involving the emerging markets such as wind power, solar energy, hydrogen, geothermal energy and CCUS in the field of renewable energy; fourth, transformation of the commercial mode of the new energy business from the commercial mode of oilfield services to the commercial mode of energy services. Domestically, the oilfield service market continuously driven by the "Seven-year Action Plan" for guaranteeing national energy security and strengthening reserves and production continued to grow steadily.

BUSINESS REVIEW

In 2022, the geopolitical uncertainties continued and the weakening of the fundamentals of the global economy intensified the volatility of finance environment. After experienced a "roller coaster", the international oil price depended on the global economic trend and the relationship between supply and demand to a greater extent. The increase in upstream exploration investments was mainly concentrated on land and limited on the sea. The utilization rate of global drilling rigs increased slightly, and the demand for oilfield services in some regions was strong. The Company seized the opportunity of market recovery, actively guaranteed domestic exploration and development to strengthen reserves and production, coordinated the accurate layout of overseas markets, continuously improved the scale of equipment and output value, adhered to strengthening the leading advantage of costs, effectively alleviated the cost pressure brought by global inflation, and made every effort to tackle key core technologies. In 2022, the operating revenue amounted to RMB35,610.1 million, representing a year-on-year increase of RMB6,441.6 million or 22.1%, while net profit amounted to RMB2,493.1 million, representing a year-on-year increase of RMB2,171.0 million.

Drilling Services

DRILLING SERVICES SEGMENT

The Company is the largest offshore drilling contractor in China and one of the internationally well-known drilling contractors. It mainly provides relevant drilling and well completion services such as jack-up drilling rigs, semi-submersible drilling rigs and land drilling rigs. At the end of 2022, the Company operated and managed a total of 62 drilling rigs (of which 48 are jack-up drilling rigs, and 14 are semi-submersible drilling rigs), etc.

In 2022, revenue from drilling services amounted to RMB10,334.1 million, representing an increase of 17.9% as compared with RMB8,767.7 million in 2021.

The Company kept up with the recovery trend of the offshore oil and gas industry and gasped opportunities from the increasing global demand for drilling rigs, continuously improved the market matching accuracy and market response speed of drilling rigs, rationally allocated large-scale equipment resources at home to ensure the construction of a maritime power and accelerate the exploration and development of deep-sea oil and gas resources while speeding up the adjustment of the global market layout overseas. The Company improved capabilities of support and guarantee of international supply chains, made every effort to steadily improve the safety governance level, continuously optimized the comprehensive management and utilization efficiency of large-scale equipment. The "China Merchants Hailong 8" successfully completed the well drilling and completion operation of the first development project of shallow-water subsea Christmas tree system in China. "HYSY944" realized the completion operation of the super extended reach well with the deepest well depth and the longest horizontal trajectory in the west of the South China Sea. "Challenger" refreshed the record of the maximum water vertical ratio of shallow extended reach wells in Bohai Oilfield during operation. "NH4" completed the fracturing test of shale oil exploration well in the west of the South China Sea and obtained commercial oil flow, marking a major breakthrough in offshore shale oil exploration in China. "HYSY982" undertook the drilling of China's first offshore deepwater high-temperature and high-pressure gas field project. "COSLPower" won the "Best Performance Drilling Rig in the World" award from a national oil company in Southeast Asia for three consecutive quarters. After entering into the equipment sequence, "Guoshuo" started in-depth cooperation in the Southeast Asian market, secured operating contracts and formally started the cooperation. Three semi-submersible drilling rigs in Europe gradually recovered operating during the year. The capacity of international operation and management and service quality of the Company had been fully recognized by the international first-class oil companies and the Company secured several long-term contracts on drilling rigs services in the Middle East market with the total contract amount of approximately RMB14 billion, entering a new stage of deepening cooperation with international oil companies in various fields including oilfield exploration and development.

At the end of 2022, the Company had 37 drilling rigs operating in the China Sea, 13 drilling rigs operating overseas, 9 drilling rigs were standby and 3 were being maintained in the shipyard.

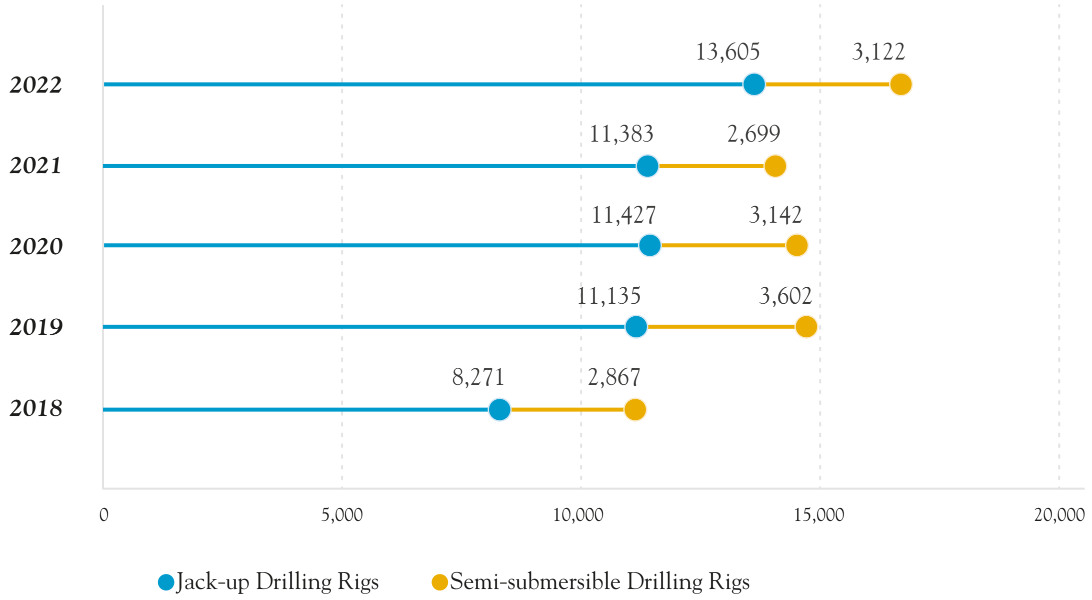
With the impact of the increasing global demand for offshore drilling rigs, the Company's drilling rigs operated for 16,727 days in 2022, representing a year-on-year increase of 2,645 days or 18.8%.

Drilling Services

In 2022, the Company's jack-up drilling rigs operated for 13,605 days, representing a year-on-year increase of 2,222 days; semi-submersible drilling rigs operated for 3,122 days, representing a year-on-year increase of 423 days. Operational details are as follows:

	2022	2021	Change	Percentage change
Operating days (day)	16,727	14,082	2,645	18.8%
Jack-up drilling rigs	13,605	11,383	2,222	19.5%
Semi-submersible drilling rigs	3,122	2,699	423	15.7%
Available day utilization rate	83.5%	71.9%	Up 11.6 percentage points	
Jack-up drilling rigs	88.2%	75.8%	Up 12.4 percentage points	
Semi-submersible drilling rigs	67.6%	59.3%	Up 8.3 percentage points	
Calendar day utilization rate	78.5%	69.1%	Up 9.4 percentage points	
Jack-up drilling rigs	83.3%	73.3%	Up 10.0 percentage points	
Semi-submersible drilling rigs	63.0%	55.5%	Up 7.5 percentage points	

NUMBER OF OPERATING DAYS FOR DRILLING RIGS IN RECENT YEARS



In 2022, the average daily revenue of the Company's drilling rigs is as follows:

Average daily revenue (ten thousand US$/day)	2022	2021	Change	Percentage change
Jack-up drilling rigs	6.9	7.0	(0.1)	(1.4%)
Semi-submersible drilling rigs	11.4	13.5	(2.1)	(15.6%)
Drilling rigs average	7.8	8.2	(0.4)	(4.9%)

Notes: (1) Average daily revenue = revenue/operating days.

(2) USD/RMB exchange rate was 1:6.9646 as at 31 December 2022 and 1:6.3757 as at 31 December 2021.

Well Services

WELL SERVICES SEGMENT

The Company is the main provider of China offshore well services together with the provision of onshore well services. Through the continuous input in technology research and development, advanced technological facilities and an excellent management team, the Company provides comprehensive professional well services, including but not limited to logging, drilling & completion fluids, directional drilling, cementing, well completion, well workover, stimulation etc.

In 2022, revenue from the well services increased by 29.9% from RMB15,067.9 million in the same period of 2021 to RMB19,571.2 million. The Company actively implemented the technology-driven strategy, optimized the allocation of technical personnel resources, deepened the reform of the science and technology system, strengthened the integration of the science and technology market, and accelerated the layout of integrated competitive advantages. Both the revenue and the profit contribution maintained a year-on-year increase.

By closely following the trends of technology development, the Company continuously improved a value-oriented scientific research management system and achieved a series of technological achievements and breakthroughs in application transformation. The well completion tools broke through the technical problem of sealing with temperature resistance of 350℃ and formed more than 10 kinds of thermal recovery full wellbore completion tools. The Company independently researched and developed the high-temperature plugging technology to help the first offshore superheated steam drive project increase oil and production. The self-developed injection-production integration technology of jet pump helped the first offshore thermal recovery development of ultra-heavy oil in China to successfully put an oilfield into production. The Company continued to break through the high-end wireline logging technology, and conquered 28 key core technologies of wireline logging, such as ultra-high temperature grand slam upto 235℃ and high-temperature electrical imaging upto 205℃. For the characteristic cased-hole neutron density measurement technology, the Company completed the commercial operation of horizontal wells, and for the high-temperature electric large-diameter coring in slim holes, the Company completed the first commercial operation. The high-temperature acoustic imaging set the highest operating temperature record of 202℃, and the cumulative operations of high-temperature and high-pressure wireline logging technology and equipment exceeded 200 wells, realizing large-scale commercial application. The Company independently researched and developed the "Xuanji" rotary steering and well logging while drilling system to achieve the full-scale field operation capability, and at the same time built and put into production the first intelligent processing production line of this system to achieve full coverage of high-end machining process capability and promote the transformation from "self-sufficient" operation-driven mode to "export-oriented" product-driven mode. The core products developed by the Company, such as self-developed HT fluid loss control agent for WBM and high-efficiency lubricant, successfully broken the technical monopoly and achieved industrialization promotion. The temperature and pressure measurement nipple for deepwater cementing by the Company was successfully applied in oilfield of the South China Sea, with the temperature tolerance limit exceeding 180℃. In combination with the high-quality resources of universities, the Company made important progress in accelerating the research on key technologies of offshore carbon sequestration and gas storage cementing, so as to provide technical support for meeting new application scenarios such as CCUS and gas storage.

The Company actively promoted the "global coverage" of technical support capabilities, and achieved success in the overseas oilfield service markets. The self-developed deepwater remote control Cement Head debuted successfully in the international market. The optical spectral analysis module for formation testing researched and developed by the Company successfully completed its operation in a well in Southeast Asia, gained the recognition of the customer, realized the large-scale application of the module, and broke the monopoly of foreign key technologies. The new technology, "EMRT nuclear magnetism conveyed by drill pipe", completed its first operation in South American waters and was recognized by the customer. The drilling fluid service entered a traditional oilfield services area in Southeast Asia for the first time and operated smoothly. The Company obtained a 2-year wireline logging and perforation service contract in the Middle East. The Company planned to obtain a 3-year offshore cementing service contract in Southeast Asia. The Company achieved breakthroughs in integrated services in Southeast Asia, America, Africa and the Middle East, and obtained long-term operation contracts in some regions. The Company won a number of overseas regional sales contracts for technical products throughout the year, realizing the first export of the "Xuanji" system, the large-scale sales of MUIL instruments and the first overseas sales of EFDT instruments researched and developed by the Company.

Marine Support Services

MARINE SUPPORT SERVICES SEGMENT

The Company operates and manages the largest offshore operation fleet with the most comprehensive functions in China, with over 170 vessels including AHTS vessels, platform supply vessels and oilfield standby vessels at the end of 2022. The Company can provide comprehensive support and services, including anchor handling for different water level, towing of drilling rigs/engineering barges, offshore transportation, oil/gas field standby, firefighting, rescue, oil spill assisting, for offshore oil and gas exploration, development, construction and oil/gas field production, which can fulfill multidimensional needs of clients.

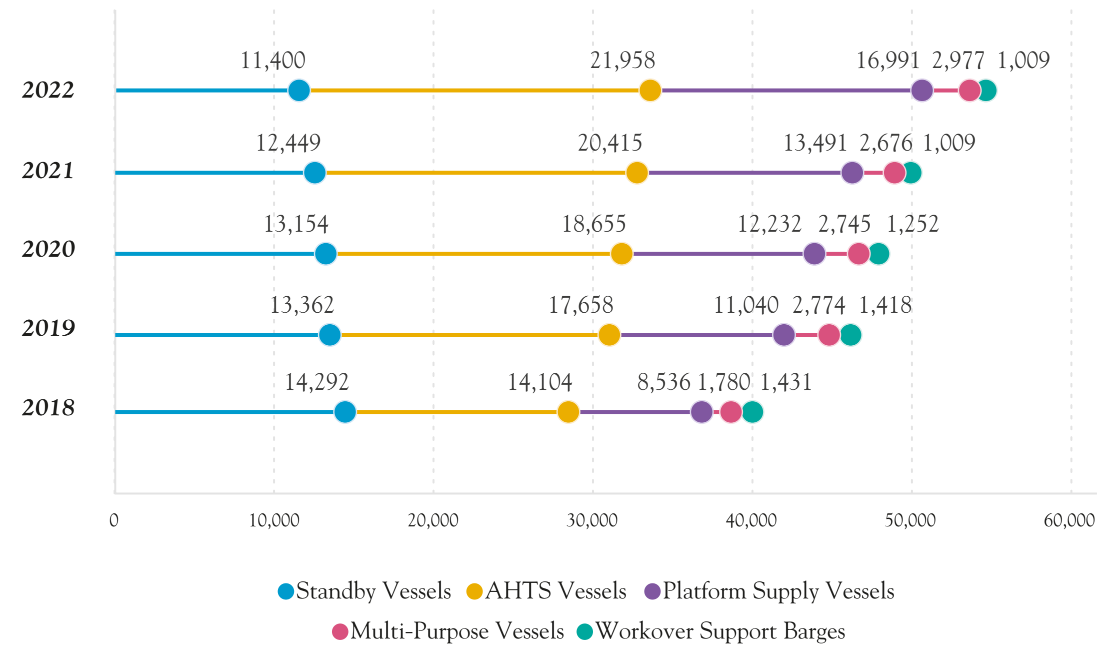
In 2022, revenue of marine support services increased by 12.6% to RMB3,719.9 million from RMB3,303.7 million in 2021. The accumulative operating days for vessels operated and managed by the Company for the year amounted to 54,335 days, representing an increase of 4,295 days as compared with last year. The calendar day utilization rate was 91.1%, which remained basically stable as compared with last year.

The Company actively gave play to its strengths of providing cooperative support for operation waters, managed resources in a scientific manner, optimized market strategies and took effective measures to control the social vessel resources so as to ensure the availability of vessels in an all-around way. The Company completed the delivery of 12 LNG-powered vessels, forming a world's largest LNG-powered vessel fleet in the OSV (Offshore Support Vessel) industry, which can reduce carbon emissions by 12,000 tons every year. Among them, the first batch of LNG-powered standby vessels equipped with four intelligent systems at the same time, i.e. "HYSY542" and "HYSY547", realized the integration and data analysis of vessel navigation, hydrology, meteorology and other information, effectively promoting the digitized and intelligent transformation of vessels with intelligent integrated platforms, intelligent navigation, intelligent engine rooms and intelligent energy efficiency.

In 2022, the operational details of vessels of the Company are as follows:

Operating days (day)	2022	2021	Change	Percentage Change
Standby vessels	11,400	12,449	(1,049)	(8.4%)
AHTS vessels	21,958	20,415	1,543	7.6%
Platform supply vessels	16,991	13,491	3,500	25.9%
Multi-purpose vessels	2,977	2,676	301	11.2%
Workover support barges	1,009	1,009	0	0
Total	54,335	50,040	4,295	8.6%

NUMBER OF OPERATING DAYS FOR UTILITY VESSELS IN RECENT YEARS



Geophysical Acquisition and Surveying Services

GEOPHYSICAL ACQUISITION AND SURVEYING SERVICES SEGMENT

The Company is a major supplier for China offshore geophysical acquisition and surveying services and a solid competitor and a provider of effective and high quality service in the global geophysical exploration. At the end of 2022, the Company owns 5 towing streamer vessels, 4 submarine seismic vessels, 4 integrated marine surveying vessels and 2 support vessels for operation in deep water. Services for clients include but not limited to providing services of wide azimuth, broadband, high density seismic acquisition services, ocean bottom cable and ocean bottom node multi-component seismic acquisition services, as well as integrated offshore surveying services.

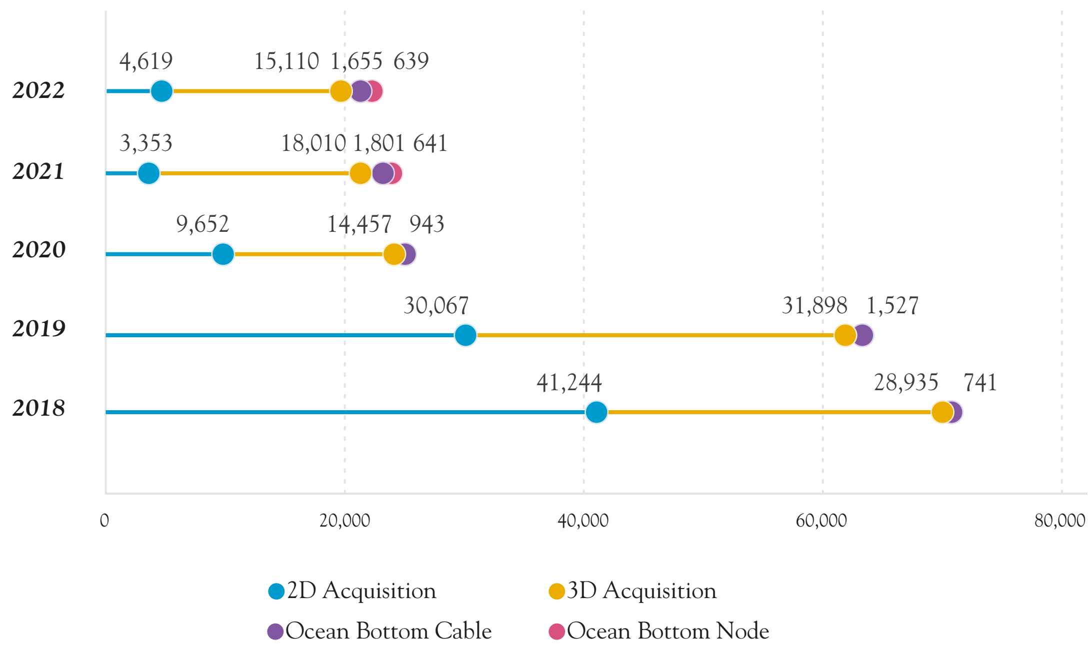
In 2022, revenue of geophysical acquisition and surveying services amounted to RMB1,984.9 million, which remained basically stable as compared with RMB2,029.2 million of 2021, of which, the surveying services recorded revenue of RMB564.1 million, which was basically the same as that of 2021.

In 2022, with the utilization rate of geophysical vessels at a low ebb worldwide and the continuous impact of overcapacity in offshore geophysical industry, the recovery has been slowly. The Company actively promoted technology transformation and upgrade, steadily promoted the research and development and industrialization of independent acquisition equipment, distributed resources in a rational manner, optimized resource sharing, continued to deeply enhance the independent management capability of operation units and fully improved the comprehensive utilization ability of large-scale equipment. A complete set of self-developed tower streamer acquisition equipment was deployed with "HYSY720", the geophysical exploration vessel with 12 towing streamers, and realized the commercial application, making the Company one of the few service providers in the world who have mastered this independent research and development technology and equipment capability. The ocean bottom node (OBN) acquisition equipment independently researched and developed by the Company realized product finalization and small batch manufacturing, further improving the self-controllable high-end offshore oil and gas exploration equipment system, and making the Company take a key step towards achieving the international advanced level. The Company achieved a series of key technological breakthroughs, such as joint acquisition of towing streamers and ocean bottom nodes, and dual-vessel and four-source overlapping acquisition, which greatly improved the quality of exploration data in the target stratum of Paleogene and Middle Paleozoic erathem. By optimizing the OBN operation construction scheme, the Company continued to break the daily records of operation. In the ultra-deep water area of the South China Sea, the Company successfully completed the in-situ static cone test penetration under the mud surface for surveying services, which once again set a new record for the water depth in China's surveying services operation. In overseas markets, the Company successfully completed the 2D acquisition operation in Southeast Asia, and built a good reputation for starting the new large-scale 2D acquisition service contracts in Southeast Asia in 2023.

In 2022, the details of geophysical acquisition of the Company are as follows:

Businesses	2022	2021	Change	Percentage Change
2D acquisition (km)	4,619	3,353	1,266	37.8%
3D acquisition (km^2)	15,110	18,010	(2,900)	(16.1%)
of which: multi-client	0	3,640	(3,640)	(100.0%)
Ocean bottom cable (km^2)	1,655	1,801	(146)	(8.1%)
Ocean bottom node (km^2)	639	641	(2)	(0.3%)

THE OPERATING VOLUME OF GEOPHYSICAL SERVICE FLEET IN RECENT YEARS (KM/KM^2)



MAJOR SUBSIDIARIES

China Oilfield Services (BVI) Limited ("BVI"), COSL Hong Kong International Limited, COSL Norwegian AS ("CNA"), COSL Singapore Limited and China France Bohai Geoservices Co., Ltd. ("China France Bohai") are major subsidiaries of the Group, which mainly engage in drilling, well services and relevant businesses.

As at 31 December 2022, the total assets of BVI amounted to RMB8,900.2 million and equity was RMB1,294.8 million. BVI realized revenue of RMB3,853.9 million in 2022, representing an increase of RMB1,331.1 million or 52.8% as compared with last year. The net profit amounted to RMB316.8 million, representing an increase of RMB42.6 million or 15.5% as compared with the net profit in the same period of last year.

As at 31 December 2022, the total assets of COSL Hong Kong International Limited amounted to RMB7,453.4 million and equity was RMB7,432.5 million. COSL Hong Kong International Limited realized revenue of RMB33.4 thousand in 2022, and revenue in the same period of last year was RMB16.7 thousand. The net profit amounted to RMB35.2 million, and net profit in the same period of last year was RMB0.3 thousand.

As at 31 December 2022, the total assets of CNA amounted to RMB7,549.1 million and equity was RMB-4,656.7 million. CNA realized revenue of RMB608.6 million in 2022, representing an increase of RMB195.0 million or 47.1% as compared with last year. The net profit amounted to RMB-688.8 million, and net profit in the same period of last year was RMB-2,271.1 million. Taking into account the continuing severe overseas industrial market and the utilization rate and the operating price of large-scale equipment have not yet recovered to a normal level, the Company provided impairment loss of fixed assets amounting to RMB1,454.2 million in total in the same period of last year, while no significant impairment loss was provided in 2022.

As at 31 December 2022, the total assets of COSL Singapore Limited amounted to RMB22,510.4 million and equity was RMB-3,319.9 million. COSL Singapore Limited realized revenue of RMB1,834.2 million in 2022, representing an increase of RMB293.8 million or 19.1% as compared with last year. The net profit amounted to RMB-627.2 million, and net profit in the same period of last year was RMB-1,028.2 million. Taking into account the continuing severe overseas industrial market and the utilization rate and the operating price of large-scale equipment have not yet recovered to a normal level, the Company provided impairment loss of fixed assets amounting to RMB485.1 million in total in the same period of last year, while no significant impairment loss was provided in 2022. COSL DRILLING STRIKE PTE. LTD. and COSL PROSPECTOR PTE. LTD. are major drilling rig subsidiaries of COSL Singapore Limited.

As at 31 December 2022, the total assets of COSL DRILLING STRIKE PTE. LTD. amounted to RMB3,500.7 million and equity was RMB-3,317.0 million. The Company has provided financial support for COSL DRILLING STRIKE PTE. LTD. in order to make sure it will be able to continue as a going concern. COSL DRILLING STRIKE PTE. LTD. realized revenue of RMB286.6 million in 2022, representing an increase of RMB122.8 million or 75.0% as compared with last year. The net profit amounted to RMB-134.5 million, representing an increase in loss of RMB87.3 million as compared with last year.

As at 31 December 2022, the total assets of COSL PROSPECTOR PTE. LTD. amounted to RMB7,932.2 million and equity was RMB-6,123.7 million. The Company has provided financial support for COSL PROSPECTOR PTE. LTD. in order to make sure it will be able to continue as a going concern. COSL PROSPECTOR PTE. LTD. realized revenue of RMB519.3 million in 2022, representing an increase of RMB67.6 million or 15.0% as compared with last year. The net profit amounted to RMB-394.1 million, representing a decrease in loss of RMB545.6 million as compared with last year. Taking into account the continuing severe overseas industrial market and the utilization rate and the operating price of large-scale equipment have not yet recovered to a normal level, the Company provided impairment loss of fixed assets amounting to RMB485.1 million in total in the same period of last year, while no significant impairment loss was provided in 2022.

China France Bohai has been accounted for as a subsidiary and has been consolidated into the consolidated financial statements by the Group since 1 August 2022 when the Group obtained the control over China France Bohai. As at 31 December 2022, the total assets of China France Bohai amounted to RMB1,280.5 million and equity was RMB519.4 million. From August to December 2022, China France Bohai realized revenue of RMB1,031.0 million and net profit amounted to RMB251.2 million.

FINANCIAL REVIEW

1. ANALYSIS ON CONSOLIDATED STATEMENT OF PROFIT OR LOSS

1.1 Revenue

For the year 2022, revenue of the Group amounted to RMB35,610.1 million, representing an increase of RMB6,441.6 million or 22.1% as compared with last year. The detailed analysis is set out below:

Analysis by business segment

Unit: RMB million

Business segments	2022	2021	Change	Percentage change
Drilling services	10,334.1	8,767.7	1,566.4	17.9%
Well services	19,571.2	15,067.9	4,503.3	29.9%
Marine support services	3,719.9	3,303.7	416.2	12.6%
Geophysical acquisition and surveying services	1,984.9	2,029.2	(44.3)	(2.2%)
Total	35,610.1	29,168.5	6,441.6	22.1%

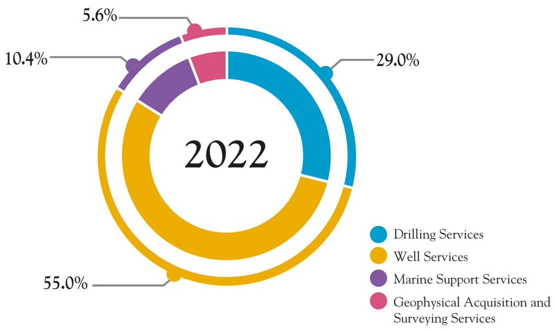
- Revenue generated from drilling services increased by 17.9% as compared with last year. With the impact of the increasing demand for offshore rigs, drilling rigs operation volume and utilization rate were improved and income increased steadily for the year.

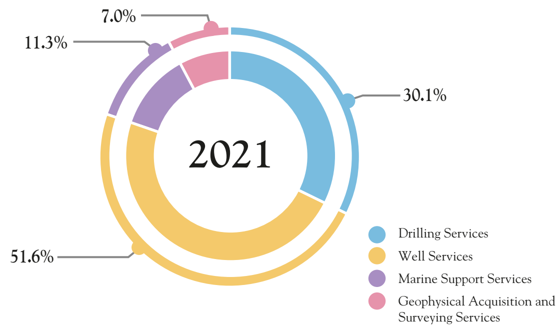
- Revenue from well services increased by 29.9% as compared with last year, mainly because the Company actively promoted the development demand of technology industrialization and made breakthroughs at domestic and overseas markets, the operating volume of major business lines maintained growth, and the proportion of high-value services of certain business lines increased.

- Revenue from marine support services increased by 12.6% as compared with last year, which was mainly due to the increase in the scale and overall operation volume of vessels for the year.

- Revenue from geophysical acquisition and surveying services was basically consistent with last year, which was mainly due to the slow recovery of the global offshore geophysical industry.

Revenue analysis – by business segment





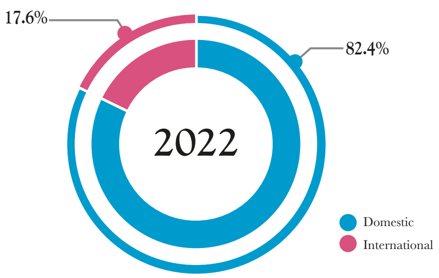
Analysis by operation area

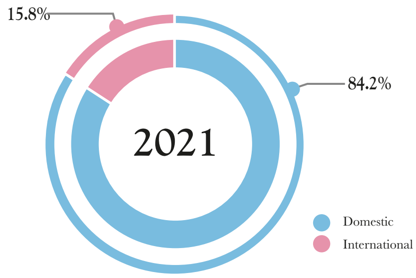
Unit: RMB million

Region	2022	2021	Change	Percentage change
Domestic	29,335.6	24,552.9	4,782.7	19.5%
International	6,274.5	4,615.6	1,658.9	35.9%
Total	35,610.1	29,168.5	6,441.6	22.1%

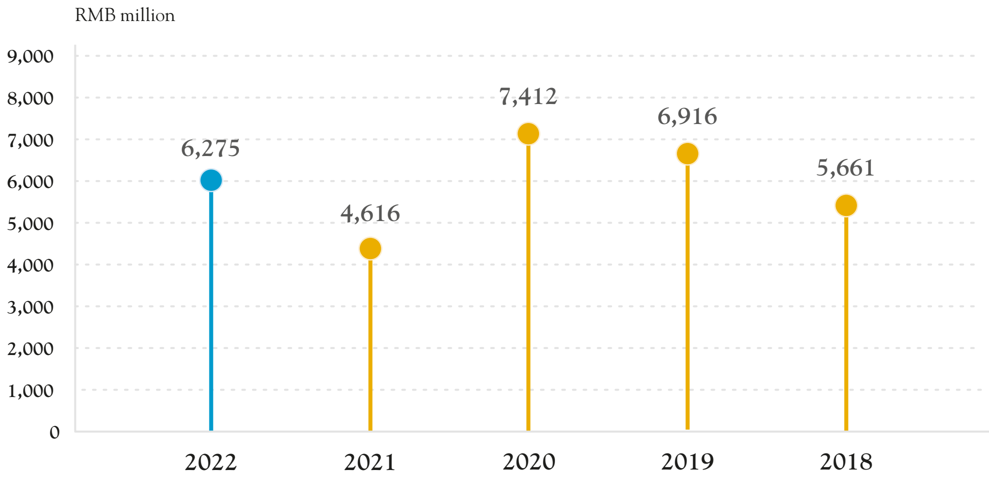
In terms of operation area, the Group's main source of revenue was from China offshore, accounting for 82.4% of the Group's total revenue. In 2022, the Group's international business recorded revenue of RMB6,274.5 million (compared with RMB4,615.6 million over last year, representing an increase of 35.9% as compared with last year), accounting for 17.6% of the Group's revenue for the year.

International revenue





THE LATEST FIVE YEARS' INTERNATIONAL REVENUE



1.2 OPERATING EXPENSES

For the year 2022, operating expenses of the Group amounted to RMB33,228.9 million, representing an increase of RMB5,044.4 million or 17.9% as compared with RMB28,184.5 million of last year.

The table below shows the comparison of the breakdown of the Group's operating expenses in 2022 and 2021:

Unit: RMB million

	2022	2021	Change	Percentage change
Depreciation of property, plant and equipment and amortisation of intangible assets and MultiClient library	4,685.6	4,503.8	181.8	4.0%
Depreciation of right-of-use assets	367.1	363.0	4.1	1.1%
Employee compensation costs	7,414.0	6,030.2	1,383.8	22.9%
Repair and maintenance costs	594.8	479.0	115.8	24.2%
Consumption of supplies, materials, fuel, services and others	9,080.6	6,572.7	2,507.9	38.2%
Subcontracting expenses	8,164.6	5,643.2	2,521.4	44.7%
Lease expenses	1,666.9	1,318.5	348.4	26.4%
Other operating expenses	1,175.7	1,247.0	(71.3)	(5.7%)
Impairment loss of property, plant and equipment	30.2	2,011.3	(1,981.1)	(98.5%)
Impairment loss under expected credit losses model, net of reversal	49.4	15.8	33.6	212.7%
Total operating expenses	33,228.9	28,184.5	5,044.4	17.9%

Depreciation of property, plant and equipment and amortisation of intangible assets and MultiClient library for the year increased by RMB181.8 million as compared with last year.

Depreciation of right-of-use assets for the year remained the same as last year.

Employee compensation costs for the year increased by RMB1,383.8 million compared with last year, mainly due to the increase in remuneration of certain front-line employees as per the norms of the industry for the year.

Repair and maintenance costs for the year increased by RMB115.8 million as compared with last year.

Consumption of supplies, materials, fuel, services and others for the year increased by RMB2,507.9 million as compared with last year, mainly due to the increase in operation volume and repair arrangement and the increase in price of raw materials.

Subcontracting expenses for the year increased by RMB2,521.4 million as compared with last year, mainly due to the increase in the operation volume, which led to the increase in operation and personnel subcontracting input of the Company.

Lease expenses for the year was RMB1,666.9 million, representing an increase of RMB348.4 million as compared with last year.

Impairment loss of property, plant and equipment for the year amounted to RMB30.2 million, representing a decrease of RMB1,981.1 million as compared with last year, which was mainly due to the fact that the utilization rate and operating price of certain large-scale equipment of the Group have not returned to normal levels, leading to provisions for the significant impairment loss of fixed assets in last year.

Impairment loss of credit for the year amounted to RMB49.4 million, representing an increase of RMB33.6 million as compared with last year.

Other operating expenses in 2022 amounted to RMB1,175.7 million, which mainly included nearly 30 cost items including travel expenses, business trip expense, office expenses, expenses for library materials, health, safety and environmental protection expenses, weather guarantee fees, consulting fees, audit fees and so on, representing a decrease of RMB71.3 million as compared with last year. Of the total other operating expenses, health, safety and environmental protection expenses amounted to RMB366.5 million, accounting for 31.2%; transfer fees for technology amounted to RMB179.2 million, accounting for 15.2%; collective expenses amounted to RMB132.1 million, accounting for 11.2%; travel expenses amounted to RMB85.6 million, accounting for 7.3%; business trip expenses, consulting fees, audit fees and other fees amounted to RMB412.3 million in total.

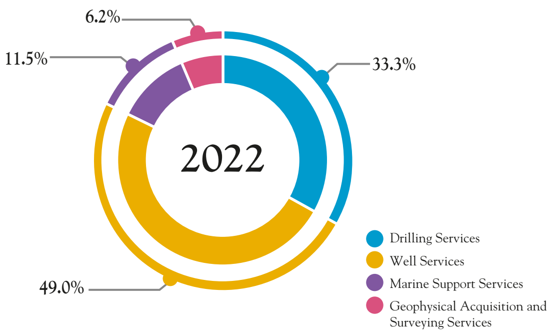
Other operating expenses in 2021 amounted to RMB1,247.0 million, which mainly included nearly 30 cost items including travel expenses, business trip expense, office expenses, expenses for library materials, health, safety and environmental protection expenses, weather guarantee fees, consulting fees, audit fees and so on. Of the total other operating expenses, health, safety and environmental protection expenses amounted to RMB307.0 million, accounting for 24.6%; travel expenses amounted to RMB217.9 million, accounting for 17.5%; transfer fees for technology amounted to RMB180.8 million, accounting for 14.5%; business trip expenses amounted to RMB62.4 million, accounting for 5.0%; consulting fees, audit fees, office expenses and other fees amounted to RMB478.9 million in total.

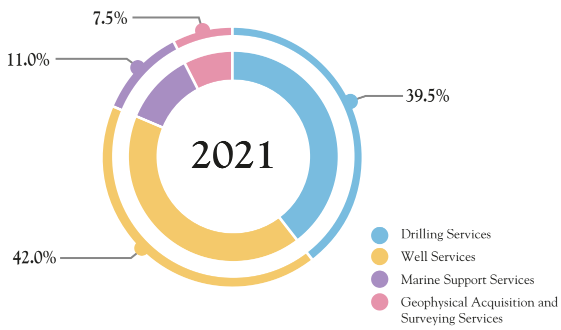
The operating expenses for each segment are shown in the table below:

Unit: RMB million

Business segments	2022	2021	Change	Percentage change
Drilling services	11,059.7	11,128.0	(68.3)	(0.6%)
Well services	16,281.0	11,833.5	4,447.5	37.6%
Marine support services	3,813.6	3,091.1	722.5	23.4%
Geophysical acquisition and surveying services	2,074.6	2,131.9	(57.3)	(2.7%)
Total	33,228.9	28,184.5	5,044.4	17.9%

Analysis of operating expenses – by business segment





1.3 Profit from operations

For the year 2022, the Group's profit from operations amounted to RMB2,723.4 million, representing an increase of RMB1,182.1 million as compared with RMB1,541.3 million of last year.

The profit from operations for each segment is shown in the table below:

Unit: RMB million

Business segments	2022	2021	Change	Percentage change
Drilling services	(635.5)	(2,082.2)	1,446.7	69.5%
Well services	3,483.8	3,393.8	90.0	2.7%
Marine support services	(58.8)	254.7	(313.5)	(123.1%)
Geophysical acquisition and surveying services	(66.1)	(25.0)	(41.1)	(164.4%)
Total	2,723.4	1,541.3	1,182.1	76.7%

1.4 Financial expenses, net

Unit: RMB million

	2022	2021	Change	Percentage change
Exchange gains or losses, net	(565.8)	165.4	(731.2)	(442.1%)
Finance costs	777.1	831.3	(54.2)	(6.5%)
Interest income	(123.4)	(123.9)	0.5	0.4%
Financial expenses, net	87.9	872.8	(784.9)	(89.9%)

The exchange gains increased by RMB731.2 million as compared with last year as affected by the change of exchange rates during the year.

1.5 Investment income

For the year 2022, the Group's investment income amounted to RMB16.3 million, representing a decrease of RMB28.3 million as compared with RMB44.6 million of last year, which was mainly attributable to the decrease in gains from long-term equity investments accounted for using the equity method as a result of acquisition of the effective ownership of certain joint ventures during the year.

1.6 Other gains and losses

In 2022, the Group's other gains and losses amounted to RMB-23.2 million, as compared with RMB-59.4 million of last year.

1.7 Profit before tax

The profit before tax of the Group was RMB2,981.5 million in 2022, representing an increase of RMB1,891.9 million as compared with RMB1,089.6 million of last year.

1.8 Income tax expense

The income tax expense of the Group in 2022 was RMB488.4 million, representing a decrease of RMB279.1 million as compared with RMB767.5 million of 2021, mainly because the Company applied the policy on increasing the pre-tax deduction for supporting scientific and technological innovation of high-tech enterprises in the Announcement No.28 of 2022 (the "Announcement No.28") issued by the Ministry of Finance, the State Taxation Administration and the Ministry of Science and Technology.

1.9 Profit for the year

For the year 2022, profit of the Group was RMB2,493.1 million, as compared with profit of RMB322.1 million of last year due to the impact of provision of significant impairment of fixed assets.

1.10 Basic earnings per share

For the year 2022, the Group's basic earnings per share were approximately RMB49.30 cents, as compared with approximately RMB6.56 cents of last year.

1.11 Dividend

In 2022, the Board of Directors of the Company recommended a final dividend of RMB0.16 per share (tax inclusive), totaling approximately RMB763.5 million. The final dividend will be paid on or before 30 June 2023 upon approval at the general meeting of shareholders.

In accordance with the Enterprise Income Tax Law of the People's Republic of China, the implementation regulations and related tax regulations which came into effect on 1 January 2008, the Company is required to withhold and pay enterprise income tax at the rate of 10% on behalf of the non-resident enterprise shareholders whose names appear on the register of members for H share of the Company when distributing dividends to them. For H shares of the Company registered other than in the name(s) of individual(s), including HKSCC Nominees Limited, other nominees, trustees, or other organizations or groups, shall be deemed to be shares held by non-resident enterprise shareholder(s). On the basis, enterprise income tax shall be withheld from dividends payable to such shareholder(s). If relevant shareholders believe that the dividend income obtained needs to enjoy any tax treaty (arrangement) treatment, they can apply to the competent tax authority on their own after receiving the dividend in accordance with the regulations.

2. ANALYSIS ON CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2022, the total assets of the Group amounted to RMB77,184.1 million, representing an increase of RMB3,872.4 million or 5.3% as compared with RMB73,311.7 million as at the end of 2021. The total liabilities amounted to RMB37,286.0 million, representing an increase of RMB2,190.6 million or 6.2% as compared with RMB35,095.4 million as at the end of 2021. Total equity amounted to RMB39,898.1 million, representing an increase of RMB1,681.8 million or 4.4% as compared with RMB38,216.3 million as at the end of 2021.

The analysis of reasons for significant changes in the amount of accounts on the consolidated statement of financial position is as follows:

Unit: RMB million

Items		2022	2021	Change	Percentage change	Reasons
Assets						
1	Other intangible assets	151.7	86.1	65.6	76.2%	The increase in the management system and software during the year.
2	Contract costs (non-current assets)	496.8	204.0	292.8	143.5%	The increase in contract performance costs arising from renovation of drilling rigs during the year.
3	Deferred tax assets	50.0	175.0	(125.0)	(71.4%)	Mainly due to the temporary differences between tax base and accounting base as the parent applied to the Announcement No.28 during the year, represented by net amount at the end of the period.
4	Accounts receivable	14,175.2	10,511.7	3,663.5	34.9%	Mainly due to the significant increase in operation revenue for current year.
5	Contract assets	48.0	91.0	(43.0)	(47.3%)	Mainly due to transfer of certain contract assets to accounts receivable upon the recognition from customers.
6	Contract costs (current assets)	47.4	26.5	20.9	78.9%	The increase in contract performance costs reclassified according to its liquidity.
7	Other current assets	1,771.3	842.0	929.3	110.4%	Mainly due to the reclassification of deductible input value-added tax and prepaid tax as at the end of the period and the increase in purchase of monetary funds during the year.
8	Time deposits	548.5	95.4	453.1	474.9%	The increase in time deposits during the year.

Items		2022	2021	Change	Percentage change	Reasons
Liabilities						
1	Notes payable	11.9	54.2	(42.3)	(78.0%)	The decrease in commercial acceptance bills during the year.
2	Salary and bonus payables	1,033.2	794.9	238.3	30.0%	The increase in remuneration of certain front-line employees as per the norms of the industry.
3	Tax payable	94.9	339.0	(244.1)	(72.0%)	Mainly due to the decrease in corporate income tax payable at the end of the year resulting from applying to the Announcement No.28.
4	Interest-bearing bank borrowings (current liabilities)	3,515.7	18.3	3,497.4	19,111.5%	Mainly due to the new short-term borrowing contracts during the year.
5	Long-term bonds (current liabilities)	872.2	8,122.7	(7,250.5)	(89.3%)	Mainly due to the repayment on maturity of US$1 billion bonds.
6	Contract liabilities (current liabilities)	759.7	545.1	214.6	39.4%	Mainly due to the increase in mobilization revenue during the year.
7	Deferred tax liabilities	345.8	38.7	307.1	793.5%	Mainly due to the temporary differences between tax base and accounting base as the parent applied to the Announcement No.28 during the year, represented by net amount at the end of the period.
8	Contract liabilities (non-current liabilities)	458.7	31.5	427.2	1,356.2%	Mainly due to the increase in mobilization revenue reclassified according to its liquidity.
9	Employee benefit liabilities	7.6	0.0	7.6	N/A	Employee benefit liabilities were accrued by overseas subsidiaries in accordance with local policies.
10	Other non-current liabilities	20.7	51.9	(31.2)	(60.1%)	Mainly due to the performance recognition of the onerous contracts during the year.
Equity						
1	Non-controlling interests	566.8	183.5	383.3	208.9%	Mainly due to acquisition of effective control over certain joint ventures during the year which resulted in the increase of non-controlling interests.

3. ANALYSIS OF CONSOLIDATED STATEMENT OF CASH FLOWS

At the beginning of 2022, the Group held cash and cash equivalents of RMB5,006.4 million. During 2022, the net cash inflows from operating activities amounted to RMB6,898.8 million; the net cash outflows from investing activities amounted to RMB3,732.7 million; the net cash outflows from financing activities amounted to RMB4,867.9 million and the impact of foreign exchange rate fluctuations resulted in an increase of cash of RMB257.1 million. As at 31 December 2022, the Group's cash and cash equivalents amounted to RMB3,561.7 million.

3.1 Cash flows from operating activities

In 2022, the net cash inflows from operating activities of the Group amounted to RMB6,898.8 million, representing a decrease of 7.0% as compared with last year, mainly due to the increase in cash paid for purchase of goods and receipt of labour services during the year.

3.2 Cash flows from investing activities

In 2022, the net cash outflows from investing activities of the Group amounted to RMB3,732.7 million, representing a decrease of outflows of RMB995.0 million as compared with last year, which was mainly due to the decrease of RMB3,142.4 million in cash paid for purchase of floating rate corporate wealth management products, monetary funds, debt instruments and time deposits. Cash received from the disposal of/matured investments in floating rate corporate wealth management products and monetary funds decreased by RMB2,116.4 million, and the total increase of cash outflows from other investment activities amounted to RMB31.0 million.

3.3 Cash flows from financing activities

In 2022, the net cash outflows from financing activities of the Group amounted to RMB4,867.9 million, representing an increase of outflows of RMB671.8 million as compared with last year. During the year, cash paid for repayment of bonds increased by RMB6,021.6 million, cash received from new bank loans increased by RMB3,383.9 million, cash received from new borrowings from related parties increased by RMB2,133.6 million and cash outflows from other financing activities increased by RMB167.7 million in total as compared with last year.

3.4 The effect of foreign exchange rate fluctuations on cash during the year was an increase of cash of RMB257.1 million.

3.5 The Group provides operation capital mainly through cash from operating activities, investment activities and financing activities and interest-bearing borrowings. For details of the Group's borrowings for the year ended 31 December 2022, please refer to Notes 36 and 37 to the consolidated financial statements of this report.

4. CAPITAL EXPENDITURE

In 2022, the capital expenditure of the Group amounted to RMB4,079.2 million, representing an increase of RMB633.8 million or 18.4% as compared with last year.

The capital expenditure of each business segment is as follows:

Unit: RMB million

Business segments	2022	2021	Change	Percentage change
Drilling services	1,371.7	819.5	552.2	67.4%
Well services	2,208.9	1,932.1	276.8	14.3%
Marine support services	243.7	315.5	(71.8)	(22.8%)
Geophysical acquisition and surveying services	254.9	378.3	(123.4)	(32.6%)
Total	4,079.2	3,445.4	633.8	18.4%

The capital expenditure of drilling service business is mainly used for the renovation of drilling rigs. The capital expenditure of well services business is mainly used for the construction of equipment related to technical services. The capital expenditure of marine support services business is mainly used for the construction of oilfield vessels. The capital expenditure of geophysical acquisition and surveying services is mainly used for the purchase of operational equipment.

BUSINESS PLAN

In 2022, the capital expenditure of the Company amounted to RMB4.08 billion, representing 98% of the annual budget for the year, and the overall target had been basically achieved. On 31 January 2023, the World Economic Outlook report issued by the International Monetary Fund (IMF) predicted that the world economic growth rate would be 2.9% in 2023. In terms of oil supply and demand, the demand recovery will be stronger, while the supply will be relatively stable and the balance between supply and demand will remain tense. The U.S. Energy Information Administration (EIA) predicts that the demand for offshore drilling rigs will increase in 2023, and the demand for jack-up drilling rigs will increase by 9%, with the Middle East, China, India and Mexico as the main demand markets, and the demand for floater drilling rigs will increase by 5%, with Brazil, Gulf of Mexico, West Africa and the North Sea as the main demand markets.

In 2023, it is estimated that the Company's capital expenditure will be approximately RMB9.3 billion, which will be mainly used for equipment investment, transformation and renovation, technical equipment transformation and renovation and investment in technology research and development, as well as base construction. The Company's internal capital liquidity will be stable and the external financing channels will be sufficient, which can ensure the safety of cash flow.

The Company will continue to implement the five development strategies, strengthen the basic, forward-looking and leading technology research, build core competitive advantages, establish a new integrated model to create value for customers, add value to the Company's business and resist industry risks, and fully release the value-added space of various businesses and the whole chain business. The Company will adhere to the green and low-carbon development, promote industrial transformation and upgrading, stick to the road of high-quality development, actively safeguard the interests of investors, and ensure the stable dividend return for shareholders.

2023 BUSINESS OUTLOOK

With the emission reduction promoted by global climate cooperation and other factors, the global energy structure will continue to gradually transform, and the renewable energy is becoming more and more important. The energy transformation has a long way to go and is full of challenges. The global energy is still dominated by fossil energy by 2040.

According to the research report issued by the International Energy Agency (IEA), it is highly probable that the international oil price in 2023 will fluctuate widely and run at a medium and high level for a long time. It is estimated that the annual average price of Brent crude oil will be US$88/barrel in 2023. Under the situation that the global economic growth prospects are weakening and the uncertainty of the oil market is increasing, oil companies are cautious in upstream investment. According to the conclusion of the latest Global Upstream Spending Report issued by IHS Markit Ltd., it is estimated that the global upstream capital expenditure will be approximately US$561.2 billion in 2023, representing an increase of 12.42%.

Corporate Governance Report

As a domestic and overseas listing company, the Company has reviewed the compliance with the Corporate Governance Code (hereinafter referred to as the "Code") contained in Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange") (hereinafter referred to as the "Listing Rules") and the regulatory documents on listed companies governance issued by China Securities Regulatory Commission. Upon the review, the Board is of the view that the corporate governance of the Company has generally met the requirements set out in the Code and the regulations during the reporting period. During the 12 months ended 31 December 2022, the Company has complied with the principles and code provisions as set out in the Code in Appendix 14 of the Listing Rules, and also explained the implementation of Code provision C.2.1 under Part 2 of the Code.

The Board is of the view that the improvement in corporate governance in 2022 was mainly reflected in the following aspects:

1. Paid attention to the changes of international energy structure, attached importance to risk assessments of overseas businesses, improved the Company's business development planning and deployment, comprehensively improved its risk response capability, and continuously balanced the relationship between market development and risk prevention.

2. Strengthened the evaluation and review of investment strategies, implemented the full life-cycle management of projects, and improved the risk prevention ability of the Company in dealing with asset impairment, accounts receivable and other matters; strengthened the review and risk assessment of connected transactions, and improved the disposal capacity of possible risks; strengthened the construction and supervision of the Company's compliance governance, regularly listened to compliance management reports, and ensured the continuous improvement and implementation of the Company's compliance governance.

3. In order to adapt to the new regulatory changes, improve the corporate governance system and safeguard the rights and interests of shareholders and investors, the Company amended the Articles of Association; by formulating the Implementation Plan for Implementing the Functions and Powers of the Board of Directors, the Company continuously improved its corporate governance capacity and efficiency, and effectively improved the scientific decision-making quality of the Board; in order to give full play to the supervision and examination functions of the committees of the Board, the Company amended the Terms of Reference for the Remuneration and Assessment Committee of the Board and the Terms of Reference for the Nomination Committee of the Board, so as to strengthen the diligent and conscientious performance of the duties by the Directors.

4. Deeply implemented the Company's medium-and long-term development strategy, paid attention to overseas operational effectiveness and risks, and strengthened operational control in areas with geopolitical risks; accelerated the informatization construction and helped improvement of the management efficiency; fully considered the characteristics of the industry, paid attention to the low-carbon transition window period, continuously promoted the Company's high-quality development, and enhanced the overall profitability.

5. Continuously improve information disclosure and investor relationship, enhance the management and registration of inside information. The Company attaches great importance to information disclosure, strictly abides by the requirements of information disclosure laws and regulations, and publishes regular reports and temporary announcements in accordance with the law. According to the industry environment and actual operation situation, the Company timely made risk alerts to investors, expressing the sincerity to be accountable to investors and the idea of offering maximum protection to small and medium investors. During the reporting period, the Company carried out insider management and registration in accordance with regulatory requirements and Company rules, formulated the Insider Registration and Management Methods, actively conducted trainings on insider management and registration and deeply improved the inside information management mechanism. During the reporting period, there was no evidence of insiders using inside information to buy or sell the Company's shares.

In 2022, the Company was awarded the "Outstanding Brand Image Award 2022" of the 11th China Finance Summit. The Chairman of the Company was awarded the "Outstanding Influential Entrepreneur Award 2022" of the 11th China Finance Summit. The Company was included in the "Constituent of Hang Seng (China A) Corporate Sustainability Benchmark Index" for eleven consecutive years. The Company was included in the "Central Enterprises ESG • Vanguard 50 Index", the "Central Enterprises ESG • Social Value Vanguard 50 Index" and the "Central Enterprises ESG • Risk Management Vanguard 50 Index" published by the SASAC of the State Council and the CSR Cloud Research Institute. The Company was included in the "Governance Pioneer" in 2022 ESG Golden Bull Award of the China Social Responsibility 100 Forum; and won the "2022 China Business Top 100 Best Management and Operation Award" at the 22nd China Business Top 100 Listed Companies Summit.

(I) DIRECTOR'S INVOLVEMENT IN SECURITIES TRANSACTIONS

Following specific enquiries with all directors, the Directors confirmed that during the 12 months ended 31 December 2022, the provisions of the Model Code for Securities Transaction by Directors of Listed Issuers ("the Model Code") set out in Appendix 10 to the Listing Rules were observed. The Company currently has adopted a code of conduct for securities transactions by Directors that is stricter than the provisions set out in the Model Code. In addition, Directors, Supervisors and Senior Management of the Company confirmed that during the 12 months ended 31 December 2022, they complied with the "Management Rules with regard to the Holding of and Changes in Company Shares by Directors, Supervisors and Senior Management of Listed Companies" regulated by the China Security Regulatory Commission.

(II) PERFORMANCE OF THE BOARD OF DIRECTORS

1. Composition of the Board of Directors

The composition of the Board of Directors during 2022 and on the date of this report is as follows:

Chairman:	Zhao Shunqiang
Executive Directors:	Zhao Shunqiang
	Xiong Min (appointed at the 2022 Second EGM)
Independent Non-executive Directors:	Chiu Lai Kuen, Susanna
	Kwok Lam Kwong, Larry (appointed at the 2021 AGM)
	Yao Xin (appointed at the 2022 First EGM)
Non-executive Directors:	Wu Wenlai
	Liu Zongzhao

2. The Roles of the Board of Directors and the Management

The Articles of Association of the Company clearly define the duties and functions of the Board of Directors and the Management, which provides for an adequate check and balance mechanism to ensure good corporate governance and internal control.

The Board is responsible for deciding the Company's business and investment plans, determining the establishment of internal management department of the Company, establishing the basic management system of the Company, resolving major business and administrative issues of the Company, exercising powers and duties within the scope of authorization of the general meeting and supervising the management. The management is responsible for implementing various proposals made by the Board and organizing daily operation and management of the Company. For details, please refer to the Articles of Association of the Company on the Company's website.

Besides, the Company has a specified system to divide responsibilities between the Board and the management towards making investment decisions: all equity investment shall be approved by the Board (approval from shareholders is required if such investment exceeds a certain amount); large-scale equipment projects and base construction projects with an investment amount of more than RMB300 million (inclusive) may be approved by the Board.

3. Board Meetings

The Board of Directors convened six meetings during the year. Please see Table I of this Report for details of Board meeting attendance and general meeting attendance of directors. For other items not within the scope of the regular Board meeting's agenda and require approval from the Board, the Chairman may serve to the members of the Board the proposed resolutions in written form in accordance with the related requirements of the Articles of Association, and the items will become valid resolutions upon signing by the directors which meets the quorum as stated in the Articles of Association. To create more opportunities for the Independent Non-executive Directors to express their views and make recommendation in respect of the Company's affairs, the Chairman hold several meetings with Independent Non-executive Directors in the absence of Executive Directors every year so as to listen to the advice of Independent Directors in respect of the corporate governance and management (this practice has adopted the Code provision C.2.7 under Part 2 of the Code). In the year of 2022, one meeting was held in such regard. The Board is of the view that meeting proceedings and resolutions of the Board complied with requirements of laws, regulations and the Articles of Association, which ensured prudent discussion by Directors before making decisions on material items, and performance of integrity and due diligence and act in the interests of the Company and shareholders as a whole by Directors in the related decision making process. Please see Table II for detailed resolutions adopted by the Board in the year of 2022.

4. Performance of Independent Directors

The Board currently has three Independent Directors. All of them have rich professional experience in the fields of accounting, law and energy field, and are very familiar with the operation of board of directors and duties of independent directors of listed companies. During the reporting period, the Independent Directors effectively performed their due diligent and attentive responsibilities as directors, and provided various professional advice to the Company, especially in the review of financial reports, the review of connected transactions, the internal audit and the management of risks, among which, please see section VII of this report for details of related reviews of financial reports, the review of connected transactions, internal audit and risk management, as well as sections V and VI of this report for other relevant work. In 2022, the independent directors reviewed the Company's continuing connected transactions, the provision for asset impairment, re-appointment of the auditor, report on the continuous risk assessment of connected persons and others and expressed their independent opinions. Please see the section headed "Summary of General Meetings" of this annual report for the details of the Independent Directors' attendance of the general meetings during the reporting period. Please see Table I of this report for details of Board meetings and special committee meetings attendance of Independent Directors.

During the reporting period, Independent Directors did not have any objection to resolutions of the Board or any other items for the year (other than resolutions of the Board) of the Company.

5. Policy on Diversification of Board Composition

The Board of Directors held discussion with regards to the diversification policy of Board composition, and considered it could play a positive role for the Company in recruiting different types of talents, improving corporate governance level and achieving sustainable development to the largest extent. The Board considered that the Company should have different perspectives at the time of selecting Directors (measurable objectives include but not confined to factors of educational background, professional experience, age, gender, location and race, etc.), so as to achieve and maintain a policy of diversification among the directors. The Board will endeavour to implement and promote the policy of Board diversification. Each year, the Nomination Committee of the Company will be responsible for monitoring the implementation of this policy and making recommendations to the Board on assessing the implementation process at an appropriate time. The Company carried out the nomination and election of Directors in 2022 (Mr. Xiong Min was appointed as an Executive Director of the Company, Mr. Kwok Lam Kwong, Larry and Mr. Yao Xin were appointed as Independent Non-executive Directors of the Company), and the Nomination Committee considered that when the Company handled the Director nomination process, the policy of diversification of Directors was adequately considered. As at 31 December 2022, the Board comprised seven directors, among which one is female director.

6. Internal control and risk management

The Company has established and continuously improved the risk management and internal control systems to prevent that the Company may face. The Company has established a hierarchical organizational structure for the Board and its affiliated Audit Committee, headquarter departments and direct units to ensure the effective operation of internal control and risk management. The Board is responsible for the risk management and internal control systems, and has the responsibility to review the effectiveness of the systems and conduct a review of the risk management and internal control systems once a year.

In terms of internal control, the Company has established 14 internal control systems covering the headquarter of the Company and domestic and overseas units at all levels in line with the“Basic Norms for Internal Controls of Enterprises” and “Guidelines for Enterprise Internal Control Support” issued by the government, and the requirements for listing supervision. The Company continued to carry out system optimization such as “Planning, establishment, modification, abolition, interpretation and evaluation”, aiming to ensure the scientific, adaptable and compliance of the internal control system. The Company has checked and evaluated the effectiveness of internal control operations through daily internal control inspections and annual internal control evaluations. The Board meeting held by the Board of the Company at the beginning of each year evaluated the effectiveness of the internal control evaluation for the previous year. The Company’s internal control system was sound and its implementation was effective, and no major deficiencies in the design or implementation of the Company’s internal control were found.

In terms of risk management, the Company established a comprehensive risk management organization system, formulated comprehensive risk management systems including the "Comprehensive Risk Management Measures" and the "Management of Reports and Response on Major Business Risk Events". The Company established a systematic and comprehensive risk management organization and built a risk management network from horizontal to edge and vertical to the end. The Company organizes annual risk identification and assessment and reports the annual risk control to the Board. It conducts quarterly comprehensive risk identification and assessment and submits the "Quarterly Comprehensive Risk Management Report" to the Board. The Company actively carries out special investigation and control of major risks, continuously strengthens risk identification and early warning capabilities; holds risk work meetings and exchanges and trainings through various channels and forms to publicize the risk management culture and enhance the risk prevention awareness; establishes and improves comprehensive risk emergency management mechanism, and continuously improves emergency disposal capabilities. We continuously strengthen the coordinated risk management to improve our ability and level of prevention and resolution of major risks.

7. Directors and General Meetings

Particulars of General Meetings convened by the Board and the particulars of the participation of Directors during the reporting period were set out in the section "Summary of General Meetings" of this annual report. In the opinion of the Board, the Company complied with all requirements of resolution of the General Meeting during the reporting period. The Board reviewed the implementation of the resolution passed at the General Meeting by the Company, and considered there was no problem occurred in the implementations of the resolution of General Meeting.

8. Procedure Mechanism of the Board

All Directors have timely access to relevant information as well as the advice and services of the Company Secretary, with a view to ensuring compliance with Board procedures and all applicable laws and regulations. The Board has established a number of committees, including the Audit Committee, the Remuneration and Assessment Committee and the Nomination Committee for overseeing particular aspects of the Company's affairs. All committees under the Board were established with defined written terms of reference. The committees under the Board are provided with sufficient resources to perform their duties. Upon reasonable requests, the committees under the Board may seek independent professional advice in appropriate circumstances at the expense of the Company.

During the reporting period, the Board is of view that such Procedure Mechanism was implemented effectively.

9. Other Matters

During the reporting period, the number and qualifications of Independent Non-executive Directors of the Company were in compliance with Rule 3.10 (1) and (2) and Rule 3.10A of the Listing Rules and the independence of the current Independent Non-executive Directors of the Company is in compliance with the requirements set out in Rule 3.13 of the Listing Rules. Apart from working relationship, there is no material relationship between the Directors, Supervisors and Senior Management of the Company in relation to financial, business, family or other aspects.

The Board is responsible for the corporate governance functions of the Company, and regularly reviews the corporate governance practices to ensure that the Board fully performs the corporate governance responsibilities contained in the Code provision A.2.1 under Part 2 of the Code.

(III) CHAIRMAN AND CHIEF EXECUTIVE OFFICER

The Chairman and the Chief Executive Officer of the Company are currently held by Mr. Zhao Shunqiang alone. This is different from the Code provision C.2.1 under Part 2 of the Code which states that the roles of chairman and chief executive officer should be different and should not be performed by the same person at the same time. However, the Board believes that, the roles of chairman and chief executive officer being assumed by the same person can help to meet the Company's overall production and operation needs in current phase, and guarantee the effective formulation and vigorous promotion of the Company's strategies. At the same time, all major decisions of the Company are discussed by the Board, the special Board Committees and Senior Management. The Board believes that the current structure does not reduce the balances of power and authorization, and allows the Company to make timely and effective decisions and implementations.

(IV) TERMS OF OFFICE OF NON-EXECUTIVE DIRECTORS

The term of office of Ms. Chiu Lai Kuen, Susanna is three years since the 2020 AGM. The term of office of Mr. Kwok Lam Kwong, Larry is three years since the 2021 AGM. The term of office of Mr. Yao Xin is three years since the 2022 First EGM. The term of office of Mr. Wu Wenlai is three years since the 2021 First EGM. The term of office of Mr. Liu Zongzhao is three years since the 2021 First EGM.

(V) DIRECTORS' REMUNERATION

1. The Composition and Functions of the Remuneration and Assessment Committee

(1) The Remuneration and Assessment Committee of the Company consists of four members, all of them are non-executive directors, namely Kwok Lam Kwong, Larry, Chiu Lai Kuen, Susanna, Yao Xin and Wu Wenlai. Three of them are independent non-executive directors. Kwok Lam Kwong, Larry acts as Chairman.

