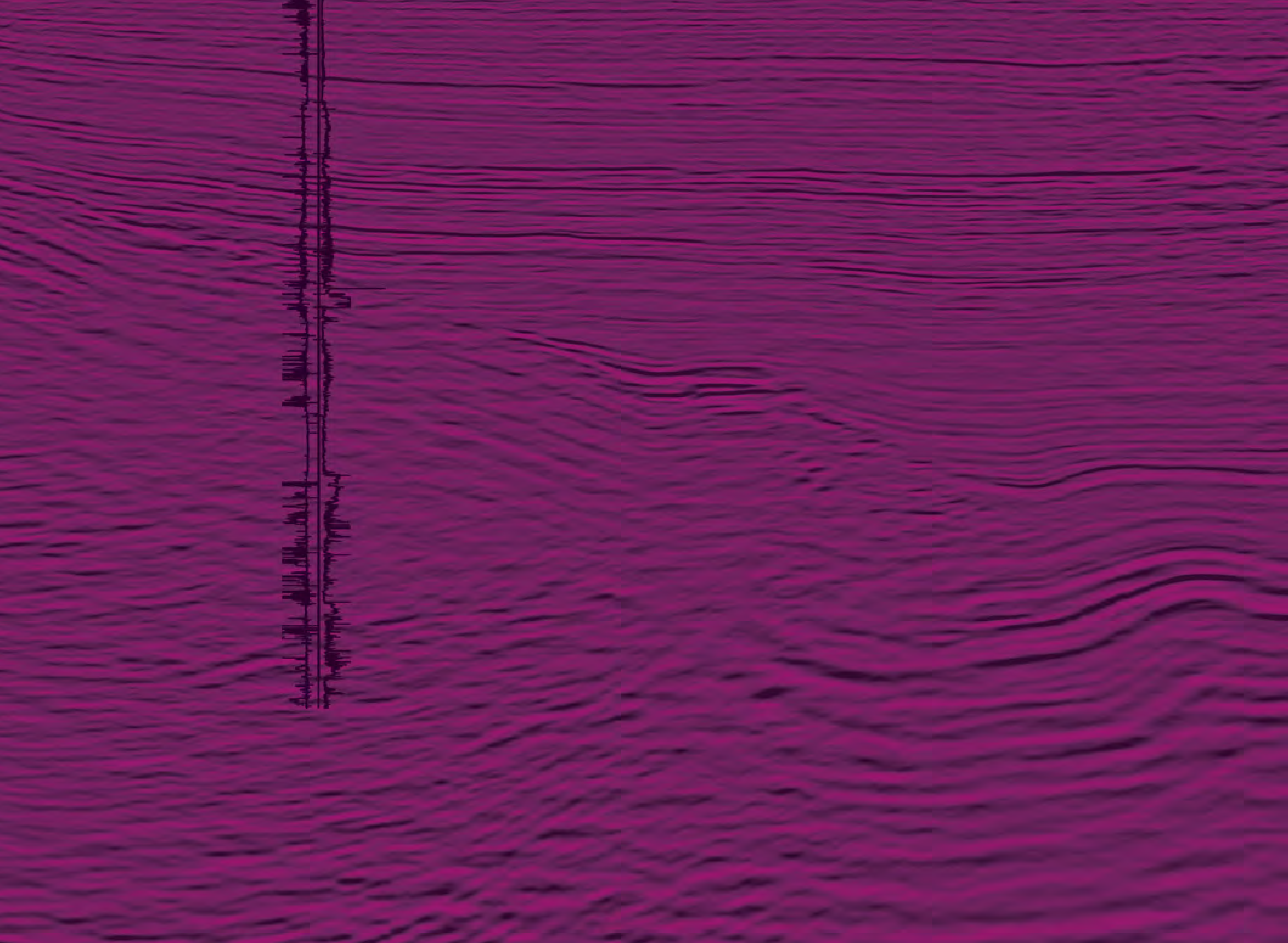
TGS ANNUAL REPORT / **2019**

ANNUAL REPORT

2019



Our Vision

Energy starts with us.

It is our vision to become the leading data insights company with the best people, quality and service. Our unique culture and extensive data library will ensure that when E&P companies think subsurface data and insights, they think TGS.

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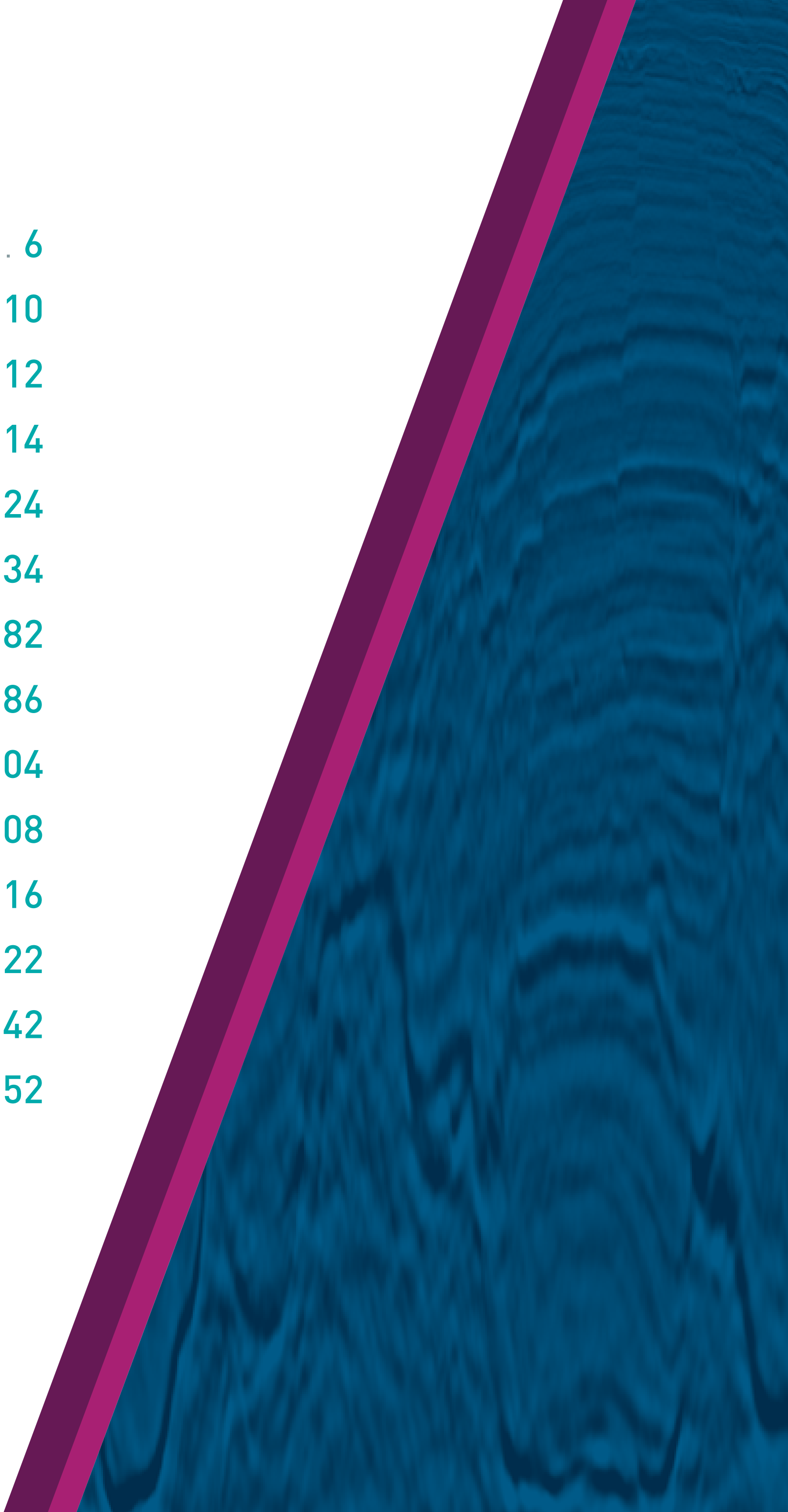
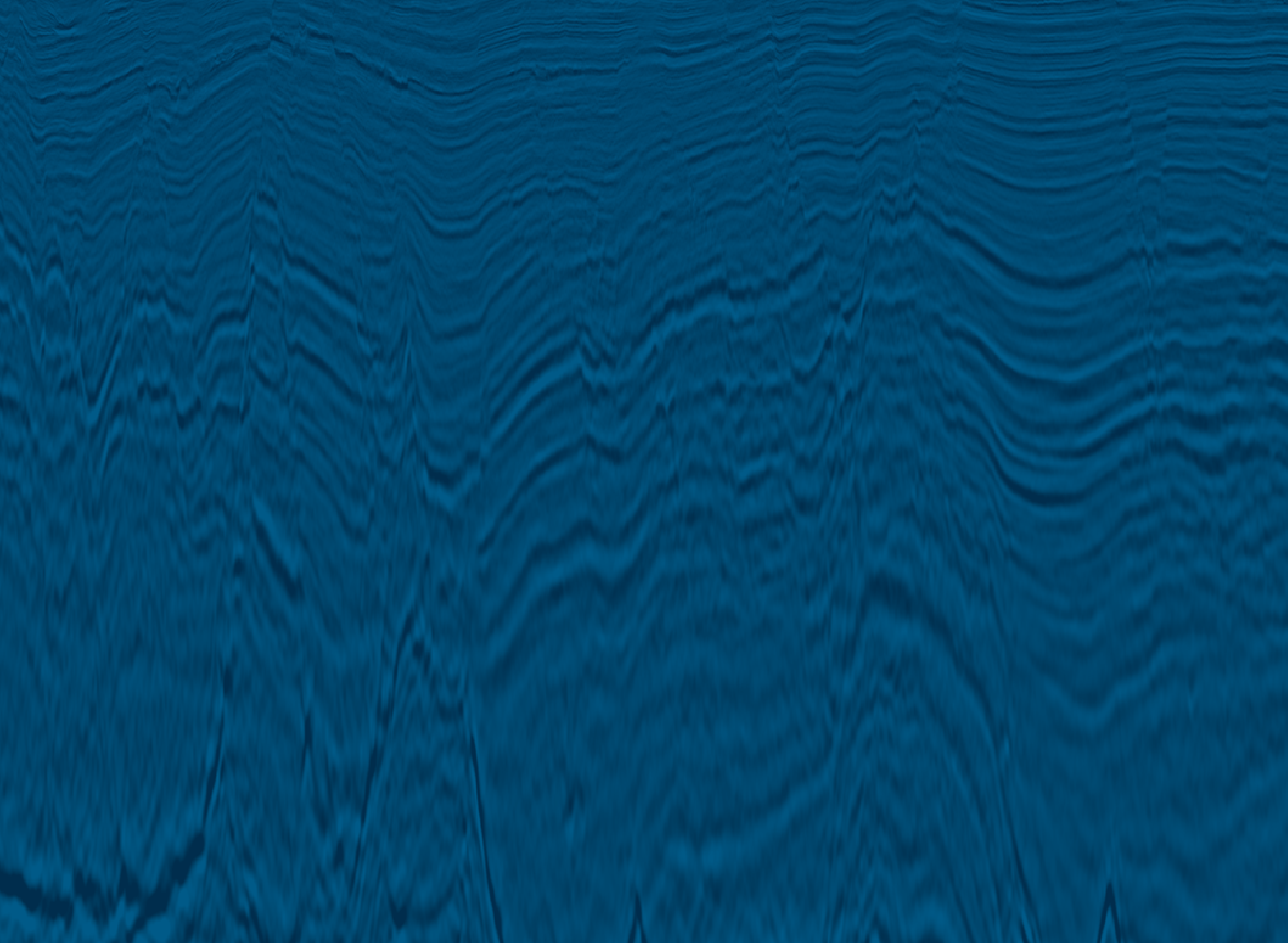
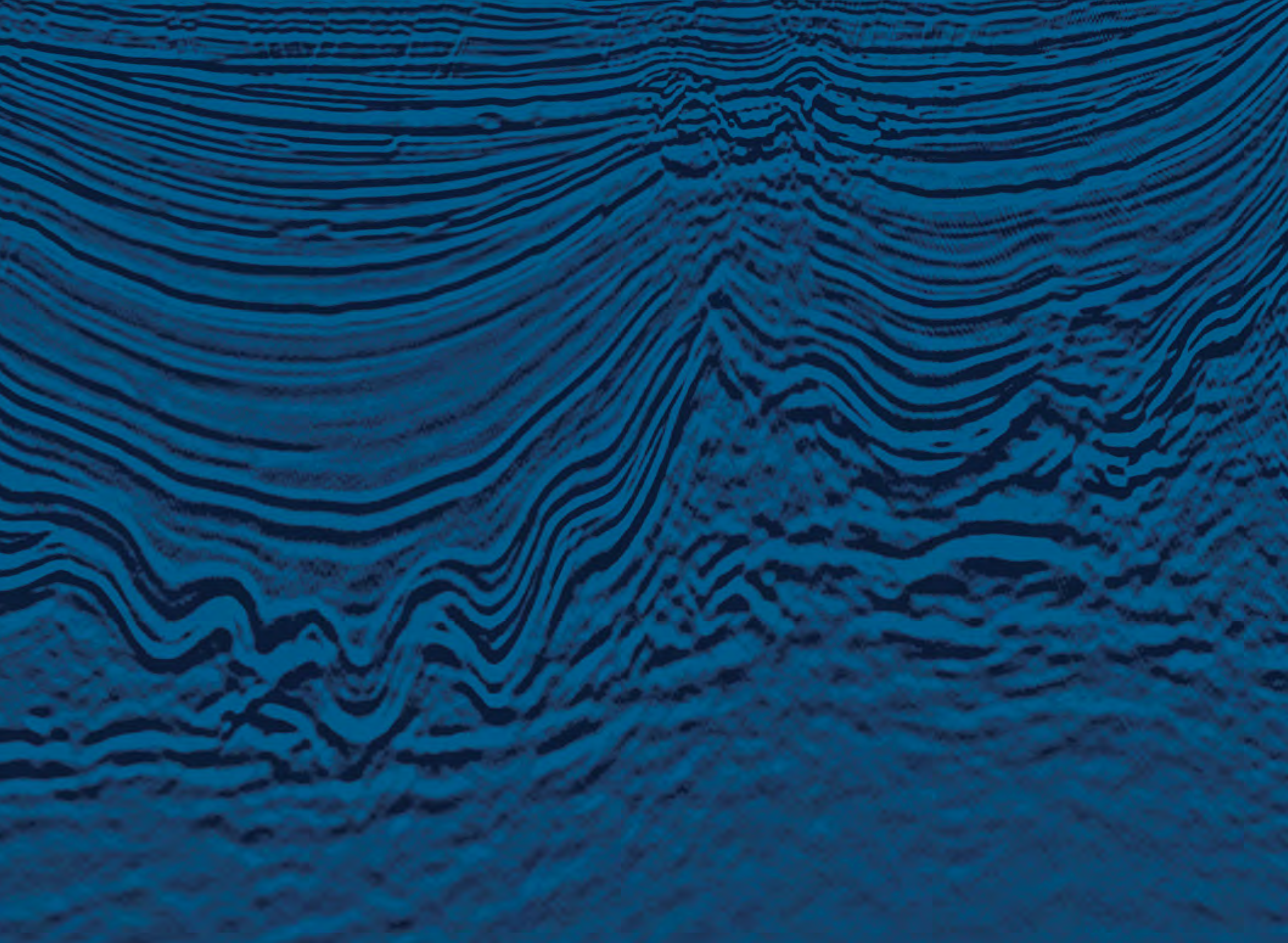






Financial Highlights

TGS' flexible, asset light business model and ability to rapidly adjust costs allow us to deliver significant shareholder value even in a challenging market.