(2) The functions of this committee are to formulate the standard for assessing the performance of directors, supervisors and senior management and to conduct such assessment, formulate and review the remuneration policy and scheme for directors, supervisors and senior management. The committee studies and discusses the above matters and makes recommendations to the Board, and the Board reserves the final decision in respect of the above matters (please refer to documents of relevant Terms of Reference under the section of Corporate Governance on the Company's website).

2. **The work of the Remuneration and Assessment Committee during the year**

During the reporting period, the committee held two meetings (please see Table I for meeting summaries) to review and approve the remuneration of directors, supervisors and senior management for the year 2021 as disclosed in the 2021 annual report of the Company, review and approve the key performance assessment of the management in 2022 and the report on the performance evaluation of management in 2022.

(VI) NOMINATION OF DIRECTORS

1. **The Composition and Functions of the Nomination Committee**

(1) To ensure that the members of the Board possess of the professional experience and educational background as required for the business development of the Company and achieve and maintain the diversity of the Board, the Company established the Nomination Committee which would assess the implementation of policies and provide advices to the Board in due course. The Nomination Committee of the Company consists of three members, namely Yao Xin, Zhao Shunqiang and Kwok Lam Kwong, Larry. Two of them are independent non-executive directors and Yao Xin acts as Chairman.

(2) Major functions of the committee are to select and recommend candidates for directors and senior management of the Company and the standards and procedures for selecting such candidates (please refer to documents of relevant Terms of Reference under the section of Corporate Governance on the Company's website).

2. **The work of the Nomination Committee during the year**

During the reporting period, the Nomination Committee held four meetings (please see Table I for meeting summaries), during which the nomination of the Board secretary, joint company secretary and authorized representatives, the nomination of directors and the diversity policy of the directors were discussed, the independence of the independent directors was recognized, and the senior management was appointed.

(VII) THE AUDIT COMMITTEE

1. **The Composition and Functions of the Audit Committee**

(1) The Audit Committee consists of three members, namely Chiu Lai Kuen, Susanna, Kwok Lam Kwong, Larry and Yao Xin. All of them are independent non-executive directors, and Chiu Lai Kuen, Susanna acts as Chairman.

(2) The functions of the Audit Committee are to review the accounting policy, financial position and financial reporting procedures of the Company; to review the internal control structure, internal supervision and risk management; to recommend and engage external auditing firm; and to be primarily responsible for the communication, supervision and review of the internal and external audits of the Company (please refer to documents of relevant Terms of Reference under the section of Corporate Governance on the Company's website).

2. The Work of the Audit Committee during the year

During the reporting period, the Audit Committee held five meetings, please see Table I for meeting summaries. The major work of the Audit Committee for the year is as follows:

(1) Reviewed the annual financial results of 2021, the first quarterly report, the interim financial results and the third quarterly report of 2022 of the Company. During the review process, the members performed sufficient and necessary communication with the Company's external auditors and the management of the Company and fulfilled the committee's duties in ensuring the Company's compliance with regulations, completeness and accuracy of the financial results disclosed by the Company.

(2) Reviewed and discussed the work for internal audit and risk management of the Company and considered and approved the 2021 annual internal audit report and the 2021 annual internal control assessment report of the Company, and proposed to pay attention to data security. During the reporting period, the committee listened to the internal control and internal audit working report, required the Company to pay attention to the impact of international environment and conduct compliance risk management and control and risk research and judgement of overseas investments. The Company should strengthen the management of audit work, and the key areas and links of overseas audit should be fully covered and normalized. Meanwhile, the Company should also strengthen internal audit training and strengthen the application of big data in audit work.

(3) Reviewed the provision for asset impairment and the connected transactions of the Company. The committee required the Company to pay attention to the changes of industry environment and attach importance to the evaluation of investment strategy. The committee reviewed the daily connected transactions in 2022, and deliberated the continuing connected transactions in the next three years (2023-2025).

(4) Regarding the re-appointment of the auditors, the committee unanimously approved the re-appointments of Ernst & Young Hua Ming LLP and Ernst & Young as domestic and international auditors of the Company for 2022.

(VIII) TRAINING FOR DIRECTORS

In 2022, all directors of the Company participated in relevant trainings to obtain continuous professional development. In February, the Company's directors and senior management participated in the "2021 Annual Report Risk Concern Prompt Training for Independent Directors" organized by the China Association for Public Companies. In June, the Company's independent directors participated in the "Follow-up Training for Independent Directors" organized by Shanghai Stock Exchange. In July, the Company's independent directors participated in the "Independent Director Qualification Training" organized by Shanghai Stock Exchange. From July to August, the Company's directors participated in the "Initial Appointment Training for Directors, Supervisors and Senior Management" organized by Shanghai Stock Exchange. In December, the Chairman of the Company participated in the "Special Training on Corporate Governance" organized by the China Association for Public Companies. In December, the Company's independent directors participated in the

"Pre-service Training for Independent Directors" organized by Shanghai Stock Exchange. In December, the Company's directors, supervisors and senior management participated in the "Training on Corporate Governance and Refinance of Key and Minority of Listed Companies in Tianjin" organized by Tianjin Association for Public Companies.

(IX) BOARD SECRETARY

On 21 January 2022, the Company convened the first meeting of the Board of 2022, appointed Mr. Sun Weizhou as the Board Secretary and Joint Company Secretary and appointed Ms. Ng Sau Mei as the Joint Company Secretary with effect from 21 January 2022. Biography of Mr. Sun Weizhou and Ms. Ng Sau Mei are set out in the section "Directors, Supervisors, Senior Management and Employees" in this Annual Report. The Board Secretary of the Company reports to the Chairman and Chief Executive Officer and makes recommendation to the Board in respect of completing corporate governance, improving the quality of listed companies and strengthening Director training, etc., and continues to promote corporate governance compliance operation. For the year 2022, Mr. Sun Weizhou and Ms. Ng Sau Mei has confirmed that they have taken not less than 15-hour relevant and professional training.

(X) PROTECTION ON THE SHAREHOLDERS' INTERESTS

In respect of the protection on the shareholders' interests, shareholders of the Company may obtain relevant information in accordance with the requirements under the Articles of Association, including the personal information of the directors, supervisors and senior management of the Company, share capital of the Company, record of general meetings, Board resolutions, resolutions of Supervisor Committee and financial reports, and so on. The Company provides its contacts in regular reports and on the Company's website to facilitate smooth communication with its shareholders. Also, the Company makes a clear explanation for the procedures of calling an EGM or a class meeting by shareholders in the Articles of Association. For details of which, please refer to the Articles of Association published on the Company's website.

During the reporting period, the Company made amendments to the Articles of Association, please refer to the announcements dated 27 October 2022 and 22 December 2022 of the Company for details. For details of the Articles of Association, please visit the Company's website.

(XI) THE REMUNERATION OF AUDITORS

In 2022, the Company has appointed Ernst & Young Hua Ming LLP and Ernst & Young as its domestic and international auditors for 2022, and authorized the Board to fix their remuneration. The fees for the audit and non-audit services provided by the auditors to the Company during the reporting period were as follows:

Audit services – The audit fees totaled RMB12.96 million for audit/review of the annual and interim financial statements in 2022 and internal control.

Non-audit services – The fees totaled RMB2.49 million for provision of professional service for tax compliance and tax advice in 2022.

(XII) RESPONSIBILITIES UNDERTAKEN

The Board of Directors acknowledges its responsibilities of preparing the account of the Company and the auditors have also explained their reporting responsibilities in the financial reports; the Board of Directors undertakes the responsibilities for the effectiveness of internal control of the Company and its subsidiaries and has completed the relevant review and assessment during the reporting period, and concluded that there were no material weaknesses in the internal controls of the Company and its subsidiaries; the Board of Directors confirms that, unless otherwise stated in this annual report, there are no major events and circumstances of uncertainty which may affect the operation of the Company as a going concern.

Table I: Summary of the Board Meetings & Special Committee Meetings

Meeting	Time	Place	Attendant	Moderator	Notes
First Meeting of Board of Directors	21 January 2022	Yanjiao	Zhao Shunqiang, Yu Feng, Wong Kwai Huen, Albert, Lin Boqiang, Chiu Lai Kuen, Susanna, Wu Wenlai, Liu Zongzhao	Zhao Shunqiang	Three supervisors attended as non-voting delegates
Second Meeting of Board of Directors	24 March 2022	Yanjiao	Zhao Shunqiang, Yu Feng, Wong Kwai Huen, Albert, Lin Boqiang, Chiu Lai Kuen, Susanna, Wu Wenlai, Liu Zongzhao	Zhao Shunqiang	Three supervisors attended as non-voting delegates
Third Meeting of Board of Directors	28 April 2022	Yanjiao	Zhao Shunqiang, Yu Feng, Wong Kwai Huen, Albert, Lin Boqiang, Chiu Lai Kuen, Susanna, Wu Wenlai, Liu Zongzhao	Zhao Shunqiang	Three supervisors attended as non-voting delegates
Fourth Meeting of Board of Directors	25 August 2022	Yanjiao	Zhao Shunqiang, Yu Feng, Chiu Lai Kuen, Susanna, Kwok Lam Kwong, Larry, Yao Xin, Wu Wenlai, Liu Zongzhao	Zhao Shunqiang	Three supervisors attended as non-voting delegates
Fifth Meeting of Board of Directors	27 October 2022	Yanjiao	Zhao Shunqiang, Yu Feng, Chiu Lai Kuen, Susanna, Kwok Lam Kwong, Larry, Yao Xin, Wu Wenlai, Liu Zongzhao	Zhao Shunqiang	Three supervisors attended as non-voting delegates
Sixth Meeting of Board of Directors	21 December 2022	Yanjiao	Zhao Shunqiang, Yu Feng, Chiu Lai Kuen, Susanna, Kwok Lam Kwong, Larry, Yao Xin, Wu Wenlai, Liu Zongzhao	Zhao Shunqiang	Three supervisors attended as non-voting delegates
First Meeting of Audit Committee	21 January 2022	Yanjiao	Chiu Lai Kuen, Susanna, Wong Kwai Huen, Albert, Lin Boqiang	Chiu Lai Kuen, Susanna	Two supervisors attended as non-voting delegates
Second Meeting of Audit Committee	23 March 2022	Yanjiao	Chiu Lai Kuen, Susanna, Wong Kwai Huen, Albert, Lin Boqiang	Chiu Lai Kuen, Susanna	Two supervisors attended as non-voting delegates
Third Meeting of Audit Committee	27 April 2022	Yanjiao	Chiu Lai Kuen, Susanna, Wong Kwai Huen, Albert, Lin Boqiang	Chiu Lai Kuen, Susanna	Two supervisors attended as non-voting delegates

Meeting	Time	Place	Attendant	Moderator	Notes
Fourth Meeting of Audit Committee	24 August 2022	Yanjiao	Chiu Lai Kuen, Susanna, Kwok Lam Kwong, Larry, Yao Xin	Chiu Lai Kuen, Susanna	Three supervisors attended as non-voting delegates
Fifth Meeting of Audit Committee	26 October 2022	Yanjiao	Chiu Lai Kuen, Susanna, Kwok Lam Kwong, Larry, Yao Xin	Chiu Lai Kuen, Susanna	Three supervisors attended as non-voting delegates
First Meeting of Remuneration and Assessment Committee	23 March 2022	Yanjiao	Wong Kwai Huen, Albert, Lin Boqiang, Chiu Lai Kuen, Susanna, Wu Wenlai	Wong Kwai Huen, Albert	Two supervisors attended as non-voting delegates
Second Meeting of Remuneration and Assessment Committee	20 December 2022	Yanjiao	Kwok Lam Kwong, Larry, Chiu Lai Kuen, Susanna, Yao Xin, Wu Wenlai	Kwok Lam Kwong, Larry	Three supervisors attended as non-voting delegates
First Meeting of Nomination Committee	21 January 2022	Yanjiao	Lin Boqiang, Zhao Shunqiang, Wong Kwai Huen, Albert	Lin Boqiang	Two supervisors attended as non-voting delegates
Second Meeting of Nomination Committee	27 April 2022	Yanjiao	Lin Boqiang, Zhao Shunqiang, Wong Kwai Huen, Albert	Lin Boqiang	Two supervisors attended as non-voting delegates
Third Meeting of Nomination Committee	26 October 2022	Yanjiao	Yao Xin, Zhao Shunqiang, Kwok Lam Kwong, Larry	Yao Xin	Two supervisors attended as non-voting delegates
Fourth Meeting of Nomination Committee	20 December 2022	Yanjiao	Yao Xin, Zhao Shunqiang, Kwok Lam Kwong, Larry	Yao Xin	Three supervisors attended as non-voting delegates

	Participation in Board Meetings							Participation in General Meetings
	Independent director or not	No. of Board Meetings Participations for This Year	No. of In-person Attendance	No. of Participation by Communication	No. of Delegated Attendance	No. of Absences	Whether or not absent from two consecutive meetings	No. of General Meetings Participations
Zhao Shunqiang	No	6	6	1	0	0	No	5
Xiong Min	No	0	0	0	0	0	No	0
Chiu Lai Kuen, Susanna	Yes	6	6	6	0	0	No	5
Kwok Lam Kwong, Larry	Yes	3	3	3	0	0	No	2
Yao Xin	Yes	3	3	3	0	0	No	1
Wu Wenlai	No	6	4	4	2	0	Yes	4
Liu Zongzhao	No	6	5	5	1	0	No	4
Yu Feng	No	6	6	1	0	0	No	4
Wong Kwai Huen, Albert	Yes	3	3	3	0	0	No	3
Lin Boqiang	Yes	3	3	3	0	0	No	4

Notes: 1. Mr. Xiong Min was elected as the Executive Director of the Company at the Second EGM held on 22 December 2022, and there was no Boarding meeting or general meeting in which he should participate during the reporting period.

2. Mr. Wu Wenlai failed to attend two consecutive Board meetings in person due to other business matters, but he has authorised other Directors to vote on his behalf in respect of the resolution of Board meetings (the proxy shall vote in accordance with the terms of the written power of attorney).

Table II: Particulars of the Board resolutions

Meeting	Matters considered	
First Meeting of Board of Directors	1	Approving the resolution of the fixed assets impairment for the year 2021
	2	Approving the resolution of appointment of the Board Secretary and Joint Company Secretary and the Authorized representative
Second Meeting of Board of Directors	1	Approving the resolution of the audited 2021 Financial Report of the Company
	2	Approving the resolution of disclosure of results of the Company for the year 2021
	3	Approving the resolution of the final dividend distribution plan of the Company for the year 2021
	4	Approving the resolution of the special dividend distribution plan of the Company for the year 2021
	5	Approving the resolution of provision of guarantees for wholly-owned subsidiaries
	6	Approving the proposal of re-appointment of Ernst & Young Hua Ming LLP and Ernst & Young as the domestic and international auditors of the Company for 2022, and authorized the Board to fix their remuneration at the general meeting
	7	Approving the resolution for the Report of the Board of Directors and Corporate Governance Report of the Company for the year 2021
	8	Approving the resolution of the Sustainability Report 2021 of the Company
	9	Approving the resolution of the Internal Control Assessment Report of the Company for the year 2021
	10	Approving the resolution of the Comprehensive Risk Management Report of the Company for the year 2022

Meeting		Matters considered
	11	Approving the resolution of amendments to the Legal Compliance Management System
	12	Approving the resolution of the Continuous Risk Assessment Report on CNOOC Finance Corporation Limited
	13	Approving the resolution of the risk disposal plan for development of financial business with CNOOC Finance Corporation Limited
	14	Approving the resolution of the debt waiver of COSL Hong Kong Limited
	15	Approving the resolution of amendments to the Financial Management System
	16	Approving the resolution of amendments to the Terms of Reference for Remuneration and Assessment Committee of the Board
	17	Approving the resolution of amendments to the Terms of Reference for Nomination Committee of the Board
	18	Approving the proposal to authorize the Board to further issue 20% of H shares at the general meeting
	19	Approving the proposal to authorize the Board to repurchase 10% of A shares and 10% of H shares at the general meeting
	20	Approving the resolution of Management Performance Assessment and Remuneration of Directors, Supervisors and Senior Management
	21	Approving the proposal for convening Annual General Meeting and Class Meeting
Third Meeting of Board of Directors	1	Approving the resolution of the 2022 First Quarterly Financial Report of the Company
	2	Approving the resolution of the 2022 First Quarterly results disclosure of the Company
	3	Approving the resolution of providing loans and interbank financing to subsidiaries
	4	Approving the resolution of the provision of guarantees for its controlled non-wholly owned subsidiaries and external third parties
	5	Approving the resolution of nominating Mr. Kwok Lam Kwong, Larry as a candidate for Independent Non-executive Director of the Company
Fourth Meeting of Board of Directors	1	Approving the resolution of the 2022 Interim Financial Report of the Company
	2	Approving the resolution of the 2022 interim results disclosure of the Company
	3	Approving the resolution of amendments to the Planning and Development Management System
	4	Approving the resolution of formulation of the Insider Registration and Management Methods
	5	Approving the resolution of the Continuous Risk Assessment Report on CNOOC Finance Corporation Limited
	6	Approving the resolution of closure of overseas subsidiaries

Meeting		Matters considered
Fifth Meeting of Board of Directors	1	Approving the resolution of the 2022 Third Quarterly Financial Report of the Company
	2	Approving the resolution of the 2022 Third Quarterly results disclosure of the Company
	3	Approving the resolution of continuing connected transactions for the next three years
	4	Approving the resolution of the US dollar loan extension by the wholly-owned subsidiary, COSL Middle East FZE, and the provision of guarantee by the Company
	5	Approving the resolution of amendments to the Articles of the Association
	6	Approving the resolution of amendments to the Administrative Management System
	7	Approving the resolution of amendments to the Marketing and International Business Management System
	8	Approving the resolution of closure of overseas subsidiaries
	9	Approving the resolution of change in equity interests of overseas subsidiaries
	10	Approving the resolution of nominating Mr. Xiong Min as a candidate for Executive Director of the Company
	11	Approving the resolution of convening EGM
Sixth Meeting of Board of Directors	1	Approving the resolution of the 2023 wealth management amount of the Company
	2	Approving the resolution of the Company's credit extension program for the year 2023
	3	Approving the resolution of the 2022 compliance management report of the Company
	4	Approving the resolution of the extension of the term of joint venture of China France Geo
	5	Approving the resolution of amendments to the Measures for the Management of Charity and Public Welfare
	6	Approving the resolution of amendments to the Supply Chain Management System
	7	Approving the resolution of the feasibility study report of purchasing four JU2000E jack-up drilling rigs
	8	Approving the resolution of the feasibility study report of Hainan Industrial Park (Phase I) Construction Project
	9	Approving the resolution of appointment of the senior management of the Company

Meeting	Matters considered	
The matters to be voted by written resolutions approved in 2022	1	Approving the resolution of implementation of the supporting system in relation to the terms of reference of the Board
	2	Approving the resolution of entering into USD loan agreement between the Company and CNOOC (including CNOOC's members)
	3	Approving the resolution of USD loan by the overseas wholly-owned subsidiaries of COSL and provision of guarantee by the Company thereof
	4	Approving the resolution of nominating Mr. Yao Xin as a candidate for Independent Non-executive Director of the Company
	5	Approving the resolution of convening EGM

Summary of General Meetings

Session and No. of Meeting	Date	Name of Proposals	Resolutions	Designated websites on which resolutions were published
2021 AGM	1 June 2022	**As ordinary resolutions:** 1. To consider and approve the audited financial statements and the report of the auditor for the year ended 31 December 2021; 2. To consider and approve the proposed final dividend distribution plan for the year ended 31 December 2021; 3. To consider and approve the proposed special dividend distribution plan for the year ended 31 December 2021; 4. To consider and approve the report of the Directors for the year ended 31 December 2021; 5. To consider and approve the report of the Supervisory Committee for the year ended 31 December 2021; 6. To re-appoint Ernst & Young Hua Ming LLP and Ernst & Young as the domestic and international auditors of the Company for the year 2022 and authorisation to the Board to fix the remuneration thereof; 7. To consider and approve the issuance of US dollar bonds by the overseas wholly-owned subsidiary of the Company in the year 2022 and the provision of guarantee by the Company thereof; 8. Appointment of Mr. Kwok Lam Kwong, Larry as an independent non-executive Director of the Company.	The convening of this meeting was in compliance with the Company Law and other relevant laws, administrative regulations and the Articles of Association. There were 17 shareholders (including on-site attendance and online voting) in attendance either in person or by proxy at the meeting, representing 3,338,895,246 shares or 69.97% of the total number of shares of the Company with voting rights. The aforesaid resolutions were approved by way of on-site and online voting by poll. All directors and supervisors of the Company attended the AGM.	www.sse.com.cn www.hkex.com.hk

Session and No. of Meeting	Date	Name of Proposals	Resolutions	Designated websites on which resolutions were published
		As special resolutions: 1. To consider and approve the provision of guarantees by the Company for its wholly-owned subsidiaries; 2. To consider and approve the provision of guarantees by the Company for its controlled non-wholly owned subsidiaries and external third parties; 3. To consider and approve the resolution of granting the Board a mandate to issue further H shares representing up to 20% of the aggregate amount of the H shares in issue during the relevant period; 4. To consider and approve the resolution of granting the repurchase rights on 10% of A shares and 10% of H shares to the Board.		
2022 First A Share Class Meeting	1 June 2022	**As a special resolution:** 1. To consider and approve the resolution of granting the repurchase rights on 10% of A shares and 10% of H shares to the Board.	The convening of this meeting was in compliance with the Company Law and other relevant laws, administrative regulations and the Articles of Association. There were 16 shareholders (including on-site attendance and online voting) in attendance either in person or by proxy at the meeting, representing 2,444,118,221 shares or 82.56% of the total number of A shares of the Company with voting rights. The aforesaid resolution was approved by way of on-site and online voting by poll. All directors and supervisors of the Company attended the Class Meeting.	www.sse.com.cn www.hkex.com.hk
2022 First H Share Class Meeting	1 June 2022	**As a special resolution:** 1. To consider and approve the resolution of granting the repurchase rights on 10% of A shares and 10% of H shares to the Board.	The convening of this meeting was in compliance with the Company Law and other relevant laws, administrative regulations and the Articles of Association. There was one shareholder in attendance either in person or by proxy at the meeting, representing 908,178,287 shares or 50.14% of the total number of H shares of the Company with voting rights. The aforesaid resolution was approved by way of on-site voting by poll. All directors and supervisors of the Company attended the Class Meeting.	www.sse.com.cn www.hkex.com.hk

Session and No. of Meeting	Date	Name of Proposals	Resolutions	Designated websites on which resolutions were published
2022 First EGM	23 August 2022	**As ordinary resolutions:** 1. To consider and approve the resolution in relation to the USD loan by the overseas wholly-owned subsidiaries and provision of guarantee by the Company thereof; 2. To consider and approve the appointment of Mr. Yao Xin as an independent non-executive director of the Company.	The convening of this meeting was in compliance with the Company Law and other relevant laws, administrative regulations and the Articles of Association. There were 10 shareholders (including on-site attendance and online voting) in attendance either in person or by proxy at the meeting, representing 3,470,639,215 shares or 72.74% of the total number of shares of the Company with voting rights. The aforesaid resolutions were approved by way of on-site and online voting by poll. Mr. Yu Feng, the executive director, and Mr. Wu Wenlai, the non-executive director, were unable to attend the EGM due to other business matters, while other directors and all supervisors of the Company attended the EGM.	www.sse.com.cn www.hkex.com.hk
2022 Second EGM	22 December 2022	**As ordinary resolutions:** 1. To consider and approve the resolution in relation to the continuing connected transactions for the upcoming three years; 2. To consider and approve the appointment of Mr. Xiong Min as the executive director of the Company; 3. To consider and approve the resolution in relation to the US dollar loan extension by the wholly-owned subsidiary, COSL Middle East FZE, and the provision of guarantee by the Company. **As a special resolution:** 1. To consider and approve the resolution in relation to the amendments to the Articles of Association.	The convening of this meeting was in compliance with the Company Law and other relevant laws, administrative regulations and the Articles of Association. There were 14 shareholders (including on-site attendance and online voting) in attendance either in person or by proxy at the meeting, representing 3,546,694,134 shares or 74.33% of the total number of shares of the Company with voting rights. The aforesaid resolutions were approved by way of on-site and online voting by poll. Mr. Liu Zongzhao, the non-executive director, was unable to attend the EGM due to other business matters, while other directors and all supervisors of the Company attended the EGM.	www.sse.com.cn www.hkex.com.hk

Environmental, Social and Governance (ESG) Report 2022

About This Report

This is the first environmental, social and governance (ESG) report and the 17th sustainable development report released by China Oilfield Services Limited (hereinafter referred to as "COSL", "the Company" or "we").

Scope of This Report

This report covers the performance of COSL and its subsidiaries in aspects like economy, environment and social responsibilities. The time range of this report is from 1 January 2022 to 31 December 2022. Part of the content data is beyond the above range.

Principle of This Report

During the preparation of this report, the principles of importance, quantification, and balance and consistency are followed to ensure that the information in this report is objective, standardized, honest and transparent.

References

References for the preparation of this report include GRI Universal Standards 2021 issued by the Global Reporting Initiative (GRI), the UN Global Compact's 10 Principles, the "Environmental, Social and Governance Reporting Guide" and relevant consultation papers of provisions of the Listing Rules of the Hong Kong Stock Exchange, the "Self-Regulatory Supervision Guidelines for Listed Companies No. 1 – Standardised Operation" issued by the Shanghai Stock Exchange, and the "Guide for Social Responsibility Report of China (CASS-ESG5.0)" from the Chinese Academy of Social Sciences.

Sources of Information and Descriptions

All information used in the report was obtained from official Company documents and statistical reports. Unless otherwise stated, all financial information in the report is stated in RMB.

Languages

This report is released in Chinese and English. The Chinese version shall prevail in case of any discrepancy.

Access to the Report

This report is available in printed and electronic versions. For the electronic version, please visit the Company's official website (http://www.cosl.com.cn).

For information on COSL's corporate governance system, measures and results, please refer to the "COSL 2022 Annual Report – Corporate Governance Report".

Statement by the Board of Directors

The Board of Directors of the Company makes the following statement in accordance with the requirements of the Environmental, Social and Governance Reporting Guide of The Stock Exchange of Hong Kong Limited ("Hong Kong Stock Exchange").

Commitments by the Board of Directors of COSL:

The Company and the Board of Directors continue to promote the construction of the environmental, social and governance (ESG) governance system, strengthen the participation of the Board of Directors in the Company's ESG and sustainable development affairs, and proactively integrate the ESG into the Company's development strategy, major decisions and production and operation in compliance with the requirements of the Code of Corporate Governance for Listed Companies issued by the China Securities Regulatory Commission, and the Corporate Governance Code and the Environmental, Social and Governance Reporting Guide issued by the Hong Kong Stock Exchange.

● ESG Governance of the Board of Directors

As the highest decision-making authority of the Company's ESG, the Board of Directors is responsible for considering the Company's ESG strategy, objectives and risks, and supervising and approving the implementation and progress of ESG planning, supervising the Company's commitments, actions and performance on key issues such as compliance management and tackling of climate change, paying attention to the ESG issues related to the Company's businesses and considering the Company's annual ESG reports, cooperating with special committees and management departments to include the ESG into the Company's production and operation, and implementing the Company's ESG management.

● ESG Management

The Company highly recognizes the importance of the ESG to the Company's steady operation and has established an effective ESG management mechanism and an effective governance mechanism. The Board of Directors has a risk management committee, which conducts risk identification and evaluation on a regular basis in combination with macro policies, the Company's strategic planning, production and operation, communication with stakeholders, etc. Relevant departments are responsible for identifying and managing financial, legal, anti-fraud, production safety, environmental protection, overseas public safety and other risks, forming a normalization mechanism for evaluation, reporting, response and supervision, and reporting such risks to the Board of Directors for review. The Company actively carries out stakeholder surveys, clarifies the key issues of ESG, and incorporates the same into the Company's overall strategy for consideration.

● Targets, Indicators and Review Progress

The Company incorporates the ESG issues such as tackling of climate change into the Company's development planning, sets ESG performance targets, prepare plans for promoting and upgrading the targets, and regularly listen to the reports on the progress of achieving the targets and makes review. The Company incorporates the ESG performance indicators such as production safety, energy conservation and environmental protection into the assessment system of the Company's management and its subsidiaries to promote the realization of ESG targets.

The Board of Directors of China Oilfield Services Limited
23 March 2023

About COSL

Company Profile

China Oilfield Services Limited is one of the world's leading energy service companies and dedicated to providing customers with full lifecycle services. The Company is listed on the Hong Kong and Shanghai stock exchanges, and has more than 50 years of experience in oil and gas exploration, development and production. Its business currently encompasses geophysical acquisition and surveying services, drilling services, well services, marine support services and integrated and new energy services. It has a strong oil service equipment group. As well as providing single-operation services to customers, COSL also offers one-stop solution services using the best oilfield technology. COSL's business has expanded to Asia Pacific, the Middle East, the Americas, Europe and Africa, with activities taking place in more than 40 countries and regions around the globe.

Corporate Culture

Corporate Spirit
Always Do Better

Performance Guideline
Do Everything Diligently

Core Value
Win-win with shareholders, customers, employees and partners

Code of Conduct
Integrity, dedication, teamwork and self-discipline

Corporate Strategies

Facing the more complicated external environment and the new situation of energy transformation and development, COSL implements the new development concept completely, accurately and comprehensively, and actively serves and integrates itself into the new development pattern. COSL adheres to the "Five Development Strategies" as the guide, focuses on specialization and strength in main businesses, improving the institutional mechanism for high-quality development by continuously deepening the reform, enhancing the effectiveness of governance, constantly improving the comprehensive strength of the Company, and striving to create a new situation of world first-class energy service company with Chinese characteristics.

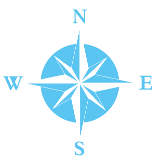
Technology-driven strategy	Always focus on basic scientific exploration, applied scientific verification, and industrial application guidance with perspective of the industry and development, so as to promote the systematization and standardization of research and development system, the Company will continue to enhance the core competitiveness of technology with greater determination and pragmatism and make technology development the core engine that drives the Company's development.
Cost leadership strategy	Reshape the cost advantage, enhance the ability of cost control and formulate the Company's competitiveness. The Company deeply roots the concept of creating value for customers in its value and well integrates the Company's business into the customer value chain. Relying on our efforts of creating added value for customers, we can improve customer investment efficiency and returns.
Integration Strategy	Taking comparative advantage of the Company's complete professional chain, increasing product categories and complete business chain, the Company re-understands, defines and expands the meaning of integration. Establish new integration model, so as to achieve benefits and efficiency to the greatest extent. Promote the development of integrated business of COSL and continuously provide value-added services for customers, making integrated services as breakthrough and value-added tool for the transformation and upgrading of various traditional businesses, so as to expand the main segment and increase market share for the Company.
International strategy	Expand the simple market internationalization into the internationalization of global comprehensive governance, building a world first-class governance ability and further developing the space for surviving and operating as the world first-class energy service companies. Organically complement the domestic market with the international market for the Company's better development.
Regional development strategy	Fully exploit domestic oil companies' comparative advantages of solid reserves management, fine reservoir engineering research and practical process technology, complemented by an all-round, fully integrated and partially integrated business model involving exploration, development, engineering and production, together with profitable models of service, product sales and equipment leasing, so as to promote the balanced development of the full range of businesses in the region and the implementation of global strategy with lower costs and risks.

Honours in 2022

2022.7	selected as the "Outstanding Brand Image Award 2022" of the 11th China Finance Summit
2022.7	the Chairman was awarded the "Outstanding Influential Entrepreneur Award 2022" of the 11th China Finance Summit
2022.9	included in the "Constituent of Hang Seng (China A) Corporate Sustainability Benchmark Index" for the eleventh consecutive year
2022.11	included in the "Central Enterprise ESG • Vanguard 50 Index", the "Central Enterprises ESG • Social Value Vanguard 50 Index" and the "Central Enterprises ESG • Risk Management Vanguard 50 Index" published by SASAC and the CSR Cloud Research Institute
2022.12	selected as the "Governance Pioneer" in 2022 ESG Golden Bull Award of the China Social Responsibility 100 Forum
2022.12	won the "2022 China Business Top 100 Best Management and Operation Award" at the 22nd China Business Top 100 Listed Companies Summit

Business Development

Business Presence



Asia-Pacific: Singapore, Indonesia, Malaysia, Thailand, etc.
Middle East: Iraq, Saudi Arabia, Kuwait, United Arab Emirates, etc.
Europe: Norway, UK
Americas: Canada, Mexico, Brazil
Africa: Uganda

Business Scope

Geophysical Acquisition and Surveying Services

- Offshore Seismic data Acquisition Services
- Offshore Geo-surveying Services
- Seismic Data Processing & Interpretation
- Fundamental Construction

Drilling Services

- Offshore Drilling Rigs
- Modular Drilling Rigs
- Supporting Rigs
- Land Drilling Rigs
- Drilling Rig Management
- Oil Casing

Well Services

- Logging
- Drilling & Completion Fluids
- Directional Drilling
- Cementing
- Well Completion
- Workover
- Oilfield Production Stimulation
- Oilfield Waste Treatment

Marine Support Services

- Anchor Handling
- Towing
- Offshore Transportation
- Stand-by oil/gas fields
- Oil Lifting
- Fire Fighting
- Rescue
- Oil Spill Assistance

Integrated Operation Services and New Energy Services

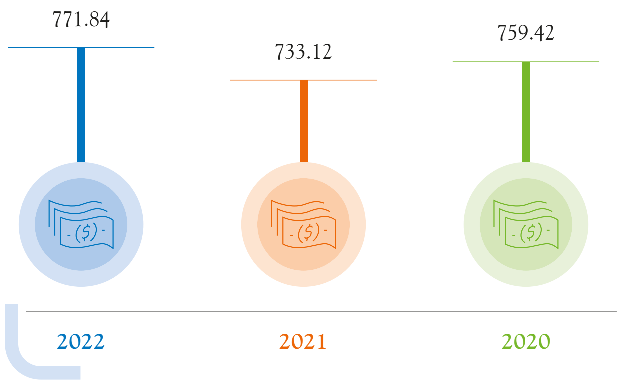
- Integrated E&P Service
- Integrated Oilfield Management Service
- Integrated Drilling, Completion and Workover Service
- Integrated Disposal Service
- Offshore Wind Power Engineering Technical Service

Key Performance

Market Performance

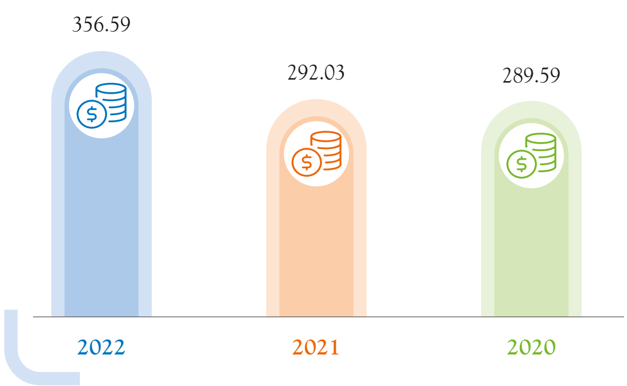
Total assets

(Unit: RMB100 million)



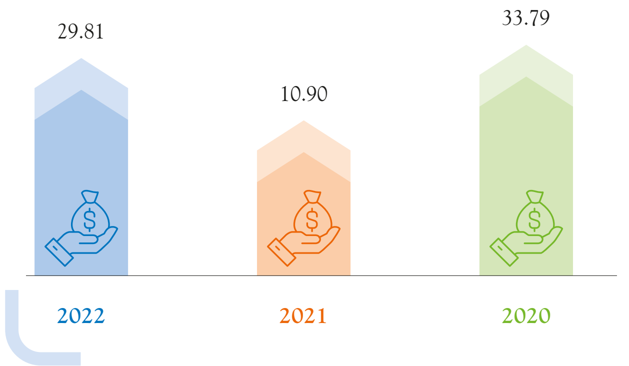
Operating revenue

(Unit: RMB100 million)



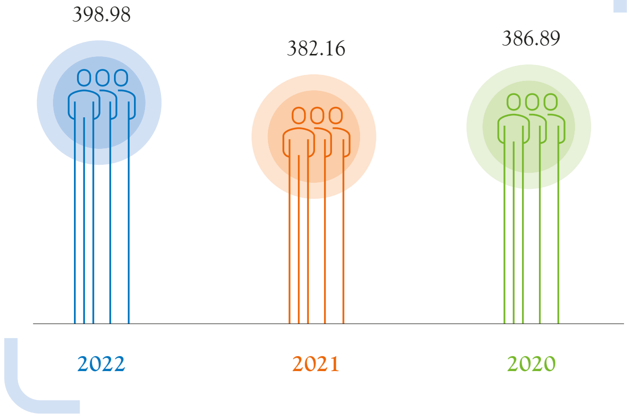
Total profit

(Unit: RMB100 million)



Equity interest

(Unit: RMB100 million)



Indicator	Unit	2022	2021	2020
Social contribution value per share	RMB Yuan	2.55	1.75	2.06
Revenue from international business	RMB100 million	62.75	46.16	74.12
Percentage of revenue from international business	%	18	16	26
Total taxation	RMB100 million	16.76	14.90	22.82

Note: Revenue from international business in 2020 include the settlement payment of US$188 million (equivalent to approximately RMB1.31 billion) in respect of the termination of Equinor contract.

Social Performance

Total number of employees
(Unit: persons)

2022 15,151

2021 14,858

2020 14,689

Total time of employees' training
(Unit: hours)

2022 1,953,215

2020 1,046,760

2021 2,600,261

Note: There was no micro and small training hour for 2020 but there were micro and small training hours for 2021 and 2022.

Proportion of Chinese female employees
(Unit: %)

2022 8.0

2021 7.3

2020 7.9

Indicator	Unit	2022	2021	2020
Percentage of social insurance coverage	%	100	100	100
Percentage of labour contracts signed	%	100	100	100
Chinese staff turnover rate	%	1.1	1.1	0.8
Total donation & employee relief fund	RMB10,000	335.33	2,476.4	397.15
Number of maritime rescues and salvages	Times	18	16	14
Number of employees participating in volunteer activities	Persons	2,953	1,796	11,530

Environmental Performance

Investment in energy conservation and emissions reduction
(Unit: RMB10,000)

2022 122.5

2021 100.0

2020 75.0

Emissions of carbon dioxide for an output value of RMB10,000
(Unit: tonnes/RMB10,000)

2022 0.4471

2020 0.5480

2021 0.5230

Energy consumption for an output value of RMB10,000
(Unit: tonnes of standard coal/RMB10,000)

2022 0.2065

2021 0.2416

2020 0.2531

Indicator	Unit	2022	2021	2020
Environmental investment	RMB10,000	5,185.00	6,412.27	7,318.06
Energy savings	tonnes of standard coal	17,764.00	9,600.00	3,434.20

Notes:

1. *Investment in energy conservation and emissions reduction: In 2022, the Company readjusted the statistics scope of investment in energy conservation and emissions reduction, only calculated expenses included in the Company's special budget for energy conservation and emissions reduction, such as expenses on monitoring energy conversion and energy audit and excluded the investment in projects that indirectly contributed to the energy conservation and emissions reduction. Figures of 2021 and 2020 were recounted according to the same standard.*
2. *Environmental investment: The Company has implemented recycling system since 2021, and certain pollutants were recycled, reducing the treatment expenses.*
3. *Emissions of carbon dioxide for an output value of RMB10,000 and energy consumption for an output value of RMB10,000: The output value involves in carbon emission and energy consumption in 2021 and 2020 was revised and adjusted according to the statistics requirement, the emissions of carbon dioxide for an output value of RMB10,000 and energy consumption for an output value of RMB10,000 was adjusted accordingly.*

Corporate Governance

- Strengthen the leadership of Party building
- Improve the governance structure
- Govern the Company through law-abiding and compliance
- Comprehensive risk management
- Pursue Incorruptible Work

Strengthen the leadership of Party building

In 2022, COSL always adhered to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era as the guidance, thoroughly implemented the spirit of the Sixth Plenary Session of the 19th CPC Central Committee, the Sixth Plenary Session of the 19th Central Commission for Discipline Inspection and the 20th National Congress of the CPC, took the party's political construction as the guide, took the promotion of high-quality development as the theme, took the "year of party building integration and consolidation" as the main line, and took the "four whether" as the most important standard to measure the grass-roots party building, adhered to the "three principles", and insists that "party affairs focus on methods and process, while party building focuses on influence and increasing actual effect", thus providing strong political and organizational guarantee for building a world first-class energy service company with chinese characteristics.

Focus on the "20th National Congress of the Communist Party of China" and quickly set off an upsurge of study, publicity and implementation

Make great efforts in comprehensive study

The Party committees at the two levels carried out special research and study through "the first topic" and central group learning. The secretaries of grass-roots party organizations learned in time through "three sessions and one lecture" and theme party days. The Party committees took the spirit of the 20th National Congress of the Communist Party of China as the focus of cadre training and party member education, and organize 49 rotation trainings by three batches, and created an immersive learning atmosphere through posters, exhibition boards, electronic screens, publicity columns and other positions.

Make great efforts in comprehensive grasp

Take the "five firm grasps" as an important guideline to earnestly combine the spirit of the 20th National Congress of the Communist Party of China with the implementation of the spirit of General Secretary Xi Jinping's important speeches and important instructions, upgrade and speed up the implementation of "three major projects, one action" and the construction of "four centers", deeply understand the decisive significance of "two establishments", and resolutely achieve "two upholds".

Make great efforts in full implementation

Unswervingly regard upholding the Party's leadership and strengthening the Party building as the fundamental political premise of developing and strengthening enterprises, always maintain the political background of "working for the Party in the economic field", establish the implementation mechanism of "two upholds", sort out 166 important instructions and comments of the General Secretary Xi Jinping in various business fields of the Company, and implement the management of "ledger management, project promotion and list write-off" to ensure that all issues are implemented.

Focus on "high-quality development", solidly promote the "year of Party building integration and consolidation"

Stimulate the role of the lead goose with the "secretary projects"

The secretaries of Party organizations at all levels firmly establish the concept that "grasping Party building means grasping development", take the lead in leading the "secretary projects" around the needs of reform and development, the urgent needs of production and operation, and the expectations of employees and the masses, and set an example by pulling hard nails and cracking hard nuts, forming a vivid situation of "secretary grasping and grasping secretary".

Stimulate the role of fortress with "reaching the standard and upgrading"

The Company insisted on "grasping both ends and taking the middle", implemented the "upgrading management" of benchmark Party branches, established the "touching height mechanism" of middle Party branches, strengthened the "twinning assistance" of backward Party branches, further promoted the "peer-to-peer" co-construction between the headquarters and grass-roots Party branches, carried out the theme activities of "grasping safety and ensuring production, and welcoming the 20th National Congress of the Communist Party of China", cultivated and formed Party building work brands such as pioneer in exploration, mission package at sea, safety red shield, etc., and promoted the "all-staff customer awareness, all-staff cost awareness, all-staff management awareness and all-staff safety awareness" to be deeply rooted in the staff's hearts, and set off the production climax of "100 ships fighting" and "10,000-person competition".

Stimulate the vitality of geese with "meritorious services and projects"

Focusing on upgrading and speeding up the implementation of the construction of "three major projects, one action" and "four centers", improving the self-management ability of grass-roots operation units and carrying out "meritorious services and projects" of urgent and dangerous tasks, the Company fully demonstrated the banner role of party members.

Continue to promote the improvement of basic management of Party building at the grass-roots

The Company improved and perfected the training system of Party building based on competence, established the mechanism of "company demonstration training, regional universal training, and all-around training of the business department", and held 100 seminars on the deep integration of Party building and production and operation and classes for improving the ability of Party branch secretaries to perform duties, with more than 5,500 person-times of trainings.

Focus on "concentration and strength", and gather together the majestic forces to build a world first-class enterprise

Enhance the attraction of corporate culture and unite employees' "vital energy and spirit"

The Company continued to enrich the era connotation of the corporate spirit of "always do better", summarized and refined the corporate culture with the main characteristics of "enterprising culture, people-oriented culture, family-country culture, and united and enterprising culture", and united the powerful forces of the broad masses of cadres and employees to work together, work hard and serve the country with energy by taking the opportunity of the "Six Ones" activity to celebrate the 20th anniversary of the Company's listing.

Stand at the forefront of the tide for 20 years, continue to struggle to write a new chapter

"Six Ones" Activity

- Write a commemorative book to inherit the struggle
- Hold a cultural performance to unite the strength of advancing bravely
- Carry out a commendation for overseas personnel to stimulate the passion for doing things
- Organize a mass solicitation activity to create a strong atmosphere
- Conduct a commemorative medal to promote cultural identity
- Shoot a development achievement film to spread the corporate culture

Enhance the brand influence of the company and drive the performance to "guarantee implementation"

The Company coordinated and planned the "Xuanji" brand and the "1,000 wells and One Million Meters Drilled Milestone" conference, the installation of "Chinese Heart" on the geophysical vessel, the commissioning of the intelligent LNG vessel and other major news, forming a benign mechanism of "promoting brand building through publicity, promoting performance through brand, and showing political responsibility through performance".

Focus on gathering strength at the grass-roots and do practical things around employees well

Take the construction of the people-oriented concept as the main line to practice the demonstration center, adhere to the concept of "the Company's reform and development achievements are shared with employees", establish and improve the long-term mechanism for doing practical things, and solidly promote the extension and in-depth development of doing practical things to the grass-roots level.

Focus on "Strictness, Practicality, Fastness and Innovation", and create a good political ecology of being honest and upright and doing practical things and starting a business

Gather the wisdom to reduce the burden of grassroots employees and let the "bearers" work lightly

The Company paid close attention to the old problems and new manifestations that have been strongly reflected at the grass-roots level, established a list of burden reduction, carried out wall chart operations, and vigorously rectified 15 typical problems such as "more inspections and more papers", forming a good atmosphere of "investigating the scene and paying attention to actual results at meetings". The Company opened a "through train" at the grass-roots level, and the Party committee members insisted on "holding two meetings every time they went to a place", and held business research meetings and on-site symposiums for Party committee members. During the year, Party committee members worked on-site for more than 90 times, which helped solve the urgent and anxious problems at the grass-roots level, such as 219 employees on-boarding in the procurement system and shift transportation for employees. The Company opened a digital empowerment "highway" and established a drilling digital center platform, which reduced the burden on the grass-roots by over 40%.

Continue to strengthen special rectifications

The Company organized and carried out the "looking back" work of 12 special rectifications, such as the implementation of the spirit of the Party's eight-point frugality code, strengthened governance from the source, comprehensively reviewed and corrected itself, and effectively improved the Company's operation in compliance with laws and regulations and risk prevention capabilities by systematically sorting out and rectifying problems.

Strengthen the construction of incorruptible culture

The Company formulated and implemented the COSL Implementation Plan for the Construction of Incorruptible Culture from 2023 to 2025, which promoted the construction of four positions of learning from integrity, stressing integrity, publicizing integrity and advocating integrity, and built a solid ideological defense line against corruption and advocating integrity.

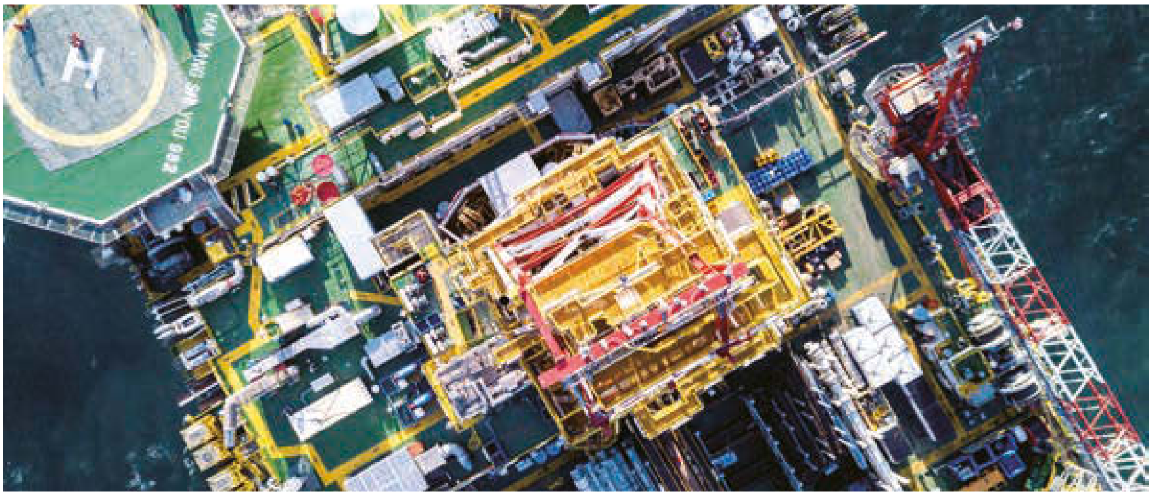
Achieve full coverage through five-year inspections

Since the first round of inspections was carried out in August 2017, the Company has achieved tangible and effective coverage of inspections of 12 Party organizations through regular inspections, special inspections, upgrading inspections and inspections "looking back".

Improve the governance structure

Construction of governance system

The Company integrates the leadership of the party into the whole process of governance, fulfills the pre-procedures of the Party Committee for making decisions on major issues, and take the “general meeting of shareholders, the Board, Board of Supervisors and senior management” as the starting point to establish governance mechanism with “the general meeting of shareholders takes overall management and control, the Board makes business decisions, The Board of Supervisors supervises in accordance with the law, and the senior management implements. The company has established a corporate governance structure of “scientific decision making, effective execution, effective supervision, and standardized operation” to effectively improve the professionalism and effectiveness of the performance of the “general meeting of shareholders, the Board, Board of Supervisors and senior management”, and comprehensively building modernized corporate governance system and capabilities.



Construction of the Board of Directors

Duties of the Board of Directors

The Company continuously optimized the functions and powers of the Board of Directors, formulated the Implementation Plan for Implementing the Functions and Powers of the Board of Directors, the Management Measures for Authorized Decision-making by the Board of Directors, and a list of authorized decision-making items, implemented the decision-making power of the Board of Directors for medium and long-term development, the right to assess the selection and appointment rights of senior management members and other functions and powers, promoted the management to exercise their rights and perform their duties according to law, improved the efficiency of operation decision-making, and laid a solid foundation for the Company’s sustainable development.

Independence of the Board of Directors

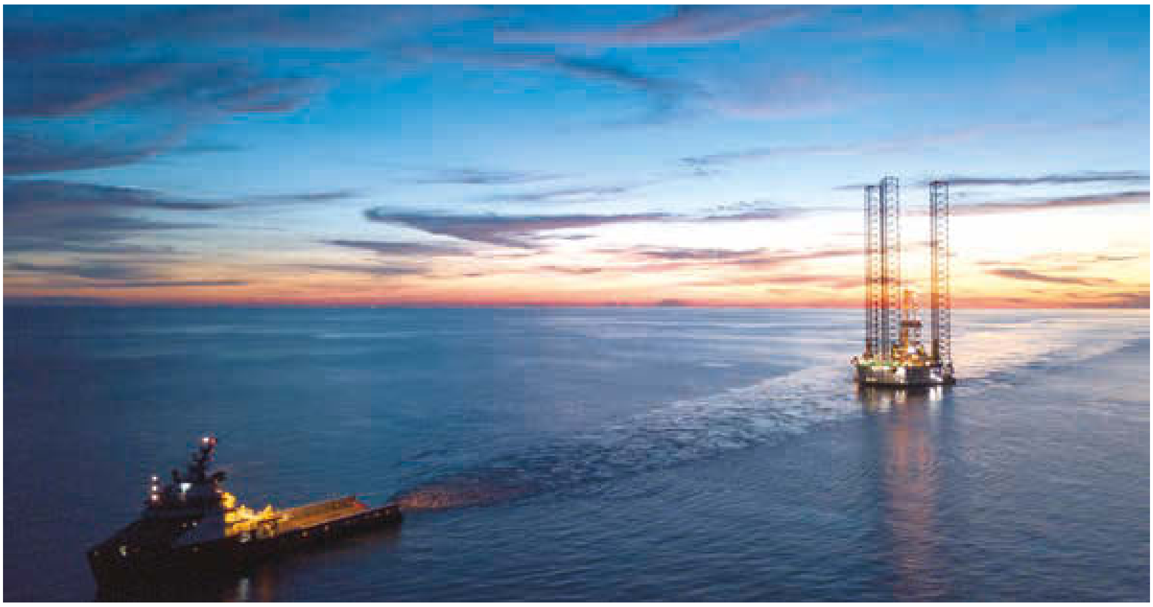
The Company selects independent directors in strict accordance with the election procedures and qualifications stipulated in the Articles of Association. At present, there are three independent directors in the Board of Directors, all of whom have rich professional experience in the fields of finance, law and energy, and are familiar with the operation of the boards of directors of listed companies and the duties of independent directors. During the reporting period, independent directors effectively performed their duties of diligence and care as directors, and provided professional advice to the Company in the aspects of review of financial reports, reviews of connected transactions, internal control system and risk management.

Validity of the Board of Directors

All members of the Board of Directors of the Company complied with the relevant laws, regulations and the Articles of Association, exercises their functions and powers as directors in a standardized manner, conscientiously implemented the resolutions of the general meeting, provided scientific decisions for the sustainable development of the Company, and actively safeguarded the interests of the Company and shareholders and other stakeholders. The Company prepared and published relevant reports of the Board of Directors regularly to disclose the work performance of the Board of Directors.

Diversification of the Board of Directors

The Board of Directors of the Company has discussed the policy of director diversification, and believes that this policy can play a positive role in attracting all kinds of talents, improving the level of corporate governance and realizing sustainable development. The Board of Directors believes that the Company should consider various factors (measurable objectives include but not limited to educational background, professional experience, age, gender, region and race) when selecting and appointing directors in order to achieve and maintain the diversification of directors. The Board of Directors will strive to implement and promote the diversification policy of directors. The Nomination Committee of the Company is responsible for monitoring the implementation of this policy and evaluating the situation at an appropriate time every year, and providing suggestions to the Board of Directors. As of the end of 2022, the proportion of female directors of the Company was 14%.



Remuneration and Assessment of Directors and Senior Management

The Board of Directors has a Remuneration and Assessment Committee, which is responsible for formulating the assessment standards for directors, supervisors and senior management and conducting assessment, and for formulating and reviewing the remuneration policies and plans of directors, supervisors and senior management. The Remuneration and Assessment Committee studies and discusses the above matters and makes suggestions to the Board of Directors. The Board of Directors reserves the right to make final decisions on the above matters (for details, see the relevant rules of procedure documents under the corporate governance item on the Company's website).

Govern the Company in Compliance with Laws and Regulations

Compliance with Relevant Laws and Regulations

The Company strictly abides by relevant laws and regulations in its development to ensure legal operation. It maintains full compliance with the Labour Law and relevant regulations, respects and protects the legal rights of employees, complies with the Safety Production Law to prevent all kinds of accidents and ensure production safety, complies with the Anti-unfair Competition Law, the Patent Law of the People's Republic of China and relevant regulations to promote fair competition, respect and protect intellectual property, and follows the Environmental Protection Law and relevant regulations. The Company endeavours to adapt to the changing climate and protect the ecological environment.

Construction of the Compliance System

Based on its commitment to governance in respect to the law, the Company strengthened its system of lawful compliance. The Company established and improved a compliance management system that is in line with its actual situation, successively issued compliance management system documents such as the Legal Compliance Management System, the Compliance Management Measures, and the Trade Compliance Management Guidelines, formulated and revised relevant systems and norms such as legal dispute management, legal person authorization management, joint venture management, enterprise industrial and commercial registration management, and overseas intermediary service fee management, and promoted the exploration and construction of legal, compliance, internal control and risk collaborative operation mechanisms through systems and mechanisms. Based on its principal activities, the Company resolved the primary risks, strengthened internal control management to reduce secondary risks, extended compliance management to prevent derivative risks, ensured that the construction of compliance management system conformed to the Company's actual development, highlighted the management of key areas, key links and important personnel, and effectively implemented the compliance responsibilities. The Company organized and conducted legal compliance trainings, including eight kinds of special trainings such as economic sanctions, import and export control, anti-corruption and anti-commercial bribery, and prevention of insider trading, and carried out compliance publicity activities to strengthen the concept of rule of law and compliance spirit of the Company's employees.

Comprehensive Risk Management

Internal Control Management

Internal control system and system construction

The Company takes strategy, problems and risks as the guide, strengthens the top-level design of the system and continuously improves the "demand-oriented, business-driven" collaborative and efficient globalization system. The Company highlights the new function positioning of the headquarter as "four centers" and implements the whole lifecycle, that is "planning, establishment, amendment, abolishment, interpretation and assessment", management of internal control system. The overall institutional system is divided into three levels, L1/L2/L3, covering 14 major functional areas. The Company establishes an ABC classification review and filing mechanism, and the two-level system of the Company and its directly subordinate units forms an effective connection. The Company establishes expert review mechanism of internal control system, and strictly controls the quality of internal control system. The Company investigates the crossover of functions and blind areas of management to break down the functional barriers and realize the horizontal connection, carries out special work to streamline and optimize the redundancy of control points of system process and evaluate the Headquarters' systems, improve the overall operation efficiency, stimulate the vitality of operation management, and strive to build an "export-oriented" modern enterprise system with complete business and market-oriented systems, scientific norms and efficient operation.

Internal control system training

The Company adopts the mode of "system publicity week + departmental training + list of knowledge and operative skill of positions" to continuously carry out accurate system propaganda at all levels of the Unit. Combined with the needs of different positions and Units on system knowledge and operative skill, the Company continues to carry out system construction and implements effectiveness evaluations, systematically screens existing systems, and conducts targeted trainings. The Company organized and carried out a number of internal control system publicity week activities, and all functional departments and units at all levels arranged and promoted the system in a timely manner after the system has been revised and improved, so as to continue to cultivate a good atmosphere of proactive promotion and implementation of the system and strengthen the system's execution.

Internal control evaluation

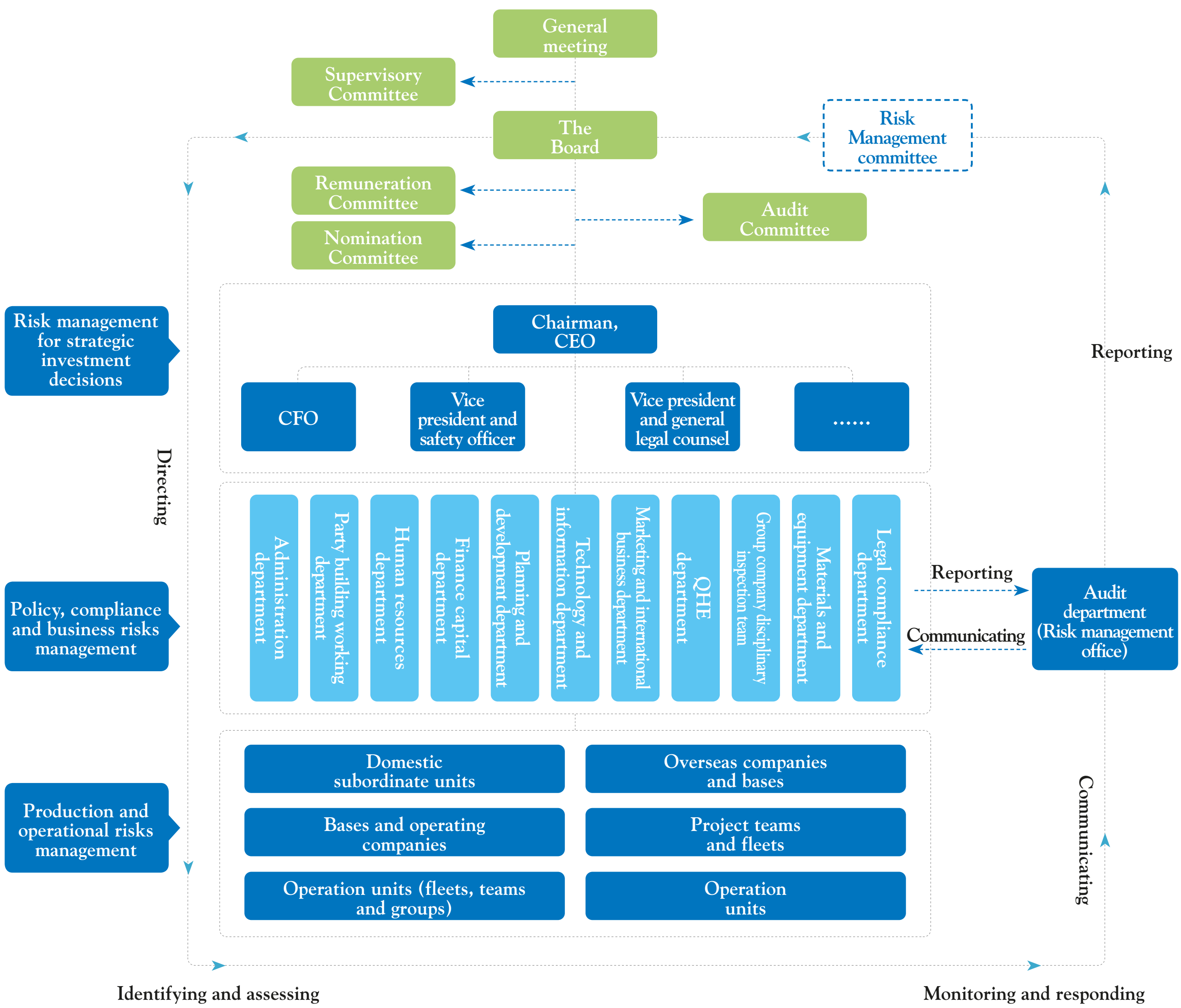
In accordance with the regulatory rules of listed companies and the requirements of the Board, the Company continues to carry out internal control system design and evaluation of implementation effectiveness, On the basis of realizing "three full-coverage" of the directly subordinate units, internal control system and key business processes, the Company carries out semi-annual self-evaluations on emerging business and high-risk business areas, establishes ledgers for the problems found and urge rectifications. At the same time, the Company incorporates risk management, internal control system construction, internal control evaluation and rectification implementation into the annual performance appraisal of units at all levels, and urges to comprehensively improve the Company's risk management and control capabilities, thus effectively preventing the Company's systemic risks.

Risk Management

Establishing the risk management system

The Company establishes the Committee on Rule of Law Construction, Internal Control Compliance and Risk Management, which has the Office of Rule of Law Construction and Compliance Management and the Office of Risk Management, and all directly affiliated institutions establish corresponding risk management organizations, building a comprehensive risk management framework with the Board of Directors as the core. The Company formulates and revises the Comprehensive Risk Management Measures and the Management Measures for Reporting and Responding to Major Operational Risk Events, conducts study and publicity through system publicity weeks and risk assessment meetings, continuously establishes and improves its major risk prevention and control mechanism, and improves the risk reporting mechanism and the reporting work system that are connected vertically and coordinated horizontally.

Risk Management Organisation Chart



Risk Identification

The Company establishes a systematic and comprehensive risk management process, including collecting initial information of risk management, risk assessment, formulating management strategies, proposing and implementing solutions, and monitoring and improving. The Company establishes a normalized early warning and monitoring mechanism for major operational risks, organizes and holds annual and quarterly risk assessment meetings, and reports the management and control of major risks to the Board of Directors and the Committee on Rule of Law Construction, Internal Control Compliance and Risk Management of the Company. The Company continuously optimizes the risk information sharing and reporting channels, and strengthens the Headquarters' guidance and tracking of risk management for each unit and overall coordination and linkage. The Company comprehensively strengthens the risk identification and control capabilities of units at all levels, expands the depth and breadth of risk assessment, and the risk awareness and risk assessment capabilities of units at all levels have been continuously improved.

Risk prevention and response

The Company pays attention to cultivating good risk awareness and culture, and enhances its ability to prevent and resolve major operation risks. The Company holds annual corporate risk control work promotion meetings, quarterly risk assessment meetings, overseas risk identification meetings and other meetings and trainings, continuing to temper the abilities of leading cadres at all levels to identify risks. The Company prepares guidance opinions and risk management cases to strengthen internal control risk management, guides units at all levels to better and effectively deal with various risk challenges, and strengthens the bottom line thinking of units at all levels, firmly building a risk firewall. The Company establishes three lines of defense for risk management formed by various business departments and units, risk management organizations and internal supervision organizations, implements a risk management mechanism of stratification, classification and grading, integrates risk management into its daily production and operation management activities, and forms a normalization mechanism of early warning, evaluation, reporting, response, emergency response and supervision. All major risks can be controlled, and the overall risk management mechanism runs smoothly and effectively.