2019 Financial Highlights

(All amounts in USD 1,000s apart from EPS, ratios and dividend per share)

	2019	2018	2017	2016	2015
Revenue	**585,610**	614,239	492,181	455,991	612,347
EBIT	**128,998**	230,025	97,429	53,035	(21,230)
Pre-tax profit	**131,211**	236,771	99,636	52,675	(24,505)
Net income	**113,111**	178,800	75,594	27,653	(28,347)
EBIT margin	**22%**	37%	20%	12%	-3%
Net income margin	**19%**	29%	15%	6%	-5%
Return on average capital employed	**12%**	24%	10%	5%	-2%
Earnings per share	**1.05**	1.75	0.74	0.28	(0.28)
Earnings per share fully diluted	**1.03**	1.73	0.73	0.28	(0.28)
Total assets	**2,194,889**	1,582,044	1,424,100	1,476,575	1,455,247
Shareholders' equity	**1,545,806**	1,232,606	1,200,102	1,169,124	1,198,088
Equity ratio	**70%**	78%	84%	79%	82%
Share buy-back	**43.4**	–	–	–	4.8
Dividend per share (paid in year)	**USD 1.08**	USD 0.8	USD 0.6	USD 0.6	NOK 8.5

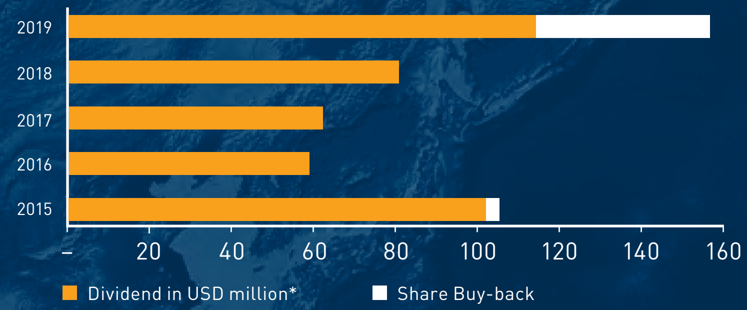
* Return on average capital employed = EBIT/Average capital employed. Capital employed = Equity + Net interest-bearing debt ** Quarterly USD dividend introduced in 2016

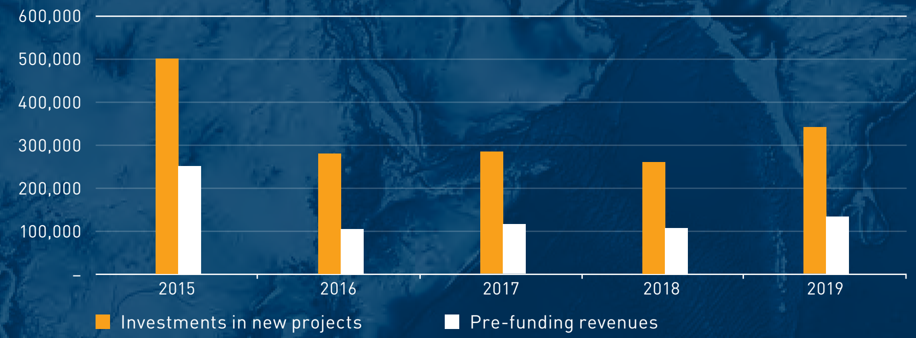
** Quarterly USD dividend introduced in 2016

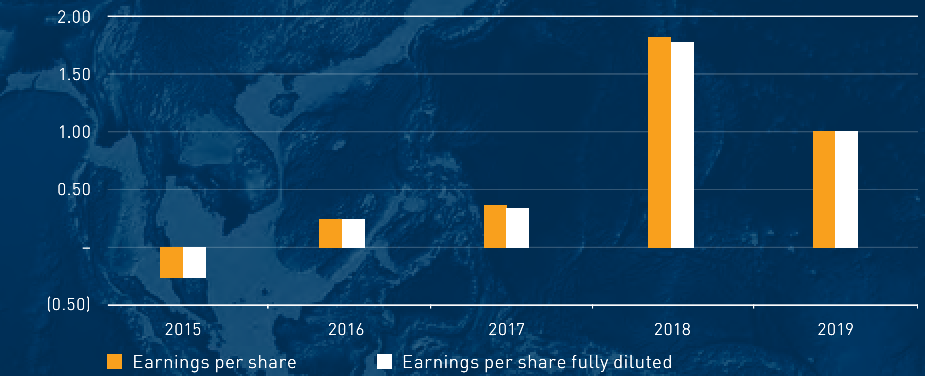
Multi-client Library

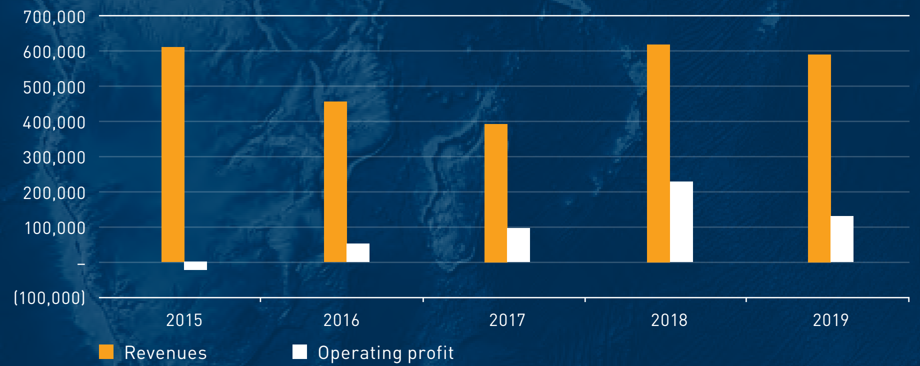
	2019	2018	2017	2016	2015
Opening net book value	**870.495**	799.015	812.399	838.916	818.132
Multi-client data purchased from third parties	**183.505**	6.507	9.522	0.166	26.407
Investments in new projects	**339.527**	256.922	279.440	271.010	501.653
Amortization	**(302.233)**	(270.781)	(302.346)	(297.693)	(507.276)
Adjustments related to implementation of IFRS 15	**–**	78.832	–	–	–
Ending net book value	**1,091.294**	870.495	799.015	812.399	838.916
Prefunding % on operational investments	**39%**	44%	44%	48%	52%

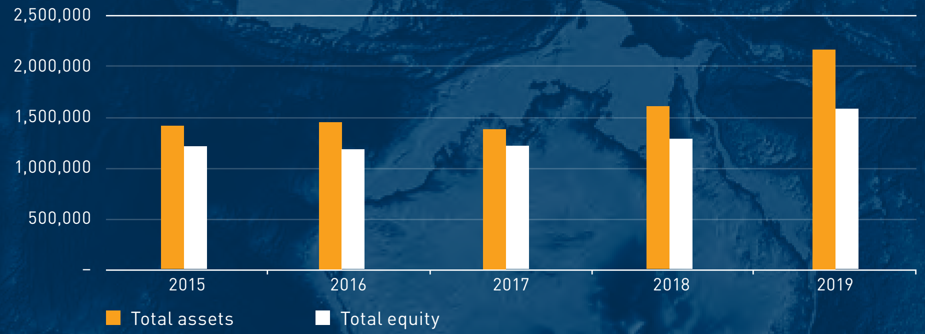
Cash Distribution to Shareholders











Dear Shareholders,

I'm pleased to report another very positive year for TGS with 24% [1] revenue growth and further improvements in our key performance metrics: free cash flow and return on capital. The acquisition of Spectrum, which closed in mid-August, further enhances TGS' position as a leading multi-client geophysical data provider covering all mature and frontier basins. The acquisition fits well with our asset-light business model and provides significant momentum to deliver on our long-term strategy.