Internal control and risk management training performance table (2020-2022)

Indicator	Unit	2022	2021	2020
Number of internal control management training	Times	118	105	112
Number of participants in internal control management training	Person-times	2,465	2,338	2,662
Number of risk management training	Times	46	48	42
Number of participants in risk management training	Person-times	1,762	1,810	1,709

Pursue Incorruptible Work

Preventing commercial corruption and bribery

The Company conforms to the Anti-Unfair Competition Law of the People's Republic of China and the Interim Provisions on the Prohibition of Commercial Bribery, and has promoted the governance of commercial bribery in depth. It organized and carried out integrity risk investigation in major areas and key links, scientifically assessed integrity risk points from both external environment and internal business dimensions, improved integrity risk base and enhance integrity risk control. The Company has built compliance management system, formulated integrity guidelines to cultivate integrity culture, enhance the integrity awareness of corporate management and employees, and resolutely resist commercial bribery.

In 2022, the Company did not involve in major corruption, malpractice, fraud or money laundering, and there was no litigation in relation to corruption against the Company or its employees.

Preventing and controlling corruption and fraud risks on overseas institutes

The Company has turned the strengths of its mechanism into its corporate governance, implemented overseas ethics compliance management systems and developed training courses for ethic and compliance management and foreign laws and regulations in where it operates businesses as well as courses for anti-corruption and anti-fraud education. The Company selected the best and empower overseas compliance supervision team, sent a regulatory team and the selected supervisors for ethics compliance to the Americas, Asia-Pacific, and the Middle East, rationalized the management relationship of the overseas compliance supervision team and improve the supervision and management level of the overseas compliance supervision team, so as to continue to improve its overseas regulatory system.

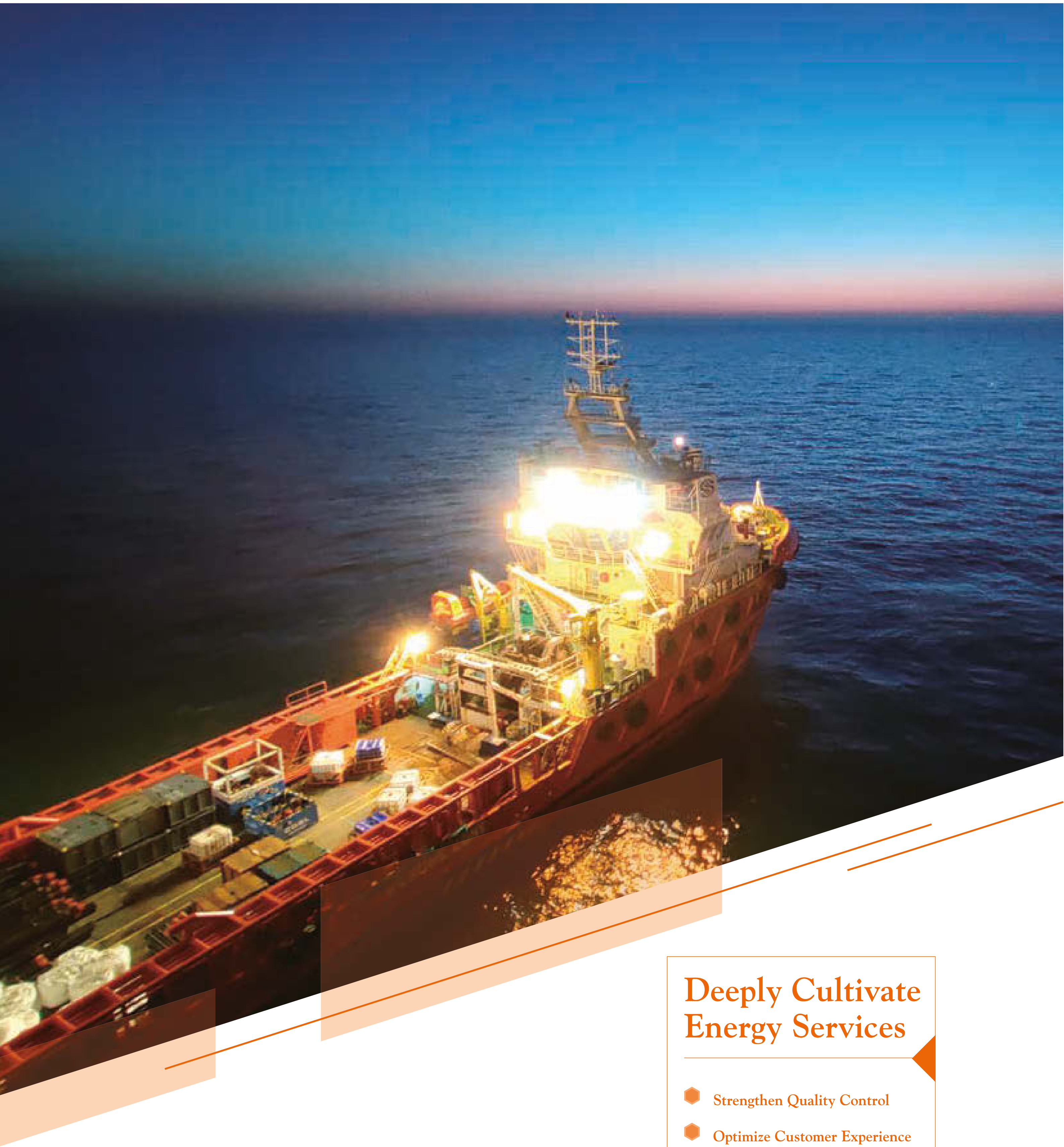
In 2022, the Company sent staff to the Americas, Asia-Pacific, and the Middle East to carry out supervision work to realize the effective operation of overseas supervision mechanisms. It enabled overseas employees to enter the Letter of Commitment on Following Ethics and Code of Conduct to strengthen awareness of ethics compliance. Every directly managed overseas institution has now duly created tip off email addresses and telephone numbers and opened channels for reporting ethics compliance issues.

Intensified anti-fraud education

The Company has adhered to enforcing discipline in the workplace and kept an eye on the "critical minority". It attached high importance to key issues and set up a mechanism for monitoring the key persons in-charge of various aspects around every festival. Besides, it strengthened the penalty and intensified the anti-fraud spirit by opening channels for reporting any fraud cases so as to create an ethical workplace with incorruptible culture and strong awareness of compliance. The Company formulated integrity records for key personnel, as an important reference in personnel's post evaluation, selection, appointment, and promotion. It carried out anti-corruption warning education, special learning activities on the construction of party conduct and clean governance, etc., to strengthen the awareness of honesty and self-discipline of leading cadres.

Performance of Anti-fraud trainings (2020-2022)

Indicator	Unit	2022	2021	2020
Number of anti-fraud trainings	Times	237	575	469
Number of participants in anti-fraud training	Person-times	13,742	21,380	17,891



Deeply Cultivate Energy Services

- Strengthen Quality Control
- Optimize Customer Experience
- Insist on Innovation-driven
- Create a Responsible Supply Chain

Strengthen Quality Management

Through strictly abiding by the "Product Quality Law of the People's Republic of China", "Industrial Product Quality Responsibility Regulations" and other relevant laws and regulations, as well as adherence to its policy of "impeccable credibility, equipment in good condition and quality assurance", COSL fully implements quality management, provides clients high-quality and sustainable products and services, and meets the diverse needs of customers.

Improving the Quality Management Organisation

The Company and its direct Units have established and improved quality management organisational networks which unify the management and supervision of product and service quality.

Improving Quality Management Systems

As part of its efforts to continuously improve its quality management systems, all direct Units followed the latest quality system versions and the Company's requirements for QHSE management and international and industrial management to identify gaps, which led to continuous improvements in quality management system documentation. The relevance, effectiveness and operability of quality management systems were further enhanced through evaluation by the superior, internal/external audit, and management appraisal and compliance evaluation of the Company.

Conducting Quality Training

Through various forms of quality trainings on quality management system, quality management basic knowledge, QC team practice, quality accident case analysis, quality control and quality assurance, and technical competition, the Company continue to improve the quality knowledge and skills of employees and help the Company's high-quality development.

2022 COSL Laboratory Certification Certificate

Advancing Laboratory CNAS Certification

In 2022, in order to meet the international market access requirements, the Company continued to promote the ISO/IEC 17025 laboratory certification of the Well Tech Experiment Center and the Geophysical Civil Engineering Experiment Center. The Experiment Center of Research Institute of the Company's Oilfield Chemicals Division successfully passed the biennial certificate renewal review.

2022 Excellent Achievement Certificate of QC Team

Carrying out QC Team Activities

The Company carried out a total of 118 QC team activities throughout the year. In the "CNOOC 2022 Quality Management Team Activities Outstanding Achievements" selection, a total of 18 teams including "'Gluttonous Snake' Manufacturing QC Team" won the title of Outstanding QC Team Achievement.

Optimize Customer Experience

As a professional oilfield service company, COSL aims to provide customers with first-class oilfield full life-cycle solutions. The Company focuses on customer needs, establishes a regular customer communication mechanism, improves customer management, actively connects with and deeply understands customer's problems, and makes full use of the advantages of the Company's entire business chain to provide customers with complete solutions. The Company benchmarks the requirements of customers in the industry, strengthens the integration ability to improve the benchmarking, promotes the ability improvement from various aspects such as technology, equipment, system and quality control, and accelerates the improvement of service quality in all business lines of the Company.

First-rate Services

Provide integrated services

The Company gives full play to the advantages of regional development, and unifies and coordinates the key resources in the regions to provide integrated professional services for customers. The Company continuously creates maximum value for customers by virtue of first-class technical strength, high-standard equipment capability and performance of operation quality, realizes long-term high-quality business cooperation, gains the trust and favor of important customers in the regions, and establishes a good brand image.

Asia Pacific region

- The services cover Indonesia, Malaysia, Thailand, Singapore and other countries and regions. The Company provides various services such as drilling, workover, stimulation, cementing, mud, logging, directional drilling, supporting vessels and disposal services in the region.
- Indonesia HCML directional while-drilling service project pushed the Company's self-developed high-end rotary steering equipment to foreign markets for the first time and successfully applied it.
- Won the bid for Indonesia PHR wireline logging project, which is the largest project obtained by the Company's wireline logging business in Southeast Asia so far.

Middle East region

- Saudi Arabia: Provide drilling service.
- Iraq: Provide integrated services of drilling and completion and related services.
- Kuwait: Provide drilling service.
- Won the bids for jack-up drilling rig service project, workover rig project and integrated drilling & completion project in the Middle East.

Europe region

- Mainly serve the North Sea region, and continue to provide drilling rig services to high-end customers such as Equinor.

America region

- Canada: Provide integrated services of drilling and completion for CNOOC International Limited ("CNOOC International")
- Mexico: Provide drilling and completion services and various technical services for Petróleos Mexicanos ("PEMEX") for a long time.
- The integrated drilling and completion project of CNOOC Limited North America in the next five years.
- Successfully passed the pre-qualification of PEMEX onshore and offshore integrated services, and completed onshore integrated services for the first time.

Africa region

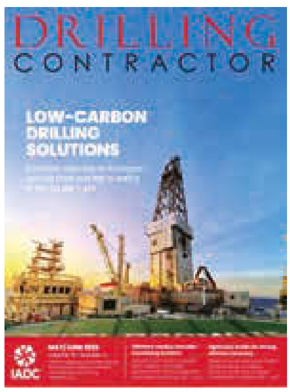
- Provide integrated services of drilling and completion and related technical services for CNOOC International and TotalEnergies in Uganda.
- Complete the signing of contracts with CNOOC International and TotalEnergies in Uganda, and get the workload of integrated services of drilling and completion and related technical services in the next five years.

Case COSL Indonesia won the HCML Gold Award for Safety

In 2022, COSL Indonesia was awarded the Gold Award for Safe Operation issued by Husky-CNOOC Madura Limited (HCML). COSL Indonesia successfully completed the operations of 2 wells in MBH gas field and 5 wells in MDA gas field subordinated to HCML. After the successful production of 7 wells, the output was stable, exceeding the designed production capacity, and the output of some single wells was more than doubled compared with the design value, which was highly praised by customers. HCML Gold Award for Safety is a full affirmation of COSL Indonesia's service ability of drilling and completion.

Case COSLPromoter appeared in the journal of the International Association of Drilling Contractors

In May 2022, the Promoter semi-submersible drilling rig of COSL Drilling Europe AS ("CDE") appeared on the cover of MAY/JUN 2022 of the DRILLING CONTRACTOR of the International Association of Drilling Contractors, and the low-carbon emission reduction system of CDE semi-submersible drilling rig was reported by the magazine "Low-Carbon Drilling Solutions – Emission-reducing technologies moving from concept to reality at the rig site. The report systematically shows that the main engine energy management system helps drilling contractors to reduce fuel consumption and emissions, the peak cutting and valley filling ability of super capacitors is faster than that of batteries, and the mobile cuttings handling unit can generally reduce the carbon emissions during cuttings transportation.



Starting from solving the pain point of customers' "emission reduction", CDE made active efforts in "peak carbon dioxide emissions and carbon neutrality", comprehensively upgraded the power management systems of drilling rigs, reduced the fuel consumption used for daily power positioning of drilling rigs from 29 tons/day to 22 tons/day, and lowered the anchoring state to 14 tons/day, which won unanimous praise from major oil companies.

Help customers strengthen reserves and production

The Company takes the provision of customers with full life-cycle oilfield solutions as its responsibility, integrates the whole business chain, stands at the point of customers, takes geological reservoirs as the guidance, and solves customers' concerns from multiple dimensions such as exploration, development and production, helping customers strengthen reserves and production, and bringing added value to customers.

Case COSL full life-cycle mechanical water control technology helps offshore oilfield to stabilize and increase production

In 2022, COSL AICD screen filling and water control technology was successfully implemented in a horizontal well in Bohai Oilfield, which achieved good results of packing tool zero failure and 100% particle packing efficiency, providing a reliable guarantee for subsequent particle sand control and water control effects. The successful implementation of water control technology is another successful application of mechanical intelligent water control technology in the full life-cycle, which helps the precision and intelligent water control of offshore oilfields enter a period of rapid development.

Case COSL's production optimization technology helps customers increase their production

In 2022, the acidification services provided by COSL in the Indonesian HCML project helped increase the average open flow capacity of a single well by more than twice the design value. This operation is the first application of this system in Indonesia, which provides a good operation example for other customers' similar demands. The Company adheres to the technology-driven strategy, takes customer's demands as the guide, and constantly researches and develops new technologies and processes for increasing production in the local market, and has entered the high-end production optimization market in Indonesia.

Case COSL offshore adjustment well "New, Excellent and Fast" project to improve quality and efficiency

In October 2022, COSL completed the drilling and completion "new, excellent and fast" project of adjustment well of Panyu 4-2B beyond the expectation and with high quality. Panyu 4-2B infill adjustment well project is the first adjustment well "new, excellent and fast" drilling and completion project of CNOOC, which focuses on tapping the potential of heavy oil reservoirs and is a brand-new exploration of "new, excellent and fast" mode in the field of adjustment wells. The construction of the project sets a new record of 56.1 days ahead or 37% faster than that of the design period. The drilling period is 10.89% shorter and the well completion period is 35.98% shorter than that of historical development projects.

Customer Satisfaction

The Company continues to strengthen customer communication, establishes a regular communication mechanism with the customers' senior management, and adopts senior management communication meetings and other methods to realize timely communication and interaction between the Company and customers. The Company pays attention to protection of customer privacy, strictly implements the requirements of relevant system documents, and does not involve customer-related privacy information. The Company establishes and improves customer files, collects and implements customers' demands in time. Guided by customers' demands, the Company solves customers' problems on time and wins wide recognition and praise from customers. In 2022, the Company received no service complaints, and the customer satisfaction was 98.8%.

The Company pays close attention to the key markets and communication with core customers, actively participates in industry exhibitions and international high-end forums such as the Abu Dhabi International Petroleum Exhibition Conference (ADIPEC), the Asia Pacific Drilling Technology Conference (APDT) and the Indonesian Petroleum Association (IPA), demonstrates the Company's high-end technology, equipment strength and integrated service capability, promotes customer communication, deepens multi-party cooperation, and continuously enhances the Company's brand influence in the oil field at home and abroad.

In 2022, COSL participated in the Asia Pacific Drilling Technology Conference (APDT), demonstrated the Company's technical and equipment capabilities, deepened communication with international IOC customers, and successfully established cooperation with many international oil companies.

In September 2022, COSL participated in the 46th Indonesian Petroleum Association (IPA) and actively communicate with oil and gas companies about the Company's high-end self-developed technology, further enhancing the understanding of Indonesian oil companies and international counterparts on the Company's self-developed technology and the brand influence.

Insist on innovation-driven

Focusing on the strategic positioning of striving to be a leader in offshore drilling technology, COSL solidly promotes scientific and technological innovation, builds a technological development pattern of "comprehensive mainstream technology, outstanding main technology and characteristic technology", and promotes the iterative development of offshore drilling technology.

Stimulate innovation vitality

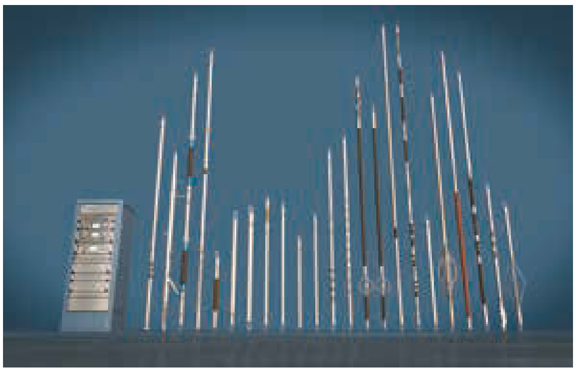
The Company continuously optimizes the system and mechanism of scientific and technological innovation, innovates the integrated management mode of "research, production, implementation and reform", and creates a virtuous circle of technological progress and industrial development with the thinking of "investment" in technological development. The Company vigorously implements scientific and technological innovation research, faces major technical needs, organizes the selection and implementation of 19 major/key scientific and technological projects, earnestly implements the "scientific and technological project manager responsibility system", and builds an organic and unified scientific and technological innovation management mechanism of "responsibility, right and benefit".

Increase scientific research inputs

In 2022, the Company invested RMB1.304 billion in technology development and obtained 226 patents, including 140 invention patents.

Key Performance Table for Technical Innovation (2020-2022)

Indicator	Unit	2022	2021	2020
Research and development expenses	RMB10,000	130,440	125,507	131,178
Number of new patents	Piece	226	130	84
Number of new invention patents	Piece	140	63	38



ESCOOL high-temperature grand slam

Core treatment agent for deep-water wellbore working fluids

Key technology research and achievement transformation

The Company strengthens its mission, focuses on key core technologies, continues to promote the domesticization of major technical equipment and tools and equipment, and accelerates the realization of independent control of key core technologies, and the effectiveness of tackling key problems is highly recognized by the industry. The Company accelerates the transformation of technological achievements, helps to strengthen reserves and production, and constantly polishes its "business card" in the industry.

Research achievements and awards of key technologies in 2022

Two achievements, such as large-diameter rotary steering, were selected as the first major technical equipment in the national energy field.

Two achievements, including working fluids for deepwater drilling wellbore, were selected into the recommended catalogue of scientific and technological innovation achievements of central state-owned enterprises.

The industrial application of closed-loop steering drilling system won the Outstanding Contribution Project Award of the 11th Golden Bridge Award of the Technology Market Association of China, which is the highest award in the domestic technology market industry.

Commercialization and application of important technological achievements in 2022

"Xuanji" rotary steering drilling and logging-while-drilling system reach the milestone of "1,000 wells and One Million Meters Drilled Milestone", achieving more than 1,000 well times and accumulated footage of over 1 million meters, and the good run ration of "Xuanji" system was improved to 92%.

During the reporting period, the high-temperature wireline logging system completed 10 well-times logging operations with well temperature greater than 175℃.

Self-developed tow streamers acquisition equipment was assembled with 12-streamers vessel to complete the 2,000-square-kilometer 3D seismic acquisition demonstration operation in offshore China, and the sales of complete sets of equipment outside CNOOC Group were realized for the first time.

Independently conquer 9 kinds of ultra-high temperature and pressure well completing tools and realize continuous application in Tarim Oilfield.

Self-developed and domestic deepwater remote control Cement Head realize successful application in international service for the first time.

Jet pump injection-production integration technology has been applied in nearly 20 well-times on a large scale, helping the world's first large-scale offshore ultra-heavy oil thermal recovery development oilfield to be successfully put into production.

Create a responsible supply chain

COSL actively responds to the call of the State to upgrade the modernization level of industrial chain and supply chain, promotes the construction and innovative application of supply chain, and strives to build a supply chain management system that integrates risk prevention and control with procurement quality, benefit and efficiency, strives to promote green procurement, green logistics and warehousing, and strengthens resource sharing and recycling, so as to provide support to build a world first-class energy service company with Chinese characteristics.

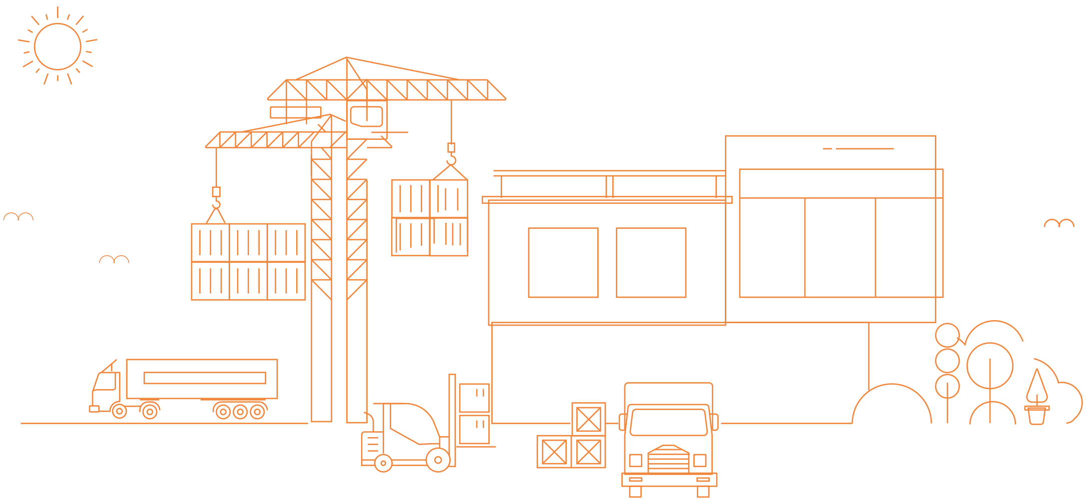
Construction of international supply chain

In 2022, around the development strategy, the Company actively coordinated the construction of domestic and international supply chains, completed the optimization and reform of supply chain organizations and the top-level design of international supply chain, and issued 12 international supply chain system documents applicable to the whole world, laying a good foundation for the further improvement of the construction of the Company's international industrial chain and supply chain. The Company promotes the smooth construction and supply of key projects, prepares a procurement support service team for key projects in advance, concentrates on tackling difficulties and create high-quality supply chain value to fully ensure the Company's production and operation.

Logistics Management

The Company actively promotes the construction of green and low carbon logistics chain and continuously strives to build a stable, open and safe international logistics chain system. By promoting regional logistics integration and implementing centralized and overall scheduling, the Company has achieved significant improvement in logistics efficiency, service quality, cost control and operational compliance.

The Company focuses on the support services of domestic and foreign markets, strengthens the establishment of good cooperative relations with high-quality international logistics service providers, effectively utilizes the professional advantages of external logistics resources, builds an all-round multi-modal transport logistics system by sea, land and air, and gradually establishes an agile, efficient and economical mature logistics operation mode to meet the needs of the Company's business development. The Company continues to build and improve the global logistics network, and adopts the combined logistics mode of "city line + provincial line" in China to build 210 logistics lines. Internationally, the Company takes Singapore, Jakarta and Dubai as important logistics hubs and builds 48 international logistics routes.



Sustainable Supply Chain Management

The Company is committed to building a "safe, stable, cost-optimized, high-quality and efficient, digital smart" supply chain, standardizing the basic standards, procedures and processes of supply chain management from the key links of supply chain management such as demand, category, procurement, suppliers, contract execution, warehousing and logistics, import and export, digitalization, performance and compliance, and constantly improving and building an all-round, integrated and intelligent oilfield service industry chain and supply chain system.

In order to strengthen the management of suppliers, the Company aims at "establishing a high-quality supplier resource pool", establishes a dynamic management mechanism of development, access and assessment through proactive strategic sourcing, constantly improves the quality of supplier resources, continuously strengthens the panoramic management and control ability of suppliers, and optimizes the competitive environment, effectively guaranteeing the stability of supply chain and preventing systemic major risks. In 2022, the number of suppliers examined by the Company as qualified was 7,528.

Supplier Management Mechanism

Supplier Resource Management

Dynamically adjust and optimize supplier resource management to improve supplier effectiveness and competitiveness; carry out "ten publicity" of procurement information and actively introduce market supplier resources.

Supplier Risk Management

Strengthen the risk management of suppliers, issue notices and announcements to suppliers, clarify the types of violations laws and regulations and handling standards of such violations, publish the list of restricted suppliers from time to time, and timely notify the controlled suppliers who violate laws and regulations and have anomalies of warning risk information.

Supplier Evaluation

Carry out the "one transaction, one evaluation" mode of supplier performance, conduct rolling performance evaluation on the completed projects, adjust the suppliers' business authorities according to the supplier performance evaluation results, and improve the standardization of supplier performance.

Number of suppliers of COSL by region (2020-2022)

Year	Unit	Total number of suppliers as at the end of the year	Overseas	Domestic	Major cities				
					Tianjin	Beijing	Guangdong	Shanghai	Others
2022	Supplier	7,528	4,734	2,794	690	431	385	164	1,124
2021	Supplier	7,339	4,490	2,849	671	420	407	165	1,186
2020	Supplier	6,312	3,270	3,042	764	452	459	197	1,170

Construction of Green Supply Chain

The Company is committed to accelerating the pace of green and low-carbon development, putting the concept of green development through the whole process of procurement supply chain, making great efforts to promote green procurement and build a green supply chain, and actively putting the green development through the development of equipment construction.

Develop and manufacture green marine engineering equipment

Through joint research and development, the Company has completed the domestic highest standard marine engineering equipment sewage treatment equipment, of which 9 key indicators are superior to the current standards, and completed the procurement and update of sewage treatment devices for 14 domestic drilling rigs.

During the construction of 12 LNG-powered vessels, in terms of localization, the Company overcame the technical barrier of LNG as OSV power fuel, and formed a fully localized green industrial chain with independent research and development design, independent construction, independent supporting and independent testing, which was fully completed and put into production during the year.

The Company also promotes the commissioning and application of the geophysical survey submarine rig. In deep-water drilling and sampling, such rig uses seawater circulation, and no mud material is used in the whole process, and no pollution is discharged into the sea, thus achieving environmental protection.

In 2022, the Company researched and developed the first set of intelligent synchronous rotary drainage gas production equipment of CNOOC, which can realize intelligent monitoring and full-automatic operation underground. The natural gas produced by the well site is used as the power source, and the single equipment can reduce carbon emissions by 5.27 tons per year compared with diesel power generation.

The Company researched and developed the flue gas purification equipment for thermal recovery boilers, which can realize boiler smoke and dust removal, sulfur removal, compression and injection into the bottom of wells, and can reduce the emission of smoke and sulfide by 32 tons every year.

Promote the green partnership between the upstream and the downstream of supply chains

The Company, CNOOC Gas and Power Group and CNOOC Energy Technology & Services Limited jointly promote the construction of LNG filling stations to improve the convenience of vessel filling, and promote the energy-saving and carbon-reducing effect of LNG to customers.

Through continuous cooperation with suppliers to improve the material technology, the Company has completed the production demonstration application of Lishui 3D Work Area in the East China Sea. All underwater equipment is made of oil-free materials, achieving "zero emission" and "zero pollution" to the marine environment.

The Company's self-developed tow streamer complete sets of equipment (four sets of core equipment: Hailiang, Haitu, Haiyan and Haiyuan) running through the multi-category supply chain were installed on the HYSY720 vessel, focusing on selection of environment-friendly materials and making history by making all-domestic offshore seismic exploration vessels.

The Company always pays attention to the impact of mud cementing materials on the environment, and clarifies the important environmental index of biotoxicity with suppliers in the process of chemical agreement procurement, requiring suppliers to provide the biotoxicity test reports recognized by relevant government and environmental supervision departments before using the mud cementing materials on site to avoid the impact of the mud cementing materials on the marine environment.

Practice Safety and Environmental Protection

- Promote the Green Development
- Stick to the Safety Bottom Line
- Safeguard the Occupational Health

Promote the Green Development

COSL thoroughly implements the concept of green development and ecological civilization, integrates environmental management into daily operations, continuously strengthens the construction of environmental management system, actively promotes energy conservation, emission reduction and carbon reduction, and makes positive contributions to the realization of the carbon peaking and carbon neutrality goals and the construction of ecological civilization.

Environmental Management

Construction of Environmental Protection Systems

The Company earnestly implements the Environmental Protection Law and the laws, regulations and normative documents on the prevention and control of air, water and soil pollution, splits and integrates the existing environmental protection management system according to the types of management specialties, adds the system documents such as the Water Management, the Solid Waste Management, the Recycling Management as well as the Waste Gas and Noise Emission Management, amends the system documents such as the Environmental Protection Management, promotes the standardization of environmental protection work, strengthens pollution prevention and control management, pays attention to the protection of ecological environment and resources, and reduces the impact of production and operation activities on the ecological environment.

Environmental Impact Assessment

In the course of its production and operating activities, the Company carries out environmental impact assessment in compliance with requirements of the “Law of the PRC on Environmental Impact Assessment” and the “Administrative Regulations on Environmental Protection for Construction Projects”. It has strengthened the identification and assessment of environmentally sensitive areas and environmental risks, and formulated strategies and measures to prevent and alleviate adverse environmental impacts. The Company continuously tracks the effectiveness of its measures in order to avoid or alleviate impacts on the environment and mitigate business risks.

Environmental Protection Education and Training

The Company attaches great importance to environmental protection education and publicity work. It sorts out and summarizes national key policies on ecological and environmental protection every quarter, and sends them to all direct units, combines with the Company’s business characteristics to compile the environmental training course matrix, organizes the development of training courses, establishes a full-time environmental management team and carries out special training. The Company invites the experts specially appointed by the National People’s Congress on environmental law enforcement and the experts from the Hazardous Waste Committee of the China Association of Circular Economy to provide centralized trainings for the Company’s full-time environmental management personnel, so as to comprehensively improve the professional skills of management personnel. In 2022, the Company organized and participated in all kinds of environmental protection skills training of CNOOC for 4 times, and the full-time and part-time personnel of environmental protection management participated in nearly 1,000 person-times, thus building a professional team of systematic ecological and environmental protection management in an all-round way.

Tackling Climate Change

Climate Risk Identification and Tackling

Deeply aware of the various impacts of climate change on its businesses, the Company has incorporated the response to climate change into its development plan. The Company implements the green and low-carbon development strategy, introduces green and low-carbon technology and earnestly promotes the transformation into a green and low-carbon industry, so as to respond to the potential impact of climate change on enterprises in an active manner.

As of 2022, all the 12 LNG powered vessels planned and manufactured by the Company have been put into operation, initially building the world's largest LNG powered standby fleet. The Company carries out the green factory evaluation project of Lanhai Boda Technology Co., Ltd., the Company's oilfield chemical service material production unit, and initially completes the "three simultaneities" project of factory construction and environmental protection facilities. The Company operates and manages 9 shore-based mud stations and 12 sets of environment protection technology, equipment and facilities with advanced performance, and actively carries out technical research on resource utilization of drilling cuttings, offshore drilling cuttings reinjection, drilling cuttings reinjection into wellbore, and conversion of waste drilling fluid into cement slurry. The Company innovatively builds a recyclable and land-sea integrated environmental protection solution of "environment-friendly and recyclable drilling fluid system, offshore operation recovery and emission reduction, and onshore resource regeneration", and actively manages and responds to climate risks.

Greenhouse Gas Emission Reduction

The Company pays close attention to greenhouse gas emissions, strictly implements the requirements of relevant laws, regulations and normative documents on greenhouse gas emission in China and the countries where the Company carries out operations, actively promotes the use of clean energy, and contributes to the State's goal of realizing peak carbon dioxide emissions by 2030 and carbon neutrality by 2060. In 2022, the Company formulated the Rolling Forecast of Energy-saving and Low-carbon Indicators for 2023-2027, the COSL Promotion and Guarantee Plan of Energy-saving and Low-carbon Targets for 2022 and the COSL Action Plan for Energy Efficiency Improvement, and conducted carbon emission data investigation to reduce greenhouse gas emissions from all aspects, such as source, production process and emission reduction.

Greenhouse Gas Emissions by the Company in Chinese Waters (2020-2022)

Indicator	Unit	2022	2021	2020
Carbon dioxide emissions/greenhouse gas emissions	Tonnes	1,151,780.48	1,133,346.00	1,022,833.541
Carbon dioxide/greenhouse gas emission reduction	Tonnes	35,377.00	35,060.00	7,469.3
Carbon dioxide emissions for an output value of RMB10,000	Tonnes/RMB10,000	0.4471	0.5230	0.5480
Total direct greenhouse gas emissions	Tonnes	1,129,716.04	1,115,057.00	–
Total indirect greenhouse gas emissions	Tonnes	22,064.44	18,289.00	–

Case **The QT1600 trencher powered by marine surplus power can reduce CO_2 emission by 10,000 tons per year**

12 sets of electrical equipment, including trenchers, are needed for underwater operation. The conventional mode is to work on an offshore engineering vessel, and three 1,200KW generators are installed on the main deck for grid-connected power supply. Considering the low rent and low fuel consumption of the anchor handling towing supply vessel, by laying cables on the anchor handling towing supply vessel and using the surplus power of the vessel's power grid to supply power to the trencher, the rental of three 1,200KW generators is reduced to reduce energy consumption and carbon emissions. It is estimated that this measure can save more than 3,000 tons of diesel oil and reduce 10,000 tons of CO_2 emissions every year.

Case **Initially built the world's largest LNG powered standby fleet, and promoted the clean, green and low-carbon transformation of equipment**

In July 2022, the LNG powered standby vessels "Haiyang Shiyou 543" and "Haiyang Shiyou 548" independently invested and manufactured by COSL were successfully delivered in Nantong, Jiangsu Province. All the 12 LNG powered vessels planned and manufactured by the Company were put into operation, and the world's largest LNG powered standby fleet was initially built, marking a solid step for China's offshore oil equipment to transform into cleaner, greener and low-carbon equipment. The LNG powered standby vessel mainly serves the survey and exploitation of offshore oil and natural gas, and provides services such as material supply, standby, lifesaving and on duty for offshore rigs and mobile facilities. The emission indicators of the vessel meet the most stringent international standards, and the vessel can reduce carbon dioxide emissions by 20%-30%, sulfur oxides by 100%, nitrogen oxides by 90% and suspended particles by 100%.

Energy Conservation and Emission Reduction

Energy Resource Management

The Company adheres to the environmental protection and energy management policy of "caring for the environment, saving energy and increasing efficiency, and developing in a green way", strictly complies with various energy management regulations and requirements of the countries and regions where the Company operates, strengthens energy management, and continuously revises and improves the system. Every year, the Company invests a lot of funds in upgrading and rebuilding energy-consuming equipment and facilities and promoting the implementation of energy-saving projects, and strives to reduce energy consumption. The Company complies with the relevant laws and regulations on national water resources management, comprehensively optimizes the water use structure, actively adopts water-saving and substitution measures, reduces the use of fresh water, tries its best to reduce the loss and waste in the process of water use, and continuously reduces the pressure on water resources caused by production and operation.

Energy and Water Consumption (2020-2022)

Indicator	Unit	2022	2021	2020
Electricity	10,000 kWh	2,969.31	2,547.00	2,332.15
Diesel fuel	Tonnes	356,752.11	352,221.52	319,857.91
Natural gas	Cubic metres	338,012.00	289,100.00	358,020.00
Oil fuel	Tonnes	0	0	0
Gasoline	Tonnes	207.07	289.10	222.14
Engine oil	Tonnes	38.92	46.66	45.26
Water	Tonnes	1,151,844.38	1,081,583.18	1,004,742.41

Notes:
1. Comprehensive energy consumption, energy conservation, and output value energy consumption are calculated in strict compliance with national standards such as GB/T 2589 General Principles for Calculation of Comprehensive Energy Consumption, GB/T 13234-2009 Calculation Method for Enterprise Energy Conservation, GB17167-2006 General Rules for Equipping and Management of Energy Measuring Instruments of Energy Users and enterprise standards such as Q/HS 1300-2019 Statistical Indicators and Calculation Methods of Energy Consumption, Q/HS13005-2019 Energy-saving Statistical Management Code issued by CNOOC and other standards.

2. Engine oil: The statistical scope has been adjusted since 2021. A majority of engine oil of the Company was consumed in the course of equipment repair and maintenance rather than actual energy consumption, thus it was excluded from the statistics. The figures in 2020 were recounted according to the same standard.

Case

Established the Blue Ocean Boda Green Factory to promote energy conservation and consumption reduction

COSL made every effort to promote the establishment of the Blue Ocean Boda Green Factory, and took 35 measures in a planned and conscious way from five aspects, i.e. intensive land use, harmless raw materials, clean production, waste recycling and low-carbon energy. At present, COSL has successfully completed the compliance evaluation of the green factory carried out by the evaluation expert group of the Energy Conservation and Emission Reduction Monitoring Center of China National Offshore Oil Corporation, which is a key step for building an advanced green and low-carbon model of oilfield chemical service industry. In the future, the Company will strengthen its confidence, tackle tough problems and overcome difficulties, steadily promote the certification of national-level green factory, optimize and upgrade the technical process, adopt mass orders and compound production, promote the automatic feeding of bulk liquid raw material storage tanks, and further reduce material and energy consumption.

Case

Developed and applied 180°C ultra-high temperature seawater-based fracturing fluid to save fresh water resources

For the problems such as some low permeability reservoirs in offshore oil fields being buried over 5,000m, the reservoir temperature being as high as 180°C, and the working carrier space being narrow, the storage capacity being limited and the transportation costs of fresh water being high in the offshore fracturing construction, COSL has developed a set of 180°C ultra-high temperature seawater-based fracturing fluid with salt resistance, instant solubility and low residue. Compared with conventional fresh water-based fracturing fluid, this system can be directly prepared with filtered seawater with salinity less than 40,000mg/L, which saves fresh water resources and solves the problems of high transportation costs and high storage costs of fresh water. The research results were first applied in the field in 2017, and entered the stage of popularization and expanded application in 2020. From 2020 to 2022, 23 wells were applied in the four seas in total, saving more than 5,500m^3 of fresh water. At present, 3 invention patents have been authorized, 1 petroleum industry standard has been formulated, and 12 journal papers have been published. At the same time, this achievement has reached the “international leading” level upon appraisal by Tianjin.

Managing Discharged Gas

The Company strictly implemented the provisions of relevant laws, regulations and normative documents of the state and the countries in which it operates, and Air Pollution Prevention Certificates issued by the China Classification Society (CCS) have been obtained for all vessels and drilling rigs of the Company. For the day-to-day operation of vessels and drilling rigs, qualified and low sulphur green fuels meeting the requirements of the countries in which they are located are used to minimise exhaust of such materials as nitrogen oxides and sulphur oxides. Each diesel engine was delivered with a Diesel Engines Emission Test Report, and non-toxic and environment-friendly refrigerants were applied to air-conditioner refrigerants. The laboratory and the testing laboratory are equipped with VOCs adsorption devices and VOCs dynamic real-time monitoring systems to further ensure VOCs emission reduction and stable qualified emission. In 2022, the Company's qualified rate of exhaust emission was 100%.

Wastewater Management

The Company has provided environmental protection equipment and facilities such as water and oil separators and domestic sewage treatment plants at its operational sites to treat and discharge industrial wastewater and domestic sewage in accordance with standards including the "Effluent Limitations for Pollutants from Offshore Petroleum Exploration and Production", "Discharge Standard for Water Pollutants from Ships", the relevant emission standards of countries in which it operates, and international treaties. The real-time monitoring system for pollutant discharge indicators is installed in the land park in strict accordance with the requirements of local competent authorities, and COD detection is carried out regularly for domestic sewage discharged from offshore facilities to ensure the stable qualified discharge of wastewater. In 2022, the Company completed the upgrading and reconstruction of domestic sewage treatment devices for six rigs, namely HYSY 937, China Merchants Hailong 5, Bohai 12, Kaixuan 1, Superman and Wanzuan 1, and all the operating drilling rigs in Bohai area have the capability of "zero emission". The qualified rate of annual wastewater discharge is 100%, and the wastewater recycling amount is 2,040.00 tons.

Waste Management

The Company effectively processed all types of solid waste generated in production and operation activities to reduce pollution, in accordance with the laws and regulations of the countries in which it operates and the international treaties. The Company entered into cooperation agreements with qualified companies to recycle and process industrial waste, solid waste, domestic waste, hazardous waste, sewage oil and other waste. Offshore production sites allowed the waste to be discharged after processing at recycling facilities in accordance with the regulations. Waste that does not meet the discharge requirements shall be transported back to qualified third parties for recycling and processing. In 2022, the Company established the system of Solid Waste Management, which is used to guide the solid waste management of all units and ensure the compliant and legal disposal of solid waste. The Company strengthened the management of recycling, realizing the annual waste reduction of 26,125 tons, and generating a circular economic value of RMB16.78 million.

Discharged Volume by the Company in Chinese Waters (2020-2022)

Indicator	Unit	2022	2021	2020
Qualified discharge of oil polluted water	Cubic metres	261.48	259.38	248.97
Discharge of crushed domestic waste	Tonnes	221.42	356.72	117.87
Qualified discharge of drilling slurry	Tonnes	64,831.91	56,111.65	48,422.03
Total discharge of waste	Tonnes	84,932.41	89,894.69	80,530.52
Discharge of waste for an output value	Tonnes/RMB10,000	0.03	0.05	0.03
Total discharge of hazardous waste	Tonnes	19,043.09	18,248.98	20,920.56
Discharge of hazardous waste for an output value	Tonnes/RMB10,000	0.01	0.01	0.01
Total discharge of non-hazardous waste	Tonnes	65,889.32	71,645.71	59,609.00
Discharge of non-hazardous waste for an output value	Tonnes/RMB10,000	0.03	0.04	0.03

Note: According to the statistical requirements of the new Directory of National Hazardous Wastes issued in 2021, certain original non-hazardous waste was reclassified to hazardous waste, leading to an increase in the total discharge of hazardous waste in 2022 and a corresponding decrease in the total discharge of non-hazardous waste.

Ecological Protection

Prevention of Oil Leakage

The Company has developed strong and effective measures and procedures for preventing oil leakage in the course of production and operation. All operation units strengthened the management and control of oil leakage risks by carrying out safety inspections before drilling into oil and gas reservoirs, regular maintenance of oil spill prevention equipment, and oil spill emergency drills from time to time. In 2022, no oil leakage occurred.

Prevention of Groundwater Pollution

The Company attaches great importance to the protection of groundwater. It consistently invested in the research and development of new technologies and processes in an active manner which are applied in on-site operations to reduce pollution on groundwater in the process of oil exploration and development.

Conservation of Biological Diversity

The Company abides by animal protection laws around the world, values the conservation of biodiversity, carefully analyses the possible impact of its work on marine organisms, and takes preventive measures to reduce their effect, and eliminates or greatly reduces its negative impacts on biodiversity and ecosystems and preserves healthy environments for marine organisms wherever possible.

Case **Launched the campaign of "Helping Blue Carbon Sink and Popularizing Mangroves"**

From June to July 2022, COSL launched a mangrove planting campaign in Niuwangling Beach, Xiaogui Village, Aotou, Daya Bay with the theme of "Helping Blue Carbon Sink and Popularizing Mangroves", planting mangrove saplings, advocating the concept of ecological civilization, raising the public's awareness of biodiversity protection, and practicing the concept of green and low-carbon development.

HYSY 720 Fleet rescues endangered mammal egrets

The acquisition vessel of the Geophysical Division rescues the turtle trapped in fishing net

Stick to the Safety Bottom Line

COSL continued to thoroughly study and understand the important expositions and instructions of the General Secretary Xi Jinping on work safety, implemented the Work Safety Law of the People's Republic of China and other laws and regulations, continued to promote the construction of QHSE management system, strengthened the identification and prevention and control of safety risks, actively carried out key hidden dangers management and emergency management, and improved the level of intrinsic safety.

QHSE Management

QHSE management system

The Company is determined to implement the overall requirements and plans of the state, strictly match the requirements of ISO9001, ISO14001 and ISO45001 standards, comply with QHSE management framework and integrate key elements of production and operation such as manpower, market, equipment, procurement, etc., and build an international structure of the global unified QHSE management system by paying equal attention to domestic and foreign markets. The Company has prepared, published and implemented the Quality Management Manual and HSE Management Manual, and prepared, revised, published and implemented 38 global general management procedures. In accordance with the management requirements of the government authorities and superior authorities, the Company has prepared 30 domestically applicable management requirements. The Company has also prepared 10 overseas applicable management requirements. In 2022, the Company adhered to the concept of "building the system as a code", continuously identified the compliance of the laws and regulations and conducted QHSE management assessment, newly built 17 L2.2 and L3.1 layer files, revised 13 L2.2 and L3.1 layer files, as well as constantly improved the globalized construction of QHSE management system.

QHSE Policies

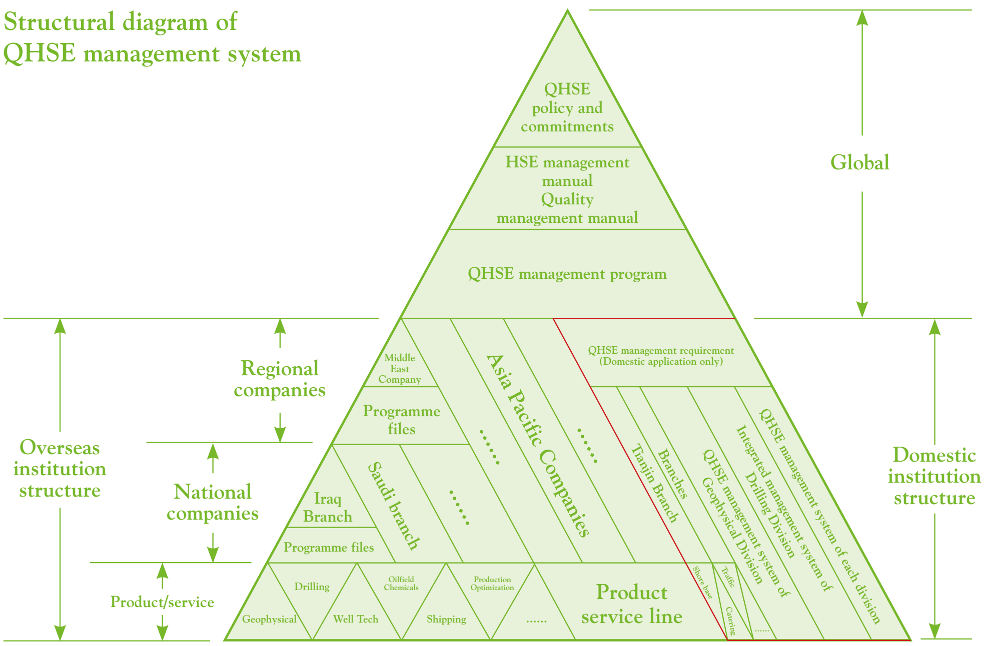
Reputation First, Complete Equipment, Quality Assurance;

Safety First, Prevention Foremost, Comprehensive Control;

People-oriented, Care for Health, Cherish Life;

Protect the Environment, Boosting Energy Savings and Efficiency, Green Development.

Structural diagram of QHSE management system



Security management systems

The Company put the internationalized strategies into practice, strengthened its internationalized operational management capability, and set up an overseas public safety system with the international generally accepted standardised framework and languages. The Company prepared 10 management documents on public safety risks, information, training, facilities, emergency response etc., based on the Handbook on Overseas Public Safety Management, standardized and unified overseas public safety management, effectively prevented and controlled overseas public safety risks, properly handled emergencies, with an aim at avoiding from and reducing the occurrence of security incidents and the impacts thereof caused to personnel, properties and reputation.

Operation Safety

The Company is committed to complying with applicable laws and regulations, and implementing industry standards, norms and best practices in all aspects of its operation. By implementing and promoting a comprehensive management system with integral quality, health, safety and environmental protections, the Company provides quality products and efficient services in a sustainable manner. Its fundamental goal is to inflict zero harm to employees, zero pollution to the environment, and cause zero accidents leading to property losses.

We continued to implement the following quality, health, safety and environmental protection policy according to the new development strategy of the Company:

- ★ Effective management commitment with visible leadership;
- ★ Continuous improvement to the Company's quality, health, safety and environmental protection management systems;
- ★ Effective consideration given by all businesses to protecting quality, health, safety, environmental protection and security;
- ★ Strengthening staff training;
- ★ Instilling a culture of "stopping work" as the employee's personal obligation as well as a company's responsibility;
- ★ Protecting the environment, reducing emissions and pollution;
- ★ Identifying and implementing effective management on quality, health, safety, environmental protection and security;
- ★ Continuous improvement to emergency management and reduced accidents and losses;
- ★ Cultivating a culture of safety, and making safety a core staff value;
- ★ Requirement that contractors manage quality, health, safety and environmental protections in accordance with this policy.

Production Safety Performance (2020-2022)

Indicator	Unit	2022	2021	2020
Number of production safety accidents	Case	19	30	26
Number of recordable injury incidents	Case	15	29	18
OSHA ratio	%	0.04	0.08	0.06
Accumulated lost working days ratio	%	1.96	2.56	1.68
Number of employee deaths	Person	1	1	1
Number of contractor deaths	Person	0	0	0

Note: OSHA ratio = Recordable incidents × 200,000/Total working hours
Accumulated lost working days ratio = Lost working days × 200,000/Total working hours

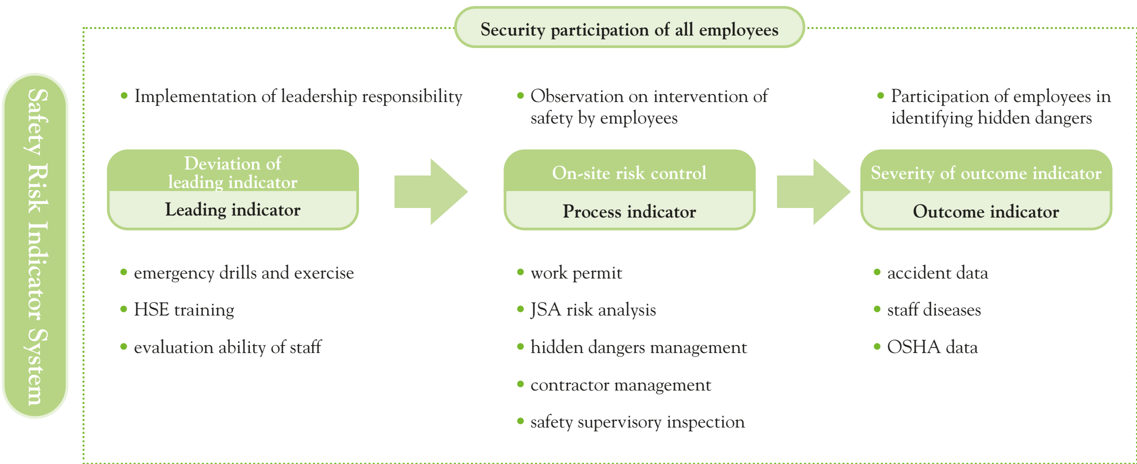
A Safe Production Responsibility System for All Staff

In 2022, combined with the reform of "two systems and one contracting", the Company amended and improved the list of all employees' post responsibilities for work safety, clarified the responsibilities for work safety from the main responsible persons to the front-line employees at the grass-roots level, and ensured the effective operation of the responsibility system of "all persons at all levels are responsible, everyone is responsible, and each is responsible for his duties". In the daily production and business activities, the Company tamped down the implementation of the "six" responsibilities of work safety, strengthened the bottom line thinking and red line consciousness of work safety, maintained the safety of on-site operations and ensured the life safety of employees. The Company established the system of safety and environmental responsibility accident scoring, safety duty performance portrait and "safety file carrying with oneself" for the heads of grass-roots units to promote the safety construction of grass-roots operation units, continuously improved the initiative and responsibility consciousness of grass-roots heads and core employees, and continuously improved the safety management ability of grass-roots units.

Improvement on Safe Production Management

The Company earnestly implemented the work plan of "Fifteen Measures" for work safety, put the responsibilities on all units, departments and posts, continuously strengthened the foundation, corrected the shortcomings and improved weak items, comprehensively improved the lean management level, prevented and resolved safety risks, and eliminated potential accidents, ensuring the continuous improvement of the Company's safety performance.

Improve the safety risk indicator system. The Company continued to carry out the QHSE form analysis and research, improved the construction of HSE monitoring index system in combination with the preparation, implementation and results in production and operation activities and through three stages of pre-event, process and post-event, strengthened the application breadth and depth of safety indicators, organized spot check and verification of safety indicators, found out the problems in the implementation process of indicators, and continuously improved the effectiveness of safety indicators. At the same time, through the accurate analysis of safety indicators, the Company took targeted prevention and real-time monitoring measures to improve the safety management level.



Establish an early warning and intervention mechanism for safety emergencies. The Company adhered to the idea of grasping small accidents early, intervening in advance and ensuring safety, gave full play to the early warning function of near misses (dangerous situations), organized all units to attach great importance to the statistics and analysis of dangerous situations and high-risk events, and put forward HSE management measures to eliminate potential risks and curb accidents in the bud. In view of the potentially serious consequences, the Company carried out cause analysis and formulated preventive measures, issued warnings and shared them in time, and strengthened the safety awareness of the on-site team, so as to ensure the safety of on-site operations.

Mobilize all employees to deeply participate in safety management. The Company took teams and operation teams as units to mobilize all members to participate in safety management such as presiding over pre-shift and post-shift meetings, risk analysis meetings, and organizing safety inspections, so as to further improve employee participation, make everyone a safety officer, deepen the management concept of "safety first", and form a joint force to jointly safeguard the safety of on-site operations.

Safety Risk Prevention and Control

The Company continuously consolidated and expanded the normalization mechanism of supervision and inspection, further promoted the management mode of supervision by all employees, promoted safety supervisor to the direct management by the division, strengthened the independence of safety supervisor, reduced the routine work of safety supervisor, promoted safety supervisor to focus on the main business, ensured safety supervisor could patrol and inspect externally for 2/3 of the time, empowered the "discipline inspection team" of safety supervisor site, and improved the efficiency of safety supervisor and monitoring. The Company gave full play to the role of safety awareness propagandist, risk whistler and health and safety guardian of safety supervisor, realized on-site supervision and monitoring by all staff, strengthened on-site risk management and control, effectively promoted the implementation of the Company's QHSE management measures, and firmly built a "firewall" for work safety.

In order to draw the experience and lessons from accidents, the Company sorted out the personal injury accidents since its establishment, analyzed the main reasons, and carried out the activities of "anti-crowdedness, anti-falling, anti-collision, improving safety awareness and skills, and improving safety protection standards", organized all employees to carry out accident case study and work safety discussion, and promoted the enthusiasm and incentive of grassroots employees to participate in the Company's safety governance. The Company further identified and sorted out the operations and places that may have the risk of "three harms" in the work, sorted out and identified more than 3,000 risk points of "three harms", put forward intrinsic safety solutions, formulated reasonable inspection cycles, strengthened safety protection standards, improved the intrinsic safety of the site and maintained the operation safety of the site personnel.

Identifying and Addressing Safety Hidden Dangers

The Company strengthens the classification of hidden dangers, and implements hidden dangers rectification according to the high, medium and low risk levels to ensure that the hidden dangers on site are controllable. The Company digs deep into the human factors and management defects of hidden dangers, systematically analyzes and finds the occurrence trend of hidden dangers, and controls and eliminates hidden dangers in a targeted manner. The Company carries out the network application of hidden danger management, and implements network monitoring on the timely rectifications of hidden dangers based on the big data to ensure that hidden danger management is controlled. The Company takes supervision and inspection as a breakthrough to deepen the investigation and management of hidden dangers, formulates temporary control measures for hidden dangers and makes rectifications within a time limit, and regularly verifies the rectification effect. The Company implements the mechanism of treating major hidden dangers as accidents, and investigates and holds whoever accountable for hidden dangers that have not been rectified on time for a long time as accidents to fully guarantee the safety of operations. The Company formulates the COSL Integral System Scheme for the Incomplete Rectification of Hidden Dangers, formulates the criteria for judging the integral system and keeps it updated dynamically, combines with the special rectification of unsafe behaviors in the year, and relies on the person in charge of the site and safety supervisor to carry out integral handling on unsafe behaviors on site to protect the safety of on-site operations.

In 2022, 11 inclined ladders of mixed water tanks were rebuilt and put into use at the cementing operation site, so as to reduce the risk of employees falling off when going up and down the water tanks and ensure the safety of operators.

Strengthening Safety Education and Training

The Company has created a philosophy of "insufficient training causes significant impacts to safety", and continuously implemented safety publicity, education and training work. In 2022, with the Company's safety education dominated by online training remotely, company-wide and special training courses for safety skills have been developed around leaderships, management and front-line staff; the Company has set up training sessions for safety production education to continuously strengthen all employees' safety awareness and prevent and reduce accidents for safety production. During the reporting period, 1,626 team leaders of the Company have 100% accepted the training and evaluation for improving safety skills, and were certified; all units provided a total of 2,133 training sessions, with a total of 21,000 learners and 756,000 learning hours, or 36 hours per person on average.

Safety Training Performance Table (2020-2022)

Indicator	Unit	2022	2021	2020
Number of safety training	Times	27,792	25,277	22,352
Number of participants in safety training	Person-times	333,504	300,958	254,547

Safety Emergency

The Company complies with the laws, regulations and standards such as the Regulation on Emergency Responses to Work Safety Accidents, the Measures for the Administration of Contingency Plans for Work Safety Accidents, and the Guidelines for Enterprises to Develop Emergency Response Plan for Work Place Accidents (GB/T29639-2020), and properly makes emergency management from the aspects of emergency plan management, emergency command center construction, emergency rescue team construction, emergency information management and early warning, prevention and response of natural disasters. The Company established a working group for preparing emergency plans, upgraded and updated the COSL Emergency Plan, improved and amended special contents such as riot prevention, terrorism prevention, piracy prevention and overseas public safety, increased prevention guidelines in multiple scenarios, defined graded early warning and response requirements, scientifically guided overseas branches to formulate effective work measures and emergency plans, and improved their abilities to prevent and resolve major risks.

In 2022, the Company carried out a total of 24,420 ship-shore joint exercises and on-site exercises involving rigs, ships and shore facilities based on the annual schedule. These included 6,204 general exercises and 18,216 special exercises with a total of 489,984 participants.

Number of general exercises	Number of special exercises	Total number of participants in the exercise
6,204 times	18,216 times	489,984 participants

Emergency drill

Well control integrated shore-based joint emergency exercise

Protect Occupational Health

On the basis of strengthening the prevention and control of occupational diseases, COSL continuously promotes the occupational health management of all employees, builds a health management culture, deepens employees' mental health care, and promotes employees' healthy work and life.

Health Management

The Company's commitment to the occupational health of its employees was manifested in the formulation and improvement of management rules such as the "Employee Health" and "Occupational Health". The Company comprehensively integrated health education and promotion, formulated and implemented health improvement and occupational health management plans and hearing protection plans for all staff. It launched a series of occupational health management programmes as planned. At the same time, the Company worked to make continuous improvements to employee working conditions in accordance with relevant laws, regulations and standards, to provide a safer and more comfortable work environment.

In 2022, 100% of the Company's staff working in offshore workplaces and fields passed the body check, 100% of our staff exposed to occupational harmful environment completed the health check and the coverage of routine health check of our staff working in the land workplace reached 100%.

Health Checks for Chinese Employees (2020-2022)

Indicator	Unit	2022	2021	2020
Coverage of all staff health check and health records	%	99.68	99.63	99.6
Number of persons attending occupational health checks	Person	3,754	3,880	3,673
Completion rate of occupational health checks	%	100	100	100

Notes: 1. Number of persons attending occupational health checks is the number of persons exposed to occupational hazard factors

2. In 2022, the Company excluded the statistics of the occupational health checks for labour personnel, and the dispatching unit will be responsible for collecting the statistics. Figures of 2021 and 2020 were recounted according to the same standard.

Health Examinations of Employees Exposed to Occupational Hazards (2020-2022)

Indicator	Unit	2022	2021	2020
Persons of pre-employment occupational health examination	Person-times	237	257	226
Completion rate of pre-employment occupational health examination	%	100	100	100
Persons of on-the-job occupational health examination	Person-times	3,269	3,377	3,286
Completion rate of on-the-job occupational health examination	%	100	100	100
Persons of post-employment occupational health examination	Person-times	248	252	164
Completion rate of post-employment occupational health examination	%	100	100	100

Health Training

The Company comprehensively enforced occupational disease prevention laws and regulations, aided employees in understanding occupational hazards, promoted knowledge of prevention and control of occupational diseases and effectively enhanced the awareness of self-protection of its staff. A major element of these efforts consisted of expert led seminars on health and first aid. They were complemented by the posting of health promotion posters, issue of electronic health magazines, and by health blogs on the Company website.

In 2022, all staff at home and abroad received a total of more than 100 various health-related articles in forms of "HSE Garden" and emails. The Company continued to build "Health Culture" to promote the staff to be their own health managers, simultaneously offered health talks in all areas and units so as to create a good atmosphere for active health management.

Case **Carry out the Mental Health Promotion Activity and Education Training**

In 2022, COSL organized the employees of business divisions, branches and overseas branches to actively participate in mental health promotion activities and education training in various forms, such as face-to-face lectures, online videos, online supervision and salon study, in combination with activities such as "525 Mental Health Festival", World Mental Health Day, and special trainings for overseas employees on occupational diseases and mental health, fully popularizing mental health knowledge and common sense of psychological crisis intervention. The training contents included the requirements of the Company's mental health management measures, stress and emotional management, employee behavior observation and recording, identification and referral of high-risk employees, psychological intervention and response to crisis events, etc. During the reporting period, more than 20,000 persons were trained.

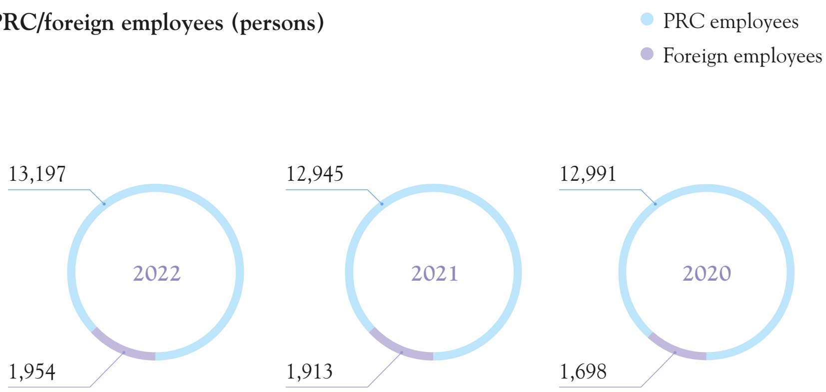
Mental Health Counselling

The Company pays close attention to employees' mental health, stimulates employees' potential from the perspective of improving employees' mental health level and personality quality level by taking the mental health management system as the starting point and using scientific mental health assessment and intervention methods, mobilizes employees' enthusiasm from the perspective of professional value, organizational identity and happiness in life, prevents and reduces the occurrence of psychological crisis events, guides and leads employees to scientifically resolve stress and protect employees' physical and mental health. In 2022, the Company carried out the mental health assessment of all employees from 29 dimensions, including depression, anxiety, obsessive-compulsive symptoms and terror, and completed the assessment of 21,108 persons. The employees' ideological, emotional and behavioral performance was relatively stable, and their mental health status was better than the national average.