TGS has proven over many years that its flexible, asset-light business model and ability to adjust costs rapidly deliver superior shareholder value. Despite a relatively modest growth in clients' exploration spending, TGS delivered a free cash flow before dividend of USD 226 million in 2019. The strong cash flow enabled us to pay a dividend to our shareholders of USD 115 million, corresponding to a growth of 40% from the previous year, as well as repurchasing USD 43 million worth of shares. In February 2020, we announced a 39% increase in our quarterly dividend. In May 2020, the Board will propose to the AGM authorization to pay further quarterly dividends for the following 12 months, as well as asking for a renewal of authorization to repurchase shares. TGS' ambition of returning the Company's value creation to shareholders through a combination of quarterly cash dividends and share buybacks remain firm. Our return on capital and cash conversion rate continue to be industry-leading. For every dollar of revenue in 2019, 29% was converted to free cash flow, and this ratio ranks TGS as a top player in the global oil service industry. Our Return on Average Capital Employed (ROACE) continued to improve in 2019, and at 19% TGS is one of few international oil service companies delivering a return above cost of capital.

Our clients' ongoing focus on cost, capital discipline and more efficient use of technology, combined with increased interest in frontier basins in the Southern Hemisphere, fits well with TGS' strategy. We have been expanding our geographical footprint in Latin America and Africa, both organically and through the acquisition of Spectrum. Moreover, our strategy of making new generations of technology available on a large scale through the multi-client model, particularly in mature basins such as U.S. Gulf of Mexico and Norway, is producing exciting results.

Building on this strategy, TGS is continuing to develop its technology offering. Several initiatives were launched in 2019 within the imaging area to enhance TGS'

[1] Based on segment reporting (see note 5)

position as a leading data processing company. Furthermore, TGS has added substantial resources to its data and analytics initiative and will continue to do so. Through combining artificial intelligence (AI) and advanced data analytics capabilities with our strong geoscience knowledge and vast library of geophysical and geological data, we are further enhancing the value offering to our clients.

Expanding access to energy is one of the key drivers behind improving the standard of living across the globe. As the dominant source of energy globally, oil and gas play an essential role in this development. Over the past century, oil and gas, directly and indirectly, has played an important role in revolutionizing transportation, manufacturing, communication, agriculture, medicine, etc. As such, the oil and gas industry continues to be vital for moving people out of poverty and improving health and life expectancy, particularly in the developing world.

However, we need to be conscious of the fact that the exploitation and consumption of oil and gas also have some negative consequences, particularly related to greenhouse gas emissions, which are contributing to climate change.

For the oil and gas sector to remain sustainable in the long term, the industry has to collaborate to minimize any damaging impacts of the extraction and consumption of our products, as well as facilitating for the gradual transition to other energy sources. In TGS we are prepared to do our share. We have put in place several initiatives for reducing the emissions from our business, both the ones that we are directly responsible for and those that we are indirectly responsible for through vendors. You can read more about these initiatives in our Sustainability Report, which is included in this Annual Report.

I am convinced that geoscience will play an important role in the energy transition. Being one of the leading geoscience companies in the world, this means that there should be opportunities for TGS to utilize our core skillsets and business model in areas outside of oil and gas. During 2019 we established a framework for evaluating and implementing such opportunities.

Recent geopolitical events and the impact of COVID-19 have put significant pressure on the global economy. The last few weeks have once again proven how our industry can be impacted by unexpected events that have a dramatic impact on supply and demand for energy and economic growth. While it remains uncertain how these factors could impact the future, history shows that an asset-light business model with a flexible cost base is a great advantage. TGS remains committed to delivering industry- leading returns and is well-prepared to take the necessary actions to rapidly adjust cost and capital expenditure to changes in the marketplace.

Despite the recent turmoil, there is a recognition among E&P companies, both big and small, that they need to replenish reserves and the world will still need more oil and gas to support economic development, even in future low-carbon scenarios.

As we look forward into 2020, the short-term outlook for our industry is considered uncertain. An oil price in the $30s will clearly test the vulnerability of business models, balance sheets and long-term strategies. The duration of the downturn will depend on the global magnitude of COVID-19, the response from the OPEC+ group of countries and our clients' financial strength. We remain confident that energy companies eventually will need to increase exploration efforts in order to grow production levels in the longer term to meet the expected long-term growth in demand. TGS' unique culture, people and quality library assures that it will be the leading company providing geoscience information when companies return to exploring for hydrocarbons.

TGS remains fully committed to safeguarding and maintaining the environment in which we operate and live in, while also providing a safe and healthy workplace for our employees and contractors. There were no employee-related injuries recorded in 2019.

The employees of TGS are strongly committed to our core values of quality, service, integrity and growth. Thanks to our people, TGS has become the largest and most successful multi-client geoscientific data provider in the world.

On behalf of the TGS team, I would like to thank our shareholders and clients for their continued confidence in us. I would also like to thank our employees for all the hard work, passion and client focus during another successful year for TGS and our shareholders.

Kristian Johansen
Chief Executive Officer / TGS

2019 Highlights

OFFSHORE DATA LIBRARY

Europe

- Alongside our partner, CGG, we undertook the Greater Castberg TopSeis™ survey in the Barents Sea. The 5,168 square kilometers survey is being processed using TopSeis imaging technology
- Carried out the Atlantic Margin 2019 3D multi-client survey in the Norwegian Sea, covering approximately 6,000 square kilometers. This data is also being used as part of a three-year sub-basalt imaging research project to unlock values in volcanic basins
- In conjunction with Axxis Geo Solutions (AGS), we completed the acquisition of the landmark 1,584 square kilometers Utsira ocean bottom node (OBN) survey in the Norwegian North Sea
- Completed the first sale of one of our seismic datasets to OGCI Climate Investments' Net Zero Teesside project, a carbon capture, utilization and storage (CCUS) initiative planned for the northeast of England

North America

- Completed acquisition of the 2,758 square kilometer Amendment Phase 1 FWI sparse node survey in the U.S. Gulf of Mexico. This project, which was acquired in partnership with Schlumberger, is the largest deepwater node survey ever delivered in the GoM. Amendment Phase 1 was optimized to acquire a minimum of 40 kilometers ultra-long offsets – another industry first for an area of this size
- Launched the Declaration Refocus M-WAZ imaging program in the U.S. Gulf of Mexico. The program comprises data covering more than 380 Outer Continental Shelf (OCS) blocks (~8,860 square kilometers) from previously acquired orthogonal 3D WAZ programs
- Partnered with PGS to acquire the first multi-client 3D survey in the Jeanne d'Arc basin, spanning approximately 4,450 square kilometers in East Canada. The survey covers a mix of Exploration Licenses, Significant Discovery Licenses and open acreage
- The TGS/PGS joint venture also delivered another industry first, with its Torngat 3D survey in the Labrador Sea in East Canada. This survey, of approximately 3,700 square kilometers, is the first 3D seismic ever acquired offshore Labrador
- The TGS/PGS joint venture acquired its third 3D multi-client project of the 2019 season, North Tablelands 3D in the Flemish Pass and Orphan Basin areas of Newfoundland. This project, covering approximately 4,600 square kilometers, extends the JV data library over acreage that is available in the November 2020 call for bids
- In addition, the TGS/PGS joint venture acquired nearly 12,000 kilometers of data in the Southeast Grand Banks and Northeast Newfoundland Slope areas offshore Canada

South America

- Continued acquisition on the Santos 3D program over the prospective southern Santos Basin offshore Brazil. The survey covers an area of ~23,000 square kilometers south of the high-profile discoveries of the Santos Basin
- Completed the acquisition of ~10,350 kilometers of 3D multi-client data in the Potiguar Basin Brazil
- Completed a new multi-client 2D survey in the Colorado Basin Argentina spanning ~26,000 kilometers and commenced acquisition on the Malvinas 3D, a new 17,800 square kilometer 3D multi-client acquisition in the Malvinas Basin. Upon completion of this project, TGS will bring overall coverage in Argentina to over 75,000 kilometers of 2D and 17,800 square kilometers of 3D data
- Continued acquisition of the Campos 3D survey offshore Brazil and successfully delivered Fast Track data to underwriters ahead of Brazil Round 16