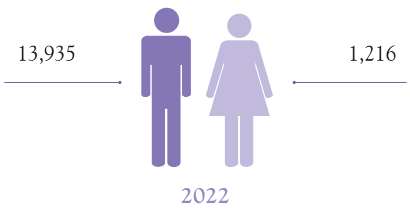
Care for Staff Development

- Protect Employee Rights
- Pay Great Attention to Talent Cultivation
- Localisation and Diversification
- Put Employee Care into Practice

PRC/foreign employees (persons)



Male/female employees (persons)



Indicator	2022	2021	2020
Number of new employees during the reporting period (persons)	458	328	329
Percentage of Chinese female employees (%)	8.0	7.3	7.9
Social insurance coverage (%)	100	100	100
Percentage of labour contracts signed (%)	100	100	100
Proportion of female employees in management positions (%)	7.0	18.3	20.2
Proportion of ethnic minority employees (%)	3.0	2.8	2.6

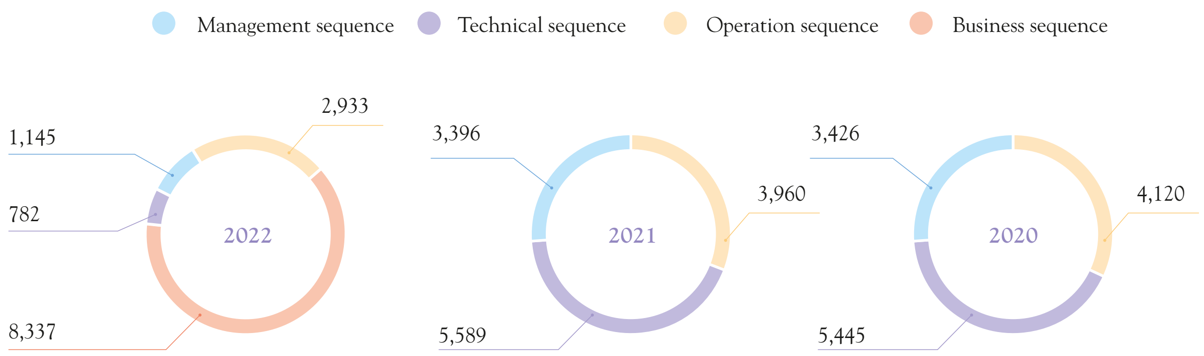
PRC Employees by Qualification (2020-2022) (persons)

Academic qualification	2022	2021	2020
Doctor	45	38	36
Master	1,099	929	846
Bachelor	6,675	6,075	6,013
Below	5,378	5,903	6,096

PRC Employees by Age (2020-2022) (persons)

Age	2022	2021	2020
30 or under	1,570	1,600	1,858
31-40	6,488	6,653	6,647
41-50	3,269	2,888	2,788
Over 51	1,870	1,804	1,698

PRC Employees by Position (2020-2022) (persons)



Note: In 2022, the Company optimized and adjusted original three post sequences (i.e. management, technical and operation) to four post sequences (i.e. management, technical, operation and business) based on functional characteristics and differences in responsibilities and tasks of each post.

PRC Employees Turnover Rate by Gender (2020-2022) (%)

Gender	2022	2021	2020
Male	96.9	97.2	95.4
Female	3.1	2.8	4.6

PRC Employees Turnover Rate by Age (2020-2022) (%)

Age	2022	2021	2020
30 or under	58.1	35.9	45
31-40	28.4	51.0	43.1
41-50	5.7	6.2	4.6
Over 51	7.8	6.9	7.3

Protect Employee Rights

Adhering to the "people-oriented" management philosophy, COSL provides employees with perfect employment, salary and welfare protection, effectively protects their legitimate rights and interests, and promotes a harmonious, stable and orderly labor relation.

Equal Employment

The Company strictly abides by the "Labour Law of the PRC" and other domestic laws and regulations as well as all relevant laws, rules and regulations of countries related to the Company's business. The Company's labour contracts are founded on the principles of "Legality, Equality, Voluntary, Consensus, Honesty and Trust". We treat all employees fairly and equally in adhering to the equal and non-discriminatory employment policy, regardless of nationality, race, gender, religion and cultural background. Child labour is resolutely prohibited, as are all forms of forced and compulsory labour. We also implement the national "Special Labour Protection Regulations for Female Workers" in a strict manner to ensure that female employees have equal remuneration, benefits and career development opportunities.

Compensation and Welfare

The Company strictly complies with domestic and local laws and policies on employee compensation and social security by operating a competitive compensation & welfare and fair performance appraisal system; makes contributions to basic social insurance and housing funds for employees; implements an enterprise annuity system and provides personal accident insurance, critical illness insurance, safety liability insurance and a supplementary medical insurance system for employees and their children; establishes a global medical security system for expatriate employees, so that expatriate employees can enjoy medical treatment, emergency rescue and other services in most countries and regions around the world; and provides employees with a range of benefits, including health checks, paid vacations, assistance to those with difficulties or severe diseases, offering multilevel and all-rounded compensation and welfare protection system to its staff to provide safer and more decent occupational environment, address their concerns and consistently enhance their sense of fulfillment and happiness.

Democratic Management

In 2022, the Company held the second session of the Fourth Workers' Congress to innovate and expand the channel space for employees to make suggestions, fully mobilize the enthusiasm, initiative and creativity of employees to participate in corporate governance, extensively listen to employees' opinions and suggestions, and strive to expand the breadth and depth of employees' participation in enterprise management.

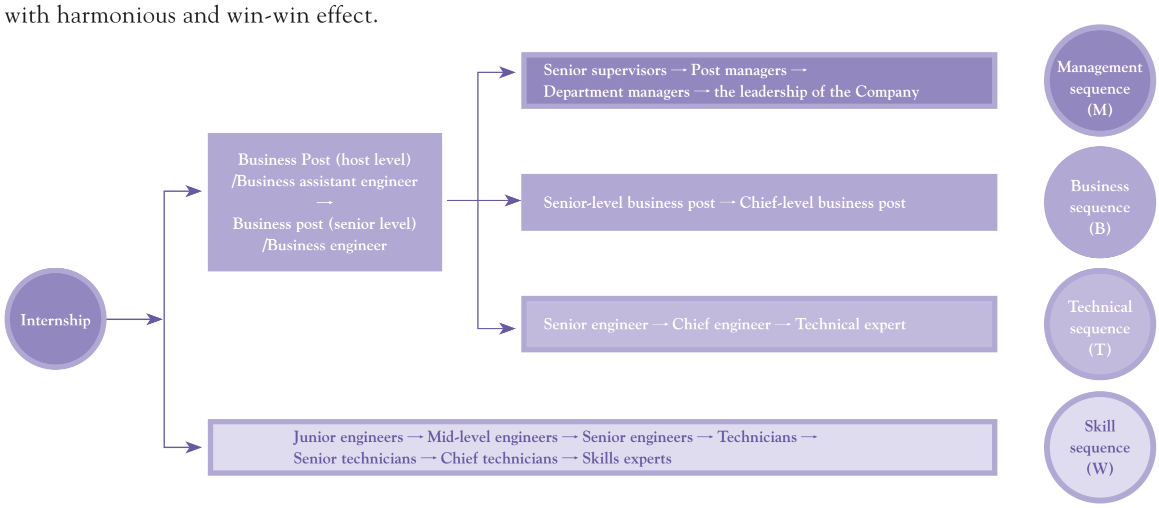
The Company held the second session of the Fourth Workers' Congress

Pay Great Attention to Talent Cultivation

COSL attaches great importance to the cultivation of talents, establishes a perfect career development channel, and creates an open and fair working environment for employees, so that all outstanding employees can fully enjoy the development achievements of the Company. In addition, COSL helps employees realize their self-worth.

Channels of Development

The Company conscientiously implements the important exposition of the General Secretary Xi Jinping that "talent is the first resource", focusing on the four teams of cadre talents, technical and skilled talents, scientific research talents and international talents of the Company, and formulating targeted solutions and operational talent training strategies from the aspects of top-level design, model building, cultivation system construction, personnel ability evaluation and evaluation incentive mechanism. At the same time, the Company standardizes the post management of employees, expands the development space of employees, improves the career development system of employees, optimizes and improves the post sequence and career development channels of employees with clearer functions, more reasonable structure and better promotion, and stimulates the motive force and vitality of employees' development, so as to realize the self-growth of employees and the Company's development with harmonious and win-win effect.



Employee Training

Based on the strategic development needs and employee's ability improvement requirements, the Company continued to increase investment in talent development by conducting extensive skill training and skill competitions, to encourage employees to enrich their knowledge, strengthen their skills, and improve their quality, and to enhance their competitive advantage and overall business level in all respects.

Key training programs and results in 2022

- Completed the business English training courses for new expatriates in 2022. 27 new expatriate leading cadres participated in the training;
- Completed the special seminar on improving the ability of Party branch secretaries to perform their duties in 2022. 29 leaders of Party organizations in grassroots units participated in the training;
- Completed the special seminar on the deep integration of Party building and production and operation in 2022. 31 Party organization secretaries and full-time deputy secretaries of secondary units participated in the training;
- Completed the series training (short-term class) of COSL's implementation of "Two Consistencies" in 2022. 35 newly appointed cadres directly under the Party Committee participated in the training;
- Held the tenth strategic reserve talent training class. 78 outstanding young leading cadres participated in the training;
- Held the COSL "Empowering School" in 2022, with a total of 3 sessions and 356 employees participated in the lectures;
- Completed the induction training for new employees in 2022. 398 new employees participated in the training;
- Completed the TTT training for internal part-time lecturers of the Company in 2022, with a total of 3 sessions. 81 internal part-time lecturers completed the training and obtained internal qualification certifications;
- Held seven international well control trainings, with 58 persons obtaining certificates. Held five training courses for assessors and verifiers, cultivating 35 assessors and 35 verifiers.

Statistics on employee training (2020-2022)

Indicator	2022	2021	2020
Percentage of male trained staff (%)	93.8	93.0	93.0
Percentage of female trained staff (%)	6.2	7.0	7.0
Percentage of trained staff in operation positions (%)	23.7	32.9	29.3
Percentage of trained staff in technical positions (%)	4.7	42.4	50.4
Percentage of trained staff in management positions (%)	7.6	24.7	20.3
Percentage of trained staff in business positions (%)	64.0	–	–
Average training time for male employees (hours)	157.4	187.8	155.5
Average training time for female employees (hours)	205.3	176.1	79.9
Average training time for staff in operation positions (hours)	102.5	183.5	173.1
Average training time for staff in technical positions (hours)	140.8	197.3	195.4
Average training time for staff in management positions (hours)	208.7	227.0	118.5
Average training time for staff in business positions (hours)	178.6	–	–

Case

Establish the skill training course system of the Company's main types of work, and consolidate the construction of basic training resources

In order to speed up the cultivation of a team of high-quality skilled personnel with reasonable structure, complete echelon, exquisite skills, excellent quality, safety and reliability, COSL has set up a training course system according to "post ability quality requirements-post ability knowledge map-post training course matrix-training form-assessment form" based on the Company's main types of work and corresponding vocational skill level standards. As of the end of 2022, the Company has systematically developed 17 course frameworks for main types of work, including marine seismic exploration workers and oil drillers. The course scope covers four dimensions of "basic knowledge, professional knowledge, operational skills and technical management", with a total of 2,926 developed courses and training time of 31,837 minutes.

Training course workshop for main types of work of COSL

Case

COSL Uganda Company held the induction training for the first batch of local new employees

The local employee training is an important measure for Chinese enterprises to go global and implement localization. In 2022, COSL Uganda Company carried out induction training for 149 local employees to help them to initially establish a sense of identity with COSL Uganda Company, familiarize themselves with related businesses as soon as possible, cultivate necessary professional quality and ability and reduce unsafe factors, and trained oilfield development talents for Uganda's first oilfield construction project.

Induction training for new employees of COSL in 2022

Vocational skills competitions of COSL in 2022

Localisation and Diversification

COSL has always adhered to the internationalization strategy and the scale of its overseas market has been growing year by year, with business expanding to more than 40 countries and regions in five regions: Asia Pacific, Middle East, America, Europe and Africa. The Company strictly abides by the labor policies and laws of the countries where it is located, actively fulfills the social responsibilities, promotes the localisation and diversity of employees, adheres to the employment policy of equality, freedom and anti-discrimination, advocates that employees of different cultural backgrounds respect each other's religious beliefs, customs and traditions, as well as the personal hobbies of employees, further promotes understanding and trust among employees, and provides various jobs for the local. In 2022, the Company had 1,954 foreign employees.

Local Employees in Overseas Offices (2020-2022)

Indicator	2022	2021	2020
Number of local employees recruited by the Company (persons)	1,954	1,913	1,698
Percentage of local employees (%)	71	69	69

Put Employee Care into Practice

COSL attaches great importance to employees' needs in work and life, thinks about employees' thoughts and worries, and carries out diversified humanistic care activities to continuously improve and enhance employees' quality of life and enhance their happiness.

Care and Concern Employees

Focus on the construction of small homes for workers at sea	Focus on improving the office experience for employees	Focus on solving the problems of employees' urgent difficulties and worries
The Company spends RMB16 million every year to upgrade the network of 133 families of rigs and vessels to realize video calls.	The Company builds employee apartments and installs charging piles to enhance the living and commuting experience. The Company greatly improves the food standards of Tianjin and Zhanjiang canteens, and increases the number of employees' meal seats in Tianjin by 920. The Company invests nearly RMB10 million to realize the full coverage of wireless network in 96 office buildings and improve the office experience. The Company establishes an infirmary in the park, adds 9 physical examination items, and takes many measures to care for the health of employees.	The Company cooperated with Hainan Education Bureau to solve the problem of schooling for children of employees in Hainan.

Colourful Life

The Company regularly carries out various cultural and sports activities, organizes community activities, cultural performances, sports events, etc., cultivates team consciousness and fighting spirit, stimulates employees' enthusiasm and sense of honor, relieves employees' work pressure, balances employees' work and life, and enhances employees' enterprise cohesion and centripetal force.

Launched a basketball game to celebrate the 20th anniversary of the Company's listing

Held a cultural performance to celebrate the 20th anniversary of the Company's listing

Create a Better Society Together

- Contribution to charitable public welfare
- Marine Salvage
- Participation in Voluntary Service
- Practice overseas responsibility

Contribution to Charitable Public Welfare

COSL firmly regards the realization of the effective connection between the achievements of consolidating and expanding poverty alleviation and rural revitalization as an important political task, and regards it as an important starting point for fulfilling the social responsibility of state-owned enterprises. COSL actively participates in local construction, continues to make efforts on the establishment of Hope Primary School, vigorously carries out consumer assistance, and fulfills the social responsibility of state-owned enterprises with practical actions. In 2022, based on its actual situation, the Company amended the Measures for the Administration of Charity and Public Welfare, and prepared a charity donation plan. All district branches of the Company continued to follow up the implementation of local assistance and student assistance projects to ensure that the assistance projects were promoted as planned. During the reporting period, COSL made 18 external donations, totaling RMB1,707.6 thousand.

Proceed with Rural Revitalization

Consumer Assistance

All units of the Company implemented the central government's work requirements of "consumer assistance and full participation" and organized the purchase of agricultural and sideline products in CNOOC counterpart assistance areas. The annual consumer assistance reached RMB9,013.8 thousand.

Local Support

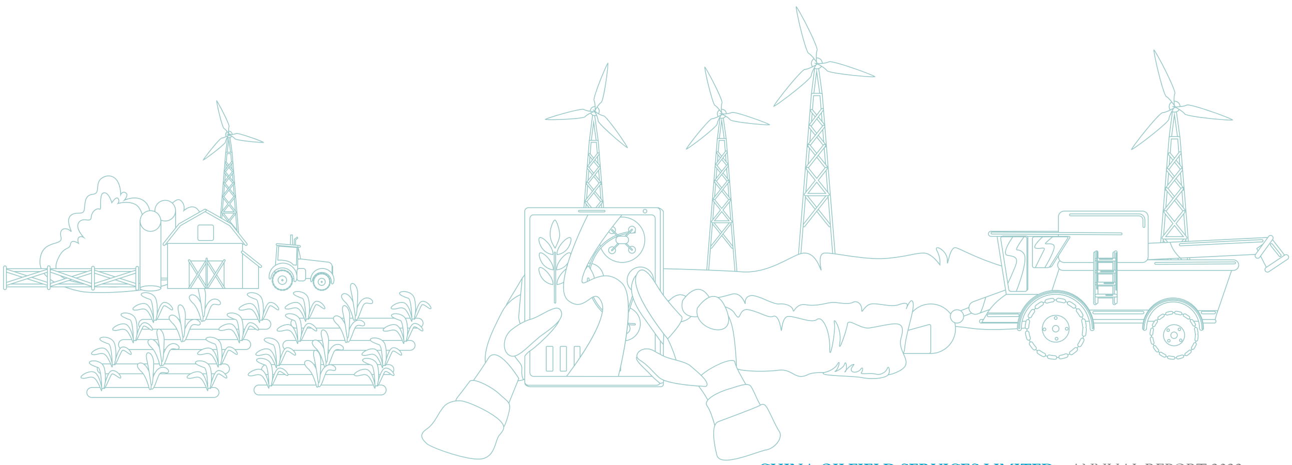
The Company actively participates in the construction of local communities, supports rural revitalization through financial guarantee, and carried out activities such as the support in rural development, further fulfills COSL's social responsibility in the territory where COSL operates, and actively demonstrates the spirit of central enterprises.

Educational Assistance

In 2022, the Company carried out 11 educational assistance and donation activities, involving RMB1,199.4 thousand, which have all been implemented, including "International Children's Day" visiting and condolence activities of 11 COSL Hope Primary Schools of CNOOC, donating sports goods, children's books, uniforms for teachers and students and stationery, supporting the transformation of teaching environment, repairing gates and roads, building campus playgrounds, building cultural atmosphere of teaching buildings, and purchasing school sports equipment, teaching equipment, monitoring equipment and air conditioning equipment, so as to provide children with a safe and comfortable learning environment.

Employment Assistance

The Company actively responds to the national call for employment assistance, and promotes the employment of college students from Tibet, Qinghai, Xinjiang and areas out of poverty. In 2022, the Company employed a total of 17 college students from such areas, and through employment assistance, the Company helped families to achieve continuous income increase and facilitated rural revitalization.



Case Help teaching and intelligence with heart and soul, and promote educational assistance in a targeted way

Education is the top priority for rural revitalization. In 2022, COSL's social responsibility fulfillment was upgraded from aid construction and donation to intellectual assistance and support. COSL established a young "Blue Power" volunteer teaching pioneer team. The young employees in Tianjin, Zhanjiang and Shenzhen acted by orders. They used their own knowledge, strengths and specialties to serve the rural Hope Primary Schools in Hebei, Yunnan, Hubei and Hainan, and regularly carried out volunteer teaching in the countryside every month.

Over the past year or so, the Company's "Blue Power" volunteer team adopted the online + offline teaching mode, popularized music theory, painting, popular science and other knowledge for children in mountainous areas, and also cooperated with volunteers from the Central Committee of the Communist Youth League and the China University of Petroleum to offer special loving care classes to children, giving them a good "Winter Olympics Ideological and Political Course" and "Red Party History Course".

In the summer vocation of 2022, the "Blue Power" volunteer pioneer team in Tianjin area and the volunteers from the China University of Petroleum (Beijing) jointly launched the summer camp of "Colorful Summer Healthy Growth", and the "Blue Power" volunteer team in Zhanjiang area tried to introduce the loving care classes into the Hope Primary School and actively optimized the curriculum system.

In June 2022, the "Blue Power" volunteers from Zhanjiang area went to four COSL Hope Schools of CNOOC to carry out "International Children's Day" condolence activities. Volunteers from Shenzhen area carried out book donation, online cloud teaching volunteer recruitment, Online accompanying reading, and small wish lighting plan, and organized 7 COSL Hope Primary Schools of CNOOC to actively participate in online rural teacher trainings.

The volunteers went to four COSL Hope Primary Schools of CNOOC in Hainan Province to carry out the theme group day activity of "offering loving care classes on campus and building a future dream together"

The volunteers went to four COSL Hope Primary Schools of CNOOC in Hainan Province for "International Children's Day" condolences

The volunteers launched a group day activity with the theme of "response to the mountain's call from the sea and releasing hope", and sent love items, love culture and handicraft classes to the Hope Primary Schools

The volunteers donated school uniforms, stationery, kettles, etc. to the Hope Primary School in Dianping Village, Zhushan County, Hubei Province and the Hope Primary School in Xunkou Village, Mancheng District, Hebei Province

Marine Salvage

COSL took the initiative to fullfil social responsibility and be active to participate in marine salvage. In 2022, the Company participated in marine salvage for 18 times in total, dispatched 21 vessels, took part in 15 marine salvage operations, rescued 182 persons, received 8 thank-you letters from the maritime department, and was commended twice by the maritime department and local government. The impressive performance of marine salvage was greatly appreciated and highly recognized by the national maritime authorities.

Participation in marine salvage work in 2022 (for example)

- In April 2022, the "HYSY 642" successfully rescued the "Dongsheng 7" and successfully towed it into the port
- In September 2022, the "Nanhai 217" successfully rescued two persons in distress on the "Guibei Yu 61199"
- In November 2022, the "Binhai 267" successfully completed the rescue mission of the small boat in distress near the rig 1-1A of Jinxian County

Participation in Voluntary Service

Since the establishment of the "Blue Power" volunteer team in 2014, COSL has planned and carried out voluntary services for 9 years in a row, consistently expanding the scope of voluntary services and contributing to the construction of a harmonious society.

Environmental Protection Volunteer Service

In 2022, the Company's "Blue Power" youth volunteer service team further thoroughly implemented the ecological civilization thought, bravely took the lead in protecting the environment and jointly built a clean and beautiful world. The Company innovated the form of voluntary activities, carried out the sowing plan, sowed the seeds of ecological civilization in the hearts of children, and showed new achievements in helping green and low-carbon development.

The Company carried out a co-construction activity with the theme of "Advancing Deep Blue and Green Development" on the 3.12 tree planting day

1. The "Blue Power" volunteer service team of Tianjin area carried out the community voluntary co-construction activity of "actively protecting the ecological environment and working together to build a beautiful China" on the World Ocean Day, the Environment Day, etc.

2. On the International Children's Day, the young volunteers from Shenzhen area went to the CNOOC Hope Primary School in Yunnan to give the students a popular science lesson on offshore oil.

3. Zhanjiang area organized the "Blue Power" volunteer service team to carry out a nationwide voluntary tree planting activity with the theme of "Advancing Deep Blue and Green Development", planting more than 120 seedlings.

4. Shenzhen area organized the Party members and youth league members to carry out voluntary tree planting activities, planting more than 120 Ficus gracilis trees.

5. From June to July, the Company launched a mangrove planting campaign in Niuwangling Beach, Xiaogui Village, Aotou, Daya Bay with the theme of "Helping Blue Carbon Sink and Popularizing Mangroves".

Practice Overseas Responsibility

In the overseas development, COSL actively develops together with local communities, actively fulfills its overseas social responsibilities, pays attention to good interactions with local society, and continues to participate in local public welfare undertakings to enhance mutual understanding and trust and build a beautiful home together. The Company's social image overseas has been continuously improved.

Case COSL Iraqi Branch strengthens local "school-enterprise cooperation"

In August 2022, COSL Iraq Branch paid an exchange visit to the University of Baghdad, met with Professor Mr. Moneer Hameed Tolephih, Chairman of the University of Baghdad, and had in-depth exchanges and discussions on personnel training, transformation of the achievements of enterprises, universities, research institutions, internship and cultivation of college students, joint laboratory construction, cultural exchange between China and Iraq, and joint cultivation with China's petroleum universities. Both parties agreed to carry out all-round cooperation in the fields of talent orientation cultivation, industrial cooperation research, cultural exchange and localization promotion, and gradually carry out various tasks under this framework, build a communication bridge and lay a solid foundation for cooperation.

Case COSL Mexico has carried out the charity activity of "Caring for Children" for six consecutive years

In April 2022, on the occasion of Mexico's National Traditional Children's Day, the public welfare service volunteers of COSL MEXICO S.A.DE C.V. (COSL Mexico) went to Carmen San Pedro Pescado Orphanage to visit and sympathize with the children in the orphanage. Since 2017, COSL Mexico has been to the orphanage for six consecutive years to carry out the social welfare activity of "caring for children", fulfilling corporate social responsibilities in the most recognized way by local people, and winning the respect of local people and the government. In the future, COSL Mexico will continue to strengthen its ties with local people and social institutions, and make more active efforts to integrate local culture, continuously expand the influence of COSL brand and cultivate good reputation.

Case COSL Uganda promotes localized employment

COSL Uganda SMC Limited (COSL Uganda) adheres to the concept of talent localization to carry out localized recruitment according to its needs, implement fair and transparent recruitment according to the relevant recruitment laws and regulations of the local community government, and provide equal opportunities for all job seekers. The recruitment ratio of the community personnel outside the capital Kampala was 75%, further enhancing the employment opportunities of local personnel in Uganda and establishing a good relation with the local government. In the future, COSL Uganda will continue to provide jobs that meet the skills requirements for the local community in the operation area according to the requirements of the local government and client, and ensure that every community village in the operation area has the right to obtain the available job opportunity.

COSL Uganda conducted theoretical training on admission education for local new employees

COSL Uganda and the China University of Petroleum (East China) exchanged views on employment cooperation for African overseas students

ESG Management

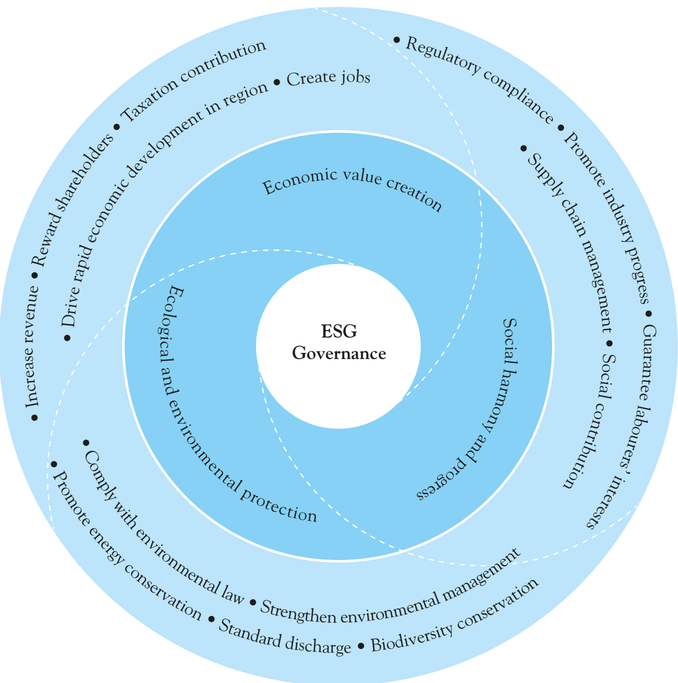
ESG Governance

ESG risk management

The Board attaches great importance to the ESG risk management, and has established a risk management committee, which meets regularly for risk identification and assessment. Relevant departments are responsible for managing risks in finance, legal issues, anti-fraud, safe production, environmental protection, overseas public security, etc., which are integrated into day-to-day production and operation management to form a routine system of risk assessment, reporting, response and monitoring.

ESG management system

The Company continues to optimize its ESG management and incorporates its sustainable philosophy of "Always Do Better" into the enterprise development strategy and daily operations. The Company appoints a specific department to prepare and publish ESG reports and carry out ESG training and exchanges. All departments and business units participate in promoting systematic and standardized management of ESG, combining their functions and responsibilities to achieve integration of ESG governance and business management.



Analysis of Material Issues

The Company actively uses questionnaire surveys to identify, evaluate and screen ESG issues, and has determined issues that are of high concern to the Company and stakeholders. Disclosures and responses focusing on these are made in the report.

Strengthening party building	ESG management	Risk management	Compliance	Anti-fraud initiatives
Technological innovations	Quality management and quality services	Strengthening oil and gas reserves and production	Safe production and occupational health	Response to climate change
Energy saving and emissions reduction	Supply chain management	Protection of employee rights	Career development	Staff caring
Conservation of biological diversity	Rural revitalization	Marine salvage	Voluntary services	Social responsibility overseas

Communication with Stakeholders

The Company attaches great importance to communication with stakeholders, established various channels for daily communication and special communication with each stakeholder, fully understands the demands and expectations of stakeholders, and adopts their relevant demands as the Company's objectives and incorporates them into plans and proposals for ESG. The Company also maintains ongoing communications on new developments of its ESG concepts and on its performance in taking initiative to response to expectations of all stakeholders.

Stakeholders	Concerns	Responses and measures
Regulatory authorities and government	Implementing macroeconomic policy Operation in compliance with law Paying taxation in accordance with the law	Promoting laws and regulations Paying taxation in accordance with the law Accepting supervision and evaluation Visiting, reporting and filing
Employees	Protection of rights Career development Health and safety Employee participation Employee care	Equal employment policies Optimisation of pay and benefits Four-level training Respecting diversity Occupational health and safety management Employee representatives meetings Cultural and recreational activities Employee care
Shareholders	Improving corporate governance Value creation Guarding against operational risks Information disclosure	Regular reports General meetings Daily communication Publishing annual reports and ESG reports
Clients	Provision of safe, high quality and efficient services Security of customer information Improvement of customer satisfaction	Development of quality management system Continuous technological innovation Providing professional solutions Visits and communications Protecting customer information Comprehensive improvement of work standards
Suppliers and contractors	Compliance with business ethics and laws and regulations Establishing long-term partnerships Mutual benefit and win-win development	Business discussions and technology exchange Negotiation of contracts and daily exchange Electronic management platform
Financial institutions	Operating conditions Operational risks Corporate governance	Special sessions Information disclosure
Media	Fulfillment of ESG Corporate performance Major events, activities and initiatives	Information disclosure Multi-channel communication
Charity and non-governmental organisations	Maintaining close contact and information sharing Participation in social welfare activities	Active participation in social welfare Information disclosure
Community and the public	Improving communication and exchange Carrying out social contribution activities Supporting public welfare	Rural revitalization Marine salvage Promoting employment Supporting education Community care Volunteering services
Environment	Compliance with environmental laws and regulations Environmental protection Conserving energy and reducing emissions	Establishment of environment management system Conducting environmental training and propaganda Clean production Conservation of biological diversity Practicing environmental charity

Prospects

Over the past 20 years since its listing, COSL, as the main force to strengthen reserves and production, has always adhered to the corporate philosophy of "Always Do Better", maintained its strategic determination, adhered to cultural leadership, and achieved a win-win situation with shareholders, customers, employees and partners in the leap-forward and high-quality development of serving the offshore oil industry, and has become one of the largest comprehensive oilfield service providers in the world.

Standing at a new historical starting point, we will continue to focus on our main responsibility and business, build a high-quality energy service industry, and continue to provide technical products and service support for offshore oil and gas resources exploration and development. We shall take innovation as the first driving force and build a core competitive advantage in the process of comprehensively cultivating innovative culture. We shall evolve from "the development method of relying on human capital" to "the development method of people-oriented concept", and fully release the potential of "people" in the process of building a demonstration center for the practice of people-oriented concept, so as to store, empower and improve energy for building the core competitiveness. We will actively implement the concept of green development, accelerate the green transformation, anchor CCUS, and serve the realization of the goals of "carbon peaking and carbon neutrality". We will bear the responsibility of central enterprises to actively participate in disaster relief and poverty alleviation, cultural education and maritime emergency rescue to build a better society together.

In the future, COSL will take the protection of national energy security as its responsibility, identify the road of sustainable development, to build a world first-class energy service company with Chinese characteristics.

Directors, Supervisors, Senior Management and Employees

I. CHANGE IN SHAREHOLDING AND REMUNERATIONS OF CURRENT AND RESIGNED DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT DURING THE REPORTING PERIOD

Unit: Shares

Name	Position (Note)	Gender	Age	Starting date of term	Expiry date of term	Shareholdings at the beginning of the year	Shareholdings at the end of the year	Change of shareholding during the year	Reason of change	Total remuneration before tax received from the Company during the reporting period (RMB10,000)	Whether received remuneration from the related party of the Company
Zhao Shunqiang	Chairman Executive Director CEO	Male	54	2021-4-28 2020-10-21 2021-4-28	2023-10-20					157.01	No
Xu Yingbo	Team Leader of the Discipline Inspection Commission	Male	49	2020-7-29						131.42	No
Lu Tao	Vice President	Male	54	2020-7-29						132.72	No
Xiong Min	Executive Director Former Vice President Former General Legal Counsel Former Chief Compliance Officer	Male	46	2022-12-22 2020-12-18 2021-7 2022-5-9	2025-12-21 2022-7-27 2022-11-7 2022-11-7					132.83	No
Yang Dexing	Vice President Safety Director	Male	42	2020-12-18 2021-2						131.57	No
Chong Xiaojie	CFO	Female	46	2021-5-11						126.79	No
Shang Jie	Chief Engineer	Male	46	2022-12-21						4.69	No
Sun Weizhou	Vice President General Legal Counsel Chief Compliance Officer Secretary to the Board (Joint Company Secretary)	Male	51	2022-12-21 2022-11-7 2022-11-7 2022-1-21						99.30	No
Chiu Lai Kuen, Susanna	Independent Non-executive Director	Female	63	2021-6-1	2024-5-31					40.00	No
Kwok Lam Kwong, Larry	Independent Non-executive Director	Male	67	2022-6-1	2025-5-31					23.33	No
Yao Xin	Independent Non-executive Director	Male	44	2022-8-23	2025-8-22					13.33	No
Wu Wenlai	Non-executive Director	Male	60	2021-12-28	2024-12-27					–	Yes
Liu Zongzhao	Non-executive Director	Male	57	2021-12-28	2024-12-27					–	Yes
Peng Wen	Chairman of the Supervisory Committee	Male	53	2020-10-21	2023-10-20					–	Yes
Cheng Xinsheng	Independent Supervisor	Male	60	2015-6-2	2024-12-27					8.00	No

Name	Position (Note)	Gender	Age	Starting date of term	Expiry date of term	Shareholdings at the beginning of the year	Shareholdings at the end of the year	Change of shareholding during the year	Reason of change	Total remuneration before tax received from the Company during the reporting period (RMB10,000)	Whether received remuneration from the related party of the Company
Ma Xiuen	Employee Representative Supervisor	Male	47	2022-8-12	2025-8-11					43.21	No
Yu Feng	Former Executive Director Former Vice President	Male	58	2021-12-28 2017-1	2022-12-22 2022-6-24					138.15	No
Liu Xiaogang	Former Vice President	Male	44	2021-8-25	2022-7-1					42.24	Yes
Wong Kwai Huen, Albert	Former Independent Non-executive Director	Male	71	2016-5-31	2022-6-1					16.67	No
Lin Boqiang	Former Independent Non-executive Director	Male	65	2020-5-28	2022-8-23					26.67	Yes
Zhao Bi	Former Employee Representative Supervisor	Male	41	2019-7-30	2022-8-12					62.72	No
Total	/	/	/	/	/	/	/	/	/	1,330.65	/

Notes: 1. The total remuneration of the above directors, supervisors and senior management was the remuneration for holding their respective positions before tax received from the Company during the reporting period.

2. Details of the changes are set out in "Changes of Directors, Supervisors and Senior Management" of "Directors, Supervisors, Senior Management and Employees" of the annual report.

BOARD OF DIRECTORS:

Zhao Shunqiang

Mr. Zhao Shunqiang, Chinese, born in 1968, Chairman, Executive Director and CEO of COSL, senior engineer, graduated from China University of Petroleum (East China) with bachelor degree of drilling engineering in 1990 and was granted EMBA of CEIBS in 2008. From July 1990 to November 2001, Mr. Zhao successively served as drilling foreman, staff member of operating department and senior team leader of China Offshore Oil Northern Drilling Company; from November 2001 to October 2002, he successively served as Vice President of China Offshore Oil International Engineering Company and manager of Bohai No. 9 Rig of China Offshore Oil Northern Drilling Company; from October 2002 to August 2004, he served as Vice General Manager of Tianjin Branch of COSL; from August 2004 to November 2004, he served as Director of Drilling Technology Institute (Tanggu) of COSL IPM Division; from November 2004 to December 2005, he served as General Manager of Tianjin Branch of COSL; from December 2005 to April 2012, he served as General Manager of the Production Optimization Division of COSL, while he also served as the Dean of Production Optimization Research Institute from January 2011 to April 2012; from April 2012 to March 2018, he served as the Vice General Manager of CNOOC International Limited; from March 2018 to August 2020, he served as President of CNOOC Uganda Limited; from August 2020 to April 2021, he has served as President of COSL. Since October 2020, he has served as an Executive Director of COSL. He has been served as Chairman and CEO of COSL since April 2021. Mr. Zhao has over 30 years of experience in the oil and natural gas industry.

Xiong Min

Mr. Xiong Min, Chinese, born in 1976, Executive Director, Deputy Party Secretary and Chairman of Labour Union of COSL, is a senior engineer. Mr. Xiong graduated from University of Petroleum in 1996 with major in oil engineering and obtained a Bachelor's degree of engineering, and then obtained a Master degree from the University of Science and Technology Beijing with major in vehicle engineering (mining machinery). From July 1996 to January 1998, he was a junior engineer at Huanxiling Oil Production Plant in Liaohe Oilfield. From January 1998 to October 2001, he served as a junior engineer at Research Institute of Drilling and Production Technology of Liaohe Oilfield. From October 2001 to March 2004, he studied for Master's degree in University of Science and Technology Beijing with major in vehicle engineering (mining machinery). From March 2004 to April 2005, he served as Sales Engineer at Lincom Pty Ltd. From April 2005 to April 2007, he was the project manager of Tanggu Base, Cementing Center, COSL Well Tech Division. From April 2007 to February 2012, he served as Technology Supervisor and Manager of Cementing Operation Company, Tanggu Base, COSL Oilfield Chemicals Division. From February 2012 to November 2014, he was Vice Manager and Manager of Indonesia Base of COSL Oilfield Chemicals Division. From November 2014 to August 2016, he was Manager of Indonesia Operation Company of COSL Oilfield Chemicals Division. From August 2016 to September 2017, he served as Vice General Manager of COSL Oilfield Chemicals Division. From September 2017 to August 2021, he served as General Manager of Malaysian joint venture of COSL. From January 2019 to August 2021, he concurrently served as General Manager of COSL Drilling Pan Pacific (Malaysia) Company (CDPPM). From December 2020 to July 2022, he served as Vice President of COSL. He also concurrently served as General Legal Counsel of COSL from July 2021 to November 2022. He concurrently served as Chief Compliance Officer of COSL from May 2022 to November 2022 and served as Deputy Party Secretary of COSL since July 2022. He has served as an Executive Director and the Chairman of Labour Union of COSL since December 2022.

Chiu Lai Kuen, Susanna

Ms. Chiu Lai Kuen, Susanna, China (Hong Kong) by nationality, born in 1960, an Independent Non-executive Director of COSL, MH, JP., graduated from the University of Sheffield (United Kingdom) with First-Class Honours in Economics, and obtained an EMBA degree in business administration from the Chinese University of Hong Kong. Ms. Chiu is a Hong Kong certified public accountant, a Chinese certified public accountant, a qualified Chartered Accountant from England and a Certified Information System Auditor. She is a current member of the Chinese People's Political Consultative Conference (CPPCC) of Shanghai, an expert on government accounting standards at the Ministry of Finance and an executive member of the Guangdong Women's Federation. In respect of her professional career, Ms. Chiu was the former president of the Hong Kong Institute of Certified Public Accountant and the former president of the Information Systems Audit and Control Association (China Hong Kong Chapter). Ms. Chiu is devoted to social affairs and held a number of public service positions, including the council treasurer of the Education University of Hong Kong, and a member of the Women's Commission and the Equal Opportunities Commission and the Energy Advisory Committee. Ms. Chiu was awarded the Medal of Honor, the "Justice of Peace" and the "Justice of Peace NT" by the Hong Kong Government. She also obtained various awards including the Greater Bay Area Outstanding Women Entrepreneur Award for 2021, the Outstanding Women Professionals Award by the Hong Kong Women Professionals & Entrepreneurs Association, the "Distinguished Alumni" Award from the University of Sheffield (United Kingdom) and the "Outstanding Business Woman" by Hong Kong Commercial Daily, etc. Ms. Chiu currently serves as an executive director and the chief financial officer of Bonjour Holdings Limited. From 2006 to 2019, Ms. Chiu successively served as Senior Vice President, Eastern China Chief Representative and Consultant under the Fung Group. From 2000 to 2005, she served as the Chief Operating Officer of DVN (Holdings) Limited (currently known as Frontier Services Group Limited, stock code: 0500). Ms. Chiu also served as an independent non-executive director of Huijing Holdings Company Limited (stock code: 9968), Huali University Group Limited (stock code: 1756), which are listed on the Hong Kong Stock Exchange, Songz Automobile Air Conditioning Co., Ltd. (stock code: 002454), an A-share listed company on Shenzhen Stock Exchange and Nanyang Commercial Bank Limited. She has been an Independent Non-executive Director of COSL since June 2021.

Kwok Lam Kwong, Larry

Mr. Kwok Lam Kwong, Larry, China (Hong Kong) by nationality, born in 1955, an Independent Non-executive Director of COSL, SBS, BBS, JP, graduated from the University of Sydney, Australia with double bachelor's degrees in economics and laws respectively as well as a master's degree in laws. He also obtained the Advanced Management Program diploma from the Harvard Business School. Mr. Kwok is currently qualified to practise as a solicitor in Hong Kong and a partner of Kwok Yih & Chan. He is also admitted as a solicitor in Australia, the United Kingdom and Singapore. In addition, he is qualified as a Chartered Accountant in the United Kingdom and an Accredited Accountant in Australia and Hong Kong. Mr. Kwok has worked in international law firms in the United States, the United Kingdom and Australia, and served as the managing partner of Greater China for a total of 15 years. Mr. Kwok served as the managing partner of King & Wood Mallesons (Asia Strategy & Markets) from 2012 to 2014. Since 2014, Mr. Kwok has served as a partner of Kwok Yih & Chan. Since December 1994, Mr. Kwok has been an independent non-executive director (re-designated as a non-executive director in 2005) of First Shanghai Investments Limited and has served as an independent non-executive director of Shenwan Hongyuan (H.K.) Limited since March 1995. Mr. Kwok has been an independent non-executive director of Starlite Holdings Limited and Café de Coral Holdings Limited since July 2004. Since February 2018, he has served as an independent non-executive director of AAC Technologies Holdings Inc. Mr. Kwok is also an independent non-executive director of CMB Wing Lung Bank Limited, a private company in Hong Kong. Mr. Kwok has served regularly on Government boards and committees and is currently the vice chairman of Heep Hong Society, a non-profit organization in Hong Kong. He is also the chairman of the Appeal Tribunal Panel, Buildings Ordinance (Chapter 123) and an arbitrator of the Shenzhen Court of International Arbitration. He has been an Independent Non-executive Director of the Company since June 2022.

Yao Xin

Mr. Yao Xin, Chinese, born in 1979, an Independent Non-executive Director of COSL. Mr. Yao successively obtained a bachelor's degree in engineering from Tsinghua University and a doctorate degree in economics from Xiamen University. He joined the School of Economics of Xiamen University as an assistant professor after obtaining his PhD in 2010 and was promoted to associate professor in 2012. He was selected into Outstanding Young Scientific Research Talent Cultivation Program in Fujian Colleges and Universities in 2013, awarded as Fujian Province Youth Top-Notch Talent in 2014, became a doctoral tutor in 2015, and promoted to professor in 2017. He was a visiting scholar at Industrial Engineering and Logistics Management Department of the Hong Kong University of Science and Technology during the period from 2014 to 2016. He has served as the director of China Centre for Energy Economics Research at Xiamen University since 2022. Mr. Yao has been devoted to the research in fields such as energy and environmental economy, green finance and sustainable supply chain for many years, and has undertaken a number of relevant national important research projects. The research results are influential and have won multiple awards above provincial and ministerial level. He is awarded the Most Cited Chinese Researchers in applied economics by Elsevier in 2021. He has been an Independent Non-executive Director of the Company since August 2022.

Wu Wenlai

Mr. Wu Wenlai, Chinese, born in 1962, is a Non-executive Director of COSL, a professor-level senior engineer graduating from Changchun Institute of Geology with a major in geological and mineral surveys in the Geology Department in September 1984. He received his Doctorate of Science in solid geophysics from the Institute of Geology and Geophysics, Chinese Academy of Sciences in July 2008. From September 1984 to July 1988, he served as an assistant engineer in Shanxi Institute of Metallurgical Geology. From July 1988 to June 1992, he served as a geologist and deputy director in the second exploration division of Bohai Oil Research Institute. From June 1992 to October 1999, he successively served as a deputy director and director of the geological laboratory, a chief of the scientific research and production management department, and a deputy chief geologist in the Bohai Oil Research Institute. From October 1999 to September 2009, he successively served as the dean, deputy director, deputy secretary to the Communist Party Committee, secretary to the Disciplinary Committee, and chairman of the Labor Union in the Bohai Oil Research Institute of CNOOC Research Center, as well as a deputy director in the Beijing Research Center of CNOOC China Limited. From September 2009 to December 2011, he successively served as a director of the ideological and political work department and the news center, and a director of the news office, as well as a president in Offshore Oil Press of China National Offshore Oil Corporation. From December 2011 to March 2013, he served as a director of the ideological and political work department (news office) of China National Offshore Oil Corporation and a president in Offshore Oil Press. From March 2013 to February 2018, he served as a general manager and a secretary to the Communist Party Committee in China United Coalbed Methane Corporation Limited, and a general manager of the Unconventional Oil and Gas Branch of CNOOC (China) Co., Ltd.. From February 2018 to January 2021, he served as a chairman and a secretary to the Communist Party Committee in CNOOC Gas and Power Group Co., Limited. Since January 2021, he has been engaged in special work. He has been a Non-executive Director of COSL since December 2021.

Liu Zongzhao

Mr. Liu Zongzhao, Chinese, born in 1965, is a Non-executive Director of COSL, a professor-level senior engineer graduated from Southwest Petroleum Institute with a major in Oil Production Engineering in the Oil and Gas Field Development Department in July 1989. He obtained a master's degree in Petroleum and Natural Gas Engineering from the School of Petroleum and Natural Gas Engineering, University of Petroleum in July 2003. From July 1989 to September 1997, Mr. Liu successively served as an intern operator, the director and then the head of the Research Institute of the Oil Exploration Company of CNOOC Bohai Corporation. From September 1997 to April 2001, he successively served as the deputy director and the director of the Oil Production Technology Research Institute of CNOOC Bohai Corporation. From April 2001 to January 2005, he successively served as the deputy manager, general manager and secretary to party branch of the Oil Production Engineering Technical Service Company of CNOOC Bohai Corporation. From January 2005 to July 2008, he served as the general manager of the Oil Production Technology Service Branch of CNOOC Base Group Ltd. From July 2008 to November 2012, he served as the general manager of the Oil Production Technology Service Branch of CNOOC Energy Technology & Services Limited. From November 2012 to March 2013, he served as the assistant to the general manager of CNOOC Energy Technology & Services Limited and the general manager of the Oil Production Technology Service Branch. From March 2013 to March 2021, he successively served as the deputy general manager of China United Coalbed Methane Corporation Limited and the deputy general manager of the Unconventional Oil and Gas Branch of CNOOC (China) Co., Ltd. Since March 2021, Mr. Liu has been a full-time director of CNOOC. He has been a Non-executive Director of COSL since December 2021.

SUPERVISORY COMMITTEE

Peng Wen

Mr. Peng Wen, Chinese, born in 1969, is the Chairman of the Supervisory Committee of COSL, a senior accountant. He graduated from the Economics Department of Xiangtan Mining Institute in July 1991, majoring in accounting, studied by correspondence in China University of Mining and Technology with a Bachelor of Management in Accounting from September 2000 to July 2003, and studied part-time in China University of Mining and Technology from February 2004 to January 2008 and obtained an undergraduate degree in Law. From July 1991 to April 1999, Mr. Peng served successively as cashier, accountant of financial division of the geological exploration team, accountant of financial department of special construction basic engineering head company, financial accounting of social insurance coordinating office and vice section chief and chief staff member of financial fund department in DaTun Coal Electricity Company. From April 1999 to April 2006, he successively served as chief of the finance department of Kongzhuang Mine, chief accountant and general legal counsel of Construction and Installation Engineering Company of DaTun Coal Electricity (Group) Co., Ltd. From April 2006 to September 2007, he served as vice General Manager and chief accountant of Hunan Ordnance Industry Group Co., Ltd. From September 2007 to April 2013, he served as chief accountant of China United Coalbed Methane Corporation Ltd. From April 2013 to February 2016, he served as chief accountant of China United Coalbed Methane Corporation Ltd. and chief accountant of the Unconventional Oil and Gas Branch of CNOOC (China) Co., Ltd. From February 2016 to February 2017, he served as the vice president of CNOOC International Financial Leasing Limited. From February 2017 to June 2020, he served as the vice president of CNOOC International Financial Leasing Limited, and the vice General Manager of CNOOC Investment Holding Co., Ltd. From June 2020 to September 2022, he has been a full-time supervisor of CNOOC. Since September 2022, he has been a full-time director of CNOOC. Since October 2020, Mr. Peng has served as the Chairman of the Supervisory Committee of COSL.

Cheng Xinsheng

Mr. Cheng Xinsheng, Chinese, born in 1963, is an Independent Supervisor of COSL. Mr. Cheng obtained his Bachelor degree and Master degree from the School of Economics of Nankai University and Doctoral degree from Tianjin University of Finance and Economics in Management, and he holds the independent director qualification of China. Mr. Cheng was a lecturer and an associate professor of the Accounting Department of Nankai University in March 1993, and passed the PRC Certified Public Accountants examination in 1994 and became a member of The Chinese Institute of Certified Public Accountants. He promoted to the Head of the Audit Teaching and Research Offices of the Accounting Department of Nankai University from September 1995 to August 2001. He engaged in the research on corporate governance when he was stationing in the post-doctoral business administration offices of Nankai University from September 2001. Since September 2002, Mr. Cheng has been acting as the Head of Corporate Governance Evaluation Study Offices of the Research Institute of China Corporate Governance of Nankai University. Since December 2005, Mr. Cheng has been acting as a professor and a doctoral supervisor of Nankai University. Mr. Cheng was an Independent Non-executive Director of Offshore Oil Engineering Co, Ltd., a company listed on the Shanghai Stock Exchange. Mr. Cheng is an Independent Supervisor of COSL since June 2015.

Ma Xiuen

Mr. Ma Xiuen, Chinese, born in 1975, is the employee representative supervisor of COSL and an administrative officer. He graduated from University of Petroleum (East China) with a Bachelor degree in July 1999. From July 1999 to December 2001, he served as an assistant engineer of well testing in CNOOC Technical Services Limited. He served as the external affairs and the deputy secretary of the youth league committee of Tianjin Branch of China Oilfield Services Limited from December 2001 to December 2002. He also served as the Secretary and Secretary of Class II (officer in charge) of the Company from December 2002 to April 2006. He served as the manager of the business services department, manager of the administration department, a general manager assistant and manager of the administration department of Tianjin Branch of the Company from April 2006 to May 2008. From May 2008 to July 2010, he served as the manager of the human resources department of Production Optimization Division of the Company. He served as the Director of Party and Mass Affairs Office and Deputy Director of the Party Committee Office of the administration department of the Company from July 2010 to February 2017. He also served as Secretary to the Disciplinary Committee, Deputy Secretary to the Party Committee and the Deputy General Manager of the Shipping Division of the Company from February 2017 to June 2021. He has been the manager of human resources department of the Company since June 2021. He has served as the employee representative supervisor of COSL since August 2022.

SENIOR MANAGEMENT:

Zhao Shunqiang

Mr. Zhao Shunqiang, please refer to the section of Board of Directors.

Xu Yingbo

Mr. Xu Yingbo, Chinese, born in 1973, is the Team Leader of the Discipline Inspection Commission, senior engineer. He graduated from the University of Petroleum (East China) with major in production process automation and obtained a Bachelor's degree in engineering, and later was granted a master's degree in project management from the China University of Petroleum (Beijing). From July 1997 to November 2002, Mr. Xu served as instrument engineer, instrument chief operator and equipment supervisor at the Western South China Sea Petroleum Production Company. From November 2002 to January 2007, he served as equipment supervisor and FPSO director assistant of CNOOC Energy Development Oil Production Service Company. From January 2007 to July 2007, he served as FPSO Director of CNOOC Shenzhen Branch Xijiang 23-1 Oilfield. From July 2007 to April 2009, he served as Director of CNOOC Shenzhen Branch Xijiang 23-1 Oilfield. From April 2009 to December 2010, he served as Production Director of CNOOC Shenzhen Branch Self-operated Oilfield; From December 2010 to January 2013, he served as Production Manager of CNOOC Shenzhen Branch Xijiang Oilfield Operation Area. From January 2013 to December 2014, he served as the Vice Manager of CNOOC Shenzhen Branch Xijiang Oilfield Operation Area. From December 2014 to October 2016, he served as Vice General Manager, Deputy Party Secretary and Secretary of the Disciplinary Committee of CNOOC Shenzhen Branch Xijiang Oilfield Operation Area. From October 2016 to September 2017, he served as Manager of the Supervision Department of the Eastern South China Sea Petroleum Administration. From September 2017 to December 2018, he served as Deputy Leader of the Discipline Inspection Group of the Party Team in CNOOC Shenzhen branch. From December 2018 to February 2020, he served as Deputy Leader of the Party Inspection Team of CNOOC. Since February 2020, Mr. Xu has served as Team Leader of the Discipline Inspection Commission.

Lu Tao

Mr. Lu Tao, Chinese, born in 1969, Vice President of COSL, is a professor-level senior engineer. He graduated from the University of Electronic Science and Technology of China with major in electromagnetic field and microwave technology and a master's degree in 1993, and later was granted a doctorate degree in measurement technology and instrumentation from the University of Electronic Science and Technology of China. From April 1993 to July 1993, Mr. Lu served as research engineer at the Research Institute of China National Offshore Oil Logging Corporation, and from July 1993 to October 1993, he had an intern at Xinjiang Branch of China National Offshore Oil Logging Corporation. From October 1993 to January 2002, he served as research engineer at the Research Institute of China National Offshore Oil Logging Corporation. From January 2002 to September 2002, he served as Vice Chief Engineer of the Technology Development Center of COSL Logging Division. From September 2002 to December 2004, he served as the Vice Chief Engineer of the Electromechanical Equipment Institute of COSL R&D Center. From December 2004 to April 2006, he served as the Director of the Electromechanical Equipment Institute of the COSL Technical Center. From April 2006 to January 2010, he served as the Chief Engineer of the COSL Technical Center. From January 2010 to May 2010, he served as Deputy Director of COSL Technical Center. From June 2010 to June 2016, he served as Vice General Manager of COSL Well Tech Division. From June 2016 to November 2017, he served as General Manager of COSL Well Tech Division. From November 2017 to August 2019, he served as General Manager and Deputy Party Secretary of COSL Well Tech Division. From August 2019 to November 2019, he served as General Manager and Deputy Party Secretary (responsible for the work of the Party Committee) of COSL Well Tech Division. From November 2019 to August 2020, he served as General Manager and Party Secretary of COSL Well Tech Division. He concurrently served as General Legal Counsel of COSL from July 2020 to July 2021. Since July 2020, he has served as Vice President of COSL.

Xiong Min

Mr. Xiong Min, please refer to the section of Board of Directors.

Yang Dexing

Mr. Yang Dexing, Chinese, born in 1980, Vice President and Safety Director of COSL, is senior engineer. Mr. Yang graduated from University of Petroleum (East China) with a major in oil engineering and obtained a Bachelor's degree in 2003, and then obtained a Master's degree from China University of Petroleum (East China) with major in oil and gas field development, and a Master's degree from University of Stavanger in Norway with major in industrial economics. From July 2003 to November 2007, he served as learning foreman and drilling team leader of Bohai 10 in Tanggu Base of COSL Drilling Division. From November 2007 to September 2008, he served as Senior Team Leader of HYSY931 at Tanggu Operation Company of COSL Drilling Division. From September 2008 to July 2012, he served as the Senior Team Leader and Drilling Rig Manager of Bohai 4 at Tanggu Operation Company of COSL Drilling Division. From July 2012 to August 2013, he was an off-production training student for the Master of industrial economics at University of Stavanger in Norway. From August 2012 to July 2014, he obtained a Master's degree in industrial economics from University of Stavanger. From August 2013 to May 2014, he served as COSLGIFT Drilling Rig Manager at Tanggu Operation Company of COSL Drilling Division. From May 2014 to October 2014, he was Manager of Human Resources Department of COSL Drilling Division. From October 2014 to February 2016, he was Manager of Operational Safety and Environmental Protection Department of COSL Drilling Division. From February 2016 to April 2017, he served as President of PT. COSL DRILLING INDO of COSL Drilling Division. From April 2017 to June 2018, he served as Vice Manager of the Quality and Safety Department of COSL. From June 2018 to August 2021, he was Manager of the Quality and Safety Department of COSL. Since December 2020, he served as Vice President of COSL. Since February 2021, he concurrently served as Safety Director of COSL.

Chong Xiaojie

Ms. Chong Xiaojie, Chinese, born in 1977, CFO of COSL, is a senior accountant with master's degree. Ms. Chong graduated from the Shaanxi Institute of Economic Management Specialty with a major in international trade in 1998, and then obtained a master's degree from Central University of Finance and Economics with major in business administration in 2009. From July 1998 to December 2001, she served as a cashier and asset manager of Planning and Finance Department of Logging Corporation. From December 2001 to December 2002, she served as a budget manager of Finance Department of International Engineering Company of China Oilfield Services Limited. From December 2002 to August 2007, she successively held positions in COSL Finance Department for the external financial report and disclosure and overseas financial planning. From August 2007 to August 2010, she served as Manager of Planning and Finance Department of COSL Technology Center. From August 2010 to February 2012, she served as Manager of Planning and Finance Department of COSL Well Tech Division. From February 2012 to January 2016, she served as Planning Budget Manager of COSL Planning and Treasury Department. From January 2016 to December 2017, she served as Deputy General Manager of COSL Oilfield Chemicals Division. From December 2017 to July 2019, she served as Manager of COSL Planning and Treasury Department. From July 2019 to August 2021, she was Manager of COSL Planning and Finance Department. Since May 2021, she has served as CFO of COSL.

Shang Jie

Mr. Shang Jie, Chinese, born in 1977, Chief Engineer of COSL, is a professor-level senior engineer. He graduated from Harbin Institute of Technology with major in Automobile Design and Manufacturing and obtained a Bachelor's degree in July 1999. He graduated from Tsinghua University with major in Instrument Science and Technology and obtained a Master's degree in July 2002 and graduated from Tsinghua University with major in Instrument Science and Technology and obtained a Doctoral degree in July 2005, respectively. From July 2005 to August 2006, he worked as an editor of the Chinese government's official website in Xinhuanet Co., Ltd. From January 2007 to November 2007, he worked as an intern in the Electromechanical Equipment Research Institute of the COSL Technical Center. From November 2007 to December 2009, he served as an electronic engineer in the Electromechanical Equipment Research Institute of COSL Technical Center. From December 2009 to December 2012, he served as a senior electronic engineer of Electromechanical Equipment Research Institute of COSL Technical Center. From December 2012 to June 2014, he served as a senior electronic engineer and director of the Oriented Engineering Research Institute of Oilfield Technology Institute of COSL Well Tech Division. From June 2014 to November 2014, he served as a superior electronic engineer and director of the Oriented Engineering Research Institute of Oilfield Technology Institute of COSL Well Tech Division. From November 2014 to July 2016, he served as the vice dean of Oilfield Technology Institute of COSL Well Tech Division. From July 2016 to August 2020, he served as the dean of Oilfield Technology Institute of COSL Well Tech Division. From August 2020 to January 2021, he served as the dean of Oilfield Technology Institute of COSL Well Tech Division (presided over the daily management of COSL Well Tech Division). He has been served as Party Secretary and General Manager of COSL Well Tech Division since January 2021. He has been the Chief Engineer of COSL since December 2022.

Sun Weizhou

Mr. Sun Weizhou, Chinese, born in 1971, Vice President, General Legal Counsel and Chief Compliance Officer, Secretary to the Board (Joint Company Secretary) of COSL, is an engineer. From 1988 to 2014, he successively studied in petroleum geology at North China Petroleum Technical School, English at Tianjin Foreign Studies University, business administration in the School of Continuing Education at Yangtze University and business administration at China Europe International Business School. He obtained a bachelor's degree and a master's degree in business administration in 2008 and 2014, respectively. Mr. Sun obtained a registered qualification certificate of PRC enterprise legal adviser in October 2008. Mr. Sun joined Bohai Petroleum Geological Services Company in July 1992, responsible for geological logging. From June 1995 to December 2001, he successively served as a mud logger, data engineer and unit manager of China France Bohai Geoservices. From December 2001 to December 2002, he served as a foreign affairs officer of China Oilfield Services Limited. From December 2002 to April 2006, he successively served as the secretary of the Administration Department, the person in charge of the business unit of Kazakhstan Office, the supervisor of the business unit of Malaysia Office of COSL. From April 2006 to December 2007, he served as the contract and risk control manager of the Legal Affairs Department of COSL. From December 2007 to November 2009, he served as the manager of contract review/legal affairs of joint venture of the Legal Affairs Department of COSL. From November 2009 to November 2011, he served as the general manager of the Legal Affairs Department of COSL. From November 2011 to January 2015, he served as the general manager of the Strategic Studies and Development Department of COSL. From January 2015 to December 2021, he served as the deputy general manager of COSL-Expro Testing Services (Tianjin) Company Ltd. From December 2021 to January 2023, he served as the Party Secretary and the general manager of the Production Optimization Division of COSL. He has been the Secretary of the Board (Joint Company Secretary) of COSL since January 2022. He has been the General Legal Counsel and Chief Compliance Officer of COSL since November 2022 and has been the Vice President of COSL since December 2022.

JOINT COMPANY SECRETARIES:

Mr. Sun Weizhou is one of the Joint Company Secretaries of the Company and was appointed in January 2022. For the biography of Mr. Sun Weizhou, please refer to the section headed “SENIOR MANAGEMENT”.

Ms. Ng Sau Mei was appointed as one of the Joint Company Secretaries of the Company in January 2022. Ms. Ng is a director of the Listing Services Department of TMF Hong Kong Limited, an international corporate services provider. Ms. Ng has over 20 years of professional experience in the company secretarial industry. Ms. Ng holds a bachelor’s degree in laws from City University of Hong Kong and a master’s degree in laws from University of London in the United Kingdom, and is a fellow member of The Hong Kong Chartered Governance Institute (formerly known as The Hong Kong Institute of Chartered Secretaries) and The Chartered Governance Institute in the United Kingdom.

The directors, supervisors and senior management resigned during 2022 and as at the date of preparation of this report:

Mr. Yu Feng, Chinese, born in 1964, former Executive Director and Vice President of COSL, resigned as Vice President of COSL on 24 June 2022 and resigned as Executive Director of COSL on 22 December 2022.

Mr. Liu Xiaogang, Chinese, born in 1978, former Vice President of COSL, resigned as Vice President of COSL on 1 July 2022.

Mr. Wong Kwai Huen, Albert, China (Hong Kong) by nationality, born in 1951, former Independent Non-executive Director of COSL, resigned as Independent Non-executive Director of COSL on 1 June 2022.

Mr. Lin Boqiang, USA, born in 1957, former Independent Non-executive Director of COSL, resigned as Independent Non-executive Director of COSL on 23 August 2022.

Mr. Zhao Bi, Chinese, born in 1981, former Employee Representative Supervisor of COSL, resigned as Employee Representative Supervisor of COSL on 12 August 2022.