Africa and Middle East

- Commenced Nigeria's first regional multi-client Multibeam and Seafloor Sampling (MB&SS) Study, which is the first multi-client program in Nigeria for 10 years
- Commenced a new survey in the MSGBC Basin, offshore northwest Africa. The Senegal Ultra-Deep offshore 3D survey covers over 4500 square kilometers and is being acquired to support the country's 2020 license round
- Completed the Jaan 3D seismic survey, our 28,000 square kilometers 3D dataset covering the southern portion of the Mauritania, Senegal, Gambia, Guinea Bissau and Guinea Conakry (MSGBC) Basin, offshore northwest Africa
- Successful international bid round in the Red Sea following the completion of our RS-18 2D survey and 3D seismic reimaging project in conjunction with Schlumberger
- Supported Somalia in the launch of their first Offshore Licensing round featuring exclusive coverage by TGS seismic data
- Supported Lebanon in 2nd Offshore Oil & Gas Round with 3D Data
- Official Technical Partner for Gabon as they launch their twelfth Offshore round featuring TGS seismic data in key license blocks

Asia Pacific

- Signed a contract with Petroliam Nasional Berhad (PETRONAS) awarding TGS and partners exclusive rights to seek pre-funding for a project to deliver broadband 3D volume of over 40,000 square kilometers covering the Malay Basin
- Working with Institut de Physique du Globe de Paris (IPGP) Marine Geosciences Group on a project to assess earthquake and tsunami hazards in Banda arc and neighboring regions

ONSHORE DATA LIBRARY

- Completed the acquisition of the Canton and Gloss Mountain 3D surveys as part of our continued growth in the SCOOP and STACK in the Anadarko Basin, final products are expected to be delivered in Q1 and Q2 2020. Additionally TGS completed the Hackberry South 3D (714 square kilometers) and purchased the Kingfisher 3D (1,062 square kilometers). By adding these four 3D surveys to our asset base, TGS has extended our leading onshore seismic data coverage in the core of the SCOOP and STACK in the Anadarko Basin to ~8,483 square kilometers
- Purchased over 2,072 square kilometers of existing onshore 3D seismic surveys, most notably in the SCOOP and STACK of the Anadarko Basin, Powder River Basin and the Permian Basin
- Completed acquisition of the 696 square kilometers Railgun 3D in the Powder River Basin in Q3 2019, final products to be delivered in Q2 2020
- Completed acquisition of the 168 square kilometers Midnight 3D and commenced acquisition of the 100 square kilometers South Halfway 3D in the Montney Basin of northeast British Columbia in Canada. Both datasets will be available in early 2020

WELL DATA PRODUCTS

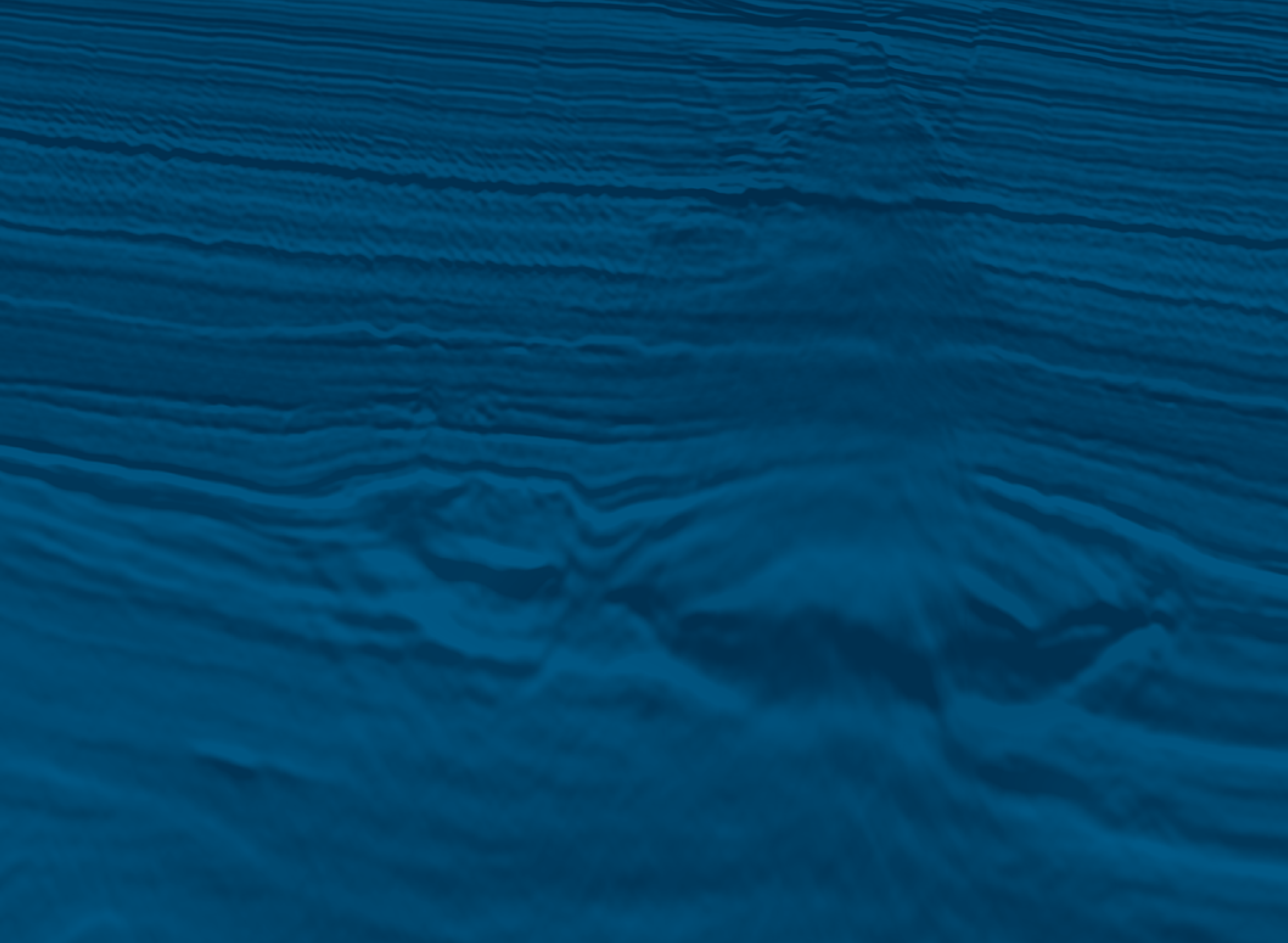
- Enhanced TGS' Well Performance Database with the purchase of Lasser,Inc., to provide TGS clients access to previously unavailable historical production data prior to 1970
- Purchased the entire U.S. onshore petrophysical log database and associated intellectual property from Petrophysical Solutions, Inc. These Petrophysical Interpretation Logs, derived from well log and core analysis relationships in approximately 1,400 wells within key unconventional basins, will be added to the current TGS data library. TGS will create more of these logs using its extensive data library as the starting point to improve the product
- R360™ received a major user experience update with new, easy-to-use interface and tools designed around feedback from users. The update featured a more intuitive user interface, a new list search tool and improved map search functionality
- Expanded the world's largest library of digital well log data by adding 2.4M digital Log ASCII Standard (LAS) wells, enhanced digital LAS+ well logs, raster logs, Validated Well Headers, as well as directional surveys and production data
- Multiple global interpretive studies delivered which leverage TGS well and seismic data
- 70,000 international wells added

IMAGING TECHNOLOGY

- Deblending is a technology that allows the industry to acquire seismic data more quickly without sacrificing quality. We do this by allowing more than one source vessel to shoot at the same time in relatively close proximity and we then separate the different sources' signals (deblending) in processing. TGS has invested significant effort to develop and successfully apply a 3D inversion-based deblending tool on the Amendment 3D project, the industry's largest heavily blended sparse deepwater node project
- Full waveform inversion (FWI) development and application reached a significant milestone with application of the technology on Amendment 3D. This application yielded enhanced subsalt images, demonstrating the ultra-long offset/sparse node value proposition
- Another FWI innovation includes application of phase-only FWI on the Fusion and Santos project. This is an example of how TGS used its in-house development expertise along with an understanding of the problem to deliver business-focused solutions to obtaining better velocity models and, by extension, better images
- Least squares imaging can reduce the impact of overburden complexity and acquisition footprint. We have added Q-compensated least squares Kirchhoff and 1-way least squares wave equation migration to the toolkit, effectively expanding our ability to deliver higher resolution images
- We have successfully run 3D inversion-based deghosting on a large (~500 block) proprietary project. Application of this technology extended the bandwidth and enables more reliable AVO analysis
- We have developed and tested 3 methods of internal multiple attenuation. The 3D Jakubowicz and 3D Marchenko methods along with the 2D ISS method. Having these tools in our toolbox has enabled us to offer this key technology to clients so that this noise can be attenuated, resulting in improved images
- TGS has invested significant effort to develop its OBN technology for northeast Europe OBN surveys, including deblending using 3D inversion, Up/Down deconvolution and long offset FWI

DATA & ANALYTICS TECHNOLOGY

- Increased the TGS Data Lake of multi-client subsurface data to over 3 petabytes (3 million gigabytes) including post-stack seismic, gathers, well logs, production data and subsurface interpretation models
- Implemented the SaltNet prediction algorithm internally and with TGS clients. The Salt Identification Kaggle challenge , which TGS launched in 2018 and serves as the core of the SaltNet algorithm, has become a basis for numerous 2019 data science research, masters and doctorate theses around the globe and is regularly found as a basis for discussion and video-sharing on public platforms
- Generated the commercially successful Analytics Ready LAS (ARLAS) product and completed creation of over 1,000,000 ARLAS in 2019. Key basins covered include the Permian, Anadarko, Eagle Ford and the remainder of the most prolific onshore U.S. basins
- TGS signed an agreement with Google Cloud for flexible, cloud-based, high-performance compute capacity. The arrangement provides a flexible hybrid compute solution that enables TGS to deliver on complex, compute-intensive projects and to focus on cycle time reduction while preserving superior data quality



This is TGS

The gateway to subsurface intelligence.

From seismic to well data, TGS has the largest library of geoscience and engineering data in the industry. Specializing in the design, acquisition and processing of multi-client seismic surveys, we use our data to provide subsurface insights to help our customers de-risk their exploration and production initiatives. Our vast data library and global experience has helped TGS become the largest and most successful multi-client geoscience data provider in the world.

This is TGS

TGS is the world's largest geoscience data provider, known for its asset-light, multi-client business model and global data library. TGS employs approximately 700 employees and has its corporate headquarters in Asker, Norway, and its operational headquarters in Houston, Texas, U.S.A. The company's other main offices are in Calgary, Woking and Perth, with further employees located in other cities around the globe. The company's stock is traded on the Oslo Stock Exchange and is part of the OBX Index (25 most liquid shares at the OSE) and has a market capitalization of approximately USD 3.6 billion (December 2019).

The Company's primary business is to provide geoscience data to energy companies worldwide. The company offers extensive global libraries that include seismic data, magnetic and gravity data, multi-beam and coring data, digital well logs and production data. Additionally, we offer advanced processing and imaging services, interpretation products and data integration solutions.

A Brief History

TGS was founded in Houston in 1981 and over time built the dominant 2D multi-client data library in the Gulf of Mexico. The Company expanded further into North America and West Africa and added a substantial 3D portfolio in the Gulf of Mexico. Also, in 1981, NOPEC was founded in Oslo and began building an industry-leading multi-client 2D database in the North Sea, with additional operations in Australia and the Far East. In 1997, NOPEC went public on the Oslo Stock Exchange. In 1998, the companies merged to form TGS-NOPEC Geophysical Company (TGS), creating a winning combination for investors, customers and employees. Since then, we have set the standard for geoscience and subsurface data around the world.

Multi-client: Our Distinct Approach

Deepwater offshore wells can cost hundreds of millions of dollars to drill. Before taking on this risk, energy companies often look for assurance in the form of seismic and other geophysical data. These data types are becoming even more valuable as exploration moves into more geologically, environmentally and operationally challenging areas. Typically, seismic data is delivered through either a proprietary or multi-client business model. For proprietary business, the energy company contracts a seismic service company to acquire and process data on its behalf. By contrast, TGS works in the multi-client realm. We retain ownership and control of the data and can license it to multiple parties. Energy companies often prefer multi-client over proprietary because the cost is substantially lower. Typically, one or more clients will commit to licensing the data before acquisition begins, which is called "pre-funding." Licenses sold after data acquisition has commenced are called "late sales." TGS applies a firm definition to pre-funding, so our stakeholders can assess the level of risk in our business by seeing how much of our new project investments are covered by client commitments. TGS capitalizes its seismic investments to the balance sheet and, for segment reporting purposes, amortizes each project during the work-in-progress (WIP) phase based on total cost versus forecasted total revenues. From 2016, a straight-line amortization is applied after a project is completed. The straight-line amortization will be assigned over a remaining useful life, which for most projects is four years. Geological data investments are also booked to the balance sheet and amortized on a straight-line basis over seven years.

Our Competitive Advantages

Focus

Last year, over 98 percent of our revenues came from multi-client data sales. This is our lifeblood, and our entire company is intensely focused on developing the best multi-client projects to maximize returns and achieve long-term profitable growth. Our culture drives achievement because all employees have common goals and share in our success through profit-related bonuses.

Asset-Light

TGS does not own acquisition vessels and equipment. Nor do we have seismic crews on the payroll. All data acquisition activity is outsourced, which gives us flexibility to execute only those projects that meet our investment criteria and align with client goals. We are not influenced by vessel or crew utilization targets. Instead, we only access these resources when needed, and we are free to use the most appropriate vendors and technologies to tackle specific imaging challenges. TGS is asset-light, which means low overheads and high stability, regardless of industry cycles.

Quality Processing

While acquisition is outsourced, TGS processes data in-house. This is how we ensure our customers get the highest-quality seismic data. Energy companies often consider processing capabilities when assessing whether to commit pre-funding to a project. As one of the industry's leading processing companies, we give E&P companies the confidence to move forward. We also maintain our competitive edge by continuously investing in new computer capacity and R&D. In addition, we use custom-developed algorithms to reprocess old data sets at low cost to attract additional sales from our library.

ROI Discipline

TGS typically targets projects that will earn sales returns between 2 and 2.5 times the investment. On projects with lower targeted returns we require high levels of prefunding to keep the investment attractive. An example of this is a project on acreage that has already been largely awarded to energy companies, meaning that late sales opportunities are later in the cycle – when farm-ins, relinquishments and mergers and acquisitions create new activity. Conversely, we may accept lower pre-funding on projects where our confidence in rapid late sales is higher, such as when we make an investment in a region with frequent license rounds and high customer interest.

Renowned Library

TGS has one of the largest and best performing multi-client data libraries in the world. This provides an ongoing revenue stream and re-processing opportunities. Exploring our own library also helps our project developers and interpretation teams identify high-profile prospects for new surveys. In fact, most of our 3D seismic investments are in areas where we previously acquired 2D data or have extensive well data products.

Active Portfolio Management

The multi-client business is a portfolio business. Some projects may underperform, and others exceed expectations. A 3D project is a significant financial undertaking, and TGS has the means to invest in a broad portfolio of projects to balance risks and rewards.