2. SHARE OPTION INCENTIVES FOR DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT DURING THE REPORTING PERIOD

☐ Applicable √ Not applicable

3. POSITIONS OF CURRENT AND RESIGNED DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT DURING THE REPORTING PERIOD

(1) Positions in the Shareholder Company

√ Applicable ☐ Not applicable

Name	Name of shareholder company	Position in the shareholder company	Starting date of term of office	Expiry date of term of office
Wu Wenlai	CNOOC	Full-time director	January 2021	Until now
Liu Zongzhao	CNOOC	Full-time director	March 2021	Until now
Peng Wen	CNOOC	Full-time director	September 2022	Until now
Yu Feng	CNOOC	Full-time director	June 2022	Until now

Please refer to the biography for details of positions in the shareholder company.

(2) Positions in Other Units

√ Applicable ☐ Not applicable

Name	Name of other company	Position in other units	Starting date of term of office	Expiry date of term of office
Chiu Lai Kuen, Susanna	Bonjour Holdings Limited	Executive Director	December 2020	Until now
	Nanyang Commercial Bank Limited	Independent Non-executive Director	2018	Until now
Kwok Lam Kwong, Larry	Kwok Yih & Chan	Partner	2014	Until now
Yao Xin	Xiamen University	Professor	August 2017	Until now
Peng Wen	Offshore Oil Engineering Co., Ltd.	Chairman of Supervisory Committee	December 2020	Until now
Cheng Xinsheng	Nankai University	Professor	December 2005	Until now
Wong Kwai Huen, Albert	Huen Wong & Co.	Principal	June 2021	Until now
Lin Boqiang	Xiamen University	Professor	June 2006	Until now
	CNOOC Limited	Independent Non-executive Director	September 2022	Until now
Liu Xiaogang	Hainan Branch of CNOOC China Limited	General Manager	July 2022	Until now

Please refer to the biography for details of positions in other units.

4. REMUNERATION OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

√ Applicable ☐ Not applicable

Decision-making procedures of remuneration of Directors, Supervisors and Senior Management	Remunerations of Directors and Supervisors are subject to shareholders' approval at the general meetings, while the remuneration of Senior Management shall be determined by the Board.
Reference for determining remuneration of Directors, Supervisors and Senior Management	Depends mainly on the duties and responsibilities of Directors, Supervisors and Senior Management and the results of the Company.
Actual remuneration payable to Directors, Supervisors and Senior Management	RMB13,306.5 thousand
Total actual remuneration of Directors, Supervisors and Senior Management at the end of the reporting period	RMB13,306.5 thousand

5. CHANGES OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

1. Changes of Directors

(1) On 1 June 2022, the Company convened the 2021 AGM, at which Mr. Wong Kwai Huen, Albert, an Independent Non-executive Director, retired due to the expiration of six years. The AGM considered and approved the appointment of Mr. Kwok Lam Kwong, Larry as an Independent Non-executive Director of the Company to fill in the vacancy to be left open by the resignation of Mr. Wong Kwai Huen, Albert for a term of three year starting from the date when the resolution was passed at the AGM and Mr. Kwok also serves as Chairman of the Remuneration and Assessment Committee, a member of the Audit Committee and a member of the Nomination Committee.

(2) On 14 July 2022, the Board received the written resignation from Mr. Lin Boqiang, an Independent Non-executive Director of the Company, who resigned from the positions of Independent Non-executive Director of the Company, the chairman of the Nomination Committee, a member of Audit Committee and a member of Remuneration and Assessment Committee due to work reasons, with effect from the date when a new Independent Non-executive Director is appointed by the shareholders of the Company at the EGM. On 23 August 2022, the Company convened the 2022 First EGM, at which considered and approved the appointment of Mr. Yao Xin as an Independent Non-executive Director of the Company for a term of three years, starting from the date when the resolution was passed at the 2022 First EGM. Mr. Yao also serves as the chairman of the Nomination Committee, a member of the Audit Committee and a member of the Remuneration and Assessment Committee.

(3) On 27 October 2022, the Board received the written resignation from Mr. Yu Feng, an Executive Director of the Company, who resigned from the position of Executive Director of the Company due to the adjustment of his work arrangement. His resignation took effect when a new Executive Director was elected by the shareholders of the Company at the EGM. On 22 December 2022, the Company convened the 2022 Second EGM, at which considered and approved the appointment of Mr. Xiong Min as an Executive Director of the Company for a term of three years, starting from the date when the resolution was passed at the 2022 Second EGM.

2. Changes of Supervisors

(1) On 12 August 2022, Mr. Zhao Bi resigned as a supervisor of the Company with effect from 12 August 2022 due to expiry of his term of a supervisor.

(2) On 12 August 2022, the Company convened the employee representatives meeting, at which Mr. Ma Xiuen was elected as the employee representative supervisor of the Company. Such election is effective from 12 August 2022 with a term of three years.

3. Changes of Senior Management

(1) On 21 January 2022, the Company convened the 2022 first meeting of the Board, and appointed Mr. Sun Weizhou as Secretary to the Board and Joint Company Secretary of the Company and Ms. Ng Sau Mei as the Joint Company Secretary, with effect from 21 January 2022. For details, please refer to the announcement of the Company dated 21 January 2022.

(2) On 9 May 2022, Mr. Xiong Min was appointed as the Chief Compliance Officer of the Company with effect from 9 May 2022.

(3) On 24 June 2022, Mr. Yu Feng resigned as the Vice President of the Company due to the adjustment of his work arrangement, with effect from 24 June 2022.

(4) On 1 July 2022, Mr. Liu Xiaogang resigned as the Vice President of the Company due to the adjustment of his work arrangement, with effect from 1 July 2022.

(5) On 27 July 2022, Mr. Xiong Min resigned as the Vice President of the Company due to the adjustment of his work arrangement, with effect from 27 July 2022.

(6) On 7 November 2022, Mr. Xiong Min resigned as the General Legal Counsel and Chief Compliance Officer of the Company due to the adjustment of his work arrangement, with effect from 7 November 2022. Mr. Sun Weizhou was appointed as the General Legal Counsel and Chief Compliance Officer of the Company with effect from 7 November 2022.

(7) On 21 December 2022, the Board appointed Mr. Shang Jie as the Chief Engineer of the Company with effect from 21 December 2022.

(8) On 21 December 2022, the Board appointed Mr. Sun Weizhou as the Vice President of the Company with effect from 21 December 2022.

6. EMPLOYEES OF THE COMPANY AND ITS MAJOR SUBSIDIARIES AT THE END OF THE REPORTING PERIOD

(1) Employees

Number of in-service employees of the Company	13,197
Number of in-service employees of the major subsidiaries	1,954
Total number of in-service employees	15,151
The number of retired employees whose expenses are borne by the Company and its major subsidiaries	82

Composition of professions

Type of profession	Number of employees in the profession
Management sequence(M)	1,181
Technology sequence(T)	808
Business sequence(B)	9,220
Skilled Workers sequence(W)	3,942
Total	15,151

Educational level

Type of educational level	Number of Employees (Headcount)
Master degree or above	1,169
Bachelor degree	7,280
College graduates	3,202
Below college graduates	3,500
Total	15,151

Note: In 2022, the Company optimized and adjusted original three post sequences (i.e. operation management, professional skill and skill operation) to four sequences (i.e. management sequence, technology sequence, business sequence and skilled workers sequence) based on functional characteristics and differences in responsibilities and tasks of each past.

(2) Remuneration Policy

The Company strictly complies with domestic and business operating countries' laws and policies on labour remuneration and established competitive remuneration system and performance appraisal system. The Company pays the basic social insurance and housing fund for employees, implements enterprise annuity system, supplementary medical insurance system, and provides personal accident insurance and corporate supplementary pension insurance and a number of welfare including health check, paid vacation, helping and assisting those with difficulties or major diseases and etc., taking efforts to address the worries of employees, so as to provide reliable and multi-layered protection for employees.

During the reporting period, the Company do not have share option scheme.

(3) Training Programme

Training programme and development of the Company are closely related to the development strategy of the Company. Based on the Company's development plan, the Company established a dimensional demand-oriented training model with layers and differentiation, which enhanced the training capability, highly promoted the internal teaching team's construction, gradually improved the training system, fulfilled the requirement of the Company's business development and built our core competitiveness.

Report of the Board of Directors

The Board of Directors (the "Board") present the report and the audited financial statements of the Company and its subsidiaries (hereinafter collectively referred to as "the Group") for the year ended 31 December 2022.

THE BOARD'S WORK

The particulars of work of the Board and the special committees of the Company during the year are set out in the section headed "Corporate Governance Report" of this annual report.

PRINCIPAL ACTIVITIES

The Company is principally engaged in the provision of oilfield services including drilling services, well services, marine support services and geophysical acquisition and surveying services. The principal activities of the subsidiaries comprise provision of drilling, well workover and logging services. There were no significant changes in the nature of the Group's principal activities during the year. The review of the operating result of the Company during the reporting period and the future development outlook of the Company is set out in the section headed "Management Discussion and Analysis" of this annual report.

RISKS AND MEASURES

1. Major Potential Risks

During the production and operation process, the Company will take various measures to try to avoid various operational risks, but it is not possible to completely exclude the occurrence of the following types of risks and uncertain factors in the actual production and operation process.

(1) Market competition risk. Affected by high global inflation, tense financial environment and disruptions to economic activities by geopolitical conflict, the global economy recovery will face greater pressure in 2023. Meanwhile, oil and gas companies accelerate the energy transition and seek to achieve the promised emission reduction targets, and may focus more on portfolio transformation and decarbonization during the new investment cycle. In the short-term, energy service market is still facing greater competitive and operating pressure, so the Company is also exposed to market competition risks.

(2) Health, safety and environmental risk. As an offshore oilfield service company, the Company's production environment is mainly in the ocean. As the domestic laws and regulations is becoming increasingly improved and the environmental protection supervision of overseas local government agencies is becoming increasingly strict, the Company's investment in environmental protection is expected to increase accordingly. At the same time, the inherent high-risk attributes of the offshore oil industry are superimposed by possible natural disasters, harsh marine weather and other factors, thus health, safety and environmental protection incidents are more likely to occur. The Company expects that the workload will remain at a high level. New business, new technology, new equipment and application of new craft will bring challenges to safe production. Overseas operations were facing more complicated social, political, ethnic, natural environment, terrorist threats and other severe situations, which has certain impact on the Company's overseas project operation.

(3) Domestic and overseas business expansion and operational risks. The Company operates in different countries and regions and has more exchanges with the local governments, enterprises and personnel. Due to the influence of various geopolitical, economic, religious, humanistic, policy changes, technological change, information network security, legal and regulatory environment, and other factors in the countries where it operates, including political instability, unstable fiscal and tax policies, barriers to entry, contract breach, tax disputes, legal disputes, trade secret dispute or disclosure, technical equipment and information capacity cannot meet the competition demand, etc., may increase the risk of the Company's domestic and overseas business development and operations.

(4) Exchange rate risk. Due to the Company's holding of US dollar debt and conducting business in multiple countries and regions overseas, which involves income and expenditure activities in multiple currencies, fluctuations in the exchange rate of Renminbi against relevant foreign currencies and exchange between currencies will affect the Company's operating costs. The Company controls the exchange rate risk by conducting regular research and analysis of exchange rate trends and reducing exchange risk exposure.

(5) Risk of impairment of assets. According to the requirements of accounting standards, the Company should perform impairment testing on the assets that may have indicators of impairment on the balance sheet date. With the operating uncertainty brought by oil prices and industry fluctuations, the Company may experience various impairment risks including impairment of fixed assets caused by the recoverable amount of some fixed assets is less than its book value.

(6) Accounts receivable recovery risk. When expanding overseas markets, the Company may face some high-risk customers as well as small and medium-sized customers cooperated for the first time. If the customers do not abide by the contract to pay on time, or if the small and medium-sized customers are unable to pay all operation payment due to poor management, it will lead to overdue accounts receivable or bad debt, increase the Company's collection costs and even cause capital losses, which will adversely affect operating cash flow.

2. Risk Response Measures

With the Board as the core, the Company has established a comprehensive risk management organization system. The sound comprehensive risk management organization structure provides an important organizational guarantee for risk prevention and control. The Company has formulated comprehensive risk management systems including "Comprehensive Risk Management Measures" and "Management of Reports and Response on Major Business Risk Events", which improved the reporting mechanism and working system of reporting and response that connects departments at all levels with horizontal coordination. The Company continued to improve the risk management mechanism of "rating, stratification, classification", held risk meetings and conducted trainings through various channels and forms to play the role of case warning, firmly established all employees' risk management awareness, actively carried out special investigation and control of major risks, improved risk identification and early warning capabilities, and enhanced coordinated management and control of risk, established and improved a risk emergency preparedness and response system, continuously improved emergency disposal capabilities, constructed the risk coordinated management and control network and continued to improve our ability and level of prevention and resolution of major risks.

RESULTS AND DIVIDENDS

The Group's performance prepared under Hong Kong Financial Reporting Standards ("HKFRSs") for the year ended 31 December 2022 and the statement of financial position of the Group at that date are set out in the financial statements of this annual report on pages 155 to 160.

The Board recommended a dividend of RMB0.16 per share (tax inclusive) for the year to shareholders who are entitled to dividends. This recommendation has been incorporated as proposed dividends within the retained profits section of the consolidated statement of financial position. The total dividend amounts to approximately RMB763,454,720 (tax inclusive). Further details of this accounting treatment are set out in the Note 15 to financial statements in this annual report.

SUBSIDIARIES

Particulars of the Company's subsidiaries as at 31 December 2022 are set out in Note 22 to the financial statements in this annual report.

GEARING RATIO

The details of gearing ratio of the Group as at 31 December 2022 are set out in Note 48 to the financial statements in this annual report.

SHARE CAPITAL

During the reporting period, there was no changes in the share capital of the Company.

PRE-EMPTIVE RIGHTS

There are no provisions for pre-emptive rights under the Articles of Association of the Company or the Company Law of the PRC which would oblige the Company to offer new shares in proportion to the existing shareholders.

PURCHASE, SALE OR REDEMPTION OF LISTING SECURITIES OF THE COMPANY

Neither the Company nor its subsidiaries purchased, redeemed or sold any of its listing securities during this year.

BONDS

On 18 May 2007, the Company issued 15-year corporate bonds, with a nominal value of RMB100 per bond, amounting to RMB1,500,000,000. The bonds carry interest at an effective interest rate of 4.48% per annum, and the maturity date is 14 May 2022. As of 31 December 2022, the Company has repaid all principal and interest. For details, please refer to Note 38 to the financial statements.

On 6 September 2012, COSL Finance (BVI) Limited, a subsidiary of the Company, issued 10-year senior unsecured bonds, with a US$1,000,000,000 principal amount. The maturity date is 6 September 2022. The effective interest rate of the senior unsecured bonds is 3.38% per annum. As of 31 December 2022, the Company has repaid all principal and interest. For details of the issuance, please refer to the announcements of the Company dated 24 August 2012, 31 August 2012 and 5 September 2012, and Note 38 to the financial statements.

In 2016, the Company successfully issued corporate bonds with an aggregate amount of RMB10 billion by two tranches. The first tranche of the bonds was issued on 26 May 2016, with the actual issue size of RMB5 billion. The first tranche of the corporate bonds comprises two types: corporate bonds type I has a term of 3 years and has an actual issue size of RMB2 billion with final coupon rate of 3.14%; corporate bonds type II has a term of 10 years and has an actual issue size of RMB3 billion with final coupon rate of 4.10%.

The second tranche of the bonds was issued on 21 October 2016, with the actual issue size of RMB5 billion. The second tranche of the corporate bonds comprises two types: corporate bonds type I has an issue size of RMB2.1 billion and has a term of 5 years with an option for the issuer to adjust the coupon rate and the investors' option to sell back at the end of the third year and final coupon rate of 3.08%; corporate bonds type II has an issue size of RMB2.9 billion and has a term of 7 years with an option for the issuer to adjust the coupon rate and the investors' option to sell back at the end of the fifth year and final coupon rate of 3.35%.

The above two tranches of bonds were traded on the SSE on 29 June 2016 and 3 November 2016 respectively. The proceeds from the issuance of bonds would be used according to the agreed use in the prospectus and are proposed to fully repay the Company's debts and replenish working capital after deducting the issuance expenses. As at 31 December 2022, accumulated expenditures of two tranches of bonds amounted to RMB9,985,425,000.00. The proceeds were utilized in full.

In 2019, the principal and interest of type I of the first tranche of the corporate bonds have been fully paid. On 24 October 2019, part of type I of second tranche of the corporate bonds was sold back, with a resale amount of RMB1.9981 billion. The resale amount was released on 24 October 2019. On 25 October 2021, the principal and interest of type I of the second tranche of the corporate bonds have been fully paid, and such bonds have been fully repaid.

On 25 August 2021, the Company disclosed the Coupon Rate Adjustment Announcement, and exercised the coupon rate option to adjust the coupon rate of type II of second tranche of the corporate bonds to 2.90%. On 25 October 2021, part of type II of second tranche of the corporate bonds was sold back, with a resale amount of approximately RMB2.171 billion. The resale amount was released on 25 October 2021.

The details of bonds issued by the Company during the reporting period are set out in Note 38 to the financial statements in this annual report.

PLACING OF H SHARES

On 15 January 2014, the Company completed the placing of an aggregate of 276,272,000 H shares, representing approximately 5.79% of the total number of issued shares (as enlarged by the allotment and issue of the placing shares) and approximately 15.25% of the total number of H shares in issue (as enlarged by the allotment and issue of the placing shares). After the placing, the total number of issued shares of the Company increased from 4,495,320,000 shares to 4,771,592,000 shares. The total number of issued H shares increased from 1,534,852,000 H shares to 1,811,124,000 H shares. For further details, please refer to the Company's announcements dated 7 January 2014 and 15 January 2014, respectively. The net proceeds from the placing amounted to approximately HK$5,819,392,302.91 (after deduction of the commissions and estimated expense) and used for general corporate purposes. The proceeds from the placing shares would be used according to the agreed use in the placing agreement. Approximately US$401,435.34 was not yet utilized as at 31 December 2022. The above balance of raised funds will continue to be used for general corporate purposes and in a timely manner.

SUMMARY OF FINANCIAL INFORMATION

A summary of the published results, and the assets and liabilities of the Group for the last five years in accordance with HKFRSs is set out below:

Unit: RMB'000

	2022	2021	2020	2019	2018
Revenue, net of sales surtaxes	35,610,128	29,168,479	28,925,315	31,075,838	21,886,628
Other income	342,172	557,411	438,024	352,136	284,090
Depreciation of property, plant and equipment and amortization of intangible assets and Multiclient library	(4,685,573)	(4,503,772)	(4,335,730)	(4,372,838)	(4,262,776)
Depreciation of right-of-use assets	(367,115)	(363,007)	(480,380)	(589,264)	–
Employee compensation costs	(7,414,041)	(6,030,276)	(4,897,099)	(5,807,994)	(5,026,085)
Repair and maintenance costs	(594,825)	(479,014)	(435,878)	(691,334)	(523,764)
Consumption of supplies, materials, fuel, services and others	(9,080,592)	(6,572,746)	(6,290,190)	(6,933,202)	(4,954,252)
Subcontracting expenses	(8,164,558)	(5,643,164)	(4,768,526)	(5,943,860)	(3,578,949)
Lease expenses	(1,666,872)	(1,318,482)	(1,224,265)	(1,287,702)	(1,126,191)
Other operating expenses	(1,175,708)	(1,246,982)	(1,333,746)	(1,348,745)	(1,516,863)
Impairment of property, plant and equipment	(30,198)	(2,011,343)	(1,447,834)	(241,485)	(122,962)
Impairment losses under expected credit loss model, net of reversal	(49,435)	(15,758)	(7,778)	(316,324)	(415,364)
Total operating expenses	(33,228,917)	(28,184,544)	(25,221,426)	(27,532,748)	(21,527,206)
Profit from operations	2,723,383	1,541,346	4,141,913	3,895,226	643,512
Exchange gains/(losses), net	565,845	(165,389)	(403,839)	111,871	358,647
Finance costs	(777,108)	(831,257)	(924,485)	(1,118,797)	(1,082,501)
Interest income	123,432	123,932	69,644	67,522	107,552
Investment income	16,307	44,550	116,175	218,214	164,730
Gains/(losses) arising from financial assets at fair value through profit or loss	65,263	62,740	26,572	(38,829)	49,441
Share of profits of an associate and joint ventures, net of tax	287,558	372,996	364,917	320,452	184,288
Other gains and losses, net	(23,201)	(59,368)	(12,157)	16,515	280,660
Profit before tax	2,981,479	1,089,550	3,378,740	3,472,174	706,329
Income tax expense	(488,360)	(767,500)	(660,424)	(944,159)	(617,657)
Profit for the year	2,493,119	322,050	2,718,316	2,528,015	88,672

ASSETS AND LIABILITIES

Unit: RMB'000

	2022	2021	2020	2019	2018
Total assets	77,184,090	73,311,708	75,942,308	76,101,838	74,687,004
Total liabilities	37,286,006	35,095,378	37,253,500	39,191,561	40,009,598

PROPERTY, PLANT AND EQUIPMENT

The details of the changes in property, plant and equipment of the Group are set out in Note 17 to the financial statements in this annual report.

DIVIDEND

The Company's dividend policy is: Dividend shall be determined by the Board of Directors of the Company according to overall financial condition of the Company, which includes but not limited to factors such as revenue and profits, capital requirements and surplus and expectations for the Company. In ensuring the normal operation of the Company and continuous development, and as long as the profit for the relevant year and accumulated retained profits remain positive, the annual dividend level shall not be lower than 20% of the total net profit for the year. The specific payout amount shall be finally approved by the shareholders in a general meeting.

The formulation and implementation of the Company's dividend policy are in compliance with the Articles of Association of the Company and the resolution of the General Meeting. The distribution criterion and proportion are accurate and clear; and the related decision-making procedures and mechanism are thorough and complied. During the process of formulating and implementing the dividend policy, independent directors have fully performed and expressed their opinions and have fully taken into consideration the minority shareholders' opinions and requirements; and the legal rights of minority shareholders have been fully protected.

In 2022, based on a net profit of RMB2,493,118,894 achieved by the Group (of which net profit attributable to the owners of the Company amounted to RMB2,352,625,065) plus the retained profits of RMB18,621,883,306 as at the beginning of the year and deducted the dividend of RMB715,738,800 declared and paid in 2022, the total retained profit would be RMB20,258,769,571 at the end of 2022. The Group recommended a dividend of RMB0.16 per share (tax inclusive) on the basis that the total share capital was 4,771,592,000 shares as at 31 December 2022. The total dividend amounts to RMB763,454,720 and the balance of retained profits of RMB19,495,314,851 will be carried forward to the following years.

According to the Company Law and the Articles of Association of the Company, the accumulated statutory common reserve fund of the Company for 2021 has reached more than 50% of the registered capital of the Company, and no further provision of such fund is required for this year.

Such distribution proposal will be proposed at the 2022 AGM for consideration and approval.

During the year ended 31 December 2022, the Company was not aware of any shareholder had waived or agreed to waive any dividend arrangement.

Dividend of the Group in the recent three years:

Unit: RMB'000

Dividend year	Cash dividend per 10 shares (yuan) (tax inclusive)	Cash dividend (tax inclusive)	Net profit attributable to equity holders of the Company in the consolidated financial statements	Percentage of net profit attributable to equity holders of the Company in the consolidated financial statements (%)
2022	1.60	763,455	2,352,625	32.45
2021	1.50	715,739	313,176	228.54
2020	1.70	811,171	2,703,187	30.01

CHARITABLE DONATIONS

During the year, the Group made charitable donations totaling RMB1.7076 million.

MAJOR CUSTOMERS AND SUPPLIERS

During the reporting period, sales to the Group's five largest customers accounted for approximately 85.8% of the total sales for the year and sales to the largest customer included therein accounted for approximately 81.2%. Purchases from the Group's five largest suppliers accounted for approximately 22.5% of the total purchases for the year; and purchases from the Group's largest supplier accounted for approximately 9.6% of the total purchases for the year.

The Group has provided certain oilfield services to and obtained certain services from the companies with the same ultimate holding company of the Company, details of which are set out in the section headed "Connected Transactions" below. Save as aforesaid, none of the directors of the Company or any of their associates, and to the best knowledge of the directors, none of the shareholders who own more than 5% of the Company's issued share capital, had any beneficial interest in the Group's five largest customers and five largest suppliers.

RELATIONSHIP WITH EMPLOYEES

As employees are the cornerstone of development, the Group adheres to the "people-oriented" principle in human resources management, regularly reviews employee remuneration policies, strives to address employee concerns by providing multiple benefits to them, and provide employees with reliable, multi-level protection.

RELATIONSHIP WITH CUSTOMERS AND SUPPLIERS

The Group strives to establish and maintain long-term strong relationships with customers, and to improve their satisfaction by fully understanding and satisfying their needs. On the supplier side, the Group's objective is to maintain a mutually beneficial partnership with all suppliers.

ASSETS MEASURED AT FAIR VALUE

The majority of the assets of the Group were measured at historical cost, except for financial assets at fair value through profit or loss and bank acceptances included in notes receivable which have been measured at fair value. Internal control and review procedures have been taken by our audit department on works of finance department. For details of fair value changes in aforesaid financial assets of the Group during the reporting period, please see Note 47 to the financial statements in this annual report.

OUTLOOK OF THE COMPANY

For details, please refer to the Business Outlook of the Company set out in the "Management Discussion and Analysis".

CHARGE ON ASSETS

As at 31 December 2022, the Group had no material charges on its assets.

CONTINGENT LIABILITIES

As at 31 December 2022, the Group had no any significant contingent liabilities.

DIRECTORS AND SUPERVISORS

The Directors and Supervisors of the Company during the reporting period and as at the date of this annual report were:

Executive Directors	Independent Non-executive Directors	Non-executive Directors	Supervisors
Zhao Shunqiang *(Chairman)*	Chiu Lai Kuen, Susanna	Wu Wenlai	Peng Wen *(Chairman of the Supervisory Committee)*
Xiong Min	Kwok Lam Kwong, Larry	Liu Zongzhao	Cheng Xinsheng *(Independent Supervisor)*
	Yao Xin		Ma Xiuen *(Employee Representative Supervisor)*

Pursuant to the Articles of Association of the Company, upon election, all directors and supervisors shall serve the office for three years, and may be re-elected upon the expiry of such tenure.

Pursuant to the Rule 3.13 of the Listing Rules of The Stock Exchange of Hong Kong Limited, the Company had received annual confirmations of independence from Chiu Lai Kuen, Susanna, Kwok Lam Kwong, Larry and Yao Xin and as at the date of this report, still considers them to be independent.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT BIOGRAPHIES

Biographical details of the Directors, Supervisors and the Senior Management of the Company are set out in the section headed "Directors, Supervisors, Senior Management and Employees" of the annual report.

DIRECTOR AND SUPERVISORS' SERVICE CONTRACTS

The newly appointed directors and supervisors are required to enter into a service contract with the Company for a term of three years, renewable upon re-election. Details of the director and supervisors' remunerations for the year 2022 are set out in the section headed "Directors, Supervisors, Senior Management and Employees" of the annual report.

The Company has not entered into service contract which the Company cannot terminate within one year or is required to pay compensation for termination (other than statutory compensation) with Directors, Supervisors who intend to be re-elected at the forthcoming annual general meeting.

PERMITTED INDEMNITY PROVISIONS

The Company renewed Directors' liability insurance in 2022 with an insured amount RMB200 million. These liability insurances included permitted indemnity provisions. Save as disclosed above, the Company did not make any permitted indemnity provisions for the year ended 31 December 2022 and had no valid permitted indemnity provisions at the time of approval of the Report of the Board of Directors.

DIRECTORS' REMUNERATION

The remuneration of Directors and Supervisors are proposed by the Board of Directors of the Company with reference to the duties and responsibilities of the Directors and are subject to shareholder' approval at general meetings after consideration of the Remuneration and Assessment Committee's recommendation, and the performance and results of the Group.

The Remuneration and Assessment Committee had no objection to the remuneration of Directors, Supervisors and Senior Management disclosed in the annual report.

DIRECTORS' AND SUPERVISORS' INTEREST IN CONTRACTS

During the Reporting Period, the Directors, Supervisors and related entities did not have a direct or indirect significant interest in any important contract, transaction or arrangement that is material to the business of the Group.

SIGNIFICANT CONTRACTS

The Company has entered into several agreements with CNOOC Limited, a related company, and other companies within China National Offshore Oil Corporation ("CNOOC"), other than CNOOC Limited ("CNOOC Group"), for the provision of oilfield services by the Company to CNOOC Limited and CNOOC Group, and for the provision of various services by CNOOC Group to the Company. Further details of the transactions undertaken in connection with these contracts during the year are included in Note 46 to the financial statements in this annual report.

Save as disclosed, no significant contract in relation to the Group's business to which the Company or any of its subsidiaries was a party, and in which the Directors of the Company had a material interest, whether directly or indirectly, subsisted at year end or at any time during the year.

DIRECTORS', SUPERVISORS' AND SENIOR MANAGEMENT'S INTERESTS AND SHORT POSITIONS IN SHARES

As at 31 December 2022, none of the Directors, Supervisors and Chief Executives of the Company have interests and short positions in the shares, underlying shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO")) as recorded in the register required to be kept under Section 352 of the SFO, or as otherwise notified to the Company and The Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code").

DIRECTORS', SUPERVISORS', SENIOR MANAGEMENT'S AND OTHER PERSONS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

At no time during the year were rights to acquire benefits by means of acquisition of shares in or debentures of the Company granted to any directors, supervisors, senior management and other persons or their respective spouses or minor children, or were any such rights exercised by them; nor was the Company, its holding company, or any of its subsidiaries or fellow subsidiaries a party to any arrangement to enable the directors, supervisors, senior management and other persons to acquire such rights in any other body corporate.

INTERESTS AND SHORT POSITIONS OF SUBSTANTIAL SHAREHOLDERS IN SHARES

So far as is known to any Director or Senior Management of the Company, as at 31 December 2022, the following persons have interests or short positions in the H Shares or underlying H Shares which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO or which were recorded in the register required to be kept under Section 336 of the SFO or were otherwise notified to the Company and The Hong Kong Stock Exchange:

Name of shareholder	Nature of interests	Number of equity shares (Share)	Approximate percentage of the interests (H Shares) in COSL (%)
BlackRock, Inc.	Interest in controlled corporation	179,623,470(L) 7,366,000(S)	9.92(L) 0.41(S)
Allianz SE	Interest in controlled corporation	107,430,000(L)	5.93(L)

Notes:

(a) "L" means long position
(b) "S" means short position
(c) "P" means lending pool

Save as disclosed above, the Directors are not aware of any other person who had an interest in the shares of the Company which shall be registered pursuant to Section 336 of the SFO.

CONNECTED TRANSACTIONS

Under the Listing Rules, connected transactions of the Company must be fully disclosed and are subject to the independent shareholders' approval, if the transaction is over a certain amount. The Company has applied to The Hong Kong Stock Exchange at the time of listing on The Hong Kong Stock Exchange for a waiver from strict compliance with the reporting, announcement and independent shareholders' approval requirements in respect of the continuing connected transactions of the Company and The Hong Kong Stock Exchange has granted a waiver in respect of such requirements for a period of three years, subject to the approval from independent shareholders with compliance to the requirements of the Listing Rules in respect of the continuing connected transactions of the Company upon expiry. During the year ended 31 December 2022, the Group had the following continuing connected transactions:

1. Master Services Framework Agreement

The Company entered into the Master Services Framework Agreement with CNOOC on 30 October 2019. Pursuant to the Master Services Framework Agreement, the Group has agreed to continue to provide the Oilfield Services to the CNOOC and its subsidiaries, and the CNOOC and its subsidiaries have agreed to continue to provide the Machinery Leasing, Equipment, Material and Utilities Services as well as the Property Services to the Group. The resolution in respect of the continuing connected transactions for the three years from 1 January 2020 to 31 December 2022 was approved by the independent shareholders of the Company at the extraordinary general meeting held on 18 December 2019. For details, please refer to the announcements of the Company dated 30 October 2019 and 18 December 2019.

CNOOC holds 50.53% of the shares of the Company, and is the controlling shareholder of the Company. As such, CNOOC is a connected person of the Company under the Hong Kong Listing Rules.

Pursuant to the Master Services Framework Agreement, the annual caps of the continuing connected transactions of the Group under the Master Services Framework Agreement for the years ended 31 December 2020, 2021 and 2022 are as follows:

	For the year ended 31 December 2020 (RMB million)	For the year ended 31 December 2021 (RMB million)	**For the year ended 31 December 2022 (RMB million)**
Annual caps			
– Provision by the Group of oilfield services to CNOOC and its subsidiaries	40,044	52,058	**67,675**
– Provision by CNOOC and its subsidiaries of machinery leasing, equipment, material and utilities services to the Group	5,397	7,169	**9,534**
– Provision by CNOOC and its subsidiaries of property services to the Group	600	797	**1,059**

In 2022, the Company renewed connected transactions expired at the end of 2022.

The Company has entered into a new Master Services Framework Agreement with CNOOC on 27 October 2022. Pursuant to the new Master Services Framework Agreement, the Group has agreed to continue to provide the Oilfield Services to CNOOC and its subsidiaries, and CNOOC and its subsidiaries has agreed to continue to provide the Machinery Leasing, Kinetic Energy, Material and Other Ancillary Services as well as the Property Services to the Group.

The resolution in respect of the continuing connected transactions for the three years from 1 January 2023 to 31 December 2025 was approved by the independent shareholders of the Company at the extraordinary general meeting held on 22 December 2022. For details, please refer to the announcements of the Company dated 27 October 2022 and 22 December 2022.

2. Deposit and Settlement Agreement

The Company entered into a new Deposit and Settlement Agreement with CNOOC Finance Corporation Limited (hereinafter referred to as "CNOOC Finance") on 8 May 2020. Pursuant to the Deposit and Settlement Agreement, CNOOC Finance has agreed to continue to provide the Cash Depository Services as well as the Settlement Services to the Group. The Deposit and Settlement Agreement takes effect from 8 May 2020 for a term of three years and will expire on 7 May 2023.

CNOOC Finance is a non-bank financial institution which is wholly-owned by CNOOC and its associates. As such, CNOOC Finance is a connected person of the Company under the Hong Kong Listing Rules.

Pursuant to the Deposit and Settlement Agreement, the maximum daily deposit amount of the continuing connected transactions of the Group under the Deposit and Settlement Agreement for the period from 8 May 2020 to 7 May 2023 all are RMB1,200 million respectively.

During the year ended 31 December 2022, actual transaction amounts of the above-mentioned connected transactions of the Group are as follows:

a. Included in revenue

		2022 RMB'000	2021 RMB'000
i	**CNOOC Limited Group**		
	– Provision of drilling services	6,821,765	6,138,833
	– Provision of well services	16,984,054	13,661,807
	– Provision of marine support services	3,183,428	2,864,094
	– Provision of geophysical acquisition and surveying services	1,873,748	1,859,869
		28,862,995	24,524,603
ii	**CNOOC Group**		
	– Provision of drilling services	236,677	80,938
	– Provision of well services	373,181	344,295
	– Provision of marine support services	68,650	92,075
	– Provision of geophysical acquisition and surveying services	60,448	72,123
		738,956	589,431
iii	**Associates invested by CNOOC**		
	– Provision of drilling services	48,677	591
	– Provision of well services	61,546	8,255
	– Provision of marine support services	4,475	341
	– Provision of geophysical acquisition and surveying services	1,161	–
		115,859	9,187

During the current year, the revenue arising from operating leases from CNOOC Limited Group was RMB91,250,000 (2021: RMB64,293,000).

b. Included in operating expenses

	2022 RMB'000	2021 RMB'000
i CNOOC Limited Group		
Materials, utilities and other ancillary services	58,837	9,213
Transportation services	687	1,272
Leasing of equipment	1,767	84
Management services	581	–
Labour services	10,371	–
	72,243	10,569
Property services	38,264	10,019
	110,507	20,588
ii CNOOC Group		
Materials, utilities and other ancillary services	1,404,024	1,387,720
Leasing of equipment	142,440	189,118
Transportation services	54,134	69,850
Management services	144,513	29,540
Repair and maintenance services	4,844	6,540
Labour services	111,386	–
	1,861,341	1,682,768
Property services	160,291	145,011
	2,021,632	1,827,779
iii Associates invested by CNOOC		
Materials, utilities and other ancillary services	89,963	35,541
Leasing of equipment	80	–
Repair and maintenance services	350	236
Management services	2,450	–
Labour services	5,606	–
	98,449	35,777

c. Included in interest income

	2022 RMB'000	2021 RMB'000
CNOOC Finance (a subsidiary of CNOOC) Interest income	14,491	21,911

Deposits in CNOOC Finance carry interests at the applicable interest rate which is determined with reference to the prevailing bank rates published by the People's Bank of China.

d. Dividend from joint ventures

	2022 RMB'000	2021 RMB'000
Dividend from joint ventures	**98,945**	244,875

e. Included in finance costs

During the current year, the finance costs on the loan from related parties were US$12,076,000 (2021: US$2,134,000), which is equivalent to approximately RMB81,221,000 (2021: RMB13,772,000).

During the current year, the finance costs on the lease liabilities due to a related party were RMB14,773,000 (2021: RMB15,419,000).

f. Deposits

	31 December 2022 RMB'000	31 December 2021 RMB'000
Deposits placed with CNOOC Finance	**1,199,983**	1,198,957

g. During the current year, the other income from CNOOC Limited Group in respect of compensation for equipment dropping into wells when rendering services was RMB9,395,000 (2021: RMB1,706,000).

h. Right-of-use assets

The Group entered into certain lease agreements with related parties and recognized right-of-use assets and lease liabilities on lease commencement. The following is addition of right-of-use assets from related parties:

	2022 RMB'000	2021 RMB'000
CNOOC Group	**10,050**	483,588

The independent shareholders of the Company have approved the connected transactions set out in items a and b above on 18 December 2019. For items c to h above, the transactions were exempted from the independent shareholders' approval requirement of the Listing Rules and were approved by the Independent Directors.

The Independent Non-executive Directors have reviewed the above transactions and have confirmed that:

1. the transactions were entered into between the Group and the connected persons or their respective associates (where applicable) in the ordinary and usual course of business of the Group;

2. the transactions were entered into on normal commercial terms or better;

3. the transactions were executed in accordance with the relevant agreements governing such transactions, on terms that are fair and reasonable and in the interests of the shareholders as a whole; and

4. the above transactions were entered into with the annual aggregate value within the relevant annual cap of each category.

The auditors of the Company have reviewed the above connected transactions and issued a letter to the Company indicating that:

1. the above transactions were approved by the Board of the Company;

2. in case the above transactions involved provision of goods or services, they were conducted in accordance with the pricing policy of the Company;

3. the above transactions were conducted in accordance with the terms of the agreement governing such transactions; and

4. the above transactions (where applicable) did not exceed the relevant annual cap previously disclosed in the announcements of the Company.

The Directors confirmed that the Company has complied with the requirements under Chapter 14A of the Listing Rules in respect of the above connected transactions. Save as disclosed above, other related party transactions disclosed in Note 46 to the financial statements in this annual report do not constitute the connected transaction or continuing connected transaction under Chapter 14A of the Listing Rules.

There are relatively more connected transactions between the Company and its connected persons such as CNOOC Limited. It is due to the franchise system and development history of exploitation of offshore petroleum resources in cooperation with other enterprises which fulfill the requirements of the industrial policies in China. These connected transactions become the main source for generating business revenues of the Company and are important to the development of the Company. The actual operation situation of the Company since it has been listed is able to prove that connected transactions are indispensable to reaching the development of the Company. The contract prices of connected transactions of the Company are determined according to the public tendering or negotiation, which complies with the principles of fairness, openness and justness and is beneficial to both the development of the Company's main business and the maximization of the shareholders' interests. It is proved that conducting connected transactions is necessary and will be continued.

SUFFICIENCY OF PUBLIC FLOAT

Based on information that is publicly available to the Company and to the best knowledge of the Directors, at least 25% of the Company's total issued share capital was held by the public at the date of this report.

AUDIT COMMITTEE

Before the field work of the auditors for annual audit, the Audit Committee of the Group reviewed the audit plan and other relevant information submitted by the auditors in accordance with the requirements under the relevant notices from CSRC, and approved the annual audit plan and work schedule formulated by the Company and auditors for annual audit and confirmed effective communications with the auditors for annual audit before and after such field work and suggested related opinion with regard to related work.

The final results of the Group have been reviewed by the Audit Committee of the Board which consists of three independent non-executive directors. The committee has reviewed the accounting principles and practices adopted by the Company, and has also discussed audit, risk management, internal control and financial reporting matters including the review of audited 2022 annual results with the management.

BUSINESS PLAN

In 2022, the capital expenditure of the Company amounted to RMB4.08 billion, representing 98% of the annual budget for the year, and the overall target had been basically achieved. On 31 January 2023, the World Economic Outlook report issued by the International Monetary Fund (IMF) predicted that the world economic growth rate would be 2.9% in 2023. In terms of oil supply and demand, the demand recovery will be stronger, while the supply will be relatively stable and the balance between supply and demand will remain tense. The U.S. Energy Information Administration (EIA) predicts that the demand for offshore drilling rigs will increase in 2023, and the demand for jack-up drilling rigs will increase by 9%, with the Middle East, China, India and Mexico as the main demand markets, and the demand for floater drilling rigs will increase by 5%, with Brazil, Gulf of Mexico, West Africa and the North Sea as the main demand markets.

In 2023, it is estimated that the Company's capital expenditure will be approximately RMB9.3 billion, which will be mainly used for equipment investment, transformation and renovation, technical equipment transformation and renovation and investment in technology research and development, as well as base construction. The Company's internal capital liquidity will be stable and the external financing channels will be sufficient, which can ensure the safety of cash flow.

The Company will continue to implement the five development strategies, strengthen the basic, forward-looking and leading technology research, build core competitive advantages, establish a new integrated model to create value for customers, add value to the Company's business and resist industry risks, and fully release the value-added space of various businesses and the whole chain business. The Company will adhere to the green and low-carbon development, promote industrial transformation and upgrading, stick to the road of high-quality development, actively safeguard the interests of investors, and ensure the stable dividend return for shareholders.

CORPORATE GOVERNANCE CODE AND MODEL CODE FOR SECURITIES TRANSACTIONS

For the reporting period, the Company's compliance with the Corporate Governance Code is set out in the "Corporate Governance Report" section of this annual report. Upon specific enquiry to each and every director by the Company, the Board of Directors confirms that all members of the Board, for the reporting period, have complied with the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 of the Listing Rules.

AUDITORS

These financial statements have been audited by Ernst & Young, who will retire at the forthcoming AGM at which a resolution for re-appointing Ernst & Young Hua Ming LLP and Ernst & Young as the domestic and international auditors of the Company will be proposed.

EXECUTION OF THE INSIDER MANAGEMENT SYSTEM

The Company continuously worked on the regular registration and management of insiders, and proactively organised trainings for insiders to enhance the awareness of confidentiality of insiders.

All Directors and Supervisors of the Company confirmed that they had not traded the Company's securities in violation of rules in the reporting period. Furthermore, pursuant to requirements of Regulatory Guidelines for Listed Companies No. 5 – Registration and Management Policies on Insiders of Listed Companies issued by the China Securities Regulatory Commission, the Company also conducted self-assessment on whether there have been share transactions by any insider of the Company other than directors and supervisors during the reporting period, and did not find any insider trading of the Company's securities in violation of rules.

ENVIRONMENTAL POLICIES AND PERFORMANCE

In 2022, the Company resolutely implemented the requirements proposed by our government in respect of comprehensively strengthening the protection of the ecological environment and firmly fighting the critical battle against pollution, upheld the basic national policy of saving resources and protecting the environment, and adhered to the green policy of "protecting the environment, saving energy and increasing efficiency and green development". In production and operation activities, the Company strictly abided by environmental protection requirements of laws, regulations, relevant standards and international conventions, and regularly evaluated the compliance with environmental rules and regulations, continued to improve the environmental protection system to ensure the Company's operation compliance.

COSL continued to improve its environmental protection management system, revised and improved its environmental protection management system from the full dimension of "water, gas, noise and slag"; built an environmental protection management module by relying on the COSL's QHSE management platform to promote the informatization construction of environmental protection management; carried out training regarding environmental protection management theory, skills and awareness to constantly enhance the awareness and skills of environmental protection; identified and evaluated environmental factors involved in the operation process, formulated corresponding management and control measures; carried out special inspections on environmental protection, the Company addressed 270 environmental hazards in total in 2022; classified, recycled and disposed various pollutants generated from production and operation with environmental protection equipment and facilities to meet the discharge standard, and entrusted qualified organizations to treat the prohibited pollutants after collection. For the risks in production and operation activities, the Company and all production and operation units formulated emergency plan for environmental emergencies and filed with relevant government authorities. They made emergency response plans in respect of potential emergencies such as oil leakage, and organized emergency response drills regularly to continuously enhance the Company's emergency response and employees' on-site handling ability. The Company persisted in promoting the integration of ecological civilization construction with the Company's production and operation and continued to implement green and low-carbon development, laying a solid foundation for the Company's high-quality development of ecological and environmental protection.

COMPLIANCE WITH RELEVANT LAWS AND REGULATIONS

The Company insists to govern the Company according to laws, strictly follows laws and regulations of the countries where it has operation, and implements industry standards, and provides qualified and highly effective professional services to clients in a sustainable way. Through implementation of systematic management, the Company practically complies with the safety production, environmental protection laws and regulations, strives for safety production, environment protection, clean production and energy saving, protects the safety and health of staff, and protect the environment from being harmed, continues to improve the quality, health, safety and environmental management level.

MANAGEMENT CONTRACTS

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

EQUITY-LINKED AGREEMENTS

As at 31 December 2022, the Company did not enter into any equity-linked agreement.

BUSINESS COMPETITION WITH CONTROLLING SHAREHOLDERS, DIRECTORS AND SUPERVISORS

There is no substantial competition between the Company and CNOOC (including CNOOC's subsidiaries), the controlling shareholder of the Company. On 27 September 2002, CNOOC and the Company entered into a Non-competition Agreement, pursuant to which CNOOC has undertaken that there is no competition between CNOOC and the Company, and CNOOC will take various measures to avoid new competition.

During the Reporting Period, none of the Directors, Supervisors of the Company and their associates directly or indirectly competed with the business of the Company or had an interest in a business that may constitute competition.

OTHER DISCLOSURE

An analysis of the Company's performance using key financial performance indicators is set out in the section headed "Management Discussion and Analysis" in this annual report; particulars of important events affecting the Company that have occurred since the end of the reporting period can be found in the section headed "Significant Events" in this annual report. In addition, discussions on the Company's environmental policies and performance and permitted indemnity provisions provided by the Company to its Directors are included in the sections headed "Environmental, Social and Governance (ESG) Report 2022" and "Corporate Governance Report" of the report. These discussions form part of the Report of the Board of Directors.

On behalf of the Board
Zhao Shunqiang
Chairman
23 March 2023

Supervisory Committee Report

In 2022, the Supervisory Committee of the Company has diligently performed its responsibilities in accordance with the requirements of the Company Law of the People's Republic of China (hereinafter referred to as the "Company Law"), the Articles of Association of China Oilfield Services Limited (hereinafter referred to as the "Articles of Association") and the Rules of Procedure for the Supervisory Committee, supervised and examined the procedures for decision making, the operating situation according to the law, financial reports disclosure and the construction and operation of the internal control system of the Company, and provided necessary protection for the legal benefits of the shareholders, the Company and the staff.

In 2022, six Supervisory Committee's meetings were convened. Members of the Supervisory Committee attended the general meetings, Board meetings and special Board Committee Meetings of the Company and the important management meetings of the Company. The Supervisory Committee kept abreast of the issues of the Company daily production and operating activities, and carried out the supervision and inspection on compliance and risk control from procedures to content to ensure more perfection. During the reporting period, the operation of the Supervisory Committee and its opinions on the Company's supervision and inspection are as follows:

I. CHANGES OF MEMBERS OF THE SUPERVISORY COMMITTEE DURING THE REPORTING PERIOD

Mr. Ma Xiuen has been elected as the employee representative supervisor of the Company at the employee representatives meeting held on 12 August 2022. The appointment is effective from 12 August 2022 with a term of three years. Mr. Zhao Bi has ceased to be the employee representative supervisor of the Supervisory Committee of the Company since 12 August 2022. During the reporting period, Mr. Peng Wen served as the chairman of the Supervisory Committee, Mr. Ma Xiuen served as the employee representative supervisor and Mr. Cheng Xinsheng served as the independent supervisor.

II. OPERATION OF THE SUPERVISORY COMMITTEE

1) Six Supervisory Committee's meetings were held on the same days after the conclusion of the Board meetings which the Supervisors had attended. The meetings mainly reviewed the compliance in respect of procedures for calling Board meetings and Board resolutions, considered and approved the resolution of the fixed assets impairment for the year 2021, the Supervisory Committee Report in the 2021 annual report of the Company, the resolution of the final dividend distribution plan of the Company for the year 2021 and the resolution of the special dividend distribution plan of the Company for the year 2021 and other resolutions and also expressed review opinion in relation to the regular report approved by the Board.

2) Members of the Supervisory Committee also attended meetings of the special committees under the Board of Directors and listened to the matters in respect of the financial reports, the operation of internal control system prepared by the management of the Company and the establishment and the assessment of Key Performance Indicators on the management, and listened to special reports in relation to the operation, major financial matters and the nomination of the candidates for Directors and Senior Management of the Company.

3) The Supervisory Committee had given its professional review advice in respect of the 2021 Annual Report, the first quarterly report for the year 2022, the 2022 Interim Report and the third quarterly report for the year 2022 in compliance with the regulatory requirements of A shares.

4) The Supervisory Committee reviewed the operation of internal control system and risk management by the Company and made certain recommendation for improvement.

5) All members of the Supervisory Committee attended all of the six Board meetings in 2022 of the Company. Supervisors Peng Wen, Cheng Xinsheng and Zhao Bi attended the 2021 AGM, the 2022 First A Share Class Meeting and the 2022 First H Share Class Meeting. Supervisors Peng Wen, Cheng Xinsheng and Ma Xiuen attended the 2022 First EGM and the 2022 Second EGM.

6) In December, the supervisors of the Company participated in the "Training on Corporate Governance and Refinance of Key and Minority of Listed Companies in Tianjin" organized by Tianjin Association for Public Companies.

III. INDEPENDENT OPINIONS OF THE SUPERVISORY COMMITTEE

(1) The Company's Operating Situation According to the Law

After supervising and examining the performance of duties by the Board of Directors and Senior Management of the Company, and the construction and operation of internal control system, the Supervisory Committee was of the opinion that the procedures for calling the General Meeting and Board meetings, agendas and the relevant resolutions made by the meetings during the reporting period were in compliance with relevant requirements of the laws, regulations and the Articles of Association. Directors and Senior Management of the Company have not been found violating any relevant laws, regulations or the Articles of Association when performing duties of the Company and have not been found behaving in such a way that would damage the interests of the Company and the shareholders.

(2) Financial Operation of the Company

The Supervisory Committee has supervised and examined the financial management system, the operation and major financial matters of the Company by participating in the Board meetings and the meetings of the Audit Committee under the Board of Directors and has reviewed relevant financial information of the Company. After such examination, the Supervisory Committee was of the opinion that the Company was in strict compliance with the financial laws and regulations and the financial system. The financial management system of the Company was healthy and effective, the accounting treatment are consistent while the financial statements were true and reliable. Based on the Hong Kong Standards on Auditing, Ernst & Young has audited the financial statements of the Company prepared in accordance with the Hong Kong Financial Reporting Standards. Based on the China Standards on Auditing, Ernst & Young Hua Ming LLP has audited the financial statements of the Company prepared in accordance with China's Accounting Standard for Business Enterprises. The auditor has issued standard unqualified audit reports on the above financial statements. The Supervisory Committee considered the financial statements were objective and fairly reflected the financial position and the results of operation of the Company.

(3) Related Party Transactions

During the reporting period, all the related party transactions entered between the Company and CNOOC and its affiliates had complied with all the relevant requirements of The Stock Exchange of Hong Kong Limited and the Shanghai Stock Exchange and those transactions were necessary for the production and operation of the Company and were at fair terms and in the interests of the Company and its shareholders as a whole.

(4) Management Situation and Internal Control of the Company

The Supervisory Committee is of the opinion that during the reporting period and under the effective management and control of the Board and the management, the Company has continuously improved its internal control systems, enhanced the risk management capability to ensured regulated and steady operation of the Company. The Supervisory Committee is of the view that the Assessment Report of Internal Control of the Company was comprehensive, objective and matched the actual situations of the Company.

(5) The Performance of Responsibilities of Directors and Senior Management

The Supervisory Committee was of the view that the Board of Directors of the Company, both collectively and individually, have earnestly performed their duties with integrity and diligence, and each Director has earnestly understood the operating situation of the Company and thoroughly discussed the Company's affairs before making decisions. With the complex environment of the energy service market continuing to escalate, the management of the Company has actively coped with and continued to optimize production and operation, conscientiously performed their duties according to their terms of reference and implemented the decisions of the Board in a scientific way.

(6) Execution of the Insiders' Information Management System

The Supervisory Committee is of the opinion that, during the reporting period, the Company formulated the Insider Registration and Management Methods, could perform the insiders' information management strictly in accordance with laws and regulations and relevant systems of the Company, and the Supervisory Committee did not recognize any insider trading which prejudice the interests of the Company and shareholders by Directors, Supervisors and Senior Management of the Company as well as the related insiders.

(7) External Guarantee

By attending the General Meetings, Board Meetings and special Board Committee Meetings, the Supervisory Committee is of the opinion that, during the reporting period, provision of guarantee by the Company to subsidiaries of the Company is in accordance with the requirements of laws and regulations and the Articles of Association, which has been under necessary approval procedure and the Company has disclosed related information to comply with the requirements. The accumulated and current provisions of external guarantee by the Company were true.

(8) Other Information

By participating in the annual assessment on the management of the Company, the Supervisory Committee is of the opinion that the annual assessment on the management is conducted by the Board of the Company in strict compliance with the Articles of Association and procedures approved at the general meetings and the Supervisory Committee has no disagreement over the result of the assessment.

IV. WORK PLAN OF THE SUPERVISORY COMMITTEE IN 2023

In 2023, the Supervisory Committee of the Company will continue to strictly abide by the relevant provisions of the Company Law, the Articles of Association and the Rules of Procedures for the Supervisory Committee. Adhering to the spirit of being highly responsible to all Shareholders and the employees of the Company, the Supervisory Committee will diligently perform its supervisory duties. We will continue to exercise effective supervision and review over production and operation and the decision-making procedure and content of major matters of the Company by attending General Meetings and Board meetings of the Company and participating in important meetings of the Company, so as to review various proposals of the Supervisory Committee. Continue to strengthen the effectiveness of supervision and inspection, regularly review and check the Company's financial information and status and internal control, keep attention and supervision on the performance of Directors and Senior Management of the Company, and ensure that the Company's operating activities are fully in compliance with laws and regulations. We will further enhance the professional skills and ability to perform duties of the Supervisors Committee by participating in professional training and the study of relevant laws and regulations, so as to better safeguard the legitimate rights and interests of the Company and Shareholders.

For and on behalf
of the Supervisory Committee
Peng Wen
Chairman of the Supervisory Committee
23 March 2023

Significant Events

(I) SIGNIFICANT RELATED PARTY TRANSACTIONS

Further details on related party transactions are given in Note 46 to the financial statements of this annual report.

(II) GUARANTEE

Unit: RMB'000

External guarantee provided by the Company (excluding guarantee to subsidiaries)

Guarantor	Relationship between the guarantor and the Company	Guaranteed party	Guaranteed amount	Date of the guarantee (date of execution of the agreement)	Starting date of the guarantee	Expiry date of the guarantee	Type of guarantee	Collateral (if any)	Whether the guarantee is performed or not	Whether the guarantee is overdue	Overdue amount of the guarantee	The situation of counter guarantee	Whether it is a guarantee provided to related parties	Associated relationship
COSL	Headquarter of the Company	Oceancare Corporation Sdn Bhd	6,784.45	2021-12-6	2021-12-6	2022-6-29	Joint liability guarantees	–	Yes	No	0	Nil	No	Other

Total amount of guarantee occurred during the reporting period (excluding guarantee to subsidiaries)	6,784.45
Total balance of guarantee as at the end of the reporting period (A) (excluding guarantee to subsidiaries)	0
Guarantee provided by the Company and its subsidiaries to its subsidiaries	
Total amount of guarantee occurred by the Company to its subsidiaries during the reporting period	36,948,015.46
Total balance of guarantee provided by the Company to its subsidiaries at the end of the reporting period (B)	19,796,798.67
Total guarantee provided by the Company (including guarantee to subsidiaries)	
Total amount of guarantee (A+B)	19,796,798.67
Total amount of guarantee as a percentage of the Company's net assets (%)	49.62
Including:	
Amount of guarantee provided to shareholders, the actual controller and its related parties (C)	0
Debt guarantee directly or indirectly provided to parties with gearing ratio over 70% (D)	18,626,405.05
The excess of total amount of guarantee over 50% of the net assets (E)	0
Total amount of the three guarantees above (C+D+E)	18,626,405.05
Unexpired guarantee may be jointly and severally liable	N/A

Guarantee details	(1)	Guarantee provided by the Company to subsidiaries includes the guarantee to its subsidiaries in favour of US$1 billion bond issued by a subsidiary in 2012, US$500 million medium-term notes issued by a subsidiary in 2015, and US$800 million notes issued by a subsidiary in 2020.
	(2)	Subject parties with gearing ratio over 70% under debt guarantee are wholly-owned subsidiaries of the Company.
	(3)	The resolution of provision of guarantees for wholly-owned subsidiaries and the resolution of provision of guarantees for its controlled non-wholly owned subsidiaries and external third parties was considered and approved at the second meeting of the Board of Directors for 2022 and the third meeting of the Board of Directors for 2022 on 24 March 2022 and 28 April 2022, respectively. The above resolutions were considered and approved at the 2021 AGM of the Company on 1 June 2022.

(III) ENGAGEMENT AND DISMISSAL OF AUDITORS OF THE COMPANY

Unit: RMB million

	Currently appointed
Name of domestic audit firm	Ernst & Young Hua Ming LLP
Remuneration of domestic audit firm	–
The service period of domestic audit firm	2 years
Name of certified public accountant of domestic audit firm	An Xiuyan, He Xin
Consecutive term of audit services by certified public accountant of domestic audit firm	2 years
Name of international audit firm	Ernst & Young
Remuneration of international audit firm	–
The service period of international audit firm	2 years
Remuneration of domestic and international audit firm	12.96

	Name	**Remuneration**
Audit of internal control by audit firm	Ernst & Young Hua Ming LLP	Note: Remuneration of internal control audit was included in remuneration of domestic and international audit firm.

Note: On 1 June 2022, the re-appointment of Ernst & Young Hua Ming LLP and Ernst & Young as the domestic and international auditors for 2022 respectively was approved at the 2021 AGM of the Company.

Independent Auditor's Report

Ernst & Young
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979 King's Road
Quarry Bay, Hong Kong

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TO THE SHAREHOLDERS OF CHINA OILFIELD SERVICES LIMITED

(Established in the People's Republic of China with limited liability)

OPINION

We have audited the consolidated financial statements of China Oilfield Services Limited (the "Company") and its subsidiaries (the "Group") set out on pages 155 to 264 which comprise the consolidated statement of financial position as at 31 December 2022, and the consolidated statement of profit or loss, 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 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") 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 Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. 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 HKICPA's Code of Ethics for Professional Accountants (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the 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 judgement, 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. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

KEY AUDIT MATTERS (continued)

Key audit matter	How our audit addressed the key audit matter
Impairment assessment of property, plant and equipment	
As at 31 December 2022, the carrying amount of property, plant and equipment of the Group, including drilling rigs, module rigs and vessels, was RMB44,148,190,000, which was material to the consolidated financial statements. The capital expenditures of oil and gas companies remained stable under the protection of national strategies and policies. It was strongly certain of the earnings growth in the oilfield service companies. However, the oil price kept fluctuating at high level and competition was getting fierce. The day rates and utilization rates of the Group's several large-scale equipment were still at low levels, and there were impairment indicators for certain drilling rigs, module rigs and vessels. Management performed impairment assessment accordingly by determining the recoverable amount of the relevant cash-generating units based on the value-in-use calculation or the fair value less cost of disposal according to appraisal report. The assessment of their value-in-use and fair value less costs of disposal was complex and involved significant judgement by management, subjective assumptions and estimation uncertainty, including the future utilisation rates, day rates, discount rates and the demand in future international oilfield service market. As a result of the impairment assessment, management provided impairment losses of RMB30,198,000 during the year ended 31 December 2022. The Group's disclosures about the impairment of property, plant and equipment are included in Note 3.2 *Significant accounting policies*, Note 4 *Significant accounting judgements and estimates* and Note 17 *Property, plant and equipment* to the consolidated financial statements.	We understood and evaluated the key controls over the impairment assessment of property, plant and equipment, and tested the design and operating effectiveness of these key controls. Among other audit procedures performed, we understood and evaluated management assessment of impairment indicators, reviewed the underlying data used by management and tested the arithmetic accuracy of the impairment assessment. We also evaluated the significant assumptions used in the calculations, including the future utilisation rates, day rates, discount rates and the demand in future international oilfield service market by comparing them to historical operation data and external industry outlook reports. In addition, we involved our valuation specialists to assist us in assessing the valuation methodologies and the assumptions used, including the discount rates. We also assessed the adequacy of the Group's relevant disclosures included in the consolidated financial statements.

KEY AUDIT MATTERS (continued)

Key audit matter	How our audit addressed the key audit matter
Impairment assessment of accounts receivable assessed individually	
As at 31 December 2022, the Group's accounts receivable, net of expected credit loss of RMB13,546,399,000 were assessed for expected credit losses individually, which were material to the consolidated financial statements. Management assessed impairment of accounts receivable for significant balances and insignificant balances with specific risks for expected credit losses individually. The individual assessment of accounts receivable for expected credit losses was complex and significant estimation and judgement were required in determining the expected credit losses by management. In assessing the expected credit losses for above accounts receivable, management considered the specific factors, such as the historical loss experience, the creditworthiness of the debtors, the ageing of the balances and the forward-looking information. The Group's disclosures about the impairment assessment of account receivables are included in Note 3.2 *Significant accounting policies*, Note 4 *Significant accounting judgements and estimates* and Note 26 *Accounts receivable* to the consolidated financial statements.	We understood and evaluated the key controls over the impairment assessment of accounts receivable, and tested the design and operating effectiveness of these key controls. Among other audit procedures performed, we tested the arithmetic accuracy of the provision matrix prepared by management to calculate the expected credit losses, evaluated underlying data used in management's assessment of loss allowance, including the historical settlement patterns of the customers, credit ratings of customers, ageing of the balances and the forward-looking information. We compared the historical settlement patterns of the customers with ageing reports and tested repayment histories. We compared credit ratings of customers to external credit rating reports and evaluated whether the estimated loss rates were adjusted based on forward-looking information. For long-aged accounts receivable, we obtained an understanding of the background to the balance and progress on repayment. We also assessed the adequacy of the Group's relevant disclosures included in the consolidated financial statements.

OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

The directors of the Company are responsible for the other information. The other information comprises the information included in the Annual Report, other than 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 THE DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA 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 of the Company 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 of the Company either intend to liquidate the Group or to cease operations or have no realistic alternative but to do so.

The directors of the Company 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. Our report is made 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 HKSAs 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 HKSAs, we exercise professional judgement and maintain professional scepticism 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.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

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, actions taken to eliminate threats or safeguards applied.

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.

The engagement partner on the audit resulting in this independent auditor's report is Cheong Ming Yik.