Geographic Diversity

TGS has a vast global data library. We strive to build and maintain leadership positions in both mature and frontier basins around the world. Our library covers a wide variety of exploration plays including deepwater, pre-salt geologies, the Arctic and North America onshore. This diversity gives us significant stability and business continuity in the face of shifting markets, regional economic strain and geopolitical challenges.

Superior Team

Our most important competitive advantage is our people. The outstanding work of our project developers, geologists, geoscientists, data processors, sales and support personnel has made TGS the world's leading multi-client player. They are the reason TGS delivers superior project quality and financial performance, year after year.

Strategic Acquisitions

While most of our growth has been organic, we have also expanded our business through acquisitions. These opportunities have allowed us to add data processing capabilities and new geoscience data types to our library. TGS will also purchase other multi-client libraries when the price is attractive and where we see strong potential returns.

Sustainability

As detailed in TGS' Sustainability Report, TGS believes that operating in a sustainable manner is fully compatible with and critical to being a successful company. TGS remains a committed member of the UN Global Compact since 2016 and is dedicated to multiple UN Sustainable Development Goals, including Climate Action, Life Below Water, and Industry, Innovation and Infrastructure. We continue to incorporate the UN Global Compact's ten principles on human rights, labor, environment and anti-corruption into our strategy, culture and operations. In 2019, TGS' board of directors approved the Company's ESG Strategy, which is aimed at (i) understanding and targeting not just our scope 1 and scope 2 emissions, but also our scope 3 emissions; (ii) working with suppliers and vendors who demonstrate a commitment to the same sustainability efforts as TGS, particularly when it comes to emissions and human rights, and (iii) promoting gender diversity within our organization. TGS' Environmental, Social and Governance (ESG) Committee continued its work in developing sustainable business strategies and opportunities for TGS in carbon capture storage and other renewable energy industries.

Core Product Lines

Geophysical Multi-client Data

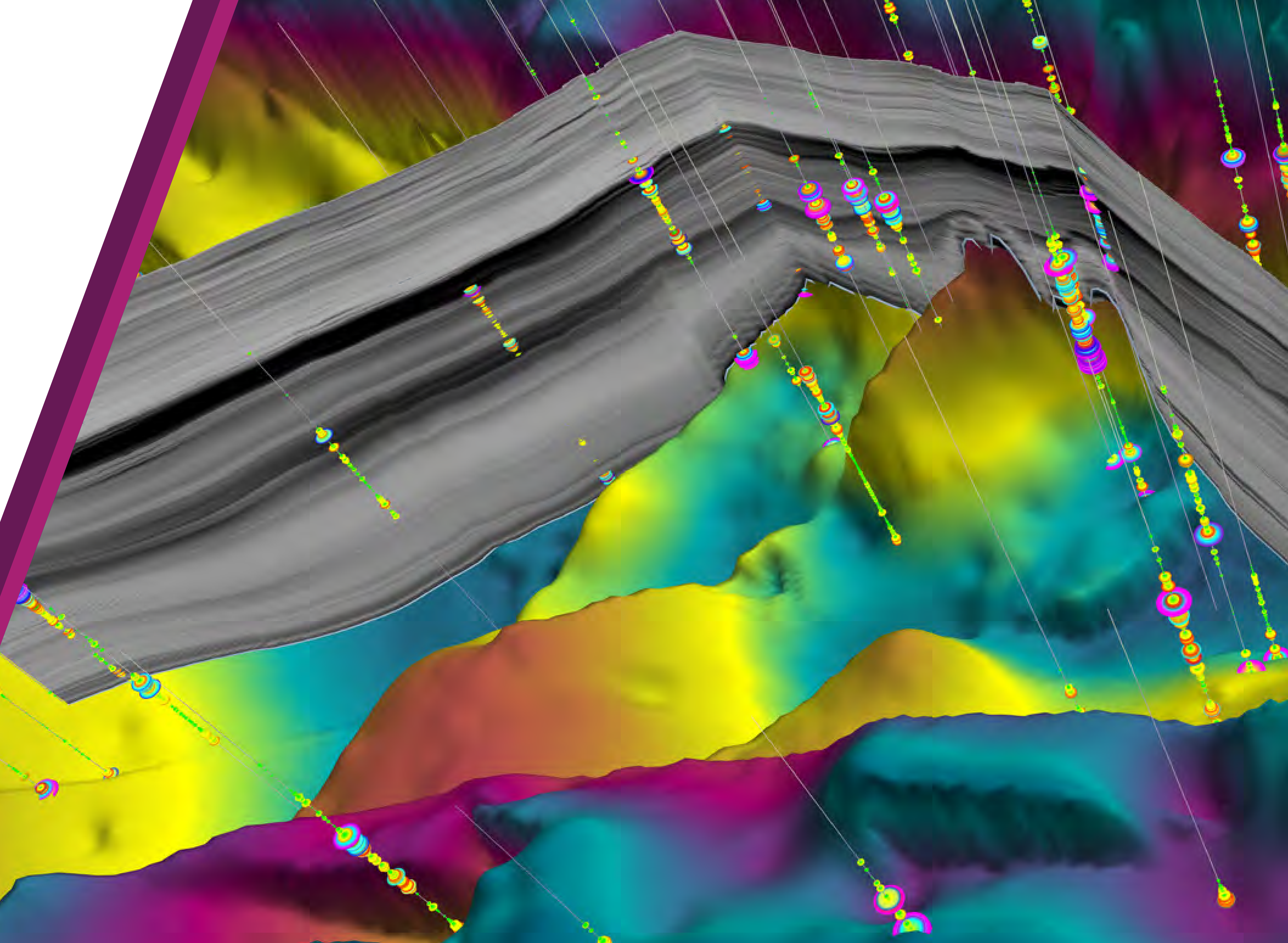
For more than 38 years, TGS has provided multi-client seismic data to energy companies globally. Over that time, we have built experience in exploration areas worldwide, established a vast global database and become the leading multi-client data provider. We offer the most current data, acquired and imaged with the latest technologies. In addition to seismic data, our geophysical library includes gravity, magnetics, seep, geothermal, controlled-source electromagnetic and multi-beam data. This library generates over 91% of our revenues and is organized by region: North and South America, Europe and Russia, Africa –- Middle East and Asia Pacific. Our multi-client success begins with a professional, geoscience and commercial approach to project development. When planning new seismic surveys, our first priority is to gain thorough geological and geophysical understanding. Our experienced project developers evaluate all available seismic, gravity, magnetic and geological data to set the project objectives and optimize the survey design. We also work closely with energy companies, local governments and geoscience specialists to address each survey's specific challenges. Our process ensures we acquire the right data to meet our clients' needs.

Geological Multi-client Data

TGS' Well Data Products vision is to provide a single platform to access the largest volume of high-quality digital subsurface and well performance data along with easy-to-use geoscience interpretation products. We have the industry's largest global collection of digital well logs available through our online well data portal, R360™. Additionally, our Well Performance Data now includes data in Canada and Mexico and has expanded to provide previously unavailable historical production data in the U.S. prior to 1970. In 2019, we added over 29,000 new Log ASCII Standard (LAS) wells; 2,800 MUDLAS wells; 207,000 validated well headers; 208,000 raster logs; 20,000 LAS+ wells; 31,000 DS+ directional surveys; and 200 CheckShot surveys. Furthermore, our AI-predicted well log curves, ARLAS, launched in mid-2019 and has expanded to over 1 million files in 15 basins throughout North America. This solidifies our position as one of the largest providers of well data in North America and in over 36 countries worldwide.