Ernst & Young
Certified Public Accountants
Hong Kong

23 March 2023

Consolidated Statement of Profit or Loss

Year ended 31 December 2022

	Notes	2022 RMB'000	2021 RMB'000
REVENUE	6	**35,658,896**	29,203,002
Sales surtaxes		**(48,768)**	(34,523)
Revenue, net of sales surtaxes		**35,610,128**	29,168,479
Other income	7	**342,172**	557,411
Depreciation of property, plant and equipment and amortisation of intangible assets and Multiclient library		**(4,685,573)**	(4,503,772)
Depreciation of right-of-use assets		**(367,115)**	(363,007)
Employee compensation costs	8	**(7,414,041)**	(6,030,276)
Repair and maintenance costs		**(594,825)**	(479,014)
Consumption of supplies, materials, fuel, services and others		**(9,080,592)**	(6,572,746)
Subcontracting expenses		**(8,164,558)**	(5,643,164)
Lease expenses	8	**(1,666,872)**	(1,318,482)
Other operating expenses		**(1,175,708)**	(1,246,982)
Impairment of property, plant and equipment	17	**(30,198)**	(2,011,343)
Impairment losses under expected credit loss model, net of reversal	10	**(49,435)**	(15,758)
Total operating expenses		**(33,228,917)**	(28,184,544)
PROFIT FROM OPERATIONS		**2,723,383**	1,541,346
Exchange gains/(losses), net		**565,845**	(165,389)
Finance costs	9	**(777,108)**	(831,257)
Interest income		**123,432**	123,932
Investment income	8	**16,307**	44,550
Gains arising from financial assets at fair value through profit or loss	8	**65,263**	62,740
Share of profits of an associate and joint ventures, net of tax	23	**287,558**	372,996
Other gains and losses, net	8	**(23,201)**	(59,368)
PROFIT BEFORE TAX	8	**2,981,479**	1,089,550
Income tax expense	14	**(488,360)**	(767,500)
PROFIT FOR THE YEAR		**2,493,119**	322,050
Attributable to:			
Owners of the Company		**2,352,625**	313,176
Non-controlling interests		**140,494**	8,874
		2,493,119	322,050
EARNINGS PER SHARE ATTRIBUTABLE TO OWNERS OF THE COMPANY			
Basic and diluted (RMB)	16	**49.30cents**	6.56 cents

Consolidated Statement of Comprehensive Income

Year ended 31 December 2022

	2022 RMB'000	2021 RMB'000
PROFIT FOR THE YEAR	**2,493,119**	322,050
OTHER COMPREHENSIVE INCOME		
Other comprehensive income that may be reclassified to profit or loss in subsequent periods:		
Exchange differences on translation of financial statements of foreign operations	**(192,861)**	(17,836)
Share of other comprehensive income of joint ventures due to translation differences, net of related income tax	**–**	2,893
Income tax effect relating to items that may be reclassified subsequently to profit or loss	**(131,517)**	31,586
	(324,378)	16,643
OTHER COMPREHENSIVE INCOME FOR THE YEAR, NET OF TAX	**(324,378)**	16,643
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	**2,168,741**	338,693
Attributable to:		
Owners of the Company	**2,010,854**	334,072
Non-controlling interests	**157,887**	4,621
	2,168,741	338,693

Consolidated Statement of Financial Position

31 December 2022

	Notes	31 December 2022 RMB'000	31 December 2021 RMB'000
NON-CURRENT ASSETS			
Property, plant and equipment	*17*	**44,148,190**	43,256,158
Right-of-use assets	*18*	**1,194,078**	972,897
Goodwill	*19*	**–**	–
Other intangible assets	*20*	**151,678**	86,129
Multiclient library	*21*	**216,100**	287,706
Investments in an associate and joint ventures	*23*	**988,381**	1,247,283
Contract costs	*31*	**496,813**	204,038
Financial assets at fair value through profit or loss	*28*	**–**	–
Other non-current assets	*32*	**1,829,173**	1,800,837
Deferred tax assets	*35*	**49,987**	174,956
Total non-current assets		**49,074,400**	48,030,004
CURRENT ASSETS			
Inventories	*24*	**2,528,806**	2,598,330
Prepayments, deposits and other receivables	*25*	**280,734**	356,062
Accounts receivable	*26*	**14,175,184**	10,511,674
Notes receivable	*27*	**22,759**	29,259
Receivables at fair value through other comprehensive income	*29*	**8,200**	9,862
Financial assets at fair value through profit or loss	*28*	**5,106,036**	5,703,728
Contract assets	*30*	**47,971**	90,997
Contract costs	*31*	**47,411**	26,523
Other current assets	*32*	**1,771,338**	841,983
Pledged deposits	*33*	**10,976**	11,479
Time deposits	*33*	**548,535**	95,418
Cash and cash equivalents	*33*	**3,561,740**	5,006,389
Total current assets		**28,109,690**	25,281,704
CURRENT LIABILITIES			
Trade and other payables	*34*	**11,629,065**	9,066,083
Notes payable		**11,866**	54,173
Salary and bonus payables		**1,033,179**	794,877
Tax payable		**94,937**	338,971
Loans from related parties	*36*	**2,437,610**	2,232,061
Interest-bearing bank borrowings	*37*	**3,515,710**	18,285
Long-term bonds	*38*	**872,231**	8,122,706
Lease liabilities	*39*	**437,193**	342,013
Contract liabilities	*40*	**759,723**	545,113
Other current liabilities	*32*	**500,387**	494,445
Total current liabilities		**21,291,901**	22,008,727
NET CURRENT ASSETS		**6,817,789**	3,272,977
TOTAL ASSETS LESS CURRENT LIABILITIES		**55,892,189**	51,302,981

Consolidated Statement of Financial Position (Continued)

31 December 2022

	Notes	31 December 2022 RMB'000	31 December 2021 RMB'000
NON-CURRENT LIABILITIES			
Deferred tax liabilities	*35*	**345,750**	38,670
Loans from related parties	*36*	**2,196,259**	–
Interest-bearing bank borrowings	*37*	**168,994**	180,239
Long-term bonds	*38*	**12,021,878**	11,980,462
Lease liabilities	*39*	**569,593**	568,080
Contract liabilities	*40*	**458,722**	31,487
Deferred income	*41*	**204,579**	235,852
Employee benefit liabilities		**7,587**	–
Other non-current liabilities	*32*	**20,743**	51,861
Total non-current liabilities		**15,994,105**	13,086,651
Net assets		**39,898,084**	38,216,330
EQUITY			
Equity attributable to owners of the Company			
Issued capital	*42*	**4,771,592**	4,771,592
Reserves		**34,559,689**	33,261,239
		39,331,281	38,032,831
Non-controlling interests		**566,803**	183,499
Total equity		**39,898,084**	38,216,330

Zhao Shunqiang
Director

Xiong Min
Director

Consolidated Statement of Changes in Equity

Year ended 31 December 2022

	Attributable to owners of the Company									
	Issued capital RMB'000	Capital reserve* RMB'000	Statutory reserve funds* RMB'000	Special reserve* RMB'000	Exchange fluctuation reserve* RMB'000	Retained profits* RMB'000	Proposed final dividend* RMB'000	Total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
At 31 December 2020	4,771,592	12,366,274	2,508,656	–	(256,472)	18,308,709	811,171	38,509,930	178,878	38,688,808
Profit for the year	–	–	–	–	–	313,176	–	313,176	8,874	322,050
Other comprehensive income for the year, net of income tax	–	–	–	–	20,896	–	–	20,896	(4,253)	16,643
Total comprehensive income for the year	–	–	–	–	20,896	313,176	–	334,072	4,621	338,693
Appropriation of safety fund	–	–	–	56,428	–	–	–	56,428	–	56,428
Utilisation of safety fund	–	–	–	(56,428)	–	–	–	(56,428)	–	(56,428)
Final 2020 dividend paid (Note 15)	–	–	–	–	–	–	(811,171)	(811,171)	–	(811,171)
Proposed final 2021 dividend (Note 15)	–	–	–	–	–	(715,739)	715,739	–	–	–
At 31 December 2021	4,771,592	12,366,274	2,508,656	–	(235,576)	17,906,146	715,739	38,032,831	183,499	38,216,330
Profit for the year	–	–	–	–	–	2,352,625	–	2,352,625	140,494	2,493,119
Other comprehensive income for the year, net of income tax	–	–	–	–	(341,771)	–	–	(341,771)	17,393	(324,378)
Total comprehensive income for the year	–	–	–	–	(341,771)	2,352,625	–	2,010,854	157,887	2,168,741
Appropriation of safety fund	–	–	–	124,000	–	–	–	124,000	–	124,000
Utilisation of safety fund	–	–	–	(120,665)	–	–	–	(120,665)	–	(120,665)
Final 2021 dividend paid (Note 15)	–	–	–	–	–	–	(715,739)	(715,739)	–	(715,739)
Proposed final 2022 dividend (Note 15)	–	–	–	–	–	(763,455)	763,455	–	–	–
Acquisition of subsidiaries	–	–	–	–	–	–	–	–	415,417	415,417
Dividends proposed to non-controlling interests	–	–	–	–	–	–	–	–	(190,000)	(190,000)
At 31 December 2022	4,771,592	12,366,274	2,508,656	3,335	(577,347)	19,495,316	763,455	39,331,281	566,803	39,898,084

* These reserve accounts comprise the consolidated reserves of approximately RMB34,559,689,000 (31 December 2021: RMB33,261,239,000) in the consolidated statement of financial position as at 31 December 2022.

Consolidated Statement of Cash Flows

Year ended 31 December 2022

	Notes	2022 RMB'000	2021 RMB'000
CASH FLOWS FROM OPERATING ACTIVITIES			
Cash generated from operations	*45*	**7,739,497**	8,010,756
Taxes paid:			
Mainland China corporate income tax paid		**(643,639)**	(347,908)
Overseas income taxes paid		**(196,972)**	(244,601)
Net cash flows from operating activities		**6,898,886**	7,418,247
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchase of property, plant and equipment and other long-term assets		**(4,136,266)**	(3,686,696)
Investment in Multiclient library		**(216)**	(61,267)
Government grant received		**1,000**	5,610
Purchase of floating rate investments in corporate wealth management products, monetary funds, debt instrument and time deposits		**(7,553,024)**	(10,695,380)
Proceeds from disposal/maturity of floating rate investments in corporate wealth management products and monetary funds		**7,329,466**	9,445,886
Proceeds from disposal of property, plant and equipment		**32,724**	22,812
Investment in an associate		**–**	(20,800)
Disposal of a joint venture		**6,524**	–
Acquisition of subsidiaries		**345,840**	–
Interest received		**63,527**	67,359
Dividends received from joint ventures and an associate		**183,590**	198,808
Deposits paid for acquisition of property, plant and equipment		**(5,803)**	(4,014)
Net cash flows used in investing activities		**(3,732,638)**	(4,727,682)
CASH FLOWS FROM FINANCING ACTIVITIES			
New bank loans		**3,383,860**	–
New loans from related parties		**2,133,599**	–
Repayment of bank loans		**(18,200)**	(18,200)
Repayment of long-term bonds		**(8,294,900)**	(2,273,282)
Repayment of lease liabilities		**(372,290)**	(287,714)
Dividends paid		**(865,739)**	(811,171)
Interest paid		**(834,277)**	(805,778)
Net cash flows used in financing activities		**(4,867,947)**	(4,196,145)
NET DECREASE IN CASH AND CASH EQUIVALENTS		**(1,701,699)**	(1,505,580)
Cash and cash equivalents at beginning of year		**5,006,389**	6,583,742
Effect of foreign exchange rate changes, net		**257,050**	(71,773)
CASH AND CASH EQUIVALENTS AT END OF YEAR		**3,561,740**	5,006,389
ANALYSIS OF BALANCES OF CASH AND CASH EQUIVALENTS			
Cash and balances with banks and financial institutions	*33*	**4,121,251**	5,113,286
Less: Pledged deposits	*33*	**(10,976)**	(11,479)
Time deposits	*33*	**(548,535)**	(95,418)
Cash and cash equivalents as stated in the consolidated statement of cash flows	*33*	**3,561,740**	5,006,389

Notes to Consolidated Financial Statements

31 December 2022

1. GENERAL

China Oilfield Services Limited (the "Company") is a limited liability company incorporated in the People's Republic of China (the "PRC"). The registered office of the Company is located at No.1581, Haichuan Road, Tanggu Ocean Hi-tech Zone, Binhai Hi-tech Development District, Tianjin, the PRC. As part of the reorganisation (the "Reorganisation") of China National Offshore Oil Corporation ("CNOOC") in preparation for the listing of the Company's shares on The Stock Exchange of Hong Kong Limited (the "HKSE") in 2002, and pursuant to an approval document obtained from the relevant government authority dated 26 September 2002, the Company was restructured into a joint stock limited liability company.

The Company and its subsidiaries (hereinafter collectively referred to as the "Group") were principally engaged in the provision of oilfield services including drilling services, well services, marine support services and geophysical acquisition and surveying services.

In the opinion of the directors of the Company (the "Directors"), the holding company and the ultimate holding company of the Company is CNOOC, which is a state-owned enterprise ("SOE") incorporated in the PRC. The registered address of CNOOC is NO.25 Chaoyangmenbei Dajie, Dongcheng District, Beijing.

The consolidated financial statements are presented in Renminbi ("RMB"), which is also the functional currency of the Company.

2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS

2.1 Amendments to HKFRSs that are mandatorily effective for the current year

In the current year, the Group has applied the following amendments to HKFRSs issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") for the first time, which are mandatorily effective for the annual period beginning on or after 1 January 2022 for the preparation of the consolidated financial statements.

Amendments to HKFRS 3	*Reference to the Conceptual Framework*
Amendments to HKAS 16	*Property, Plant and Equipment: Proceeds before Intended Use*
Amendments to HKAS 37	*Onerous Contracts – Cost of Fulfilling a Contract*
Annual Improvements to HKFRSs 2018-2020	Amendments to HKFRS 1, HKFRS 9, Illustrative Examples accompanying HKFRS 16, and HKAS 41

2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS (continued)

2.1 Amendments to HKFRSs that are mandatorily effective for the current year (continued)

The nature and the impact of the revised HKFRSs that are applicable to the Group are described below:

(a) Amendments to HKFRS 3 replace a reference to the previous *Framework for the Preparation and Presentation of Financial Statements* with a reference to the *Conceptual Framework for Financial Reporting* (the "Conceptual Framework") issued in June 2018 without significantly changing its requirements. The amendments also add to HKFRS 3 an exception to its recognition principle for an entity to refer to the Conceptual Framework to determine what constitutes an asset or a liability. The exception specifies that, for liabilities and contingent liabilities that would be within the scope of HKAS 37 or HK(IFRIC)-Int 21 if they were incurred separately rather than assumed in a business combination, an entity applying HKFRS 3 should refer to HKAS 37 or HK(IFRIC)-Int 21 respectively instead of the Conceptual Framework. Furthermore, the amendments clarify that contingent assets do not qualify for recognition at the acquisition date. The Group has applied the amendments prospectively to business combinations that occurred on or after 1 January 2022. As there were no contingent assets, liabilities and contingent liabilities within the scope of the amendments arising in the business combination that occurred during the period, the amendments did not have any impact on the financial position and performance of the Group.

(b) Amendments to HKAS 16 prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling any such items, and the cost of those items as determined by HKAS 2 *Inventories*, in profit or loss. The Group has applied the amendments retrospectively to items of property, plant and equipment made available for use on or after 1 January 2021. Since there was no sale of items produced prior to the property, plant and equipment being available for use, the amendments did not have any impact on the financial position or performance of the Group.

(c) Amendments to HKAS 37 clarify that for the purpose of assessing whether a contract is onerous under HKAS 37, the cost of fulfilling the contract comprises the costs that relate directly to the contract. Costs that relate directly to a contract include both the incremental costs of fulfilling that contract (e.g., direct labour and materials) and an allocation of other costs that relate directly to fulfilling that contract (e.g., an allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract as well as contract management and supervision costs). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. Prior to the initial application of the amendments, the Group included both the incremental costs and an allocation of other costs that relate directly to fulfilling that contract when determining whether a contract was onerous. The amendments did not have any significant impact on the financial position or performance of the Group.

(d) *Annual Improvements to HKFRSs 2018-2020* sets out amendments to HKFRS 1, HKFRS 9, Illustrative Examples accompanying HKFRS 16, and HKAS 41. Details of the amendment that is applicable to the Group are as follows:

- HKFRS 9 *Financial Instruments:* clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. The Group has applied the amendment prospectively from 1 January 2022. As there was no modification or exchange of the Group's financial liabilities during the year, the amendment did not have any impact on the financial position or performance of the Group.

2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS (continued)

2.2 New and amendments to HKFRSs in issue but not yet effective

The Group has not early applied the following new and amendments to HKFRSs that have been issued but are not yet effective in these consolidated financial statements.

Amendments to HKFRS 10 and HKAS 28 (2011)	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[3]
Amendments to HKFRS 16	*Lease Liability in a Sale and Leaseback*[2]
HKFRS 17	*Insurance Contracts*[1]
Amendments to HKFRS 17	*Insurance Contracts*[1,5]
Amendment to HKFRS 17	*Initial Application of HKFRS 17 and HKFRS 9 – Comparative Information*[6]
Amendments to HKAS 1	*Classification of Liabilities as Current or Non-current (the "2020 Amendments")*[2,4]
Amendments to HKAS 1	*Non-current Liabilities with Covenants (the "2022 Amendments")*[2]
Amendments to HKAS 1 and HKFRS Practice Statement 2	*Disclosure of Accounting Policies*[1]
Amendments to HKAS 8	*Definition of Accounting Estimates*[1]
Amendments to HKAS 12	*Deferred Tax related to Assets and Liabilities arising from a Single Transaction*[1]

1 Effective for annual periods beginning on or after 1 January 2023

2 Effective for annual periods beginning on or after 1 January 2024

3 No mandatory effective date yet determined but available for adoption

4 As a consequence of the 2022 Amendments, the effective date of the 2020 Amendments was deferred to annual periods beginning on or after 1 January 2024. In addition, as a consequence of the 2020 Amendments and 2022 Amendments, Hong Kong Interpretation 5 *Presentation of Financial Statements – Classification by the Borrower of a Term Loan that Contains a Repayment on Demand Clause* was revised to align the corresponding wording with no change in conclusion

5 As a consequence of the amendments to HKFRS 17 issued in October 2020, HKFRS 4 was amended to extend the temporary exemption that permits insurers to apply HKAS 39 rather than HKFRS 9 for annual periods beginning before 1 January 2023

6 An entity that chooses to apply the transition option relating to the classification overlay set out in this amendment shall apply it on initial application of HKFRS 17

Further information about those HKFRSs that are expected to be applicable to the Group is described below.

Amendments to HKFRS 10 and HKAS 28 (2011) address an inconsistency between the requirements in HKFRS 10 and in HKAS 28 (2011) in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The amendments require a full recognition of a gain or loss resulting from a downstream transaction when the sale or contribution of assets between an investor and its associate or joint venture constitutes a business. For a transaction involving assets that do not constitute a business, a gain or loss resulting from the transaction is recognised in the investor's profit or loss only to the extent of the unrelated investor's interest in that associate or joint venture. The amendments are to be applied prospectively. The previous mandatory effective date of amendments to HKFRS 10 and HKAS 28 (2011) was removed by the HKICPA in January 2016 and a new mandatory effective date will be determined after the completion of a broader review of accounting for associates and joint ventures. However, the amendments are available for adoption now. The amendments are not expected to have any significant impact on the Group's financial statements.

2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS (continued)

2.2 New and amendments to HKFRSs in issue but not yet effective (continued)

Amendments to HKAS 1 *Classification of Liabilities as Current or Non-current* clarify the requirements for classifying liabilities as current or non-current, in particular the determination over whether an entity has a right to defer settlement of the liabilities for at least 12 months after the reporting period. Classification of a liability is unaffected by the likelihood that the entity will exercise its right to defer settlement of the liability. The amendments also clarify the situations that are considered a settlement of a liability. In 2022, the HKICPA issued the 2022 Amendments to further clarify that, among covenants of a liability arising from a loan arrangement, only those with which an entity must comply on or before the reporting date affect the classification of that liability as current or non-current. In addition, the 2022 Amendments require additional disclosures by an entity that classifies liabilities arising from loan arrangements as non-current when it has a right to defer settlement of those liabilities that are subject to the entity complying with future covenants within 12 months after the reporting period. The amendments are effective for annual periods beginning on or after 1 January 2024 and shall be applied retrospectively. Earlier application is permitted. An entity that applies the 2020 Amendments early is required to apply simultaneously the 2022 Amendments, and vice versa. The Group is currently assessing the impact of the amendments and whether existing loan agreements may require revision. Based on a preliminary assessment, the amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 1 *Disclosure of Accounting Policies* require entities to disclose their material accounting policy information rather than their significant accounting policies. Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. Amendments to HKFRS Practice Statement 2 provide non-mandatory guidance on how to apply the concept of materiality to accounting policy disclosures. Amendments to HKAS 1 are effective for annual periods beginning on or after 1 January 2023 and earlier application is permitted. Since the guidance provided in the amendments to HKFRS Practice Statement 2 is non-mandatory, an effective date for these amendments is not necessary. The Group is currently revisiting the accounting policy disclosures to ensure consistency with the amendments.

Amendments to HKAS 8 clarify the distinction between changes in accounting estimates and changes in accounting policies. Accounting estimates are defined as monetary amounts in financial statements that are subject to measurement uncertainty. The amendments also clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 12 narrow the scope of the initial recognition exception in HKAS 12 so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences, such as leases and decommissioning obligations. Therefore, entities are required to recognise a deferred tax asset (provided that sufficient taxable profit is available) and a deferred tax liability for temporary differences arising from these transactions. The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and shall be applied to transactions related to leases and decommissioning obligations at the beginning of the earliest comparative period presented, with any cumulative effect recognised as an adjustment to the opening balance of retained profits or other component of equity as appropriate at that date. In addition, the amendments shall be applied prospectively to transactions other than leases and decommissioning obligations. Earlier application is permitted.

The Group has applied the initial recognition exception and did not recognise a deferred tax asset and a deferred tax liability for temporary differences for transactions related to leases. Upon initial application of these amendments, the Group will recognise deferred tax for all temporary differences related to leases at the beginning of the earliest comparative period presented. The Group will apply the amendments from 1 January 2023 and is currently assessing the impact of the amendments.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES

3.1 Basis of preparation of consolidated financial statements

The consolidated financial statements have been prepared in accordance with HKFRSs (which include all Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards ("HKASs") and Interpretations) issued by the HKICPA. For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on the HKSE (the "Listing Rules") and by the disclosure requirements of the Hong Kong Companies Ordinance ("CO").

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments which are measured at fair values, as explained in the accounting policies set out below. These financial statements are presented in RMB and all values are rounded to the nearest thousand except when otherwise indicated.

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, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in the consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of HKFRS 2 *Share-based Payment*, leasing transactions that are accounted for in accordance with HKFRS 16, and measurements that have some similarities to fair value but are not fair value, such as net realisable value in HKAS 2 *Inventories* or value in use in HKAS 36 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in their entirety, which are described as follows:

(a) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;

(b) 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; and

(c) Level 3 inputs are unobservable inputs for the asset or liability.

3.2 Significant accounting policies

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities (including structured entities) controlled by the Group. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Company reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Basis of consolidation (continued)

Generally, there is a presumption that a majority of voting rights results in control. When the Group has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the investee unilaterally. The Group considers all relevant facts and circumstances in assessing whether or not the Group's voting rights in an investee are sufficient to give it power, including:

- the size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- potential voting rights held by the Group, other vote holders or other parties;
- rights arising from other contractual arrangements; and
- any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss, consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Company ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein and represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Business combinations or asset acquisitions and goodwill

Optional concentration test

The Group can elect to apply an optional concentration test, on a transaction-by-transaction basis, that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The concentration test is met if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. The gross assets under assessment exclude cash and cash equivalents, deferred tax assets, and goodwill resulting from the effects of deferred tax liabilities. If the concentration test is met, the set of activities and assets is determined not to be a business and no further assessment is needed.

Asset acquisitions

When the Group acquires a group of assets and liabilities that do not constitute a business, the Group identifies and recognises the individual identifiable assets acquired and liabilities assumed by allocating the purchase price first to financial assets/financial liabilities at the respective fair values, the remaining balance of the purchase price is then allocated to the other identifiable assets and liabilities on the basis of their relative fair value at the date of purchase. Such a transaction does not give rise to goodwill or bargain purchase gain.

Business combinations

Business combinations, other than business combinations under common control are accounted for using the acquisition method. The consideration transferred is measured at the acquisition date fair value which is the sum of the acquisition date fair values of assets transferred by the Group, liabilities assumed by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. For each business combination, the Group elects whether to initially measure the non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of net assets in the event of liquidation either at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

The Group determines that it has acquired a business when the acquired set of activities and assets includes an input and a substantive process that together significantly contribute to the ability to create outputs.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, the previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in the consolidated statement of profit or loss.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognised in the consolidated statement of profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognised for non-controlling interests and any fair value of the Group's previously held equity interests in the acquiree over the identifiable net assets acquired and liabilities assumed. If the sum of this consideration and other items is lower than the fair value of the net assets acquired, the difference is, after reassessment, recognised in the consolidated statement of profit or loss as a gain on bargain purchase.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Business combinations or asset acquisitions and goodwill (continued)

Business combinations (continued)

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Group performs its annual impairment test of goodwill as at 31 December of every year. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, which represent the lowest level at which the goodwill is monitored for internal management purpose and not larger than an operating segment, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

Impairment is determined by assessing the recoverable amount of the cash-generating unit (group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit (group of cash-generating units) is less than the carrying amount, an impairment loss is recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Where goodwill has been allocated to a cash-generating unit (or group of cash-generating units) and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on the disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the operation disposed of and the portion of the cash-generating unit retained.

Merger accounting for business combinations involving businesses under common control

The consolidated financial statements incorporate the financial statements items of the combining businesses in which the common control combination occurs as if they had been combined from the date when the combining businesses first came under the control of the controlling party.

The net assets of the combining businesses are consolidated using the existing book values from the controlling party's perspective. No amount is recognised in respect of goodwill or bargain purchase gain at the time of common control combination.

The consolidated statement of profit or loss and the consolidated statement of comprehensive income include the results of each of the combining businesses from the earliest date presented or since the date when the combining businesses first came under the common control, where this is a shorter period.

The comparative amounts in the consolidated financial statements are presented as if the businesses had been combined at the beginning of the previous reporting period or when they first came under common control, whichever is shorter.

Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence. 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.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Investments in associates and joint ventures (continued)

The results and assets and liabilities of associates and joint ventures are incorporated in these consolidated financial statements using the equity method of accounting. The financial statements of associates and joint ventures used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. Adjustments are made to bring into line any dissimilar accounting policies that may exist. Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Unrealised gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in the consolidated statement of profit or loss in the period in which the investment is acquired.

The Group assesses whether there is an objective evidence that the interest in an associate or a joint venture may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with HKAS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognised is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with HKAS 36 to the extent that the recoverable amount of the investment subsequently increases.

When a group entity transacts with an associate or a joint venture of the Group, profits and losses resulting from the transactions with the associate or joint venture are recognised in the Group's consolidated financial statements only to the extent of interests in the joint venture that are not related to the Group.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Interests in joint operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

Where a group entity undertakes its activities under joint operations, the Group as a joint operator recognised in relation to its interest in a joint operation:

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

The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the HKFRSs applicable to the particular assets, liabilities, revenues and expenses.

Revenue from contracts with customers

The Group recognises revenue when (or as) a performance obligation is satisfied, i.e. when “control” of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a good and service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

Control is transferred over time and revenue is recognised over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group’s performance as the Group performs;
- the Group’s performance creates or enhances an asset that the customer controls as the Group performs; or
- the Group’s performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognised at a point in time when the customer obtains control of the distinct good or service.

A contract asset represents the Group’s right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with HKFRS 9 *Financial Instruments* (“HKFRS 9”). In contrast, an accounts receivable represents the Group’s unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group’s obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Revenue from contracts with customers (continued)

Contracts with multiple performance obligations (including allocation of transaction prices)

For contracts that contain more than one performance obligations, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis, expect for the allocation of discounts and variable consideration.

The stand-alone selling price of the distinct good or service underlying each performance obligation is determined at contract inception. It represents the price at which the Group would sell a promised good or service separately to a customer. If a stand-alone selling price is not directly observable, the Group estimates it using appropriate techniques such that the transaction price ultimately allocated to any performance obligation reflects the amount of consideration to which the Group expects to be entitled in exchange for transferring the promised goods or services to the customer.

Revenue recognised over time: measurement of progress towards complete satisfaction of a performance obligation using the output method

The progress towards complete satisfaction of a performance obligation is measured based on the output method, which is to recognise revenue on the basis of direct measurements of the value of the goods or services transferred to the customer to date relative to the remaining goods or services promised under the contract, that best depicts most of the Group's performance in transferring control of goods or services detailed in Note 6.

Variable consideration

For contracts that contain variable consideration, the Group estimates the amount of consideration to which it will be entitled using either (a) the expected value method or (b) the most likely amount, depending on which method better predicts the amount of consideration to which the Group will be entitled.

The estimated amount of variable consideration is included in the transaction price only to the extent that it is highly probable that such an inclusion will not result in a significant revenue reversal in the future when the uncertainty associated with the variable consideration is subsequently resolved.

At the end of each reporting period, the Group updates the estimated transaction price (including updating its assessment of whether an estimate of variable consideration is constrained) to represent faithfully the circumstances present at the end of the reporting period and the changes in circumstances during the reporting period.

Existence of a significant financing component

In determining the transaction price, the Group adjusts the promised amount of consideration for the effects of the time value of money if the timing of payments agreed (either explicitly or implicitly) provides the customer or the Group with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component. A significant financing component may exist regardless of whether the promise of financing is explicitly stated in the contract or implied by the payment terms agreed to by the parties to the contract. As almost all of the Group's contracts provide for a credit period of less than one year after the transfer of the associated goods or services, the Group applies the practical expedient of not adjusting the transaction price for any significant financing component.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Revenue from contracts with customers (continued)

Contract costs

Incremental costs of obtaining a contract

Incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained.

The Group recognises such costs as an asset if it expects to recover these costs. The asset so recognised is subsequently amortised to the consolidated statement of profit or loss on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the assets relate. The asset is subject to impairment review.

Costs to fulfil a contract

The Group incurs costs to fulfil a contract in its drilling services, marine support services and geophysical acquisition and surveying services. The Group first assesses whether these costs qualify for recognition as an asset in terms of other relevant Standards, failing which it recognises an asset for these costs only if they meet all of the following criteria:

(a) the costs relate directly to a contract or to an anticipated contract that the Group can specifically identify;

(b) the costs generate or enhance resources of the Group that will be used in satisfying (or in continuing to satisfy) performance obligations in the future; and

(c) the costs are expected to be recovered.

Before the Group recognises an impairment loss for assets capitalised as contract costs under HKFRS 15 *Revenue from Contracts with Customers* ("HKFRS 15"), the Group assesses and recognises any impairment loss on other assets related to the relevant contracts in accordance with the applicable standards. Then, any impairment loss for assets capitalised as contract costs is recognised to the extent that the carrying amount exceeds the remaining amount of consideration that the Group expects to receive in exchange for the related goods or services less the costs which relate directly to providing those goods or services and have not been recognised as an expense. The assets capitalised as contract costs are then included in the carrying amount of the cash-generating unit to which they belong for the purpose of evaluating impairment of that cash-generating unit.

Leases

Definition of a lease

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

For contracts entered into or modified on or after the date of initial application or arising from business combinations, the Group assesses whether a contract is or contains a lease based on the definition under HKFRS 16 at inception, modification date or acquisition date, as appropriate. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

The Group as a lessee

Allocation of consideration to components of a contract

For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Leases (continued)

The Group as a lessee (continued)

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to leases of the underlying assets that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. It also applies the recognition exemption for lease of low-value assets. Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term. During the current year, there was no lease of low-value assets.

Right-of-use assets

Except for short-term leases and leases of low-value assets, the Group recognises right-of-use assets at the commencement date of the lease (i.e. the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities.

The cost of right-of-use asset includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

Right-of-use assets in which the Group is reasonably certain to obtain ownership of the underlying leased assets at the end of the lease term are depreciated from the commencement date to the end of the useful life. Otherwise, right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term as follows:

Leasehold lands	50 years
Buildings	2 to 23 years
Plant and machinery	3 to 5 years
Motor vehicles	2 to 5 years

The Group presents right-of-use assets as a separate line item on the consolidated statement of financial position.

Refundable rental deposits

Refundable rental deposits paid are accounted under HKFRS 9 and initially measured at fair value. Adjustments to fair value at initial recognition are considered as additional lease payments and included in the cost of right-of-use assets.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Leases (continued)

The Group as a lessee (continued)

Lease liabilities

Except for short-term leases and leases of low-value assets, at the commencement date of a lease, the Group recognises and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

The lease payments include:

- fixed payments (including in-substance fixed payments) less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable by the Group under residual value guarantees;
- the exercise price of a purchase option if the Group is reasonably certain to exercise the option; and
- payments of penalties for terminating a lease, if the lease term reflects the Group exercising an option to terminate the lease.

Variable lease payments that reflect changes in market rental rates are initially measured using the market rental rates as at the commencement date. Variable lease payments that do not depend on an index or a rate are not included in the measurement of lease liabilities and right-of-use assets, and are recognised as an expense in the period in which the event or condition that triggers the payment occurs. As the lease payments of certain leases of drilling rigs which the Group has entered into were determined by utilisation days and day rates, the Group recognised these variable lease payments as an expense during the current year when the event or condition that triggers the payment occurs.

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

The Group remeasures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.
- the lease payments change due to changes in market rental rates following a market rent review, in which cases the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

The Group presents lease liabilities as a separate line item on the consolidated statement of financial position.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Leases (continued)

The Group as a lessee (continued)

Lease modifications

The Group accounts for a lease modification as a separate lease if:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The Group accounts for the remeasurement of lease liabilities by making corresponding adjustments to the relevant right-of-use asset. When the modified contract contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the modified contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

The Group as a lessor

Classification and measurement of leases

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

Rental income from operating leases is recognised in the consolidated statement of profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset, and such costs are recognised as an expense on a straight-line basis over the lease term.

Allocation of consideration to components of a contract

When a contract includes both leases and non-lease components, the Group applies HKFRS 15 to allocate consideration in a contract to lease and non-lease components. Non-lease components are separated from the lease component on the basis of their relative stand-alone selling prices.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Foreign currencies

The consolidated financial statements are presented in RMB, which is the Company's functional and presentation currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Foreign currency transactions recorded by the entities in the Group are initially recorded using their respective functional currency rates of exchange on the last day of the previous month of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency rates of exchange prevailing at the end of the reporting period. Differences arising on settlement or translation of monetary items are recognised in the consolidated statement of profit or loss, except for exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognised initially in other comprehensive income and reclassified from equity to profit or loss on disposal or partial disposal of the foreign operation.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The gain or loss arising on translation of a non-monetary item measured at fair value is treated in line with the recognition of the gain or loss on change in fair value of the item (i.e., translation difference on the item whose fair value gain or loss is recognised in other comprehensive income or profit or loss is also recognised in other comprehensive income or profit or loss, respectively).

The functional currencies of certain overseas subsidiaries and joint ventures are currencies other than the RMB. As at the end of the reporting period, the assets and liabilities of these entities are translated into the presentation currency of the Company at the exchange rates prevailing at the end of the reporting period and their profit or loss is translated into RMB at the exchange rates that approximate to those prevailing at the dates of the transactions (unless exchange rate fluctuations make it inappropriate to use the exchange rate, the spot exchange rate on the date of the transaction is used for translation).

The resulting exchange differences are recognised in other comprehensive income and accumulated in the exchange fluctuation reserve. On disposal of a foreign operation, the component of other comprehensive income, relating to that particular foreign operation is recognised in the consolidated statement of profit or loss.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on acquisition are treated as assets and liabilities of the foreign operation and translated at the closing rate.

For the purpose of the consolidated statement of cash flows, the cash flows of overseas subsidiaries are translated into RMB at the exchange rates ruling at the dates of the cash flows. Frequently recurring cash flows of overseas subsidiaries which arise throughout the year are translated into RMB at the average exchange rates for the year at which the cash flow occurs (unless exchange rate fluctuations make it inappropriate to use the exchange rate, the spot exchange rate on the date of the cash flow is used for translation).

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

Where funds have been borrowed generally, and used for the purpose of obtaining qualifying assets, an appropriate capitalisation rate will be applied to the expenditure on the individual assets.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the costs, which it is intended to compensate, are expensed.

Where the grant relates to an asset, it is credited to a deferred income account and is released to the consolidated statement of profit or loss over the expected useful life of the relevant asset by equal annual instalments.

The benefit of a government loan at a below-market rate of interests is treated as a government grant and is measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

Employee benefits

Short-term employee benefits

Short-term employee benefits are recognised at the undiscounted amount of the benefits expected to be paid as and when employees rendered the services. All short-term employee benefits are recognised as an expense unless another HKFRS requires or permits the inclusion of the benefit in the cost of an asset.

A liability is recognised for benefits accruing to employees (such as wages and salaries, social insurance premiums, housing accumulation fund etc.) after deducting any amount already paid.

Defined contribution plan

The Group's employees in Mainland China are required to participate in a central pension plan operated by local municipal governments. The Group is required to contribute 14% to 16% (2021: 14% to 16%) of its payroll costs to the central pension plan. The contributions are charged to the consolidated statement of profit or loss as they become payable in accordance with the rules of the central pension plan.

Defined benefits plan

For the defined benefit pension plan, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected immediately in the consolidated statement of financial position with a charge or credit recognised in other comprehensive income in the period in which it occurs. Remeasurement recognised in other comprehensive income is reflected immediately in the reserve of "Remeasurement of defined benefit pension plan" and will not be reclassified to consolidated statement of profit or loss. Past service cost is recognised in consolidated statement of profit or loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset.

Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income; and
- remeasurement.

The Group presents the first two components of defined benefit costs in consolidated statement of profit or loss in the line item of employee compensation costs.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Employee benefits (continued)

Defined benefits plan (continued)

The retirement benefit obligation recognised in the consolidated statement of financial position represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

Discretionary contributions made by employees or third parties reduce service cost upon payment of these contributions to the plan.

When the formal terms of the plan specify that there will be contributions from employees or third parties, the accounting depends on whether the contributions are linked to services as follows:

- If the contributions are not linked to services (for example contributions are required to reduce a deficit arising from losses on plan assets or from actuarial losses), they are reflected in the remeasurement of the net defined benefit liability or asset;

- If contributions are linked to services, they reduce service costs. For the amount of contribution that is dependent on the number of years of service, the entity reduces service cost by attributing the contributions to periods of service using the attribution method for the gross benefits. For the amount of contribution that is independent of the number of years of service, the entity reduces service cost in the period in which the related services are rendered.

Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside the consolidated statement of profit or loss is recognised outside the consolidated statement of profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the balance sheet liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

- in respect of taxable temporary differences associated with investments in subsidiaries and joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Income tax (continued)

Certain of the Group's drilling rigs are owned by the Company's wholly owned Bermuda (for tax purpose, domiciled in Singapore) and Singapore subsidiaries. Due to the changing demands of the offshore drilling markets and the ability to redeploy the Group's offshore units, such units will not reside in a location long enough to give rise to future tax consequences in that location. As a result, no deferred tax asset has been recognised in these circumstances. Should the Group's expectations change regarding the length of time an offshore drilling unit will be used in a given location, and tax laws and regulations in the future operating jurisdictions, the Group would adjust deferred tax accordingly.

Deferred tax assets are generally recognised for all deductible temporary differences, and the carry forward of unused tax credits and any unused tax losses to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

- in respect of deductible temporary differences associated with investments in subsidiaries and joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and 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, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

For the purposes of measuring deferred tax for leasing transactions in which the Group recognises the right-of-use assets and the related lease liabilities, the Group first determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies HKAS 12 *Income Taxes* requirements to the leasing transaction as a whole. Temporary differences relating to right-of-use assets and lease liabilities are assessed on a net basis. Excess of depreciation on right-of-use assets over the lease payments for the principal portion of lease liabilities results in net deductible temporary differences.

Deferred tax assets and deferred tax liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets and deferred tax liabilities when they relate to income taxes levied to the same taxable entity by the same taxation authority.

In assessing any uncertainty over income tax treatments, the Group considers whether it is probable that the relevant tax authority will accept the uncertain tax treatment used, or proposed to be used by individual group entities in their income tax filings. If it is probable, the current and deferred taxes are determined consistently with the tax treatment in the income tax filings. If it is not probable that the relevant taxation authority will accept an uncertain tax treatment, the effect of each uncertainty is reflected by using either the most likely amount or the expected value.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Property, plant and equipment and depreciation

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to the consolidated statement of profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement.

Depreciation is calculated on the straight-line basis to write off the cost of each item of property, plant and equipment to its residual value over its estimated useful life. The estimated useful lives of property, plant and equipment are as follows:

Vessels (including vessel components)	10 to 20 years
Drilling rigs (including drilling rig components)	5 to 30 years
Machinery and equipment	5 to 10 years
Motor vehicles	5 years
Buildings	20 to 30 years

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at each financial year end.

An item of property, plant and equipment including any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognised in the consolidated statement of profit or loss in the year the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress represents drilling rigs, vessels and equipment under construction, which are stated at cost less any impairment losses, and are not depreciated. Cost comprises the direct costs of construction and capitalised borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

Intangible assets (other than goodwill)

The intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value as at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year end.

The intangible assets with finite useful lives are amortised on a straight-line basis over the following periods:

Trademark	10 years
Management system	10 years
Software	3 to 5 years
Contract value	Contract period

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Research and development costs

All research costs are charged to the consolidated statement of profit or loss as incurred.

Expenditure incurred on projects to develop new products is capitalised and deferred only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the project and the ability to measure reliably the expenditure during the development. Product development expenditure which does not meet these criteria is expensed when incurred.

The amount initially recognised for internally-generated intangible asset is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognised, development expenditure is recognised in the consolidated statement of profit or loss in the period in which it is incurred.

Multiclient library consists of seismic data surveys which are licensed to customers on a non-exclusive basis. All costs directly incurred in acquiring, processing and otherwise completing seismic surveys are capitalised into the Multiclient library. Multiclient library is amortised on a straight-line basis over 4 years.

Impairment of tangible, intangible assets other than goodwill and contract costs

At the end of each reporting period, the Group reviews the carrying amounts of its assets (other than inventories, financial assets and goodwill) to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that they may be impaired.

Recoverable amount is the higher of fair value less costs of disposal and value in use. The recoverable amounts of tangible and intangible assets are estimated individually. When it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

In addition, the Group assesses whether there is an indication that corporate assets may be impaired. If such indication exists, corporate assets are also allocated to individual cash-generating units, when a reasonable and consistent basis of allocation can be identified, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. An impairment loss is charged to the statement of profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount. In allocating the impairment loss, the impairment loss is allocated first to reduce the carrying amount of any goodwill (if applicable) and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit or the group of cash-generating units. The carrying amount of an asset is not reduced to below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable) and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit. An impairment loss is recognised immediately in the consolidated statement of profit or loss.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Impairment of tangible, intangible assets other than goodwill and contract costs (continued)

When an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generating unit or a group of cash-generating units) in prior years. A reversal of an impairment loss is recognised immediately in the consolidated statement of profit or loss.

Inventories

Inventories primarily consist of materials and supplies used for the repairs and maintenance of plant and equipment and daily operations. Inventories are stated at the lower of cost and net realisable value. Cost is determined on the weighted average basis. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale. The materials and supplies are capitalised to plant and equipment when used for renewals or betterments of plant and equipment or recognised as expenses when used for daily operations.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle that obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material).

Contingent assets are not recognised, but are disclosed when an inflow of economic benefits is probable. When the realisation of income is virtually certain, the related asset is not a contingent asset and is recognised.

Onerous contracts

Present obligations arising under onerous contracts are recognised and measured as provisions. An onerous contract is considered to exist where the Group has a contract under which the unavoidable costs of meeting the obligation exceed the economic benefits expected to be received under the contract.

Cash and cash equivalents

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash on hand and demand deposits, and short term highly liquid investments that are readily convertible into known amounts of cash, are subject to an insignificant risk of changes in value, and have a short maturity of generally within three months when acquired, less bank overdrafts which are repayable on demand and form an integral part of the Group's cash management.

For the purpose of the consolidated statement of financial position, cash and cash equivalents comprise cash on hand and at banks, including term deposits, which are not restricted as to use.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Related parties

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 that person

(i) has control or joint control over the Group;

(ii) has a 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;

or

(b) the party is an entity where any of the following conditions applies:

(i) 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 of a parent, subsidiary or fellow subsidiary of the other entity);

(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;

(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); and

(viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

Dividends

Final and/or interim dividends proposed by the Directors are classified as a separate allocation of retained profits within the equity section of the consolidated statement of financial position, until they have been approved by the shareholders in a general meeting. When these dividends have been approved by the shareholders and declared, they are recognised as a liability.

Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Financial instruments (continued)

Financial assets and financial liabilities are initially measured at fair value except for accounts receivable arising from contracts with customers which are initially measured in accordance with HKFRS 15. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets or financial liabilities at fair value through profit or loss ("FVTPL") are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognised immediately in the consolidated statement of profit or loss.

The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Financial assets

Classification and measurement of financial assets

Financial assets 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.

The Group's cash and cash equivalents, pledged deposits, accounts receivable, notes receivable, certain other receivables, other current assets – deposits paid for monetary funds, debt instrument at amortised cost, which meet the above conditions are subsequently measured at amortised cost.

Financial assets that meet the following conditions are subsequently measured at fair value through other comprehensive income ("FVTOCI"):

- the financial asset is held within a business model whose objective is achieved by both selling and collecting contractual cash flows; and

- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

The Group's bank acceptance notes receivable included in receivables at fair value through other comprehensive income are subsequently measured at FVTOCI.

All other financial assets are subsequently measured at FVTPL.

In addition, the Group may irrevocably designate a debt investment that meets the amortised cost or FVTOCI criteria as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Financial instruments (continued)

Financial assets (continued)

Amortised cost and interest income

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost and financial assets classified as FVTOCI. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset from the next reporting period. If the credit risk on the credit impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit impaired.

Financial assets classified as at FVTOCI

Subsequent changes in the carrying amounts for financial assets classified as at FVTOCI as a result of interest income calculated using the effective interest method are recognised in the consolidated statement of profit or loss. All other changes in the carrying amount of these financial assets are recognised in other comprehensive income ("OCI") and accumulated in the reserve. Impairment allowance is recognised in the consolidated statement of profit or loss with a corresponding adjustment to OCI without reducing the carrying amounts of these financial assets. When these financial assets are derecognised, the cumulative gains or losses previously recognised in other comprehensive income are reclassified to the consolidated statement of profit or loss.

Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortised cost or FVTOCI or designated as FVTOCI are measured at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognised in the consolidated statement of profit or loss. The net gain or loss recognised in the consolidated statement of profit or loss is included in the "Gains/(losses) arising from financial assets at fair value through profit or loss" line item.

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9

The Group performs impairment assessment under the expected credit loss ("ECL") model on financial assets (including cash and cash equivalents, pledged deposits, accounts receivable, certain notes receivable, receivables at fair value through other comprehensive income, certain other receivables, other current assets – deposits paid for monetary funds, a debt instrument at amortised cost), a lease receivable, contract assets and financial guarantee contracts which are subject to impairment assessment under HKFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL ("12m ECL") represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessment is done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognises lifetime ECL for its accounts receivable, lease receivable and contract assets. The ECL on these assets are assessed individually for debtors with significant balances and insignificant balances with specific risks, which have sufficient past due data and forward-looking information for the ECL assessment. For the rest of the assets, the ECL is assessed collectively using a provision matrix with appropriate groupings.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Financial instruments (continued)

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (continued)

For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless there has been a significant increase in credit risk since initial recognition, in which case 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.

Significant increase in credit risk

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.

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 indicators 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; and

- 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.

Despite the foregoing, the Group assumes that the credit risk on a financial asset has not increased significantly since initial recognition if the financial asset is determined to have low credit risk at the reporting date. A financial asset is determined to have low credit risk if i) it has a low risk of default, ii) the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations. The Group considers a financial asset to have low credit risk when it has an internal or external credit rating of 'investment grade' as per globally understood definitions.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying a significant increase in credit risk before the amount becomes past due.

Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collateral held by the Group).

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Financial instruments (continued)

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (continued)

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events of default that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

- significant financial difficulty of the issuer or the borrower;
- a breach of contract, such as a default or past due event;
- the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
- it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for that financial asset because of financial difficulties.

Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery. For example, the counterparty has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognised in the consolidated statement of profit or loss.

Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data and forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights. The Group uses a practical expedient in estimating ECL on accounts receivable and certain other receivables using a provision matrix taking into consideration historical credit loss experience, adjusted for forward-looking information that is available without undue cost or effort.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Financial instruments (continued)

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (continued)

Measurement and recognition of ECL (continued)

Generally, the ECL is estimated as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition. For a lease receivable, the cash flows used for determining the ECL is consistent with the cash flows used in measuring the lease receivable in accordance with HKFRS 16.

The Group has measured ECL at the individual instrument level for most of its relevant financial assets, lease receivable and contract assets. Besides, there are insignificant balances where ECL is measured on a collective basis or cater for cases where evidence at the individual instrument level may not yet be available, the financial instruments are grouped on the following basis:

- Nature of financial instruments;
- Past-due status;
- Type of debtors and economic circumstances facing; and
- External credit ratings where available.

The grouping is regularly reviewed by management to ensure that the constituents of each group continue to share similar credit risk characteristics.

The Group recognises an impairment gain or loss in profit or loss for all financial assets through a loss allowance account, except for financial assets at FVTOCI for which the loss allowance is recognised in OCI and accumulated in the reserve without reducing the carrying amount of financial assets at FVTOCI. Such amount represents the changes in the reserve in relation to accumulated loss allowance.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

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

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Financial instruments (continued)

Derecognition of financial assets (continued)

On derecognition of an investment in a financial asset classified as at FVTOCI, the cumulative gain or loss previously accumulated in is reclassified to the consolidated statement of profit or loss.

For non-substantial modifications of financial assets that do not result in derecognition, the carrying amount of the relevant financial assets will be calculated at the present value of the modified contractual cash flows discounted at the financial assets' original effective interest rate. Transaction costs or fees incurred are adjusted to the carrying amount of the modified financial assets and are amortised over the remaining term. Any adjustment to the carrying amount of the financial asset is recognised in the consolidated statement of profit or loss at the date of modification.

Financial liabilities and equity

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

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. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in the consolidated statement of profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest method or at FVTPL. All of the Group's financial liabilities including trade and other payables, notes payable, loans from related parties, interest-bearing bank borrowings and long-term bonds are subsequently measured at amortised cost, using the effective interest method.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Financial instruments (continued)

Financial liabilities and equity (continued)

Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument. Financial guarantee contract liabilities are measured initially at their fair values. It is subsequently measured at the higher of:

- the amount of the loss allowance determined in accordance with HKFRS 9; and
- the amount initially recognised less, where appropriate, cumulative amortisation recognised over the guarantee period.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged or cancelled, or expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in the consolidated statement of profit or loss.

Non-substantial modifications of financial liabilities

For non-substantial modifications of financial liabilities that do not result in derecognition, the carrying amount of the relevant financial liabilities will be calculated at the present value of the modified contractual cash flows discounted at the financial liabilities' original effective interest rate. Transaction costs or fees incurred are adjusted to the carrying amount of the modified financial liabilities and are amortised over the remaining term. Any adjustment to the carrying amount of the financial liability is recognised in the consolidated statement of profit or loss at the date of modification.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (continued)

3.2 Significant accounting policies (continued)

Financial instruments (continued)

Financial liabilities and equity (continued)

Derivative financial instruments

Derivatives are initially recognised at fair value at the date when derivative contracts are entered into and are subsequently remeasured to their fair value at the end of the reporting period. The resulting gain or loss is recognised in profit or loss.

Embedded derivatives

Derivatives embedded in hybrid contracts that contain financial asset hosts within the scope of HKFRS 9 are not separated. The entire hybrid contract is classified and subsequently measured in its entirety as either amortised cost or fair value as appropriate.

Derivatives embedded in non-derivative host contracts that are not financial assets within the scope of HKFRS 9 are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

Generally, multiple embedded derivatives in a single instrument that are separated from the host contracts are treated as a single compound embedded derivative unless those derivatives relate to different risk exposures and are readily separable and independent of each other.

4. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of the Group's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and their accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about those assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amount of the assets or liabilities in the future.

Estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below.

Useful life and impairment of property, plant and equipment

The estimated useful life of property, plant and equipment is based on the historical experience of the actual useful life of property, plant and equipment with similar characteristics and functions. If the useful life of these property, plant and equipment is less than previously estimated, the Group will accelerate the related depreciation or dispose of idle or obsolete property, plant and equipment. This requires management to use past experience in estimating the appropriate useful life.

Where there exists an indication of impairment of an asset, the Group performs the impairment test in relation to the asset (or cash-generating unit ("CGU") to which the asset belongs). An impairment loss is recognised only if the carrying amount of an asset or CGU exceeds its recoverable amount, which is the higher of its fair value less cost of disposal and its value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In assessing the impairment loss of property, plant and equipment, management would consider all relevant factors with reasonable and supportable assumptions as well as the latest development and various relevant factors in respect of the underlying drilling rig of the respective drilling service contract to make significant accounting estimations. An asset's recoverable amount is the higher of the asset's value in use and its fair value less costs of disposal. This requires management to make assumptions about the future cash flows and discount rate and hence they are subject to uncertainty.

The capital expenditures of oil and gas companies remained stable under the protection of national strategies and policies. It was strongly certain of the earnings growth in the oilfield service companies. However, the oil price kept fluctuating at high level and competition was getting fierce. The day rates and utilization rates of the Group's several large-scale equipment are at low levels and there are indicators of impairment. Management is of the view that certain impairment indicators exist. The provision for impairment of property, plant and equipment recognised during the current year was RMB30,198,000 (2021: RMB2,011,343,000). As at 31 December 2022 the carrying amount of property, plant and equipment was RMB44,148,190,000 (2021: RMB43,256,158,000). Further details are given in Note 17.

4. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES (continued)

Estimation uncertainty (continued)

Provision of ECL for accounts receivable

Management determines the credit losses of the accounts receivable based on the expected credit loss model. Significant judgements and estimations involved include:

For expected credit losses assessed individually, the recoverable amounts of the accounts receivable are determined by management based on the historical settlement patterns of the customers, management's judgement about credit risk changes and forward-looking information. For expected credit losses assessed using the provision matrix, management is required to determine the credit loss rate based on the Group's historical default rates that are representative of the economic condition the accounts receivable are exposed to, which is then duly adjusted by the relevant forward-looking information. These involve estimation uncertainty and significant judgement.

The provision of ECL is sensitive to changes in estimates. The information about the ECL and the Group's accounts receivable is disclosed in Notes 26 and 48.

Deferred tax assets

Deferred tax assets are generally recognised for all unused tax losses and deductible temporary differences to the extent that it is probable that taxable profit will be available against which the losses and deductible temporary differences can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of future taxable profits together with future tax planning strategies. No deferred tax assets have been recognised on the tax loss of RMB7,919,272,000 (2021: RMB7,228,779,000) and deductible temporary differences of RMB4,185,098,000 at 31 December 2022 (2021: RMB4,154,317,000). Further details are contained in Note 35. In cases where there are actual future profits or the actual future profits generated are more than expected, or the effective tax rate is changed, a material recognition or change of deferred tax assets may arise, which would be recognised in the consolidated statement of profit or loss for the period in which such recognition or change takes place.

Taxes

Uncertainties exist with respect to the interpretation of complex tax regulations (including those applicable to tax credits) and the amount and timing of future taxable income. Given the wide range of international business relationships and the complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and expense already recorded. The Group establishes provisions, based on best estimates, for possible consequences of audits by the tax authorities of the respective countries in which it operates. The amount of such provisions is based on various factors, such as the Group's experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Such differences of interpretation may arise in a wide variety of issues depending on the conditions prevailing in the respective company's domicile.

Deferred tax assets and 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. Management judgement is required to determine the applicable tax rates in the further periods, based on the various tax laws, regulations, treaties and level of operations in jurisdictions of operation, future tax planning strategies and the forecast made on the Company's continuing compliance with the High-New Technical Enterprise ("HNTE") criteria. In cases where the actual tax rates are less than expected, a material reversal of deferred tax assets may arise and will be recognised in the consolidated statement of profit or loss in the period in which such a reversal takes place.

5. OPERATING SEGMENT INFORMATION

The Group is organised into four business segments based on the internal structure and management strategy, which is also the basis of information reported to the Group's chief operating decision maker (i.e. the executive directors of the Company) for the purpose of making strategic decisions.

The four reportable and operating segments are set out as follows:

(a) the drilling services segment is engaged in the provision of oilfield drilling services;

(b) the well services segment is engaged in the provision of logging and downhole services, such as drilling fluids, directional drilling, cementing and well completion, the sale of well chemical materials and well workovers, and seismic data processing services;

(c) the marine support services segment is engaged in the transportation of materials, supplies and personnel to offshore facilities, moving and positioning drilling structures; and

(d) the geophysical acquisition and surveying services segment is engaged in the provision of offshore seismic data acquisition and marine surveying.

Management monitors the results of the Group's operating segments separately for the purpose of making decisions about resources allocation and performance assessment. Segment performance is evaluated based on reportable segment result, which is a measure of adjusted profit before tax. The adjusted profit before tax is measured consistently with the Group's profit before tax except that interest income, finance costs, exchange gains or losses, net, investment income and gains or losses arising from financial assets at FVTPL are excluded from such measurement.

All assets are allocated to reportable segments other than certain cash and cash equivalents (funds managed by the Finance Department), pledged deposits, time deposits, certain other current assets, certain other non-current assets, financial assets at FVTPL and deferred tax assets as these assets are managed on a group basis.

All liabilities are allocated to reportable segments other than loans from related parties, interest-bearing bank borrowings and long-term bonds (funds managed by the Finance Department), tax payable and deferred tax liabilities as these liabilities are managed on a group basis.

Intersegment sales and transfers are transacted with reference to the selling prices used for sales made to third parties at the prevailing market prices.

5. OPERATING SEGMENT INFORMATION (continued)

Year ended 31 December 2022	Drilling services RMB'000	Well services RMB'000	Marine support services RMB'000	Geophysical acquisition and surveying services RMB'000	Total RMB'000
Revenue:					
Sales to external customers, net of sales surtaxes	10,334,097	19,571,243	3,719,901	1,984,887	35,610,128
Sales surtaxes	11,927	28,455	5,119	3,267	48,768
Revenue, before net of sales surtaxes	10,346,024	19,599,698	3,725,020	1,988,154	35,658,896
Intersegment sales	497,503	27,642	326,018	11,392	862,555
Segment revenue	10,843,527	19,627,340	4,051,038	1,999,546	36,521,451
Eliminations	(497,503)	(27,642)	(326,018)	(11,392)	(862,555)
Group revenue	10,346,024	19,599,698	3,725,020	1,988,154	35,658,896
Segment results	(635,945)	3,681,075	(59,172)	1,782	2,987,740
Reconciliation:					
Exchange gains, net					565,845
Finance costs					(777,108)
Interest income					123,432
Investment income					16,307
Gains arising from financial assets at FVTPL					65,263
Profit before tax					2,981,479
Income tax expense					(488,360)
As at 31 December 2022					
Segment assets	34,637,330	21,278,778	6,948,342	4,448,220	67,312,670
Unallocated assets					9,871,420
Total assets					77,184,090
Segment liabilities	4,097,277	9,259,523	1,171,809	1,050,988	15,579,597
Unallocated liabilities					21,706,409
Total liabilities					37,286,006
Other segment information:					
Capital expenditure*	1,371,739	2,208,960	243,662	254,874	4,079,235
Depreciation of property, plant and equipment and amortisation of intangible assets and Multiclient library	2,286,843	1,024,661	757,921	616,148	4,685,573
Depreciation of right-of-use assets	152,803	136,699	56,417	21,196	367,115
Impairment of accounts receivable	37,537	13,387	1,566	1,408	53,898
Reversal of impairment of other receivables	(1,176)	(2,459)	(521)	(307)	(4,463)
Reversal of impairment of inventories	(2,177)	(4,122)	(783)	(418)	(7,500)
Impairment of property, plant and equipment	30,198	–	–	–	30,198
Share of profits of an associate and joint ventures, net of tax	–	219,545	–	68,013	287,558
Investments in an associate and joint ventures	–	645,426	–	342,955	988,381

5. OPERATING SEGMENT INFORMATION (continued)

Year ended 31 December 2021	Drilling services RMB'000	Well services RMB'000	Marine support services RMB'000	Geophysical acquisition and surveying services RMB'000	Total RMB'000
Revenue:					
Sales to external customers, net of sales surtaxes	8,767,747	15,067,885	3,303,683	2,029,164	29,168,479
Sales surtaxes	11,514	16,767	3,587	2,655	34,523
Revenue, before net of sales surtaxes	8,779,261	15,084,652	3,307,270	2,031,819	29,203,002
Intersegment sales	68,664	126,458	283,465	5,152	483,739
Segment revenue	8,847,925	15,211,110	3,590,735	2,036,971	29,686,741
Eliminations	(68,664)	(126,458)	(283,465)	(5,152)	(483,739)
Group revenue	8,779,261	15,084,652	3,307,270	2,031,819	29,203,002
Segment results	(2,085,700)	3,632,974	244,913	62,787	1,854,974
Reconciliation:					
Exchange losses, net					(165,389)
Finance costs					(831,257)
Interest income					123,932
Investment income					44,550
Gains arising from financial assets at FVTPL					62,740
Profit before tax					1,089,550
Income tax expense					(767,500)
As at 31 December 2021					
Segment assets	35,126,818	14,406,888	7,084,363	5,046,449	61,664,518
Unallocated assets					11,647,190
Total assets					73,311,708
Segment liabilities	4,814,682	5,877,848	1,052,958	950,318	12,695,806
Unallocated liabilities					22,399,572
Total liabilities					35,095,378
Other segment information:					
Capital expenditure*	819,499	1,932,149	315,467	378,271	3,445,386
Depreciation of property, plant and equipment and amortisation of intangible assets and Multiclient library	2,500,710	754,221	696,781	552,060	4,503,772
Depreciation of right-of-use assets	176,599	88,391	63,584	34,433	363,007
Impairment of accounts receivable	5,504	7,656	962	839	14,961
Impairment of other receivables	206	430	101	60	797
Impairment of inventories	1,587	2,726	598	367	5,278
Impairment of property, plant and equipment	2,011,343	–	–	–	2,011,343
Share of profits of an associate and joint ventures, net of tax	–	278,911	–	94,085	372,996
Investments in an associate and joint ventures	–	923,396	–	323,887	1,247,283

* The capital expenditure includes the addition of property, plant and equipment, Multiclient library and other intangible assets.

5. OPERATING SEGMENT INFORMATION (continued)

Geographical information

The Group mainly engages in the provision of drilling services, well services, marine support services and geophysical acquisition and surveying services principally in Mainland China. Activities outside Mainland China are mainly conducted in the Middle East, Indonesia, Mexico and Norway.

In determining the Group's geographical information, revenue is presented below based on the location of operations. Information about the Group's non-current assets is presented based on the geographical location of the assets.

The following table presents revenue and non-current assets (excluding goodwill, investments in an associate and joint ventures, financial assets and deferred tax assets) information for the Group's geographical areas for the years ended 31 December 2022 and 2021.

		International		
Year ended/as at 31 December 2022	**Domestic RMB'000**	**North Sea RMB'000**	**Others RMB'000**	**Total RMB'000**
Segment revenue:				
Sales to external customers	**29,384,438**	**603,102**	**5,671,356**	**35,658,896**
Less: Sales surtaxes	**(48,768)**	**–**	**–**	**(48,768)**
Revenue, net of sales surtaxes	**29,335,670**	**603,102**	**5,671,356**	**35,610,128**
Non-current assets	**35,001,599**	**4,844,157**	**6,573,929**	**46,419,685**

		International		
Year ended/as at 31 December 2021	Domestic RMB'000	North Sea RMB'000	Others RMB'000	Total RMB'000
Segment revenue:				
Sales to external customers	24,587,392	403,856	4,211,754	29,203,002
Less: Sales surtaxes	(34,523)	–	–	(34,523)
Revenue, net of sales surtaxes	24,552,869	403,856	4,211,754	29,168,479
Non-current assets	31,407,122	5,137,584	8,501,907	45,046,613

Information about a major customer

Revenue from transactions with a major customer, CNOOC Limited and its subsidiaries (the "CNOOC Limited Group"), including sales to a group of entities which are known to be under common control of CNOOC Limited, accounted for 81% (2021: 84%) of the total sales of the Group for the year ended 31 December 2022, details of the segments with such revenue are given in Note 46 (A).

6. REVENUE

	2022 RMB'000	2021 RMB'000
Revenue from contracts with customers	**34,902,716**	28,838,203
Revenue arising from operating leases	**756,180**	364,799
	35,658,896	29,203,002

(A) Disaggregation of revenue from contracts with customers, before net of sales surtaxes for the years ended 31 December 2022 and 2021

	For the year ended 31 December 2022				
Segments	Drilling services RMB'000	Well services RMB'000	Marine support services RMB'000	Geophysical acquisition and surveying services RMB'000	Total RMB'000
Geographical markets					
Domestic	7,511,194	16,326,038	3,417,068	1,942,871	29,197,171
North Sea	425,909	–	–	–	425,909
Others	1,750,046	3,176,355	307,952	45,283	5,279,636
Total	9,687,149	19,502,393	3,725,020	1,988,154	34,902,716
Timing of revenue recognition					
At a point of time	–	96,333	–	28,389	124,722
Over time	9,687,149	19,406,060	3,725,020	1,959,765	34,777,994
Total	9,687,149	19,502,393	3,725,020	1,988,154	34,902,716
Type of customers					
CNOOC Limited Group	6,821,765	16,984,054	3,183,428	1,873,748	28,862,995
Others	2,865,384	2,518,339	541,592	114,406	6,039,721
Total	9,687,149	19,502,393	3,725,020	1,988,154	34,902,716

6. REVENUE (continued)

(A) Disaggregation of revenue from contracts with customers, before net of sales surtaxes for the years ended 31 December 2022 and 2021 (continued)

	For the year ended 31 December 2021				
Segments	Drilling services RMB'000	Well services RMB'000	Marine support services RMB'000	Geophysical acquisition and surveying services RMB'000	Total RMB'000
Geographical markets					
Domestic	6,957,663	12,956,748	2,854,828	1,753,862	24,523,101
North Sea	369,975	–	–	–	369,975
Others	1,151,116	2,063,612	452,442	277,957	3,945,127
Total	8,478,754	15,020,360	3,307,270	2,031,819	28,838,203
Timing of revenue recognition					
At a point of time	–	31,765	–	61,866	93,631
Over time	8,478,754	14,988,595	3,307,270	1,969,953	28,744,572
Total	8,478,754	15,020,360	3,307,270	2,031,819	28,838,203
Type of customers					
CNOOC Limited Group	6,138,833	13,726,100	2,864,094	1,859,869	24,588,896
Others	2,339,921	1,294,260	443,176	171,950	4,249,307
Total	8,478,754	15,020,360	3,307,270	2,031,819	28,838,203

6. REVENUE (continued)

(A) Disaggregation of revenue from contracts with customers, before net of sales surtaxes for the years ended 31 December 2022 and 2021 (continued)

Set out below is the reconciliation of the revenue from contracts with customers with the amounts disclosed in the segment information.

	For the year ended 31 December 2022				
Segments	Drilling services RMB'000	Well services RMB'000	Marine support services RMB'000	Geophysical acquisition and surveying services RMB'000	Revenue from contracts with customers RMB'000
Segment revenue	10,843,527	19,627,340	4,051,038	1,999,546	36,521,451
Less: Revenue arising from operating leases	(658,875)	(97,305)	–	–	(756,180)
Eliminations	(497,503)	(27,642)	(326,018)	(11,392)	(862,555)
Revenue from contracts with customers	9,687,149	19,502,393	3,725,020	1,988,154	34,902,716

	For the year ended 31 December 2021				
Segments	Drilling services RMB'000	Well services RMB'000	Marine support services RMB'000	Geophysical acquisition and surveying services RMB'000	Revenue from contracts with customers RMB'000
Segment revenue	8,847,925	15,211,110	3,590,735	2,036,971	29,686,741
Less: Revenue arising from operating leases	(300,507)	(64,292)	–	–	(364,799)
Eliminations	(68,664)	(126,458)	(283,465)	(5,152)	(483,739)
Revenue from contracts with customers	8,478,754	15,020,360	3,307,270	2,031,819	28,838,203

6. REVENUE (continued)

(B) Performance obligations for contracts with customers

(i) Drilling Services

The activities that primarily drive the revenue earned in the Group's drilling contracts include (i) mobilising and demobilising the rig to and from the drill site, and (ii) performing drilling operation and other activities required for the contract. Consideration received for performing these activities may consist of payment for drilling on a day rate basis, mobilisation and demobilisation fees, and reimbursement. The Directors consider the activities required under the drilling contracts as a single performance obligation satisfied over time as the customer simultaneously receives and consumes benefits provided by the Group's performance as the Group performs.

(ii) Well Services

The activities that primarily drive the revenue earned in the Group's well service contracts include performing logging and downhole services, such as drilling fluids, directional drilling, cementing and well completion and other activities required for the contract. Consideration for the services may consist of payment for logging and downhole services. The Directors identify all distinct performance obligations in the contracts, and recognise revenue over time for most performance obligations as the customer simultaneously receives and consumes benefits provided by the Group's performance as the Group performs. For certain well services contracts for providing relevant materials and equipment to clients, the Directors consider the goods required under the relevant service contracts as a performance obligation satisfied at a point in time, and recognise revenue when control of the goods has transferred.

(iii) Marine Support Services

The activities that primarily drive the revenue earned in the Group's marine support contracts include performing transportation of supplies and personnel to offshore facilities, or moving and positioning drilling structures and other activities required for the contract. Consideration for the services may consist of payment for marine support service and reimbursement. The Directors identify all distinct performance obligations in the contracts, and recognise revenue over time for each of the performance obligations as the customer simultaneously receives and consumes benefits provided by the Group's performance as the Group performs.

(iv) Geophysical Acquisition and Surveying Services

The activities that primarily drive the revenue earned in the Group's geophysical acquisition and surveying contracts include performing seismic data acquisition and marine surveying. Consideration for the services may consist of payment for seismic data acquisition or marine surveying and reimbursement. The Directors identify all distinct performance obligations in the contracts, and recognise revenue over time for most performance obligations as the customer simultaneously receives and consumes benefits provided by the Group's performance as the Group performs. For certain other distinct services required by part of geophysical acquisition and surveying services contracts, the Directors consider the goods and services required under the relevant services contract, as a performance obligation satisfied at a point of time, and recognise revenue when control of the goods and services has transferred.

6. REVENUE (continued)

(C) Transaction price allocated to the remaining performance obligations for contracts with customers

The transaction price allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December 2022 and 2021 and the expected timing of recognising revenue are as follows:

	As at 31 December 2022				
	Drilling services RMB'000	Well services RMB'000	Marine support services RMB'000	Geophysical acquisition and surveying services RMB'000	Total RMB'000
Within one year	**235,284**	**880,019**	**–**	**59,804**	**1,175,107**
In the second to fifth year, inclusive	**26,304**	**1,517,086**	**–**	**–**	**1,543,390**
After five years	**–**	**–**	**–**	**–**	**–**
Total	**261,588**	**2,397,105**	**–**	**59,804**	**2,718,497**

	As at 31 December 2021				
	Drilling services RMB'000	Well services RMB'000	Marine support services RMB'000	Geophysical acquisition and surveying services RMB'000	Total RMB'000
Within one year	597,451	637,653	–	47,801	1,282,905
In the second to fifth year, inclusive	1,693,677	1,400,349	–	240	3,094,266
After five years	–	–	–	–	–
Total	2,291,128	2,038,002	–	48,041	4,377,171

Most of the Group's contracts with customers generally provide for payment on a day rate or operation volume basis. The Group elected to apply the practical expedient and has recognised revenue in the amount to which the Group has a right to invoice. As permitted under HKFRS 15, the transaction price allocated to these unsatisfied contracts is not included in the table above.

7. OTHER INCOME

	2022 RMB'000	2021 RMB'000
Insurance claims received	**7,262**	251,143
Government grants (a)	**315,728**	260,474
Compensation income on breach of contracts	**6,382**	9,752
Others	**12,800**	36,042
	342,172	557,411

(a) Government grants include release of deferred income of RMB51,900,000 for the year (2021: RMB46,309,000) (Note 41).

8. PROFIT BEFORE TAX

The Group's profit before tax is arrived at after charging/(crediting):

	2022 RMB'000	2021 RMB'000
Employee compensation costs		
(including directors' and chief executive's remuneration):		
Wages, salaries and bonuses	**5,565,751**	4,406,477
Social security costs	**1,581,331**	1,411,630
Retirement benefits and pensions	**266,959**	212,169
	7,414,041	6,030,276
Auditor's remuneration	**14,585**	12,377
Other gains and losses, net		
(Gains)/losses arising from lease modifications	**(356)**	2,955
Losses on disposal of property, plant and equipment, net	**23,557**	56,413
	23,201	59,368
Lease expenses in respect of land and buildings, berths and equipment (a)	**1,666,872**	1,318,482
(Reversal)/provision of impairment of inventories	**(7,500)**	5,278
Impairment of accounts receivable	**53,898**	14,961
(Reversal)/provision of impairment of other receivables	**(4,463)**	797
Exchange (gains)/losses, net	**(565,845)**	165,389
Income from investments in corporate wealth management products, monetary funds and debt instrument	**(16,307)**	(44,550)
Gains arising from financial assets at FVTPL	**(65,263)**	(62,740)
Cost of inventories recognised as expense	**5,790,095**	4,217,875
Research and development costs, included in:		
Depreciation of property, plant and equipment	**201,841**	157,100
Employee compensation costs	**437,327**	357,311
Consumption of supplies, materials, fuel, services and others	**338,937**	445,957
	978,105	960,368

(a) Lease expenses represent short-term lease and variable lease payments not included in the measurement of lease liabilities.

9. FINANCE COSTS

An analysis of finance costs is as follows:

	2022 RMB'000	2021 RMB'000
Interest on bank borrowings	**54,571**	2,899
Interest on loans from related parties	**81,221**	13,772
Interest on long-term bonds	**585,147**	766,020
Interest on lease liabilities	**42,663**	34,878
Total interests	**763,602**	817,569
Other finance costs		
Others	**13,506**	13,688
	777,108	831,257

10. IMPAIRMENT LOSSES OF ACCOUNTS RECEIVABLE AND OTHER RECEIVABLES, NET OF REVERSAL

	2022 RMB'000	2021 RMB'000
Impairment losses recognised/(reversed) on:		
Accounts receivable	**53,898**	14,961
Other receivables	**(4,463)**	797
	49,435	15,758

Details of impairment assessment for the year ended 31 December 2022 are set out in Note 48.

11. DIRECTORS', CHIEF EXECUTIVE'S AND SUPERVISORS' REMUNERATION

Directors', chief executive's and supervisors' remuneration for the year, disclosed pursuant to the Listing Rules and the CO, is as follows:

	2022 RMB'000	2021 RMB'000
Fees	**1,280**	1,280
Other emoluments:		
Basic salaries, allowances and benefits in kind	**1,660**	1,173
Bonuses (Note)	**3,099**	2,569
Pension scheme contributions	**579**	453
	5,338	4,195
	6,618	5,475

Note: Certain directors and supervisors of the Company are entitled to bonus payments which are determined based on the duties and responsibilities of the directors and supervisors, as well as the operating results of the Group.

(a) Independent non-executive directors and independent supervisors

The fees paid/payable to independent non-executive directors and independent supervisors of the Company during the year are as follows:

	2022 RMB'000	2021 RMB'000
Independent non-executive directors:		
Fong Chung, Mark(1)	–	167
Wong Kwai Huen, Albert(2)	**167**	400
Lin Boqiang(3)	**267**	400
Chiu Lai Kuen, Susanna(1)	**400**	233
Kwok Lam Kwong, Larry(2)	**233**	–
Yao Xin(3)	**133**	–
	1,200	1,200
Independent supervisor:		
Cheng Xinsheng	**80**	80
	1,280	1,280

Notes:

(1) Chiu Lai Kuen, Susanna was appointed as an independent non-executive director and Fong Chung, Mark resigned on 1 June 2021.

(2) Kwok Lam Kwong, Larry was appointed as an independent non-executive director and Wong Kwai Huen, Albert resigned on 1 June 2022.

(3) Yao Xin was appointed as an independent non-executive director and Lin Boqiang resigned on 23 August 2022.

The independent non-executive directors' and independent supervisors' emoluments shown above were for their services as directors and supervisors of the Company.

There were no other emoluments payable to the independent non-executive directors and the independent supervisor during the year (2021: Nil).

11. DIRECTORS', CHIEF EXECUTIVE'S AND SUPERVISORS' REMUNERATION (continued)

(b) Executive directors, non-executive directors, supervisors and the chief executive

2022	Basic salaries, allowances and benefits in kind RMB'000	Bonuses RMB'000	Pension scheme contributions RMB'000	Total RMB'000
Executive director and chief executive officer:				
Zhao Shunqiang	480	936	154	1,570
Executive directors:				
Xiong Min[(1)]	462	722	144	1,328
Yu Feng[(1)]	430	805	146	1,381
	892	1,527	290	2,709
Non-executive directors:				
Wu Wenlai*	–	–	–	–
Liu Zongzhao*	–	–	–	–
Supervisors:				
Peng Wen*	–	–	–	–
Zhao Bi[(2)]	160	394	73	627
Ma Xiuen[(2)]	128	242	62	432
	288	636	135	1,059
TOTAL	1,660	3,099	579	5,338

Notes:

(1) Xiong Min was appointed as an executive director and Yu Feng resigned on 22 December 2022.

(2) Ma Xiuen was appointed as a supervisor and Zhao Bi resigned on 12 August 2022.

11. DIRECTORS', CHIEF EXECUTIVE'S AND SUPERVISORS' REMUNERATION (continued)

(b) Executive directors, non-executive directors, supervisors and the chief executive (continued)

2021	Basic salaries, allowances and benefits in kind RMB'000	Bonuses RMB'000	Pension scheme contributions RMB'000	Total RMB'000
Executive directors and chief executive officer:				
Zhao Shunqiang(1)	409	952	145	1,506
Qi Meisheng(1)	161	120	50	331
	570	1,072	195	1,837
Executive director and vice president:				
Yu Feng(2)	384	791	131	1,306
Non-executive directors:				
Wu Wenlai(3)*	–	–	–	–
Liu Zongzhao(3)*	–	–	–	–
Supervisors:				
Peng Wen*	–	–	–	–
Zhao Bi	219	706	127	1,052
	219	706	127	1,052
TOTAL	1,173	2,569	453	4,195

Notes:

(1) Qi Meisheng resigned as the chief executive officer on 28 April 2021 and resigned as an executive director on 28 December 2021. Zhao Shunqiang was appointed as the chairman and chief executive officer and resigned as the president on 28 April 2021.

(2) Yu Feng was appointed as an executive director on 28 December 2021.

(3) Wu Wenlai and Liu Zongzhao were appointed as non-executive directors on 28 December 2021.

The executive directors' emoluments shown above were for their services in connection with the management of the affairs of the Company and the Group.

There was no arrangement under which a director or a supervisor or the chief executive waived or agreed to waive any remuneration during both years.

* In addition to the directors' remuneration disclosed above, certain Directors and supervisors are not paid directly by the Company but receive remuneration from CNOOC, the ultimate holding company of the Company, in respect of their service to the larger group which includes the Group. No apportionment has been made as the qualifying services provided by these Directors to the Group are incidental to their responsibilities to the larger group.

12. FIVE HIGHEST PAID EMPLOYEES

The five highest paid employees during the year do not include any directors, supervisors and the chief executive (2021: Nil), details of whose remuneration are set out in Note 11. Details of the remuneration of the five (2021: Five) non-director, non-supervisor, and non-chief executive highest paid employees for the year are as follows:

	2022 RMB'000	2021 RMB'000
Basic salaries, allowances and benefits in kind	**7,758**	8,318
Bonuses	**3,582**	4,152
Pension scheme contributions	**59**	60
	11,399	12,530

The number of non-director, non-supervisor, and non-chief executive highest paid employees whose remuneration fell within the following bands is as follows:

	Number of employees 2022	 2021
HK$1,000,001 to HK$2,000,000	**3**	1
HK$2,000,001 to HK$3,000,000	**1**	3
HK$3,000,001 to HK$4,000,000	**–**	–
HK$4,000,001 to HK$5,000,000	**1**	–
HK$5,000,001 to HK$6,000,000	**–**	1
	5	5

13. PENSIONS AND THE DEFINED BENEFIT PLAN

All the Group's full-time employees in Mainland China are covered by a government-regulated pension scheme, and are entitled to an annual pension determined by their basic salaries upon their retirement. The PRC government is responsible for the pension liabilities to these retired employees. The Group is required to make annual contributions to the government-regulated pension in the PRC at rates ranging from 14% to 16% (2021: 14% to 16%) of the employees' basic salaries. The related pension costs are expensed as incurred.

The retirement expenses of the Group are as follows:

	2022 RMB'000	2021 RMB'000
Contributions to the PRC government-regulated pension scheme	**467,769**	407,909
Contributions to overseas subsidiaries' pension schemes	**38,417**	41,873
Cost under a defined benefit plan for overseas subsidiaries	**8,161**	–
	514,347	449,782

At 31 December 2022, the Group had no forfeited contributions available to reduce its contributions to the pension scheme in future years (2021: Nil).

14. INCOME TAX EXPENSE

The Group is subject to income tax on an entity basis on the profits arising in or derived from the tax jurisdictions in which members of the Group are domiciled and operate. The Group is not liable for income tax in Hong Kong as it does not have assessable profits currently sourced from Hong Kong.

Under the Corporate Income Tax Law of the PRC (the "CIT"), the statutory tax rate of the Company, subsidiaries and its key joint ventures and associates in Mainland China is 25%.

According to the High-New Technical Enterprise ("HNTE") certificate renewed by the Company in October 2020, the CIT rate of the Company is 15% for the years from 2020 to 2022.

According to the HNTE certificate renewed by the Group's subsidiary Tianjin Eco-friendly Technology Co., Ltd. in October 2020, the CIT rate of Tianjin Eco-friendly Technology Co., Ltd. was 15% for the years from 2020 to 2022.

According to the HNTE certificate renewed by the Group's subsidiary COSL Deepwater Technology Co. Ltd. in December 2022, the CIT rate of COSL Deepwater Technology Co. Ltd. was 15% for the years from 2022 to 2024.

According to the HNTE certificate renewed by the Group's subsidiary China France Bohai Geoservices Co., Ltd. in October 2021, the CIT rate of China France Bohai Geoservices Co., Ltd. was 15% for the years from 2021 to 2023.

List of other corporate income tax rates applicable to the Group's activities:

Countries and regions	2022	2021
Indonesia	**22%**	22%
Mexico	**30%**	30%
Norway	**22%**	22%
The United Kingdom	**19%**	19%
Iraq	**Withholding tax based on 7% of revenue generated in Iraq**	Withholding tax based on 7% of revenue generated in Iraq
United Arab Emirates	**Not subject to any income tax**	Not subject to any income tax
Singapore	**17%**	17%
The United States of America	**21%**	21%
Canada	**Net federal corporate income tax of 15% and provincial income tax rates ranging from 8% to 16%, depending on the province and the size of the business**	Net federal corporate income tax of 15% and provincial income tax rates ranging from 8% to 16%, depending on the province and the size of the business
Malaysia	**24%**	24%
Saudi Arabia	**20%**	20%
Brazil	**34%**	34%
Uganda	**30%**	30%
Thailand	**20%**	20%

14. INCOME TAX EXPENSE (continued)

An analysis of the Group's provision for tax is as follows:

	2022 RMB'000	2021 RMB'000
Current	**62,297**	769,636
Deferred	**426,063**	(2,136)
Total tax charge for the year	**488,360**	767,500

A reconciliation of the income tax expense applicable to profit before tax at the statutory rate for Mainland China, where the Company and its key joint ventures are domiciled, to the tax expense at the effective tax rate, and a reconciliation of the applicable rate (i.e., the statutory tax rate) to the effective tax rate, are as follows:

	2022 RMB'000	%	2021 RMB'000	%
Profit before tax	**2,981,479**		1,089,550	
Tax at the statutory tax rate of 25% (2021: 25%)	**745,370**	**25.0**	272,388	25.0
Tax effect as an HNTE	**(9,166)**	**(0.3)**	(326,168)	(29.9)
Tax effect of income not subject to tax	**(4,209)**	**(0.1)**	(5,286)	(0.5)
Tax effect of share of profit of an associate and joint ventures	**(71,889)**	**(2.4)**	(93,249)	(8.6)
Tax effect of expenses not deductible for tax	**181,457**	**6.1**	165,009	15.1
Tax benefit for qualifying research and development expenses	**(156,575)**	**(5.3)**	(130,421)	(12.0)
Effect of non-taxable profit or loss and different tax rates for overseas subsidiaries	**506,968**	**17.0**	543,334	49.9
Effect of different tax rates applied to the period of reversal of the temporary differences	**285,095**	**9.6**	–	–
Tax effect of tax losses and deductible temporary differences unrecognised	**8,108**	**0.3**	372,224	34.2
Utilisation of tax losses previously not recognised	**(467)**	**(0.0)**	(827)	(0.1)
Tax effect on translation adjustment Note (1)	**(11,116)**	**(0.4)**	1,159	0.1
(Over)/under provision in respect of prior years	**(21,794)**	**(0.7)**	9,504	0.9
Tax effect on full deduction of assets Note (2)	**(838,171)**	**(28.2)**	–	–
Influences to taxation due to deductible temporary differences caused by writing off unrecognised deferred tax assets from previous periods	**(85,926)**	**(2.9)**	–	–
Others	**(39,325)**	**(1.3)**	(40,167)	(3.7)
Total tax charge at the Group's effective tax rate	**488,360**	**16.4**	767,500	70.4

14. INCOME TAX EXPENSE (continued)

Notes:

(1) The translation adjustment mainly relates to the tax effect of the difference between the profit before tax determined on the tax basis in Norwegian Krone ("NOK") and that determined on the accounting basis of some group companies in Norway in US dollars, the functional currency of these companies.

(2) On 22 September 2022, the Ministry of Finance, the State Administration of Taxation and the Ministry of Science and Technology issued Announcement No. 28 of 2022 (the "Announcement No. 28"), which stated that "the newly acquired equipment and apparatus of High-New Technical Enterprise during the period from 1 October 2022 to 31 December 2022 shall be allowed to be deducted in full in the calculation of taxable income in the current year and 100% of the amount shall be allowed to be deducted additionally". Accordingly, the Company recognized deferred tax liabilities in 2022 for taxable temporary differences arising from the differences between its tax basis and accounting basis.

The share of tax attributable to an associate and joint ventures amounting to approximately RMB23,847,000 (2021: RMB65,108,000) is included in "Share of profits of an associate and joint ventures" in the consolidated statement of profit or loss.

15. DIVIDENDS

	31 December 2022 RMB'000	31 December 2021 RMB'000
Proposed final dividend – RMB0.16 per ordinary share (2021: RMB0.15 per ordinary share)	**763,455**	715,739

The Board of Directors of the Company recommended the payment of a proposed dividend for the year ended 31 December 2022 of RMB0.16 per ordinary share (tax inclusive), in an aggregate amount of RMB763,454,720. The proposed dividend for the year is subject to the approval of the Company's shareholders at the forthcoming annual general meeting.

During the year ended 31 December 2022, the dividend proposed in 2021 and paid to the shareholders of the Company was RMB0.15 per ordinary share (of which: final dividend of RMB0.02, special dividend of RMB0.13), in an aggregate amount of RMB715,738,800 (2021: RMB811,170,640).

Cash dividends to shareholders in Hong Kong will be paid in Hong Kong dollars.

Under the PRC Company Law and the Company's articles of association, net profit after tax as reported in the PRC statutory financial statements can only be distributed as dividends after allowance has been made for the following:

(i) making up prior years' cumulative losses, if any;

(ii) allocations to the statutory common reserve fund of at least 10% of after-tax profit, until the fund aggregates 50% of the Company's registered capital. For the purpose of calculating the transfer to the reserve, the profit after tax shall be the amount determined under the PRC accounting principles and financial regulations in the PRC. The transfer to this reserves must be made before any distribution of dividends to shareholders;

The statutory common reserve can be used to offset previous years' losses, if any, and part of the statutory common reserve can be capitalised as the Company's share capital provided that the amount of such reserve remaining after the capitalisation shall not be less than 25% of the registered capital of the Company;

(iii) allocations to the discretionary common reserve if approved by the shareholders. The discretionary common reserve can be used to offset prior years' losses, if any, and can be capitalised as the Company's share capital.

15. DIVIDENDS (continued)

In accordance with the articles of association of the Company, the net profit after tax of the Company for the purpose of profit distribution will be deemed to be the lower of (i) the net profit determined in accordance with the accounting principles generally accepted in the PRC and financial regulations in the PRC and (ii) the net profit determined in accordance with HKFRSs.

Pursuant to the State Administration of Taxation Circular Guoshuihan [2008] No. 897, the Company is required to withhold a 10% enterprise income tax when it distributes dividends to its non-resident enterprise shareholders out of the profit earned in 2008 and beyond. In respect of all shareholders whose names appear on the Company's register of members who are not individuals, which are considered as non-resident enterprise shareholders, the Company will distribute the dividend after deducting the enterprise income tax at a rate of 10%.

16. EARNINGS PER SHARE ATTRIBUTABLE TO OWNERS OF THE COMPANY

The calculation of the basic earnings per share attributable to owners of the Company is based on the following data:

	2022 RMB'000	2021 RMB'000
Earnings		
Earnings for the purpose of basic earnings per share calculation (profit for the year attributable to owners of the Company)	**2,352,625**	313,176

	2022	2021
Number of shares		
Weighted average number of ordinary shares for the purpose of basic earnings per share calculation (share)	**4,771,592,000**	4,771,592,000

There were no differences between the basic and diluted earnings per share amounts for the years ended 31 December 2022 and 2021 as the Group had no dilutive potential ordinary shares in issue during those years.

17. PROPERTY, PLANT AND EQUIPMENT

31 December 2022	Vessels RMB'000	Drilling rigs RMB'000	Machinery and equipment RMB'000	Motor vehicles RMB'000	Buildings RMB'000	Construction in progress RMB'000	Total RMB'000
At 31 December 2021 and 1 January 2022							
Cost	16,029,765	60,254,716	23,643,134	86,142	1,639,818	2,380,751	104,034,326
Accumulated depreciation and impairment	(8,688,514)	(34,690,247)	(17,087,909)	(72,687)	(238,401)	(410)	(60,778,168)
Carrying amount	7,341,251	25,564,469	6,555,225	13,455	1,401,417	2,380,341	43,256,158
Carrying amount							
At 1 January 2022	7,341,251	25,564,469	6,555,225	13,455	1,401,417	2,380,341	43,256,158
Additions	–	–	1,188,518	10,254	–	2,665,399	3,864,171
Acquisition of subsidiaries	–	–	261,469	732	17	–	262,218
Depreciation provided during the year	(784,494)	(1,581,038)	(2,133,799)	(3,076)	(68,591)	–	(4,570,998)
Disposals/write-offs	(4,098)	(27,541)	(27,171)	(697)	(80)	–	(59,587)
Transfers from/(to) construction in progress	434,096	257,055	1,869,538	–	113,296	(2,673,985)	–
Impairment provided	–	(30,198)	–	–	–	–	(30,198)
Exchange realignment	19,824	1,215,089	15,974	–	24,252	151,287	1,426,426
At 31 December 2022	7,006,579	25,397,836	7,729,754	20,668	1,470,311	2,523,042	44,148,190
At 31 December 2022							
Cost	16,510,403	62,608,317	27,326,068	92,842	1,783,771	2,523,452	110,844,853
Accumulated depreciation and impairment	(9,503,824)	(37,210,481)	(19,596,314)	(72,174)	(313,460)	(410)	(66,696,663)
Carrying amount	7,006,579	25,397,836	7,729,754	20,668	1,470,311	2,523,042	44,148,190

17. PROPERTY, PLANT AND EQUIPMENT (continued)

31 December 2021	Vessels RMB'000	Drilling rigs RMB'000	Machinery and equipment RMB'000	Motor vehicles RMB'000	Buildings RMB'000	Construction in progress RMB'000	Total RMB'000
At 31 December 2020 and 1 January 2021							
Cost	15,690,888	63,179,598	21,420,590	92,960	991,137	3,148,723	104,523,896
Accumulated depreciation and impairment	(8,030,695)	(33,652,391)	(15,622,981)	(81,690)	(216,799)	(410)	(57,604,966)
Carrying amount	7,660,193	29,527,207	5,797,609	11,270	774,338	3,148,313	46,918,930
Carrying amount							
At 1 January 2021	7,660,193	29,527,207	5,797,609	11,270	774,338	3,148,313	46,918,930
Additions	–	–	1,064,381	5,806	–	2,256,111	3,326,298
Depreciation provided during the year	(790,088)	(1,708,590)	(1,907,297)	(2,359)	(23,400)	–	(4,431,734)
Disposals/write-offs	(2,655)	(11,867)	(63,440)	(1,262)	–	–	(79,224)
Transfers from/(to) construction in progress	478,574	183,921	1,696,158	–	658,156	(3,016,809)	–
Impairment provided	–	(2,011,343)	–	–	–	–	(2,011,343)
Exchange realignment	(4,773)	(414,859)	(32,186)	–	(7,677)	(7,274)	(466,769)
At 31 December 2021	7,341,251	25,564,469	6,555,225	13,455	1,401,417	2,380,341	43,256,158
At 31 December 2021							
Cost	16,029,765	60,254,716	23,643,134	86,142	1,639,818	2,380,751	104,034,326
Accumulated depreciation and impairment	(8,688,514)	(34,690,247)	(17,087,909)	(72,687)	(238,401)	(410)	(60,778,168)
Carrying amount	7,341,251	25,564,469	6,555,225	13,455	1,401,417	2,380,341	43,256,158

During the year ended 31 December 2022, no interest was capitalised in property, plant and equipment (2021: Nil).

17. PROPERTY, PLANT AND EQUIPMENT (continued)

Impairment of property, plant and equipment

During the year ended 31 December 2022, the Group disposed certain module rigs, which were assessed to have recoverable amount lower than its carrying amount, and therefore a provision of impairment loss was recognised.

The day rate and utilisation rate of certain drilling rigs and vessels are at low levels, which is lower than management's expectation and there are indicators of impairment. Those assets are used in the Group's drilling services segment, marine support services segment and geophysical acquisition and surveying services segment. The Directors carried out the review of the recoverable amounts of those assets as there were impairment indicators during the year. Among others reviewed, given the higher expected day rates, utilisations, and future operating cash flows, the recoverable amount of the relevant drilling rigs and vessels is considered to be higher than their carrying value and no impairment loss needs to be recognised.

Besides, as the day rate and utilisation rate of some drilling rigs and vessels are higher than management's expectation, the directors specially assessed whether impairment loss provision provided in previous years need to be reversed. After the impairment assessment, no impairment reversal is needed.

In summary, the review led to the recognition of an impairment loss of RMB30,198,000 (2021: RMB2,011,343,000) for certain module rigs in the drilling services segment which has been recognised in the consolidated statement of profit or loss for the year ended 31 December 2022. The impairment losses have been classified under the drilling services segment.

The recoverable amount of the relevant asset, which was identified as CGU within the respective services segments, has been determined based on the higher of fair value less costs of disposal and value in use.

The fair value less costs of disposal is arrived at on the basis of valuation carried out by an independent property agent. The fair value of the relevant assets is determined based on a variety of valuation methods, including the income approach and market approach, and the reasonableness of the assumptions and range of estimates indicated by those valuation methods were also considered by the Group. The income approach is by reference to the projected discounted cash flows over the remaining economic life of the relevant assets. The market approach is by reference to the value that would be received from selling the assets in an orderly transaction between market participants at the measurement date. The above estimates of fair value requires the use of significant unobservable inputs representative of a level 3 fair value measurement, including historical contracted sales prices for similar assets, non-binding quotes from brokers and/or indicative bids, estimated utilisation rates, service prices, cost level and capital requirements.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate. The cash flow projection was based on financial budgets covering a five-year period approved by senior management. The cash flow beyond the five-year period is estimated based on the market trend and by reference to the relevant market trend report. The pre-tax discount rate applied to the cash flow projections is in the range of 8.48%~12.89%. The discount rate used is a long-term weighted-average cost of capital, which is based on management's best estimation of the investment returns that market participants would require for the relevant assets. Other key assumptions for the value in use calculations reflect management's judgements and expectations based on the past performance of the relevant assets, as well as future industry conditions and operations, including estimated utilisation rates, day rates, cost level and capital requirements.

18. RIGHT-OF-USE ASSETS

31 December 2022	Vessels RMB'000	Drilling rigs RMB'000	Machinery and equipment RMB'000	Motor vehicles RMB'000	Buildings RMB'000	Leasehold lands RMB'000	Total RMB'000
At 1 January 2022							
Cost	236,822	466,573	272,846	7,068	341,914	233,747	1,558,970
Accumulated depreciation and impairment	(160,504)	(137,428)	(113,638)	(6,040)	(135,122)	(33,341)	(586,073)
Carrying amount	76,318	329,145	159,208	1,028	206,792	200,406	972,897
Carrying amount							
At 1 January 2022	76,318	329,145	159,208	1,028	206,792	200,406	972,897
Additions	48,037	256,347	89	1,152	113,665	117,007	536,297
Acquisition of subsidiaries	–	–	–	–	38,340	–	38,340
Depreciation charge	(52,629)	(155,559)	(42,174)	(619)	(110,795)	(5,339)	(367,115)
Lease modification	–	(1,179)	(2,439)	(329)	(10,863)	–	(14,810)
Exchange realignment	–	6,657	7,025	38	7,784	6,965	28,469
At 31 December 2022	71,726	435,411	121,709	1,270	244,923	319,039	1,194,078
At 31 December 2022							
Cost	217,826	728,900	283,739	6,349	487,464	357,719	2,081,997
Accumulated depreciation and impairment	(146,100)	(293,489)	(162,030)	(5,079)	(242,541)	(38,680)	(887,919)
Carrying amount	71,726	435,411	121,709	1,270	244,923	319,039	1,194,078

31 December 2021	Vessels RMB'000	Drilling rigs RMB'000	Machinery and equipment RMB'000	Motor vehicles RMB'000	Buildings RMB'000	Leasehold lands RMB'000	Total RMB'000
At 1 January 2021							
Cost	320,779	246,390	415,013	6,384	204,458	235,512	1,428,536
Accumulated depreciation and impairment	(135,042)	(205,616)	(197,813)	(3,185)	(89,352)	(30,342)	(661,350)
Carrying amount	185,737	40,774	217,200	3,199	115,106	205,170	767,186
Carrying amount							
At 1 January 2021	185,737	40,774	217,200	3,199	115,106	205,170	767,186
Additions	–	502,592	54,369	707	178,072	–	735,740
Depreciation charge	(59,562)	(111,244)	(99,261)	(2,873)	(87,068)	(2,999)	(363,007)
Lease modification	(49,857)	(97,484)	(10,354)	–	2,681	–	(155,014)
Exchange realignment	–	(5,493)	(2,746)	(5)	(1,999)	(1,765)	(12,008)
At 31 December 2021	76,318	329,145	159,208	1,028	206,792	200,406	972,897
At 31 December 2021							
Cost	236,822	466,573	272,846	7,068	341,914	233,747	1,558,970
Accumulated depreciation and impairment	(160,504)	(137,428)	(113,638)	(6,040)	(135,122)	(33,341)	(586,073)
Carrying amount	76,318	329,145	159,208	1,028	206,792	200,406	972,897

18. RIGHT-OF-USE ASSETS (continued)

	2022 RMB'000	2021 RMB'000
Expense related to short-term leases	**697,565**	681,869
Variable lease payments not included in the measurement of lease liabilities	**969,307**	636,613
	1,666,872	1,318,482
Total cash outflow for leases	**1,849,183**	1,523,999

For both years, the Group leases various vessels, drilling rigs, machinery and equipment, buildings and motor vehicles for its operations. Lease contracts are entered into for fixed terms of 1 to 23 years, but may have extension and termination options as described below. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable.

In addition, the Group owns several leasehold lands for operating purposes and has obtained the land use right certifications. The upfront payments for such leasehold lands were classified as right-of-use assets upon application of HKFRS 16.

The Group regularly enters into short-term leases for vessels, drilling rigs, machinery and equipment, buildings and motor vehicles. As at 31 December 2022, the portfolio of short-term leases was similar to the portfolio of the short-term leases disclosed in Note 8.

Variable lease payments

The Group has entered into several lease contracts associated to certain drilling rigs, vessels with variable lease payments determined by utilisation days and day rates. The Group recognised these variable lease payments as expenses during the current year when they were paid or payable.

Extension and termination options

The Group has extension and/or termination options to maximise the operational flexibility in managing the assets used in the Group's operations. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessors.

The Group assesses at the lease commencement date whether it is reasonably certain to exercise the extension options or not to exercise the termination options. In addition, the Group reassesses whether it is reasonably certain to exercise an extension option, or not to exercise a termination option, upon the occurrence of either a significant event or a significant change in circumstances that is within the control of the lessee. During the year ended 31 December 2022, there was no such triggering event.

19. GOODWILL

Goodwill was generated in the acquisition of COSL Holding AS in 2008 by the Group, which was combined into COSL Norwegian AS by merger during the year ended 31 December 2016 (collectively referred to as the "CNA"). The entire goodwill was fully impaired as at 31 December 2016.

	2022 RMB'000
COST	
At 1 January	4,295,603
Exchange realignment	396,769
At 31 December	4,692,372
IMPAIRMENT	
At 1 January	4,295,603
Exchange realignment	396,769
At 31 December	4,692,372
CARRYING AMOUNT	
At 31 December	–

20. OTHER INTANGIBLE ASSETS

31 December 2022	Trademark RMB'000	Management system and software RMB'000	Contract value RMB'000	Total RMB'000
Carrying amount at 1 January 2022	–	86,129	–	86,129
Additions	–	97,841	–	97,841
Acquisition of subsidiaries	5,322	–	–	5,322
Amortisation provided during the year	(297)	(37,663)	–	(37,960)
Exchange realignment	–	346	–	346
At 31 December 2022	5,025	146,653	–	151,678
At 31 December 2022				
Cost	5,733	785,682	125,335	916,750
Accumulated amortisation	(708)	(639,029)	(125,335)	(765,072)
Carrying amount	5,025	146,653	–	151,678

20. OTHER INTANGIBLE ASSETS (continued)

31 December 2021	Trademark RMB'000	Management system and software RMB'000	Contract value RMB'000	Total RMB'000
Carrying amount at 1 January 2021	38	75,471	–	75,509
Additions	–	42,081	–	42,081
Amortisation provided during the year	(38)	(31,349)	–	(31,387)
Exchange realignment	–	(74)	–	(74)
At 31 December 2021	–	86,129	–	86,129
At 31 December 2021				
Cost	411	677,779	114,737	792,927
Accumulated amortisation	(411)	(591,650)	(114,737)	(706,798)
Carrying amount	–	86,129	–	86,129

21. MULTICLIENT LIBRARY

	Multiclient Library RMB'000
Carrying amount at 1 January 2022	**287,706**
Development cost capitalised in the year	**216**
Other changes	**(624)**
Amortisation provided during the year	**(76,615)**
Exchange realignment	**5,417**
At 31 December 2022	**216,100**
At 31 December 2022	
Cost	**384,582**
Accumulated amortisation	**(168,482)**
Carrying amount	**216,100**

	Multiclient Library RMB'000
Carrying amount at 1 January 2021	253,840
Development cost capitalised in the year	77,007
Amortisation provided during the year	(40,651)
Exchange realignment	(2,490)
At 31 December 2021	287,706
At 31 December 2021	
Cost	372,529
Accumulated amortisation	(84,823)
Carrying amount	287,706

The Group has entered into cooperation agreements with Spectrum Geo Inc ("Spectrum") and TGS AS ("TGS") to invest in certain multiclient data projects. These agreements are accounted for as joint operations where the parties have joint control over the projects and have rights to the assets and liabilities of the investment. Costs directly incurred in acquiring, processing and completing the multi-client data projects are capitalised to the Multiclient library. As at 31 December 2022, the entire multi-client data projects had been completed.

22. PARTICULARS OF SUBSIDIARIES

Details of the Company's principal subsidiaries at the end of the reporting period are set out below:

Name of entity	Place and date of incorporation/ registration	Principal place of business	Issued and fully paid share capital/ paid-in capital	Percentage of equity attributable to the Group		Principal activities
				2022	2021	
Tianjin Eco-friendly Technology Co., Ltd. (a)	Tianjin, PRC 7 September 1993	PRC	RMB 20,000,000	**100%**	100%	Provision of oilfield services and related activities
PT.COSL INDO	Indonesia 1 August 2005	Indonesia	US Dollar ("US$") 400,000	**100%**	100%	Provision of oil and gas exploration services
COSL–Hong Kong Limited	Hong Kong 1 December 2005	Hong Kong	Hong Kong Dollar 10,000	**100%**	100%	Investment holding
COSL (Australia) Pty Ltd. (b)	Australia 11 January 2006	Australia	Australian Dollar 10,000	**–**	100%	Provision of drilling services
COSL Mexico S.A.de C.V	Mexico 26 May 2006	Mexico	US$8,504,525	**100%**	100%	Provision of drilling services
COSL (Middle East) FZE	United Arab Emirates 2 July 2006	United Arab Emirates	UAE Dirhams 1,000,000	**100%**	100%	Provision of oil and gas exploration services
COSL Prospector Pte. Ltd.	Singapore 27 February 2007	Singapore	US$189,779,384	**100%**	100%	Provision of drilling services
COSL Norwegian AS ("CNA")	Norway 23 June 2008	Norway	NOK 1,541,328,656	**100%**	100%	Investment holding
COSL Drilling Pan-Pacific (Labuan) Ltd.	Malaysia 4 April 2009	Malaysia	US$100,000	**100%**	100%	Management of jack-up drilling rigs
COSL Drilling Pan-Pacific Ltd.	Singapore 13 April 2009	Singapore	US$1,000,000	**100%**	100%	Management of jack-up drilling rigs
COSL Singapore Capital Ltd.	Singapore 29 October 2009	Singapore	Singapore Dollar 2	**100%**	100%	Bond issuance
PT. Samudra Timur Santosa ("PT STS") (c)	Indonesia 27 July 2010	Indonesia	US$250,000	**49%**	49%	Provision of marine support services

22. PARTICULARS OF SUBSIDIARIES (continued)

Details of the Company's principal subsidiaries at the end of the reporting period are set out below: (continued)

Name of entity	Place and date of incorporation/ registration	Principal place of business	Issued and fully paid share capital/ paid-in capital	Percentage of equity attributable to the Group		Principal activities
				2022	2021	
COSL Oil-Tech (Singapore) Ltd.	Singapore 31 January 2011	Singapore	US$100,000	100%	100%	Provision of oilfield services and related activities
COSL Finance (BVI) Limited (d)	British Virgin Islands 12 July 2012	British Virgin Islands	US$1	–	100%	Bond issuance
COSL Deepwater Technology Co.Ltd. (a)	Shenzhen, PRC 12 September 2013	PRC	RMB470,000,000	100%	100%	Provision of geophysical and surveying services
COSL Drilling Saudi Ltd.	Saudi Arabia 19 April 2016	Saudi Arabia	Saudi Riyal 375,000	96%	96%	Provision of drilling services
COSL Hainan Ltd. (a)	Haikou, PRC 6 December 2019	PRC	RMB200,000,000	100%	100%	Provision of oil and gas exploration services
COSL Hainan Technical Services Ltd. (a)	Chengmai, PRC 12 May 2020	PRC	RMB1,000,000,000	100%	100%	Provision of oil and gas exploration services
Hainan Deep Drilling Ltd. (a)	Haikou, PRC 12 March 2021	PRC	RMB10,000,000	100%	100%	Provision of drilling services
COSL UK Limited	UK 24 January 2022	United Kingdom	Great Britain Pound 1,472,600	100%	–	Provision of oilfield services and related activities
China France Bohai Geoservices Co., Ltd. ("China France Bohai") (e)	Tianjin, PRC 30 November 1983	PRC	US$6,650,000	50%	50%	Provision of logging services
China Nanhai Magcobar Mud Corporation Ltd. ("Magcobar") (f)	Shenzhen, PRC 25 October 1984	PRC	RMB4,640,000	60%	60%	Provision of drilling fluids services

(a) On 9 December 2022, COSL Chemicals (Tianjin), Ltd., was renamed as Tianjin Eco-friendly Technology Co. Ltd. Tianjin Eco-friendly Technology Co. Ltd., COSL Deepwater Technology Co. Ltd., COSL Hainan Ltd., Hainan Deep Drilling Ltd. and COSL Hainan Technical Services Ltd. are established in the PRC as limited liability companies.

(b) COSL (Australia) Pty Ltd. was deregistered on 5 January 2022.

22. PARTICULARS OF SUBSIDIARIES (continued)

Details of the Company's principal subsidiaries at the end of the reporting period are set out below: (continued)

(c) In the opinion of the Directors, the Group has control over PT STS as the Group has 100% voting rights on PT STS that gives it the current ability to direct the relevant activities of PT STS. Accordingly, PT STS had been accounted for as a subsidiary and has been consolidated into the Group's consolidated financial statements for the years ended 31 December 2022 and 31 December 2021 respectively.

(d) COSL Finance (BVI) Limited was deregistered on 23 December 2022.

(e) The Group has 50% equity interests in China France Bohai, the remaining equity interests are held by another sole investor. On 1 August 2022, the shareholders of China France Bohai amended its articles of association. Pursuant to the new articles of association, the Group nominated four directors out of seven directors of the board of directors, and more than 50% voting rights of the board of directors are required for decisions on directing the relevant activities of this entity. The Group has control over China France Bohai after the amendment of articles of association. Accordingly, China France Bohai has been accounted for as a subsidiary and has been consolidated into the Group's consolidated financial statements by the Company since 1 August 2022.

(f) The Group has 60% equity interests in Magcobar, the remaining equity interests are held by another sole investor. On 1 December 2022, the shareholders of Magcobar amended its articles of association. Pursuant to the new articles of association, the Group nominated three directors out of five directors of the board of directors, and more than 50% voting rights of the board of directors are required for decisions on directing the relevant activities of this entity. The Group has control over Magcobar after the amendment of articles of association. Accordingly, Magcobar has been accounted for as a subsidiary and has been consolidated into the Group's consolidated financial statements by the Company since 1 December 2022.

The above table lists the subsidiaries of the Company which, in the opinion of the Directors, principally affected the operating results of the Group 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, result in particulars of excessive length.

The following subsidiary had outstanding issued long-term bonds amounting to RMB9,089,476,000 at the end of the year:

	Held by third parties RMB'000
COSL Singapore Capital Ltd.	9,089,476

23. INVESTMENTS IN AN ASSOCIATE AND JOINT VENTURES

	31 December 2022 RMB'000	31 December 2021 RMB'000
Cost of investments in an associate	**104,000**	104,000
Cost of investments in joint ventures	**39,922**	149,201
Share of post-acquisition profits and losses, and other comprehensive income, net of dividends received	**844,459**	994,082
Carrying amount	**988,381**	1,247,283

Particulars of all associates and joint ventures are as follows:

Name	Nominal value of issued ordinary/ registered share capital	Place and date of incorporation/ registration and operations	Percentage of Ownership interest 2022	Percentage of Ownership interest 2021	Principal activities
China Offshore Fugro Geosolutions (Shenzhen) Company Ltd.	US$6,000,000	Shenzhen, PRC 24 August 1983	**50%**	50%	Provision of geophysical and surveying services
China Petroleum Logging-Atlas Cooperation Service Company	US$2,000,000	Shenzhen, PRC 10 May 1984	**50%**	50%	Provision of logging services
COSL-Expro Testing Services (Tianjin) Company Ltd.	US$5,000,000	Tianjin, PRC 28 February 2007	**50%**	50%	Provision of well testing services
PBS-COSL Oilfield Services Company SDN BHD ("PBS– COSL") (a)	Brunei Dollar 100,000	Brunei 20 March 2014	**–**	49%	Provision of drilling services
COSL (Malaysia) SDN.BHD. ("COSL Malaysia") (b)	Ringgit Malaysia 350,000	Malaysia 31 July 2017	**49%**	49%	Provision of drilling services
Well Technology Company Ltd.	RMB 260,000,000	Foshan, PRC 24 July 2020	**40%**	40%	Provision of well technology services

23. INVESTMENTS IN AN ASSOCIATE AND JOINT VENTURES (continued)

Notes:

(a) PBS-COSL was deregistered on 4 October 2022. The Group has 49% of the equity interests in PBS-COSL, the remaining equity interests of which are held by the other sole investor. Pursuant to the articles of association of PBS-COSL, the board of directors of PBS-COSL shall comprise four directors whereby both the Company and the other sole investor shall appoint two directors each. Unanimous approvals by the directors of PBS-COSL are required for decisions on directing the relevant activities of PBS-COSL. In the opinion of the Directors, the Group does not have control over PBS-COSL and the investment in this joint arrangement constitutes interest in a joint venture based on the rights and obligations of the parties to this joint arrangement. Accordingly, PBS-COSL was accounted for in the Group's consolidated financial statements using the equity method.

(b) The Group has 49% of equity interests in COSL Malaysia, the remaining equity interests of which are held by the other sole investor. Pursuant to the articles of association of COSL Malaysia, majority voting rights are required for decisions on directing the relevant activities of this entity. The board of directors of COSL Malaysia shall comprise five directors whereby the Group shall appoint two directors and the other sole investor shall appoint three directors, while the chairman of COSL Malaysia shall be appointed by the Group and the chairman has the right to veto any major decisions. As a result, unanimous consent by the Group and the other investor are required for decisions on directing the relevant activities of COSL Malaysia. In the opinion of the Directors, the Group does not have control over COSL Malaysia and the investment in this joint arrangement constitutes interest in a joint venture based on the rights and obligations of the parties to this joint arrangement. Accordingly, COSL Malaysia has been accounted for in the Group's consolidated financial statements using the equity method. As at 31 December 2022, the Group has not injected any capital into COSL Malaysia since the capital injection time according to the joint venture agreement has not due yet.

All of the above investments in an associate and joint ventures are directly held by the Company except for COSL Malaysia, which is indirectly held through COSL Drilling Pan-Pacific Ltd.

The above associate and joint ventures are accounted for using the equity method in these consolidated financial statements.

The aggregate financial information in respect of the Group's associates and joint ventures is set out below and none of the associates and joint ventures is individually material.

	2022 RMB'000	2021 RMB'000
The Group's share of profit	**287,558**	372,996
The Group's share of other comprehensive income	–	2,893
The Group's share of total comprehensive income	**287,558**	375,889

24. INVENTORIES

	31 December 2022 RMB'000	31 December 2021 RMB'000
Raw materials	**2,094,525**	2,176,845
Goods in transit	**358,708**	321,532
Work in progress	**6,627**	66,678
Consumables and others	**68,946**	33,275
	2,528,806	2,598,330

The Group provided impairment of inventories of RMB2,127,000 (2021: RMB10,644,000) and reversed inventories' impairment of RMB9,627,000 (2021: RMB5,366,000) during the year, both of which were recorded in other operating expenses.

25. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	31 December 2022 RMB'000	31 December 2021 RMB'000
Prepayments	**157,670**	111,152
Deposits	**29,249**	60,058
Dividends receivable	**–**	46,067
Other receivables	**98,655**	148,786
	285,574	366,063
Less: Provision for impairment of other receivables	**(4,840)**	(10,001)
	280,734	356,062

An analysis of other receivables is as follows:

	31 December 2022 RMB'000	31 December 2021 RMB'000
Prepaid tax	**48,064**	53,229
Compensation receivables	**211**	211
Insurance claim receivables	**14,417**	25,225
Payments on behalf of suppliers	**7,099**	2,552
Advance to employees	**1,149**	3,137
Lease receivables	**5,044**	51,356
Government grants	**5,282**	–
Others	**17,389**	13,076
	98,655	148,786

26. ACCOUNTS RECEIVABLE

	31 December 2022 RMB'000	31 December 2021 RMB'000
Accounts receivable		
– goods and services	**17,152,684**	13,208,466
Less: Allowance for credit losses	**(2,977,500)**	(2,696,792)
	14,175,184	10,511,674

The following is an ageing analysis of accounts receivable net of allowance for credit losses, as at the end of the reporting periods, presented based on the invoice dates.

	31 December 2022 RMB'000	31 December 2021 RMB'000
Within one year	**14,051,427**	10,377,252
One to two years	**94,735**	66,753
Over two years	**29,022**	67,669
	14,175,184	10,511,674

As at 31 December 2022, included in the Group's accounts receivable balance are debtors with an aggregate carrying amount of RMB123,757,000 which were past due as at the reporting date. Out of the past due balances, RMB71,447,000 is not considered in default based on past experience, the Directors are of the opinion that no further provision for impairment is necessary in respect of these balances which are considered fully recoverable after taking into consideration the customer's credit quality, historical behaviour of payments and prevailing market conditions. The Group does not hold any collateral or other credit enhancements over these past-due balances.

As at 31 December 2022, the carrying amount of accounts receivable for which the Group assessed expected credit losses individually was RMB16,467,383,000, the amount of credit losses provided was RMB2,920,984,000, and the net amount of accounts receivable was RMB13,546,399,000. The carrying amount of accounts receivable for which the Group assessed expected credit losses based on shared credit risk characteristics was RMB685,301,000, the amount of credit losses provided was RMB56,516,000, and the net amount of accounts receivable was RMB628,785,000.

Details of impairment assessment of accounts receivable for the year ended 31 December 2022 are set out in Note 48.

27. NOTES RECEIVABLE

	31 December 2022 RMB'000	31 December 2021 RMB'000
Bank acceptance notes receivable	**1,267**	–
Commercial notes receivable	**21,492**	29,259
	22,759	29,259

The commercial notes are received from customers in the Group's ordinary course of business. The Group provided no impairment against the balance after due consideration of the customers' low credit risk.

28. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	31 December 2022 RMB'000	31 December 2021 RMB'000
Current assets		
Investments in floating rate corporate wealth management products	**4,906,011**	4,403,632
Investments in monetary funds	**200,025**	1,300,096
Non-current assets		
Unlisted equity investment	**–**	–
	5,106,036	5,703,728

29. RECEIVABLES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	31 December 2022 RMB'000	31 December 2021 RMB'000
Bank acceptance notes receivable	**8,200**	9,862

The bank acceptance notes are received from customers in the Group's ordinary course of business. As part of the liquidity management, the Group has endorsed certain bank acceptance notes receivable to banks or suppliers before the maturity date. The Group has transferred substantially all the risks and rewards of ownership relating to these bank acceptance notes endorsed, and derecognised the full carrying amounts of the bank acceptance notes receivable. Such bank acceptance notes receivable are held by the Group within a business model whose objective is achieved by both selling the notes receivable and collecting contractual cash flows. Accordingly, these bank acceptance notes receivable are subsequently measured at FVTOCI. Details of fair value of notes receivable at FVTOCI are set out in Note 48.

The Group provided no impairment against the balance after due consideration of the banks' low credit risk.

30. CONTRACT ASSETS

	31 December 2022 RMB'000	31 December 2021 RMB'000
Contract assets – current	**47,971**	90,997

The contract assets relate to the Group's rights to consideration for drilling services completed and not billed because the rights are conditioned on customers' acceptance of the work. The contract assets are transferred to accounts receivable when the rights become unconditional. The Directors assessed and provided no impairment against the contract assets after due consideration of the customers' credit quality.

31. CONTRACT COSTS

	31 December 2022 RMB'000	31 December 2021 RMB'000
Mobilisation (Note)	**544,224**	230,561
Current	**47,411**	26,523
Non-current	**496,813**	204,038
	544,224	230,561

Note: Certain direct and incremental costs incurred for initial mobilisation are costs of fulfilling a contract and are recoverable. These recoverable costs are capitalised and amortised ratably to profit or loss as services are rendered over the initial term of the related contracts.

32. OTHER CURRENT ASSETS/LIABILITIES AND OTHER NON-CURRENT ASSETS/LIABILITIES

	31 December 2022 RMB'000	31 December 2021 RMB'000
Deposits paid for monetary funds (Note(a))	**1,000,000**	600,000
Value-added tax to be deducted and prepaid	**753,485**	241,983
Others	**17,853**	–
Other current assets	**1,771,338**	841,983
Output value-added tax to be recognised	**(443,765)**	(431,385)
Provision due within one year (Note(b))	**(56,622)**	(63,060)
Other current liabilities	**(500,387)**	(494,445)
Certificate of deposit (Note(c))	**1,616,347**	1,556,535
Lease receivable	**–**	4,617
Value-added tax recoverable	**207,023**	156,127
Deposits paid for the acquisition of property, plant and equipment	**5,803**	4,014
Income tax recoverable	**–**	11,574
Land deposit	**–**	67,970
Other non-current assets	**1,829,173**	1,800,837
Provision (Note(b))	**(20,743)**	(51,861)
Other non-current liabilities	**(20,743)**	(51,861)

Notes:

(a) As at 31 December 2022, the Company contributed to the purchase of monetary funds and the shares of the fund were included in other current assets as the fund company had not yet recognized the shares. The fund shares were recognized by the fund company on 3 January 2023.

(b) CNA, a subsidiary of the Company, signed the long-term drilling service contracts in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The Company recognises the estimated loss of the contract as a liability.

(c) As at 31 December 2022, the Group held a certificate of deposit with a maturity of over 1 year and a par value of RMB1,500,000,000. The certificate of deposit can be withdrawn or sold before maturity.

33. CASH AND CASH EQUIVALENTS, PLEDGED DEPOSITS AND TIME DEPOSITS

	31 December 2022 RMB'000	31 December 2021 RMB'000
Cash and balances with banks	**2,921,268**	3,914,329
Deposits with CNOOC Finance Corporation Limited ("CNOOC Finance") (Note 46)	**1,199,983**	1,198,957
Cash and balances with banks and financial institutions	**4,121,251**	5,113,286
Less:		
Pledged deposits	**(10,976)**	(11,479)
Time deposits	**(548,535)**	(95,418)
Cash and cash equivalents	**3,561,740**	5,006,389

At 31 December 2022, the cash and bank balances of the Group denominated in RMB amounted to approximately RMB2,189,160,000 (31 December 2021: RMB1,533,053,000). The RMB is not freely convertible into other currencies. However, under Mainland China's Foreign Exchange Control Regulations and Administration of Settlement, Sale and Payment of Foreign Exchange Regulations, the Group is permitted to exchange RMB for other currencies through banks authorised to conduct foreign exchange business.

Cash at banks earns interest based on daily bank deposit rates. The bank balances, pledged deposits and time deposits are deposited with creditworthy banks with no recent history of default.

34. TRADE AND OTHER PAYABLES

	31 December 2022 RMB'000	31 December 2021 RMB'000
Trade payables	**10,821,364**	8,487,861
Other payables	**807,701**	578,222
	11,629,065	9,066,083

The ageing analysis of the trade payables as at the end of the reporting period, based on the invoice date, is as follows:

	31 December 2022 RMB'000	31 December 2021 RMB'000
Outstanding balances aged:		
Within one year	**10,036,359**	8,239,978
One to two years	**644,660**	135,328
Two to three years	**70,705**	61,487
Over three years	**69,640**	51,068
	10,821,364	8,487,861

35. DEFERRED TAXATION

For the purpose of presentation in the consolidated statement of financial position, certain deferred tax assets and liabilities have been offset. The following is the analysis of the deferred tax balances for financial reporting purposes:

	31 December 2022 RMB'000	31 December 2021 RMB'000
Deferred tax assets	**49,987**	174,956
Deferred tax liabilities	**(345,750)**	(38,670)
	(295,763)	136,286

The followings are the major deferred tax liabilities and assets recognised and movements thereon during the current and prior years:

	Balance at 1 January 2021 RMB'000	Recognised in profit or loss RMB'000	Exchange realignment RMB'000	Balance at 31 December 2021 and 1 January 2022 RMB'000	Recognised in profit or loss RMB'000	Recognised in equity RMB'000	Exchange realignment RMB'000	Balance at 31 December 2022 RMB'000
Deferred tax assets:								
Provision for staff bonuses	12,192	(9,550)	–	2,642	7,847	–	46	10,535
Impairment of assets	64,199	24,428	(45)	88,582	(8,584)	–	(678)	79,320
Fair value adjustment arising from acquisition of a subsidiary	953	(935)	(18)	–	–	–	–	–
Accrued liabilities	214,235	(46,241)	–	167,994	122,828	–	8,319	299,141
Deductible tax losses	29,748	(28,731)	(336)	681	222,209	–	140	223,030
Right-of-use assets and lease liabilities	7,251	15,511	5	22,767	(22,765)	–	–	2
Others	50,623	17,059	(68)	67,614	7,281	–	(5,087)	69,808
	379,201	(28,459)	(462)	350,280	328,816	–	2,740	681,836
Deferred tax liabilities:								
Accelerated depreciation of property, plant and equipment	215,215	(40,353)	–	174,862	(91,499)	–	95	83,458
Investment in corporate wealth management products	5,547	(5,033)	–	514	337	–	–	851
Right-of-use assets and lease liabilities	–	–	–	–	68,359	–	56	68,415
Full deduction of assets before tax	–	–	–	–	772,361	–	–	772,361
Fair value adjustment arising from acquisition of subsidiaries	–	–	–	–	(242)	4,566	–	4,324
Others	24,565	14,791	(738)	38,618	5,563	–	4,009	48,190
	245,327	(30,595)	(738)	213,994	754,879	4,566	4,160	977,599
	(133,874)	(2,136)	(276)	(136,286)	426,063	4,566	1,420	295,763

35. DEFERRED TAXATION (continued)

At 31 December 2022, the aggregate amount of temporary differences associated with undistributed earnings of the Group's associate and joint ventures for which deferred tax liabilities have not been recognised was RMB1,589,186,000 (31 December 2021: RMB1,907,918,000). No liability has been recognised in respect of these differences as the investment company and those associate and joint ventures are all located in the PRC and the applicable tax rate of those associate and joint ventures was the same as or higher than the applicable tax rate of the investment company.

At 31 December 2022, the aggregate amount of temporary differences associated with undistributed earnings of subsidiaries for which deferred tax liabilities have not been recognised was RMB1,164,914,000 (31 December 2021: RMB743,516,000). No liability have been recognised in respect of these differences because the Group is in a position to control the timing of the reversal of the temporary differences and it is probable that such differences will not reverse in the foreseeable future.

At 31 December 2022, accumulated unrecognised tax losses arising in the Group of approximately RMB7,919,272,000 (31 December 2021: RMB7,228,779,000) were available for offsetting against future taxable profits of the companies in which the losses arose.

The unrecognised income tax losses which have fixed expiry dates, will expire in the following years:

	31 December 2022 RMB'000	31 December 2021 RMB'000
31 December 2027	**1,250**	3,118
31 December 2028	**4,703**	4,703
31 December 2029	**408**	408
31 December 2031	**198**	198
	6,559	8,427

At 31 December 2022, the Group had tax losses arising in Norway of RMB7,912,713,000 (31 December 2021: RMB7,220,352,000) that are available indefinitely for offsetting against future taxable profits of the companies in which the losses arose. Deferred tax assets have not been recognised by the Group in respect of these losses as they have arisen in subsidiaries that have been loss-making for some time and it is not considered probable that taxable profits will be available against which the tax losses can be utilised.

At 31 December 2022, the Group had deductible temporary differences of RMB4,185,098,000 (31 December 2021: RMB4,154,317,000). No deferred tax asset has been recognised by the Group in relation to such deductible temporary differences as it is not probable that taxable profit will be available against which these deductible temporary differences can be utilised.

36. LOANS FROM RELATED PARTIES

		Contractual interest rate per annum (%)	Year of maturity	31 December 2022 RMB'000	31 December 2021 RMB'000
Current	(a)	1M LIBOR+0.5%	Revolving loan	**2,437,610**	2,232,061
Non-current	(b)	1M SOFR+0.4%	2027	**921,383**	–
Non-current	(c)	1M SOFR+0.4%	2027	**577,169**	–
Non-current	(d)	3M SOFR+0.6%	2027	**697,707**	–
				2,196,259	–
Unsecured loans from related parties				**4,633,869**	2,232,061

Notes:

(a) During the year ended 31 December 2022, the Group had a loan of US$350,000,000 from a fellow subsidiary Overseas Oil & Gas Corporation, Ltd. ("OOGC"), which is repayable on demand and carries interest at an effective interest rate of one-month LIBOR+0.5% per annum. The proceeds were used to finance CNA's daily operations.

(b) At 15 August 2022, the Group borrowed a loan of US$132,000,000 from its ultimate holding company CNOOC. The loan from related party is due for a lump sum repayment at maturity, and carried interest at an effective interest rate of one-month Secured Overnight Financing Rate ("SOFR")+0.4% per annum. The proceeds were used to finance CNA's daily operations.

(c) At 17 August 2022, the Group borrowed a loan of US$82,000,000 from a fellow subsidiary OOGC. The loan from related party is due for a lump sum repayment at maturity, and carried interest at an effective interest rate of one-month SOFR+0.4% per annum. The proceeds were used to finance CNA's daily operations.

(d) At 11 August 2022, the Group borrowed a loan of US$100,000,000 from a fellow subsidiary CNOOC Insurance Limited. The loan from related party is due for a lump sum repayment at maturity, and carried interest at an effective interest rate of three-month SOFR+0.6% per annum. The proceeds were used to finance COSL Middle East FZE's daily operations.

37. INTEREST-BEARING BANK BORROWINGS

		Contractual interest rate (%)	Year of maturity	31 December 2022 RMB'000	31 December 2021 RMB'000
China Development Bank					
– unsecured	(a)	1.08%	2035	**187,272**	198,524
Bank of China (Hong Kong) Limited					
– secured	(b)	SOFR +0.69%	Revolving loan	**2,812,621**	–
The Hongkong and Shanghai Banking Corporation Limited					
– secured	(c)	SOFR +0.55%	Revolving loan	**684,811**	–
				3,684,704	198,524
Current				**3,515,710**	18,285
Non-current				**168,994**	180,239
				3,684,704	198,524

Notes:

(a) The Group borrowed a loan of RMB320,000,000 from a wholly-owned subsidiary of China Development Bank in December 2015. The loan was initially recognised at fair value measured by discounting future cash flows at the prevailing market interest. The repayments started from December 2018 over 36 instalments bi-annually. The effective interest rate for the year ended 31 December 2022 was 1.08% per annum (2021: 1.08% per annum).

(b) The Group borrowed a loan of US$400,000,000 from Bank of China (Hong Kong) Limited in August 2022. The loan is a revolving loan with an effective interest rate of SOFR+0.69%. The proceeds were used to finance COSL Middle East FZE's daily operations.

(c) The Group borrowed a loan of US$98,000,000 from The Hongkong and Shanghai Banking Corporation Limited in September 2022. The loan is a revolving loan with an effective interest rate of SOFR+0.55%. The proceeds were used to finance COSL Middle East FZE's daily operations.

	31 December 2022 RMB'000	31 December 2021 RMB'000
Bank borrowings repayable:		
Within one year	**3,515,710**	18,285
In the second year	**5,370**	4,644
In the third to fifth year, inclusive	**38,330**	37,101
Beyond five years	**125,294**	138,494
	3,684,704	198,524

38. LONG-TERM BONDS

	Year of maturity	31 December 2022 RMB'000	31 December 2021 RMB'000
Corporate bonds (Note (a))	2022	–	1,542,000
2016 Corporate bonds			
(Type II of the First Tranche Issue as defined below) (Note (b))	2026	**3,072,023**	3,071,603
(Type II of the Second Tranche Issue as defined below) (Note (b))	2023	**732,610**	732,610
Senior unsecured USD bonds (Note (c))	2022	–	6,442,557
Guaranteed medium-term notes Second Drawdown Note (Note (d))	2025	**3,540,146**	3,237,994
Guaranteed senior notes			
2025 Notes (Note (e))	2025	**3,477,168**	3,181,334
2030 Notes (Note (e))	2030	**2,072,162**	1,895,070
		12,894,109	20,103,168
Current		**872,231**	8,122,706
Non-current		**12,021,878**	11,980,462
		12,894,109	20,103,168

Notes:

(a) At 18 May 2007, the Group issued 15-year corporate bonds, with a nominal value of RMB100 per bond, amounting to RMB1,500,000,000. The bonds carried interest at an effective interest rate of 4.48% per annum (2021: 4.48% per annum), and the maturity date was 14 May 2022. As of 31 December 2022, the Group has repaid all principal and interest.

(b) At 26 May 2016, the Group issued its first tranche (the "First Tranche Issue") of domestic corporate bonds ("2016 Corporate Bonds") with an aggregate amount of RMB5,000,000,000. The First Tranche Issue includes two types of bonds. The first type of bonds with a principal amount of RMB2,000,000,000 was repaid on 27 May 2019. The second type of bonds with a principal amount of RMB3,000,000,000 (the "Type II of the First Tranche Issue") carries interest at an effective interest rate of 4.12% per annum and the maturity date is 27 May 2026.

At 21 October 2016, the Group issued its second tranche (the "Second Tranche Issue") of 2016 Corporate Bonds with an aggregate amount of RMB5,000,000,000. The Second Tranche Issue includes two types of bonds. The first type of bonds with a principal amount of RMB2,100,000,000 (the "Type I of the Second Tranche Issue") is repayable on 24 October 2021. As of 31 December 2022, the Group has repaid all principal and interest.

The second type of bonds with a principal amount of RMB2,900,000,000 (the "Type II of the Second Tranche Issue") is repayable on 24 October 2023. The Group has the right to keep it unadjusted or adjust the coupon rate for the sixth and seventh years at the end of the fifth year on 24 October 2021 by giving a notice to the bondholders. The bondholders may accordingly at their option require the Group to redeem the Type II of the Second Tranche Issue at a redemption price equal to 100% of the principal plus accrued and unpaid interest to such redemption date. The remaining bonds will be subject to the interest rate offered by the Group at the end of the fifth year until the maturity date. The bondholders resold a principal amount of RMB2,171,382,000 to the Group on 25 October 2021. The effective interest rate of the Type II of the Second Tranche Issue is 2.90% per annum.

38. LONG-TERM BONDS (continued)

Notes: (continued)

(c) At 6 September 2012, COSL Finance (BVI) Limited, a subsidiary of the Group, issued 10-year senior unsecured bonds, with a US$1,000,000,000 principal amount. The maturity date is 6 September 2022. The effective interest rate of the senior unsecured bonds is 3.38% per annum. As of 31 December 2022, the Group has repaid all principal and interest.

(d) At 20 July 2015, COSL Singapore Capital Ltd., a wholly-owned subsidiary of the Company, established the Euro medium term note programme (the "EMTN Programme"). Under the EMTN Programme, COSL Singapore Capital Ltd. may issue drawdown notes in tranches up to an aggregate principal amount of US$3,500,000,000. The Company has unconditionally and irrevocably guaranteed the due and punctual payment of the EMTN Programme.

At 30 July 2015, COSL Singapore Capital Ltd. issued the second tranche of drawdown note under the EMTN Programme with a nominal amount of US$500,000,000 (the "Second Drawdown Note"). The effective interest rate is 4.58% per annum after taking into consideration initial transaction costs. The principal of the Second Drawdown Note will be repaid on 30 July 2025.

(e) At 24 June 2020, COSL Singapore Capital Ltd., a wholly-owned subsidiary of the Company, issued two tranches of guaranteed senior notes. The Company has unconditionally and irrevocably guaranteed the due and punctual payment of guaranteed senior notes.

The first tranche of the notes (the "2025 Notes") is a 5-year guaranteed senior notes, with a US$500,000,000 principal amount. The maturity date is 24 June 2025. The effective interest rate of the 2025 Notes is 1.94% per annum.

The second tranche of the notes (the "2030 Notes") is a 10-year guaranteed senior notes, with a US$300,000,000 principal amount. The maturity date is 24 June 2030. The effective interest rate of the 2030 Notes is 2.62% per annum.

39. LEASE LIABILITIES

	31 December 2022 RMB'000	31 December 2021 RMB'000
Carrying amount at 1 January	**910,093**	590,588
New leases	**409,515**	735,740
Acquisition of subsidiaries	**37,490**	–
Accretion of interest recognised during the year	**42,663**	34,878
Payments	**(414,953)**	(322,592)
Lease modification	**(11,962)**	(116,750)
Exchange realignment	**33,940**	(11,771)
Carrying amount at 31 December	**1,006,786**	910,093
Analysed into:		
Current portion	**437,193**	342,013
Non-current portion	**569,593**	568,080
	1,006,786	910,093

The weighted average incremental borrowing rates applied to lease liabilities range from 0.59% to 5.00% (2021: from 2.35% to 4.39%).

39. LEASE LIABILITIES (continued)

The Group leases its certain drilling rigs under financial lease arrangements. At 31 December 2022, the undiscounted lease payments receivable by the Group in future periods under non-cancellable financial leases with its tenants are as follows:

	31 December 2022 RMB'000	31 December 2021 RMB'000
Within one year	**5,044**	52,876
After one year but within two years	**–**	4,636
	5,044	57,512

The amount recognised in profit or loss in relation to leases is as follows:

	2022 RMB'000	2021 RMB'000
Interest on lease liabilities	**42,663**	34,878
Depreciation charge of right-of-use assets	**367,115**	363,007
Expense relating to short-term leases	**697,565**	681,869
Variable payments not included in the measurement of lease liabilities	**969,307**	636,613
Total amount recognised in profit or loss	**2,076,650**	1,716,367

40. CONTRACT LIABILITIES

	31 December 2022 RMB'000	31 December 2021 RMB'000
Contract liabilities		
Current	**759,723**	545,113
Non-current	**458,722**	31,487
	1,218,445	576,600

The Group's contract liabilities consist of the mobilisation fee, subsidies received from customers related to the adaptation of machinery for the provision of drilling services (the "Subsidies") and advance from customers relevant to certain operation contracts. The contract liabilities are recognised as revenues on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the liabilities relate.

40. CONTRACT LIABILITIES (continued)

The following table shows how much of the revenue recognised relates to carried-forward contract liabilities:

	Advance from customers RMB'000	Mobilisation fee RMB'000	Subsidies RMB'000	Total RMB'000
For the year ended 31 December 2022 Revenue recognised that was included in the contract liability balance at the beginning of the year	**202,584**	**70,993**	**54,717**	**328,294**
For the year ended 31 December 2021 Revenue recognised that was included in the contract liability balance at the beginning of the year	221,198	57,688	7,638	286,524

41. DEFERRED INCOME

Deferred income consists of the contract value acquired in the process of the acquisition of CNA, government grants, and the difference between proceeds received from loans at a below-market rate granted by a wholly-owned subsidiary of a state-owned bank and the fair value of the loans at initial recognition based on the prevailing market interest rate (the "Others"). The deferred income acquired from contract value is amortised according to the related drilling contract periods and is credited to revenues of the Group. The deferred income received from government and the Others is recognised according to the depreciable periods of the related assets and the periods in which the related costs are incurred, respectively, and is credited to other income of the Group.

	Contract value RMB'000	Government grants related to assets RMB'000	Government grants related to income RMB'000	Others RMB'000	Total RMB'000
At 1 January 2021	9,530	163,059	40,743	65,154	278,486
Additions	–	5,610	14,899	–	20,509
Credited to profit or loss	(9,422)	(18,078)	(28,231)	(7,292)	(63,023)
Exchange realignment	(108)	–	(12)	–	(120)
At 31 December 2021 and 1 January 2022	–	150,591	27,399	57,862	235,852
Additions	**–**	**1,000**	**26,582**	**–**	**27,582**
Credited to profit or loss	**–**	**(13,945)**	**(37,955)**	**(6,955)**	**(58,855)**
Exchange realignment	**–**	**–**	**–**	**–**	**–**
At 31 December 2022	**–**	**137,646**	**16,026**	**50,907**	**204,579**

42. ISSUED CAPITAL

	31 December 2022 RMB'000	31 December 2021 RMB'000
Registered, issued and fully paid:		
H shares of RMB1.00 each	**1,811,124**	1,811,124
A shares of RMB1.00 each	**2,960,468**	2,960,468
	4,771,592	4,771,592

43. BUSINESS COMBINATION

Business Combination of China France Bohai

On 1 August 2022, the shareholders of China France Bohai amended its articles of association. Pursuant to the amended articles of association, the highest authority of China France Bohai is the board of directors. The Company nominated four directors out of seven directors of the board of directors, Geoservice S.A. nominated three directors out of seven directors of the board of directors. The voting rights of China France Bohai's major business decisions were amended from "more than two-thirds of all the directors of the board approved" to "more than half of all the directors of the board approved".

The Company has control over China France Bohai after amending the articles of association. Accordingly, China France Bohai was accounted for as a subsidiary by the Company since acquisition date (1 August 2022). Prior to the acquisition date, the Company held 50% equity interests in China France Bohai which was accounted as a joint venture under equity method.

The fair values of the identifiable assets and liabilities of China France Bohai as at the date of acquisition were as follows:

	Notes	**Fair value recognised on acquisition date RMB'000**
Property, plant and equipment	*17*	252,387
Right-of-use assets	*18*	38,340
Cash and cash equivalents		239,898
Accounts receivable		396,762
Inventories		26,170
Other assets		10,411
Trade and other payables		(159,656)
Salary and bonus payables		(112,766)
Deferred tax liabilities		(1,954)
Lease liabilities	*39*	(37,490)
Other liabilities		(8,834)
Total identifiable net assets at fair value		643,268
Non-controlling interests		(321,634)
		321,634
Goodwill on acquisition		–
Satisfied by the equity investment's fair value held by the Company		321,634

The consideration for the business combination was RMB321,634,000, which was the fair value of 50% equity interests held by the Company at the acquisition date.

43. BUSINESS COMBINATION (continued)

Business Combination of China France Bohai (continued)

An analysis of the cash flows in respect of the acquisition of a subsidiary is as follows:

	RMB'000
Cash consideration	–
Cash and bank balances acquired	239,898
	239,898

Since the acquisition, China France Bohai contributed RMB1,031,034,000 to the Group's revenue and RMB251,222,000 to the consolidated profit for the year ended 31 December 2022.

Had the combination taken place at the beginning of the year, the revenue and the profit of the Group for the year contributed by China France Bohai would have been RMB1,775,667,000 and RMB453,158,000, respectively.

Business Combination of Magcobar

On 1 December 2022, the shareholders of Magcobar amended its articles of association. Pursuant to the amended articles of association, the highest authority of Magcobar is the board of directors. The Company nominated three directors out of five directors of the board of directors, M-I Holdings (BVI) Limited nominated two directors out of five directors of the board of directors. The voting rights of Magcobar's major business decisions were amended from "more than two-thirds of all the directors of the board of agreed approved" to "more than half of all the directors of the board approved".

The Company has control over Magcobar after amending the articles of association. Accordingly, Magcobar was accounted for as a subsidiary by the Company since acquisition date (1 December 2022). Prior to the acquisition date, the Company held 60% equity interest in Magcobar which was accounted as a joint venture under equity method.

The fair values of the identifiable assets and liabilities of Magcobar as at the date of acquisition were as follows:

	Note	**Fair value recognised on acquisition date RMB'000**
Property, plant and equipment	*17*	9,831
Cash and cash equivalents		105,942
Accounts receivable		94,353
Inventories		56,589
Other assets		20,930
Trade and other payables		(43,834)
Salary and bonus payables		(5,772)
Deferred tax liabilities		(2,612)
Other liabilities		(969)
Total identifiable net assets at fair value		234,458
Non-controlling interests		(93,783)
		140,675
Goodwill on acquisition		–
Satisfied by the equity investment's fair value held by the Company		140,675

43. BUSINESS COMBINATION (continued)

Business Combination of Magcobar (continued)

The consideration for the business combination was RMB140,675,000, which was the fair value of 60% equity interests held by the Company at the acquisition date.

An analysis of the cash flows in respect of the acquisition of a subsidiary is as follows:

	RMB'000
Cash consideration	–
Cash and bank balances acquired	105,942
	105,942

Since the acquisition, Magcobar contributed RMB26,335,000 to the Group's revenue and RMB5,694,000 to the consolidated profit for the year ended 31 December 2022.

Had the combination taken place at the beginning of the year, the revenue and the profit of the Group for the year contributed by Magcobar would have been RMB166,590,000 and RMB15,959,000, respectively.

44. CONTINGENCES AND COMMITMENTS

(A) Contract performance guarantees

In June 2021, the Company issued a 12-month contract performance guarantee in respect of certain obligation service agreements entered into by the Group's cooperation partner, Oceancare Corporation Sdn Bhd ("OCSB"), in favour of a customer of OCSB (the "guaranteed party"). Under the guarantee, the Company was required to make at its own cost for all outstanding contractual work for the guaranteed party if OCSB fail to perform under the said service obligations. As at 31 December 2022, the above guarantee has become due and the Group had no guarantee for other entities, and as at 31 December 2021, the total consideration of the service agreements was US$1,031,054, which is equivalent to approximately RMB6,573,691.

	31 December 2022 RMB'000	31 December 2021 RMB'000
Guarantee for other entities	–	6,574

The Group has not recognised liabilities for the above guarantee as at 31 December 2021 because the Directors consider that the possibility of an outflow of resources embodying economic benefits is remote.

(B) Capital commitments

The Group had the following capital commitments, principally for the construction and purchases of property, plant and equipment at the end of the reporting period:

	31 December 2022 RMB'000	31 December 2021 RMB'000
Contracted, but not provided for	**1,241,992**	1,230,736

At the end of the reporting period, the Group's share of joint ventures' and an associate's own capital commitments was insignificant.

45. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

Reconciliation of profit before tax to cash generated from operations

	Notes	2022 RMB'000	2021 RMB'000
CASH FLOWS FROM OPERATING ACTIVITIES			
Profit before tax		**2,981,479**	1,089,550
Adjustments for:			
Finance costs	*9*	**763,602**	817,569
Interest income		**(123,432)**	(123,932)
Investment income		**(16,307)**	(44,550)
Gains arising from financial assets at FVTPL		**(65,263)**	(62,740)
Share of profits of an associate and joint ventures, net of tax		**(287,558)**	(372,996)
Exchange (gains)/losses, net		**(565,845)**	165,389
Losses on disposal of property, plant and equipment, net	*8*	**23,557**	56,413
(Gains)/losses arising from lease modifications	*8*	**(356)**	2,955
Depreciation of property, plant and equipment and amortisation of intangible assets and Multiclient library		**4,685,573**	4,503,772
Depreciation of right-of-use assets		**367,115**	363,007
Impairment losses of accounts receivable and other receivables, net of reversal		**49,435**	15,758
(Reversal)/provision of impairment of inventories	*8*	**(7,500)**	5,278
Impairment of property, plant and equipment		**30,198**	2,011,343
		7,834,698	8,426,816
Decrease/(increase) in inventories		**144,467**	(372,141)
Increase in accounts receivable		**(2,241,638)**	(484,824)
Decrease/(increase) in pledged deposits		**1,591**	(7,968)
Decrease/(increase) in notes receivable		**23,241**	(19,209)
Decrease/(increase) in prepayments, deposits and other receivables and other assets		**13,582**	(61,307)
Decrease/(increase) in receivables at fair value through other comprehensive income		**1,662**	(6,852)
Decrease in contract assets		**43,025**	229,400
Increase in contract costs		**(281,836)**	(27,501)
Increase in trade and other payables and other liabilities, net of payables for purchases of property, plant and equipment		**1,436,358**	101,297
(Decrease)/increase in notes payable		**(42,307)**	54,173
Increase/(decrease) in salary and bonus payables		**245,889**	(25,261)
Decrease in deferred income		**(25,317)**	(40,833)
Increase in contract liabilities		**610,762**	130,045
(Decrease)/increase in provision		**(24,680)**	114,921
Cash generated from operations		**7,739,497**	8,010,756

45. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (continued)

Reconciliation of liabilities arising from financing activities

			Non-cash changes					
	1 January 2022 RMB'000	Financing cash flows (a) RMB'000	Foreign exchange movement RMB'000	Interest expenses and dividends declared RMB'000	New leases entered into and lease modified RMB'000	Acquisition of subsidiaries RMB'000	Other changes (b) RMB'000	31 December 2022 RMB'000
Loans from related parties (Note 36)	2,232,061	2,060,696	259,891	81,221	–	–	–	4,633,869
Interest-bearing bank borrowings (Note 37)	198,524	3,341,716	82,938	54,571	–	–	6,955	3,684,704
Long-term bonds (Note 38)	20,103,168	(8,989,667)	1,195,461	578,565	–	–	6,582	12,894,109
Lease liabilities (Note 39)	910,093	(414,953)	33,940	42,663	397,553	37,490	–	1,006,786
Dividend payable (included in trade and other payables)	–	(865,739)	–	905,739	–	–	–	40,000
Total	23,443,846	(4,867,947)	1,572,230	1,662,759	397,553	37,490	13,537	22,259,468

			Non-cash changes				
	1 January 2021 RMB'000	Financing cash flows (a) RMB'000	Foreign exchange movement RMB'000	Interest expenses and dividends declared RMB'000	New leases entered into and lease modified RMB'000	Other changes (b) RMB'000	31 December 2021 RMB'000
Loan from a related party (Note 36)	2,284,336	(13,806)	(52,241)	13,772	–	–	2,232,061
Interest-bearing bank borrowings (Note 37)	209,437	(21,104)	–	2,899	–	7,292	198,524
Long-term bonds (Note 38)	22,721,055	(3,027,472)	(371,951)	766,020	–	15,516	20,103,168
Lease liabilities (Note 39)	590,588	(322,592)	(11,771)	34,878	618,990	–	910,093
Dividend payable (included in trade and other payables)	–	(811,171)	–	811,171	–	–	–
Total	25,805,416	(4,196,145)	(435,963)	1,628,740	618,990	22,808	23,443,846

(a) The cash flows from loans from related parties, interest-bearing bank borrowings and long-term bonds represented the net amount of certain proceeds and repayments in the consolidated statement of cash flows.

(b) Other changes mainly represented amortisation of an upfront fee of interest-bearing bank borrowings and expenses for issuance of long-term bonds.

46. RELATED PARTY TRANSACTIONS

As disclosed in Note 1, the Company is a subsidiary of CNOOC, which is an SOE subject to the control of the State Council of the PRC Government.

(A) Related party transactions and outstanding balances with related parties

The Group has extensive transactions and relationships with the members of CNOOC. The transactions were made on terms agreed among the parties.

In addition to the transactions and balances detailed elsewhere in these consolidated financial statements, the following is a summary of significant transactions carried out between the Group and (i) the CNOOC Limited Group; (ii) the CNOOC Group; (iii) the Group's joint ventures and an associate; and (iv) associates invested by CNOOC.

a. Included in revenue – gross revenue earned from provision of services to the following related parties

	2022 RMB'000	2021 RMB'000
i. CNOOC Limited Group		
Provision of drilling services	**6,821,765**	6,138,833
Provision of well services	**16,984,054**	13,661,807
Provision of marine support services	**3,183,428**	2,864,094
Provision of geophysical acquisition and surveying services	**1,873,748**	1,859,869
	28,862,995	24,524,603
ii. CNOOC Group		
Provision of drilling services	**236,677**	80,938
Provision of well services	**373,181**	344,295
Provision of marine support services	**68,650**	92,075
Provision of geophysical acquisition and surveying services	**60,448**	72,123
	738,956	589,431
iii. Joint ventures and an associate		
Provision of drilling services	**49,791**	–
Provision of well services	**6,795**	12,042
Provision of marine support services	**682**	–
Provision of geophysical acquisition and surveying services	**364**	2,856
	57,632	14,898
iv. Associates invested by CNOOC		
Provision of drilling services	**48,677**	591
Provision of well services	**61,546**	8,255
Provision of marine support services	**4,475**	341
Provision of geophysical acquisition and surveying services	**1,161**	–
	115,859	9,187

During the current year, the revenue arising from operating leases from CNOOC Limited Group was RMB91,250,000 (2021: RMB64,293,000).

46. RELATED PARTY TRANSACTIONS (continued)

(A) Related party transactions and outstanding balances with related parties (continued)

b. Included in operating expenses

	2022 RMB'000	2021 RMB'000
i. CNOOC Limited Group		
Materials, utilities and other ancillary services	**58,837**	9,213
Transportation services	**687**	1,272
Leasing of equipment	**1,767**	84
Management services	**581**	–
Labour services	**10,371**	–
	72,243	10,569
Property services	**38,264**	10,019
	110,507	20,588
ii. CNOOC Group		
Materials, utilities and other ancillary services	**1,404,024**	1,387,720
Leasing of equipment	**142,440**	189,118
Transportation services	**54,134**	69,850
Management services	**144,513**	29,540
Repair and maintenance services	**4,844**	6,540
Labour services	**111,386**	–
	1,861,341	1,682,768
Property services	**160,291**	145,011
	2,021,632	1,827,779
iii. Joint ventures and an associate		
Materials, utilities and other ancillary services	**374,247**	252,165
Leasing of equipment	**12,302**	10,497
Labour services	**41,021**	–
	427,570	262,662
Property services	**–**	350
	427,570	263,012
iv. Associates invested by CNOOC		
Materials, utilities and other ancillary services	**89,963**	35,541
Leasing of equipment	**80**	–
Repair and maintenance services	**350**	236
Management services	**2,450**	–
Labour services	**5,606**	–
	98,449	35,777

46. RELATED PARTY TRANSACTIONS (continued)

(A) Related party transactions and outstanding balances with related parties (continued)

c. *Included in interest income*

	2022 RMB'000	2021 RMB'000
CNOOC Finance (a subsidiary of CNOOC)		
Interest income	**14,491**	21,911

Deposits in CNOOC Finance carry interests at the applicable interest rate which is determined with reference to the prevailing bank rates published by the People's Bank of China.

d. *Dividend from joint ventures*

	2022 RMB'000	2021 RMB'000
Dividend from joint ventures	**98,945**	244,875

e. *Included in finance costs*

During the current year, the finance costs on the loans from related parties (Note 36) were US$12,076,000 (2021: US$2,134,000), which is equivalent to approximately RMB81,221,000 (2021: RMB13,772,000).

During the current year, the finance costs on the lease liabilities due to a related party were RMB14,773,000 (2021: RMB15,419,000).

f. *Deposits*

	31 December 2022 RMB'000	31 December 2021 RMB'000
Deposits placed with CNOOC Finance	**1,199,983**	1,198,957

g. During the current year, the other income from CNOOC Limited Group in respect of compensation for equipment dropping into wells when rendering services was RMB9,395,000 (2021: RMB1,706,000).

46. RELATED PARTY TRANSACTIONS (continued)

(A) Related party transactions and outstanding balances with related parties (continued)

h. *Right-of-use assets*

The Group entered into certain lease agreements with related parties and recognised right-of-use assets and lease liabilities on lease commencement. The following is addition of right-of-use assets from related parties:

	2022 RMB'000	2021 RMB'000
CNOOC Group	**10,050**	483,588

Except for items in a(iii), b(iii) and d above, the above transactions also constitute connected transactions or continuing connected transactions as defined in Chapter 14A of the Listing Rules.

i. *Contingences and commitments with related parties*

The Group had the following capital commitments with related parties, principally for construction and purchases of property, plant and equipment at the end of the reporting period:

	31 December 2022 RMB'000	31 December 2021 RMB'000
Contracted, but not provided for	**831**	5,078

The Group had no guarantees granted to related parties as of 31 December 2022 and 2021.

j. *Outstanding balances with related parties*

Accounts receivable

	31 December 2022 RMB'000	31 December 2021 RMB'000
Due from CNOOC Limited Group	**10,160,288**	7,615,573
Due from CNOOC Group	**154,487**	153,015
Due from joint ventures and an associate	**20,607**	1,300
Due from associates invested by CNOOC	**59,976**	7,049
	10,395,358	7,776,937

46. RELATED PARTY TRANSACTIONS (continued)

(A) Related party transactions and outstanding balances with related parties (continued)

j. *Outstanding balances with related parties (continued)*

Prepayments, deposits and other receivables

	31 December 2022 RMB'000	31 December 2021 RMB'000
Due from CNOOC Limited Group	**7**	–
Due from CNOOC Group	**3,061**	216
Due from joint ventures and an associate	**411**	9,137
	3,479	9,353

Trade and other payables

	31 December 2022 RMB'000	31 December 2021 RMB'000
Due to CNOOC Limited Group	**65,532**	22,453
Due to CNOOC Group	**687,966**	606,397
Due to joint ventures and an associate	**237,447**	233,165
Due to associates invested by CNOOC	**70,092**	56,465
	1,061,037	918,480

Loans from related parties

	31 December 2022 RMB'000	31 December 2021 RMB'000
Unsecured loans due to CNOOC Group (Note 36)	**4,633,869**	2,232,061

Contract liabilities

	31 December 2022 RMB'000	31 December 2021 RMB'000
Due to the CNOOC Limited Group	**65,172**	81,488
Due to the CNOOC Group	**346,629**	352,065
	411,801	433,553

46. RELATED PARTY TRANSACTIONS (continued)

(A) Related party transactions and outstanding balances with related parties (continued)

j. *Outstanding balances with related parties (continued)*

Other non-current liabilities

	31 December 2022 RMB'000	31 December 2021 RMB'000
Due to the CNOOC Limited Group	**106,394**	–

Lease liabilities

	31 December 2022 RMB'000	31 December 2021 RMB'000
Due to the CNOOC Group	**321,312**	404,867

The Group and the above related parties are within the CNOOC Group and the CNOOC Limited Group and are under common control (except for the joint ventures of the Group) of the same ultimate holding company.

The balances with related parties at 31 December 2022 included in accounts receivable, prepayments, deposits and other receivables, trade and other payables and contract liabilities of the Group are unsecured, interest-free, and have no fixed terms of repayment. The loans from related parties bears interest at 1M LIBOR+0.5%, 1M SOFR+0.4% and 3M SOFR+0.6% per annum and is repayable on demand. Lease liabilities have fixed terms of repayment and are measured at the present value of lease payments that are unpaid using the incremental borrowing rate at the lease commencement date.

The Company entered into several agreements with the CNOOC Group and the CNOOC Limited Group which govern the employee benefit arrangements, the provision of materials, utilities and ancillary services, the provision of technical services, the leasing of properties and various other commercial arrangements.

The lease expenses relating to agreements with the CNOOC Group and the CNOOC Limited Group in respect of variable lease payments determined by utilisation days and day rates as well as short-term leases are disclosed in Note 46(A).

The Directors are of the opinion that the above transactions with related parties were conducted in the normal course of business.

46. RELATED PARTY TRANSACTIONS (continued)

(A) Related party transactions and outstanding balances with related parties (continued)

k. Transactions with other SOEs in the PRC

The Group has entered into extensive transactions covering the sales of goods and rendering of services, receipt of construction services of vessels and drilling rigs, purchases of goods, services or property, plant and equipment in the PRC, other than the CNOOC Group and the CNOOC Limited Group, in the normal course of business on terms comparable to those with other non-SOEs. None of these transactions are material related party transactions, individually or collectively, that require separate disclosure.

In addition, the Group has certain of its cash, time deposits and certificates of deposit and outstanding interest-bearing bank borrowings with certain state-owned banks in the PRC as at 31 December 2022 and 2021, as summarised below:

	31 December 2022 RMB'000	31 December 2021 RMB'000
Cash and cash equivalents	**1,155,816**	393,018
Time deposits	**1,419**	1,394
Certificates of deposit	**1,616,347**	1,556,535
	2,773,582	1,950,947
Long-term bank loans (Note 37)	**168,994**	180,239
Current portion of long-term bank loans (Note 37)	**3,515,710**	18,285
	3,684,704	198,524

Deposit interest rates and loan interest rates are at market rates.

	2022 RMB'000	2021 RMB'000
Finance costs	**54,571**	2,899

(B) Compensation of key management personnel of the Group

	2022 RMB'000	2021 RMB'000
Short-term employee benefits	**10,671**	10,426
Post-employment benefits	**1,356**	1,208
Total compensation paid to key management personnel	**12,027**	11,634

Further details of Directors', supervisors and the chief executive's emoluments are included in Note 11.

47. FINANCIAL INSTRUMENTS

(a) Financial instruments by category

The carrying amounts of each of the categories of financial instruments of the Group as at the end of the reporting period are as follows:

Financial assets

	31 December 2022			
	Amortised cost RMB'000	FVTPL RMB'000	FVTOCI RMB'000	Total RMB'000
Financial assets included in deposits and other receivables (Note 25)	73,852	–	–	73,852
Financial assets at FVTPL (Note 28)	–	5,106,036	–	5,106,036
Receivables measured at FVTOCI (Note 29)	–	–	8,200	8,200
Accounts receivable (Note 26)	14,175,184	–	–	14,175,184
Notes receivable (Note 27)	22,759	–	–	22,759
Pledged deposits (Note 33)	10,976	–	–	10,976
Time deposits (Note 33)	548,535	–	–	548,535
Cash and cash equivalents (Note 33)	3,561,740	–	–	3,561,740
Certificates of deposit (Note 32)	1,616,347	–	–	1,616,347
Deposits paid for monetary funds (Note 32)	1,000,000	–	–	1,000,000
Total	21,009,393	5,106,036	8,200	26,123,629

	31 December 2021			
	Amortised cost RMB'000	FVTPL RMB'000	FVTOCI RMB'000	Total RMB'000
Financial assets included in deposits and other receivables (Note 25)	188,746	–	–	188,746
Financial assets at FVTPL (Note 28)	–	5,703,728	–	5,703,728
Receivables measured at FVTOCI (Note 29)	–	–	9,862	9,862
Accounts receivable (Note 26)	10,511,674	–	–	10,511,674
Notes receivable (Note 27)	29,259	–	–	29,259
Pledged deposits (Note 33)	11,479	–	–	11,479
Time deposits (Note 33)	95,418	–	–	95,418
Cash and cash equivalents (Note 33)	5,006,389	–	–	5,006,389
Certificates of deposit (Note 32)	1,556,535	–	–	1,556,535
Deposits paid for monetary funds (Note 32)	600,000	–	–	600,000
Lease receivable (Note 32)	4,617	–	–	4,617
Total	18,004,117	5,703,728	9,862	23,717,707

47. FINANCIAL INSTRUMENTS (continued)

(a) Financial instruments by category (continued)

The carrying amounts of each of the categories of financial instruments of the Group as at the end of the reporting period are as follows: (continued)

Financial liabilities

	31 December 2022 RMB'000	31 December 2021 RMB'000
At amortised cost:		
Current		
Financial liabilities included in trade and other payables (Note 34)	**11,145,020**	8,738,684
Notes payable	**11,866**	54,173
Interest-bearing bank borrowings – current portion (Note 37)	**3,515,710**	18,285
Long-term bonds (Note 38)	**872,231**	8,122,706
Loans from related parties (Note 36)	**2,437,610**	2,232,061
Subtotal	**17,982,437**	19,165,909
Non-current		
Interest-bearing bank borrowings (Note 37)	**168,994**	180,239
Loans from related parties (Note 36)	**2,196,259**	–
Long-term bonds (Note 38)	**12,021,878**	11,980,462
Subtotal	**14,387,131**	12,160,701
Total	**32,369,568**	31,326,610

(b) Fair value of the Group's financial assets that are measured at fair value on a recurring basis

Some of the Group's financial assets are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets are determined (in particular, the valuation technique(s) and inputs used), as well as the level of the fair value hierarchy into which the fair value measurements are categorised (Levels 1 to 3) based on the degree to which the inputs to the fair value measurements are observable.

Financial assets	Fair value as at 31 December 2022 RMB'000	Fair value as at 31 December 2021 RMB'000	Fair value hierarchy	Valuation technique(s) and key input(s)
Financial assets at FVTPL – monetary funds	**200,025**	1,300,096	Level 1	Quoted bid prices in an active market
Receivables at FVTOCI – notes receivable	**8,200**	9,862	Level 2	Discounted cash flows at a discount rate that reflect the credit risk of the drawee of notes at the end of the reporting period
Financial assets at FVTPL – floating rate corporate wealth management products	**4,906,011**	4,403,632	Level 3	Discounted cash flows. Future cash flows estimated based on estimated return

47. FINANCIAL INSTRUMENTS (continued)

(b) Fair value of the Group's financial assets that are measured at fair value on a recurring basis (continued)

Reconciliation of Level 3 fair value measurements is as follows:

	Financial assets at FVTPL RMB'000
At 31 December 2020	2,539,196
Purchase	7,200,000
Redemption	(5,300,000)
Change in fair value	(35,564)
At 31 December 2021	4,403,632
Purchase	**5,900,000**
Redemption	**(5,400,000)**
Change in fair value	**2,379**
At 31 December 2022	**4,906,011**

The principal unobservable input used by the Group for floating rate corporate wealth management products is the exchange rate in future periods.

(c) Fair value of the Group's financial assets and financial liabilities that are not measured at fair value on a recurring basis

The fair value of short-term and long-term loans at floating rates is approximately equal to their carrying amounts.

Except as detailed in the following table, the Directors consider that the carrying amounts of financial assets and financial liabilities recognised in the consolidated financial statements approximate to their fair values.

	Carrying amounts		**Fair values**	
	31 December 2022 RMB'000	31 December 2021 RMB'000	**31 December 2022 RMB'000**	31 December 2021 RMB'000
Financial liabilities				
Long-term bonds (Note 38)	**12,894,109**	20,103,168	**12,153,699**	20,151,324
Interest-bearing bank borrowings – non-current (Note 37)	**168,994**	180,239	**164,235**	180,239
Total	**13,063,103**	20,283,407	**12,317,934**	20,331,563

The fair value of long-term bonds issued by the Group and non-current interest-bearing bank borrowings, with fair value measurements categorised within Level 2, are determined by reference to the present value valuation technique under the income approach and by applying the prime rate as adjusted to reflect the credit risk of the issuers as key inputs.

48. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's principal financial instruments comprise interest-bearing bank borrowings, loans from related parties, long-term bonds, cash and short term deposits and investments in corporate wealth management products, certificates of deposit, monetary funds and a debt instrument. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various other financial assets and liabilities such as trade and other receivables and trade and other payables, which arise directly from its operations.

The main risks arising from the Group's financial instruments are foreign currency risk, interest rate risk, credit risk and liquidity risk. The board of directors reviews and agrees policies for managing each of these risks and they are summarised below.

Foreign currency risk

Foreign currency risk is the risk that the value of a financial instrument will fluctuate because of changes in foreign exchange rates. With the majority of the Group's businesses transacted in RMB and USD, the aforesaid currency is defined as the functional currency of the Company and some subsidiaries respectively. RMB is not freely convertible into foreign currencies and conversion of RMB into foreign currencies is subject to rules and regulations of foreign exchange control promulgated by the PRC government.

The Group has foreign currency sales, purchases, bank borrowings, loans from related parties, long-term bonds, pledged deposits and cash and cash equivalents denominated in foreign currencies, which expose the Group to foreign currency risk. Management monitors foreign exchange exposure and will consider hedging other foreign currency exposure should the need arise.

The loans for foreign operations within the Group that form part of the Group's net investment in the foreign operations are denominated in foreign currencies, other than the functional currency of the lender.

The carrying amounts of the Group's foreign currency denominated financial assets and financial liabilities at the end of the reporting period are as follows:

	Financial assets		Financial liabilities	
	31 December 2022 RMB'000	31 December 2021 RMB'000	**31 December 2022 RMB'000**	31 December 2021 RMB'000
US$	**11,648,545**	10,263,800	**233,441**	237,146
Others	**967,406**	774,437	**572,312**	437,811

48. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Foreign currency risk (continued)

Management has assessed the Group's exposure to foreign currency risk (due to changes in the fair values or future cash flows of monetary assets and liabilities) by using a sensitivity analysis on the change in the foreign exchange rates of the US dollar, from which the Group's foreign currency risk has mainly arisen as at 31 December 2022 and 2021. The sensitivity analysis also includes inter-company balances where the denomination of the loan is in a currency other than the functional currency of the lender or the borrower. The following table details the Group's sensitivity to a 5.0% (2021: 5.0%) appreciation or depreciation of the US dollar.

	Increase/(decrease) in profit		Increase/(decrease) in other comprehensive income	
	2022 RMB'000	2021 RMB'000	**2022 RMB'000**	2021 RMB'000
Appreciation of US$	**66,580**	123,654	**415,883**	305,887
Depreciation of US$	**(66,580)**	(123,654)	**(415,883)**	(305,887)

Interest rate risk

The interest rate risk of the Group relates primarily to four variable-rate loans from related parties (see Note 36) and certain cash and cash equivalents (see Note 33). The Group currently does not have an interest rate policy. However, management monitors interest rate exposure and will consider hedging significant interest rate exposure should the need arise. The fair value interest rate risk on time deposits is insignificant as the fixed deposits are short-term.

A fundamental reform of major interest rate benchmarks is being undertaken globally, including the replacement of some interbank offered rates with alternative nearly risk-free rates. As listed in Note 37, the Group's LIBOR loan and SOFR loan may be subject to the interest rate benchmark reform. The Group is closely monitoring the transition to new benchmark interest rates.

The sensitivity analyses below have been determined based on the exposure to interest rates for non-derivative instruments at the end of the reporting period. No sensitivity analysis has been presented for cash and cash equivalents as the Directors consider that the fluctuation in interest rates on cash and cash equivalent is minimal. For variable-rate bank borrowings, the analysis is prepared assuming the amount outstanding at the end of the reporting period was outstanding for the whole year. 50 basis points (2021: 50 basis points) increase or decrease is used which represents management's assessment of the reasonably possible change in interest rates.

At the end of the reporting period, if interest rates had been increased/(decreased) by 50 basis points (2021: 50 basis points) and all other variables were held constant, the Group's post-tax profit would (decrease)/increase by approximately RMB34,029,000 for the year ended 31 December 2022 (2021: the Group's post-tax profit would (decrease)/increase by approximately RMB8,703,000) without considering the effect of capitalisation of borrowing costs.

48. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Credit risk and impairment assessment

The Group trades only with recognised and creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis.

The credit risk of the Group's other financial assets, which mainly comprise cash and cash equivalents and investments in corporate wealth management products, certificates of deposit, monetary funds and debt instrument, arises from the default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments. The Group manages this credit risk by only dealing with reputable financial institutions.

According to the Group's credit risk management policy, the Group always recognises lifetime ECL for accounts receivable, a lease receivable and contract assets. For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL.

Since the Group trades only with recognised and creditworthy third parties, there is no requirement for collateral. The Group has concentrations of credit risk in respect of accounts receivable as the Group's largest accounts receivable and the five largest accounts receivable represent 59% (2021: 72%) and 80% (2021: 82%) of the total accounts receivable respectively.

No other financial assets carry a significant exposure to credit risk.

48. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Credit risk and impairment assessment (continued)

The tables below detail the credit risk exposures of the Group's financial assets, which are subject to ECL assessment:

	12-month or lifetime ECL	31 December 2022 Gross carrying amount RMB'000	31 December 2021 Gross carrying amount RMB'000
Financial assets at amortised cost			
Financial assets included in deposits and other receivables	12-month ECL – assessed individually	**52,069**	76,848
	12-month ECL – provision matrix	**26,623**	121,198
	Lifetime ECL (credit-impaired) – assessed individually	**–**	500
		78,692	198,546
Accounts receivable (Note)	Lifetime ECL (not credit-impaired) – assessed individually	**12,632,095**	9,139,887
	Lifetime ECL (not credit-impaired) – provision matrix	**495,166**	427,757
	Lifetime ECL (credit-impaired) – assessed individually	**3,835,288**	3,500,842
	Lifetime ECL (credit-impaired) – provision matrix	**190,135**	139,980
		17,152,684	13,208,466
Notes receivable at amortised cost	12-month ECL	**22,759**	29,259
Pledged deposits	12-month ECL	**10,976**	11,479
Time deposits	12-month ECL	**548,535**	95,418
Cash and cash equivalents	12-month ECL	**3,561,740**	5,006,389
Certificates of deposit	12-month ECL	**1,616,347**	1,556,535
Deposits paid for monetary funds	12-month ECL	**1,000,000**	600,000
Lease receivable	12-month ECL	**–**	4,617
Financial assets at FVTOCI			
Receivables at FVTOCI	12-month ECL	**8,200**	9,862
Other items			
Contract assets	Lifetime ECL (credit-impaired) – assessed individually	**47,971**	90,997

Note: For accounts receivable, the Group has applied the simplified approach in HKFRS 9 to measure the loss allowance at an amount equal to lifetime ECL. Except for debtors with significant outstanding balances or insignificant balances with specific risks, the Group determines the expected credit losses on these items by using a provision matrix.

48. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Credit risk and impairment assessment (continued)

The Group has measured expected credit losses at the individual instrument level for most of its relevant financial assets. Besides, there are insignificant balances where expected credit losses are measured on a collective basis.

The following table shows the movement in lifetime ECL that has been recognised for accounts receivable under the simplified approach.

	Lifetime ECL (not credit-impaired) RMB'000	Lifetime ECL (credit-impaired) RMB'000	Total RMB'000
As at 1 January 2021			
Changes due to financial instruments recognised as at			
1 January 2021:	20,494	2,723,671	2,744,165
– Transfer to credit-impaired	(9,882)	9,882	–
– Impairment losses recognised	10,961	20,682	31,643
– Impairment losses reversed	(5,242)	(11,440)	(16,682)
– Write-offs	–	(1,476)	(1,476)
Exchange adjustments	(914)	(59,944)	(60,858)
As at 31 December 2021	15,417	2,681,375	2,696,792
As at 1 January 2022			
Changes due to financial instruments recognised as at			
1 January 2022:	**15,417**	**2,681,375**	**2,696,792**
– Transfer to credit-impaired	**–**	**–**	**–**
– Impairment losses recognised	**18,827**	**46,090**	**64,917**
– Impairment losses reversed	**(7,579)**	**(3,440)**	**(11,019)**
– Write-offs	**(20,739)**	**(277)**	**(21,016)**
Exchange adjustments	**4,511**	**243,315**	**247,826**
As at 31 December 2022	**10,437**	**2,967,063**	**2,977,500**

Changes in the loss allowance for accounts receivable are mainly due to the default of certain debtors.

48. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Credit risk and impairment assessment (continued)

The following tables show a reconciliation of loss allowances that has been recognised for other receivables:

	12M ECL RMB'000	Lifetime ECL (credit-impaired) RMB'000	Total RMB'000
As at 1 January 2021			
Changes due to financial instruments recognised as at			
1 January 2021:	8,704	500	9,204
– Impairment losses recognised	1,583	–	1,583
– Impairment losses reversed	(786)	–	(786)
Exchange adjustments	–	–	–
As at 31 December 2021	9,501	500	10,001
As at 1 January 2022			
Changes due to financial instruments recognised as at			
1 January 2022:	**9,501**	**500**	**10,001**
– Impairment losses recognised	**3,394**	**–**	**3,394**
– Impairment losses reversed	**(7,857)**	**–**	**(7,857)**
– Write-offs	**(273)**	**(500)**	**(773)**
Exchange adjustments	**75**	**–**	**75**
As at 31 December 2022	**4,840**	**–**	**4,840**

Change in the loss allowance for other receivables are mainly due to the settlement of other receivables.

Liquidity risk

In the management of the liquidity risk, the Group monitors and maintains a level of cash and cash equivalents deemed adequate by management to finance the Group's operations and mitigate the effects of fluctuations in cash flows. Management monitors the utilisation of bank borrowings, loans from related parties and long-term bonds and ensures compliance with loan covenants.

The Group's objective is to maintain a balance between continuity of funding and flexibility through long-term bonds and interest-bearing loans. 32% of the Group's borrowings would mature in less than one year as at 31 December 2022 (2021: 46%) based on the carrying value of interest-bearing bank borrowings, loans from related parties and long-term bonds reflected in the financial statements.

The following table details the Group's remaining contractual maturity for its non-derivative financial liabilities and lease liabilities based on the agreed repayment terms. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows. To the extent that interest flows are at floating rates, the undiscounted amount is derived from the interest rate at the end of the reporting period.

48. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Liquidity risk (continued)

	31 December 2022						
	Weighted average interest rate	On demand or less than 1 year RMB'000	1 to 2 years RMB'000	2 to 5 years RMB'000	Over 5 years RMB'000	Total RMB'000	Carrying amount RMB'000
Interest-bearing bank borrowings	0.61%-4.55%	3,516,827	19,298	57,314	150,072	3,743,511	3,684,704
Loans from related parties	0.61%-4.73%	2,437,610	–	2,196,259	–	4,633,869	4,633,869
Long-term bonds	1.94%-4.60%	1,123,791	374,043	9,938,493	2,032,254	13,468,581	12,894,109
Lease liabilities	0.59%~5.00%	444,312	204,671	280,891	144,150	1,074,024	1,006,786
Financial liabilities included in trade and other payables	N/A	11,145,020	–	–	–	11,145,020	11,145,020
Notes payable	N/A	11,866	–	–	–	11,866	11,866
		18,679,426	598,012	12,472,957	2,326,476	34,076,871	33,376,354

	31 December 2021						
	Weighted average interest rate	On demand or less than 1 year RMB'000	1 to 2 years RMB'000	2 to 5 years RMB'000	Over 5 years RMB'000	Total RMB'000	Carrying amount RMB'000
Interest-bearing bank borrowings	1.08%	19,492	19,395	57,605	169,080	265,572	198,524
Loan from a related party	0.56%-0.59%	2,232,061	–	–	–	2,232,061	2,232,061
Long-term bonds	1.94%-4.58%	8,583,053	1,186,761	10,264,718	2,080,072	22,114,604	20,103,168
Lease liabilities	2.35%~4.39%	360,854	261,332	296,079	42,022	960,287	910,093
Financial liabilities included in trade and other payables	N/A	8,738,684	–	–	–	8,738,684	8,738,684
Notes payable	N/A	54,173	–	–	–	54,173	54,173
Contract performance guarantee	N/A	6,574	–	–	–	6,574	–
		19,994,891	1,467,488	10,618,402	2,291,174	34,371,955	32,236,703

48. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Capital management

The primary objectives of the Group's capital management are to safeguard the Group's ability to continue as a going concern and to maintain healthy capital ratios in order to support its business and maximise shareholders' value.

The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. The Group is not subject to any externally imposed capital requirements. No changes were made in the objectives, policies or processes for managing capital during the years ended 31 December 2022 and 2021.

The Group monitors capital using a gearing ratio, which is net debt divided by the total capital plus net debt. Net debt includes interest-bearing bank borrowings, loans from related parties, long-term bonds, lease liabilities, certain trade and other payables, notes payable, salary and bonus payables, employee benefit liabilities less cash and cash equivalents (not including pledged deposits and time deposits). Capital represents equity attributable to owners of the Company and non-controlling interests. The gearing ratios as at the end of the reporting periods were as follows:

	31 December 2022 RMB'000	31 December 2021 RMB'000
Interest-bearing bank borrowings (Note 37)	**3,684,704**	198,524
Trade and other payables (Note 34)	**11,145,020**	8,738,684
Notes payable	**11,866**	54,173
Salary and bonus payables	**1,033,179**	794,877
Loans from related parties (Note 36)	**4,633,869**	2,232,061
Long-term bonds (Note 38)	**12,894,109**	20,103,168
Lease liabilities (Note 39)	**1,006,786**	910,093
Employee benefit liabilities	**7,587**	–
Less: Cash and cash equivalents (Note 33)	**(3,561,740)**	(5,006,389)
Net debt	**30,855,380**	28,025,191
Equity attributable to owners of the Company	**39,331,281**	38,032,831
Non-controlling interests	**566,803**	183,499
Total capital	**39,898,084**	38,216,330
Capital and net debt	**70,753,464**	66,241,521
Gearing ratio	**44%**	42%

49. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	31 December 2022 RMB'000	31 December 2021 RMB'000
NON-CURRENT ASSETS		
Property, plant and equipment	**28,733,946**	26,575,571
Right-of-use assets	**698,219**	646,288
Other intangible assets	**139,408**	80,606
Multiclient library	**36,755**	77,317
Investments in subsidiaries	**–**	4,130,474
Investments in an associate and joint ventures	**5,570,097**	1,246,655
Other long-term receivables	**1,968,076**	1,695,670
Other non-current assets	**1,652,421**	1,567,257
Deferred tax assets	**–**	164,949
Total non-current assets	**38,798,922**	36,184,787
CURRENT ASSETS		
Inventories	**1,701,596**	1,848,749
Prepayments, deposits and other receivables	**968,056**	741,018
Accounts receivable	**11,858,105**	9,885,253
Notes receivable	**5,802**	29,259
Receivables at fair value through other comprehensive income	**8,200**	9,662
Financial assets at fair value through profit or loss	**5,106,036**	5,703,728
Contract assets	**15,989**	424
Contract costs	**–**	17,586
Other current assets	**1,696,501**	803,464
Pledged deposits	**7,377**	11,479
Cash and cash equivalents	**2,095,985**	4,169,792
Total current assets	**23,463,647**	23,220,414
CURRENT LIABILITIES		
Trade and other payables	**12,637,047**	9,276,156
Notes payable	**11,866**	54,173
Salary and bonus payables	**634,627**	626,761
Tax payable	**167**	261,077
Interest-bearing bank borrowings	**18,279**	18,285
Long-term bonds	**806,068**	1,619,580
Lease liabilities	**283,522**	242,465
Contract liabilities	**454,029**	486,628
Other current liability	**442,652**	411,048
Total current liabilities	**15,288,257**	12,996,173
NET CURRENT ASSETS	**8,175,390**	10,224,241
TOTAL ASSETS LESS CURRENT LIABILITIES	**46,974,312**	46,409,028

49. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (continued)

	31 December 2022 RMB'000	31 December 2021 RMB'000
NON-CURRENT LIABILITIES		
Contract liabilities	**31,087**	–
Interest-bearing bank borrowings	**168,995**	180,239
Long-term bonds	**2,998,565**	3,726,633
Lease liabilities	**411,892**	437,282
Other non-current liabilities	**11,430**	–
Deferred income	**204,579**	235,851
Deferred tax liabilities	**280,310**	–
Total non-current liabilities	**4,106,858**	4,580,005
Net assets	**42,867,454**	41,829,023
EQUITY		
Issued capital	**4,771,592**	4,771,592
Reserves	**38,095,862**	37,057,431
Total equity	**42,867,454**	41,829,023

Movements in the Company's reserves

	Capital reserve RMB'000	Statutory reserve funds RMB'000 (Note(i))	Special reserve RMB'000	Exchange Fluctuation Reserve RMB'000	Retained profits RMB'000	Proposed final dividend RMB'000	Total RMB'000
At 1 January 2021	12,371,645	2,508,656	–	18,201	22,065,691	811,171	37,775,364
Profit for the year	–	–	–	–	217,531	–	217,531
Other comprehensive income for the year	–	–	–	(34,127)	–	–	(34,127)
Total comprehensive income for the year	–	–	–	(34,127)	217,531	–	183,404
Appropriation of safety fund	–	–	56,428	–	–	–	56,428
Utilisation of safety fund	–	–	(56,428)	–	–	–	(56,428)
Final 2020 dividend paid	–	–	–	–	–	(811,171)	(811,171)
Proposed final 2021 dividend	–	–	–	–	(715,739)	715,739	–
Others	–	–	–	–	(90,166)	–	(90,166)
At 31 December 2021 and 1 January 2022 (Note (ii))	12,371,645	2,508,656	–	(15,926)	21,477,317	715,739	37,057,431
Profit for the year	–	–	–	–	1,696,819	–	1,696,819
Other comprehensive income for the year	–	–	–	159,637	–	–	159,637
Total comprehensive income for the year	–	–	–	159,637	1,696,819	–	1,856,456
Appropriation of safety fund	–	–	113,533	–	–	–	113,533
Utilisation of safety fund	–	–	(111,213)	–	–	–	(111,213)
Final 2021 dividend paid	–	–	–	–	–	(715,739)	(715,739)
Proposed final 2022 dividend	–	–	–	–	(763,455)	763,455	–
Others	–	–	–	–	(104,606)	–	(104,606)
At 31 December 2022 (Note (ii))	12,371,645	2,508,656	2,320	143,711	22,306,075	763,455	38,095,862

49. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (continued)

Movements in the Company's reserves (continued)

Notes:

(i) As detailed in Note 15, the Company is required to transfer a minimum percentage of after-tax profit, if any, to the statutory common reserve fund, until the fund aggregates 50% of the Company's registered capital. As the aggregate amount of the statutory reserve funds as at 31 December 2022 and 2021 were in excess of 50% of the Company's registered capital, the Directors are of the view that no further provision of these funds is required for both years.

(ii) As at 31 December 2022, in accordance with the PRC Company Law, an amount of approximately RMB12,371,645,000 (2021: RMB12,371,645,000) standing to the credit of the Company's capital reserve account and an amount of approximately RMB2,508,656,000 (2021: RMB2,508,656,000) standing to the credit of the Company's statutory reserve funds, as determined under the PRC accounting principles in the PRC, were available for distribution by way of a future capitalisation issue. In addition, the Company had retained profits of approximately RMB23,069,530,000 (2021: RMB22,193,056,000) available for distribution as dividends. Except for the aforesaid, the Company did not have any reserves available for distribution to its shareholders at 31 December 2022.

The retained profits of the Company determined under the relevant PRC accounting principles in the PRC amounted to approximately RMB23,069,530,000 as at 31 December 2022 (2021: RMB22,193,056,000).

50. EVENTS AFTER THE REPORTING PERIOD

As at 23 March 2023, the board of directors of the Company proposed to distribute the dividend for the year ended 31 December 2022 of RMB0.16 per ordinary share (tax inclusive) in cash to the shareholders with an amount of RMB763,454,720. The proposal is subject to the approval by the shareholders at the 2022 Annual General Meeting of the Company.

51. APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements were approved and authorised for issue by the board of directors on 23 March 2023.

Company Information

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Short Name

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Development Zone, Sanhe City,
Hebei Province
Postal Code: 065201

Newspapers for Disclosure of Information

Shanghai Securities News
Securities Times
Website designated by CSRC on which the Company's annual report is posted: www.sse.com.cn

Legal Adviser

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Share Registrar

H Share:

Computershare Hong Kong Investor Services Limited
Shops 1712-1716,
17/F, Hopewell Centre,
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A Share:

China Securities Depository and Clearing Corporation Limited
Shanghai Branch
No.188 South Yanggao Road, Pudong
New Area, Shanghai

Place Where this Annual Report is Available

201 Haiyou Avenue, Yanjiao
Economic & Technological
Development Zone, Sanhe City,
Hebei Province

Place of Listing of Shares, Stock Name and Stock Code

Place of Listing of H Share

The Stock Exchange of Hong Kong Limited
H Share abbreviation:
CHINA OILFIELD
Stock Code of H Share: 2883

Place of Listing of A Share

Shanghai Stock Exchange
A Share abbreviation: 中海油服
Stock Code of A Share: 601808

Unified Social Credit Code

9112011671092921XD

Name and Office Address of the Company's Auditor

Beijing:

Ernst & Young Hua Ming LLP
Address: 16/F, Ernst & Young Tower,
Oriental Plaza,
No.1 East Changan Ave.
Dongcheng District, Beijing

Hong Kong:

Ernst & Young
Address: 27/F, One Taikoo Place,
979 King's Road, Quarry Bay,
Hong Kong

Documents for Inspection

1. Financial statements signed and sealed by legal representative, the person in charge of accounting work and the person in charge of accounting department.

2. Original copy of auditors' report (PRC) with seals of audit firm and signed and sealed by certified public accountants.

3. Original copy of auditors' report (Hong Kong) signed by certified public accountants.

4. Original copy of all documents of the Company and Announcements disclosed on the newspaper designated by the CSRC during the reporting period.

5. 2022 Annual Report published in The Hong Kong Stock Exchange.

China Oilfield Services Limited
Zhao Shunqiang
Chairman
23 March 2023

Glossary

COSL, the Company or the Group	China Oilfield Services Limited
CNOOC	China National Offshore Oil Corporation
CNOOC Limited	CNOOC Limited
CNOOC Limited Group	CNOOC Limited and its subsidiaries
2D	Seismic data acquisition in two dimensional form, by utilizing a single sound source and one or more acquisition points; typically 2D is used to map geographical structures for initial analysis
3D	Seismic data acquisition in three-dimensional form, by utilizing two sound sources and two or more acquisition points; typically 3D is used to acquire refined seismic data and to raise the probability of successful exploration well drilling
ELIS	Enhanced Logging Imaging System
LWD Tools	Logging-While-Drilling Tools
OSHA	Occupational Safety and Health Administration
QHSE	Quality, health, safety and environment
WTI	West Texas Intermediate crude oil
IPM	Integrated Project Management
HTHP	High temperature and high pressure
LWD	Logging-while-drilling, generally means the measuring of physical parameters of rock formation during the process of drilling, and transmitting the real time measured results by data telemetry system to the ground surface for processing
Cementing	The technique of filling of cement slurries into the ring-shaped space formed between the inner well hole casing and the well wall to cement them together
Well completion	Services and installation of equipment that are necessary to prepare a well for production, including casing, cementing and well treatment, such as acidizing and fracking
Well workover	Any work on a completed well designed to maintain, restore or improve production from a currently producing petroleum reservoir, this may include replacement of casing and well treatment, such as sand control, fracking and acidizing
Available day utilization rate	Operating days/(calendar days - days of repairs and maintenance)
Calendar day utilization rate	Operating days/calendar days

Integrated marine surveying vessels	Vessels providing marine surveying, marine geological coring, CPT in-situ testing, marine environment observation/sampling and marine supporting services
Geophysical vessels	Vessels carrying out marine seismic survey. Equipped with seismic survey equipment, streamers towed behind vessel, collecting seismic data by generating and receiving seismic waves during continuous sailing
RSS	Rotary Steerable System
Seismic data	Data recorded in either two dimensional (2D) or three dimensional (3D) form from sound wave reflections off of subsurface geology. This data is used to understand and map geological structures for exploratory purposes to predict the location of undiscovered reserves
Streamers	Clear flexible tubing containing numerous hydrophones used for marine seismic surveys; streamers are towed behind seismic vessels in the operation waters to collect seismic data
Jack-up rigs	Jack-up rigs are so named because they are self-elevating with three or four movable legs that can be extended ("jacked") above or below the drilling deck. During towing, the legs of a jack-up rig are elevated. When the rig reaches the drill site, the crew jacks the legs downward through the water and into the sea floor (or onto the sea floor with mat supported jack-ups). This anchors the rig and holds the drilling deck well above the waves
Semi-submersible rigs	Semi-submersible rigs do not rest on the sea floor as jack-up rigs. Instead, the working deck sits atop giant pontoons and hollow columns. These afloat above the water when the rig moves. At the drill site, the crew pumps seawater into the pontoons and columns to partially submerge the rig, hence the name semi-submersible. With much of its bulk below the water's surface, the semi-submersible becomes a stable platform for drilling, moving only slightly with wind and currents. Like jack-ups, most semi-submersibles are towed to the drill site. Because of their exceptional stability, "semis" are well suited for drilling in rough waters. Semi-submersible rigs can drill in water as deep as 10,000 feet
Module rigs	Complete rig installation fixed on offshore jacket which is immovable as a whole
bbl	A barrel, which is equivalent to approximately 158.988 liters or 0.134 tons of oil (at a API gravity of 33 degrees)
foot	Measuring unit of length, which is equivalent to approximately 0.305 meter
Standard coal	The uniform standard of thermal value, China required the thermal value of 1 kg standard coal to be 7,000 kilocalorie
Recordable incidents	Injury incident caused by work or impact of the work environment leading to death or occupational diseases or loss of consciousness, restricted working ability or mobility, or job transfer or injury incident which requires more than a simple medical treatment

COSL

CHINA OILFIELD SERVICES LIMITED

(STOCK CODE H-share : 2883 ; A-share : 601808)

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ALWAYS DO BETTER