Imaging Services

TGS employs the latest processing technologies to deliver the imaging products demanded by energy companies. We make substantial investments in developing new proprietary technologies and workflows. These investments are then used to provide imaging solutions directly to clients and to process our own global multi-client database. TGS has offerings for both 2D and 3D, including depth and time imaging, marine, land, ocean bottom cable and nodes, anisotropic imaging, transition zone, multicomponent, shear wave, 4D time-lapse and wide-azimuth (WAZ) data processing. Our imaging teams have direct access to our well log database enabling calibration of our seismic data to the well data. In 2019 we processed 180,000 km of 2D marine data; 100,000 km^2 of 3D marine data; 14,000 km^2 of WAZ/; and 27,000 km^2 of onshore data from basins around the world. In 2019 we enhanced our full waveform inversion (FWI) technology and image-domain least squares RTM and started applying them to our large multi-client projects. We also continue to enhance our inversion-based deblending technology to separate seismic data acquired with simultaneous sources and continuous recording. Development of inversion-based 3D deghosting enabled enhanced seismic bandwidth products. These technologies enabled TGS to confidently market an industry first, at-scale speculative sparse Ocean Bottom Node (OBN) survey – Amendment.



Executive Management

Kristian Johansen
CEO

Kristian joined TGS in 2010 as Chief Financial Officer and became Chief Operating Officer in early 2015 before being appointed Chief Executive Officer in March 2016. Prior to joining TGS, Kristian was the Executive Vice President and CFO of EDB Business Partner in Oslo (now Evry). Mr. Johansen also has experience from executive positions in the construction, banking and oil industries. A native of Norway, Kristian earned his undergraduate and master's degrees in business administration from the University of New Mexico in 1998 and 1999.

Fredrik Amundsen
CFO

Fredrik joined TGS in 2003 as Financial Controller and has since served TGS in a variety of capacities. These include Corporate Controller, Director of Finance, Director of Sales, VP of Europe & Russia, SVP Europe and Asia Pacific, and most recently EVP Europe & Russia before assuming the role of CFO in 2020. Fredrik received B.A. (with honors) in business administration from Washington State University in 2001.

Will Ashby
EVP North America

Will joined TGS in 2011 with the acquisition of Stingray Geophysical. He has served TGS in a number of leadership roles including M&A, Finance, Investor Relations, HR and Marketing. Will was appointed Senior Vice President of North America in January 2019. Will has over 21 years of experience in the oil & gas industry, having worked with BP, QinetiQ and a number of start-up E&P services companies. Will received M.A. (with honors) and B.A. (with honors) degrees in geography from the University of Oxford in 1997.

Rune Eng
EVP International

Rune joined TGS with the acquisition of Spectrum. He has a broad range of experience in the seismic industry. He has held various executive positions in the oil industry, most recently as CEO of Spectrum and before that in Petroleum Geo-Services (PGS), Fugro-Geoteam, Sevoteam and a senior consultant position in Digital Equipment Computing (DEC). Rune is a native of Norway. Rune holds a master's degree in geophysics from University of Gothenburg in 1998 and a Bachelor of geophysics from University of Oslo in 1996.

Katja Akentieva
EVP Onshore

Katja joined TGS in 2012 with the acquisition of Arcis and was appointed Managing Director of TGS Canada with focus on the onshore and the offshore data growth. Katja assumed the role of SVP Onshore in 2015 and gained additional executive responsibility for Well Data Products in 2018. Her previous industry experience includes 11 years with Schlumberger where she held various positions based in the UK, Norway and Canada. Katja received her master's degree in geology and geophysics from Moscow State University, she also holds a bachelor's degree in foreign languages from Moscow State University and an MBA from the Erasmus University in the Netherlands.

Sven B. Larsen
EVP Strategy & M&A

Sven Børre joined TGS in September 2015 as Chief Financial Officer. Prior to joining TGS, Sven was CFO of Prosafe, the world's leading owner and operator of semisubmersible accommodation vessels for the offshore oil and gas industry. He has also been CFO of Prosafe Production, which was one of the world's leading FPSO contractors. Sven holds a M.S. degree in business with a specialization in finance from Bodo Graduate School of Business in Norway.

Jan Schoolmeesters
EVP Operations

Jan joined TGS with the acquisition of Spectrum where he had been the COO since 2011. Prior to Spectrum he gained substantial experience in the seismic industry having served 16 years in various roles in PGS with a technical, operational and commercial background. Jan holds a master's degree in earth sciences and a Ph.D. in geophysics from Delft University of Technology (the Netherlands).

Tanya Herwanger
EVP Support & Staff

Tanya joined TGS in 2014 as Corporate Counsel. In 2015, she made a cross function move to sales and business development and then in January 2016 was appointed Vice President for Africa and Middle East. Prior to joining TGS, she spent eight years with Schlumberger based in the US and in the UK. Tanya received her law degree from the University of London, Queen Mary and Westfield College, and professional legal qualifications from the Inns of Court School of Law in London and previously served as a dual-qualified solicitor in the UK and in her native home of Belize.

Tana Pool
EVP Legal

Tana joined TGS in 2013 as General Counsel and Corporate Secretary, and in January 2019, gained additional executive responsibility for HR. Her background includes over 26 years of legal experience and seven years of accounting experience, with significant knowledge of the energy sector. Tana previously served for over six years as the general counsel of a publicly traded construction contractor focused on energy infrastructure. Her legal background also includes over nine years in private practice in corporate and transactional law with several global law firms. She received her BBA degree in accounting from Texas Tech University and her JD degree from the University of Houston Law Center. She is also licensed as a Certified Public Accountant.

Board of Directors

Hank H. Hamilton
Chairman

Mr. Hamilton joined TGS as CEO in 1995 and served in that position until June 2009. He began his career as a geophysicist with Shell Offshore (1981 – 1987) before joining Schlumberger (1987 – 1995), where he held a number of leadership positions internationally, culminating with VP and General Manager of all seismic product lines in North and South America. He also serves as Chairman of the Governing Board of Defy Ventures, a nonprofit organization in the USA. Mr. Hamilton was first elected as a TGS Director in 1998, and as Chairman in 2009.

Wenche Agerup
Director

Ms. Agerup is EVP Corporate Affairs and General Counsel Executive of Telenor ASA. From 1997 to 2010, Ms. Agerup held various leading positions within Norsk Hydro ASA, including Plant Manager at Årdal Metal Plant in Norway and Project Director in Hydro UMC Joint Venture in Australia.

From 2010 to 2015, Ms. Agerup was Executive Vice President, Corporate Staffs and General Counsel of Norsk Hydro and member of the Corporate Management Board, reporting to the Chief Executive Officer. Ms. Agerup serves as a board member of Statoil. She was first elected as a director of TGS in 2015.

Mark Leonard
Director

Mr. Leonard is currently the President of Leonard Exploration, Inc. He retired in 2007 from Shell Oil Company after 28 years of service. During his tenure at Shell, Mr. Leonard held a number of executive positions including Director of New Business Development in Russia/CIS, Director of Shell Deepwater Services, Director of Shell E&P International Ventures and Chief Geophysicist for Gulf of Mexico. He was first elected as a director of TGS in 2009. He also serves as a director of Unicorn REH, an energy company, and for three nonprofit organizations: the Society of Exploration Geophysicists Foundation, the YMCA of Greater Houston and Hope Center Houston.

Tor Magne Lønnum
Director

Mr. Lønnum is currently Chief Financial Officer of Aimia Inc. Prior to joining Aimia, he was Group CFO in Tryg AS and Tryg Forsikring AS from 2011 to 2016. He has also previously held the positions of CFO in Skipper Electronics AS, accountant in Samarbeidende Revisorer AS, manager in KPMG, Group CFO and Group Director in Gjensidige NOR Insurance, Deputy CEO and Group CFO in Gjensidige Forsikring ASA. He was first elected as a director of TGS in 2013.

Vicki Messer
Director

Ms. Messer is currently an independent consultant. She has 32 years of geophysical industry experience in various executive, management and supervisory positions for CGG Veritas, Veritas DGC, Halliburton Energy Services/Halliburton Geophysical and Geophysical Services Inc. She was first elected as a director of TGS in 2011.

Torstein Sanness
Director

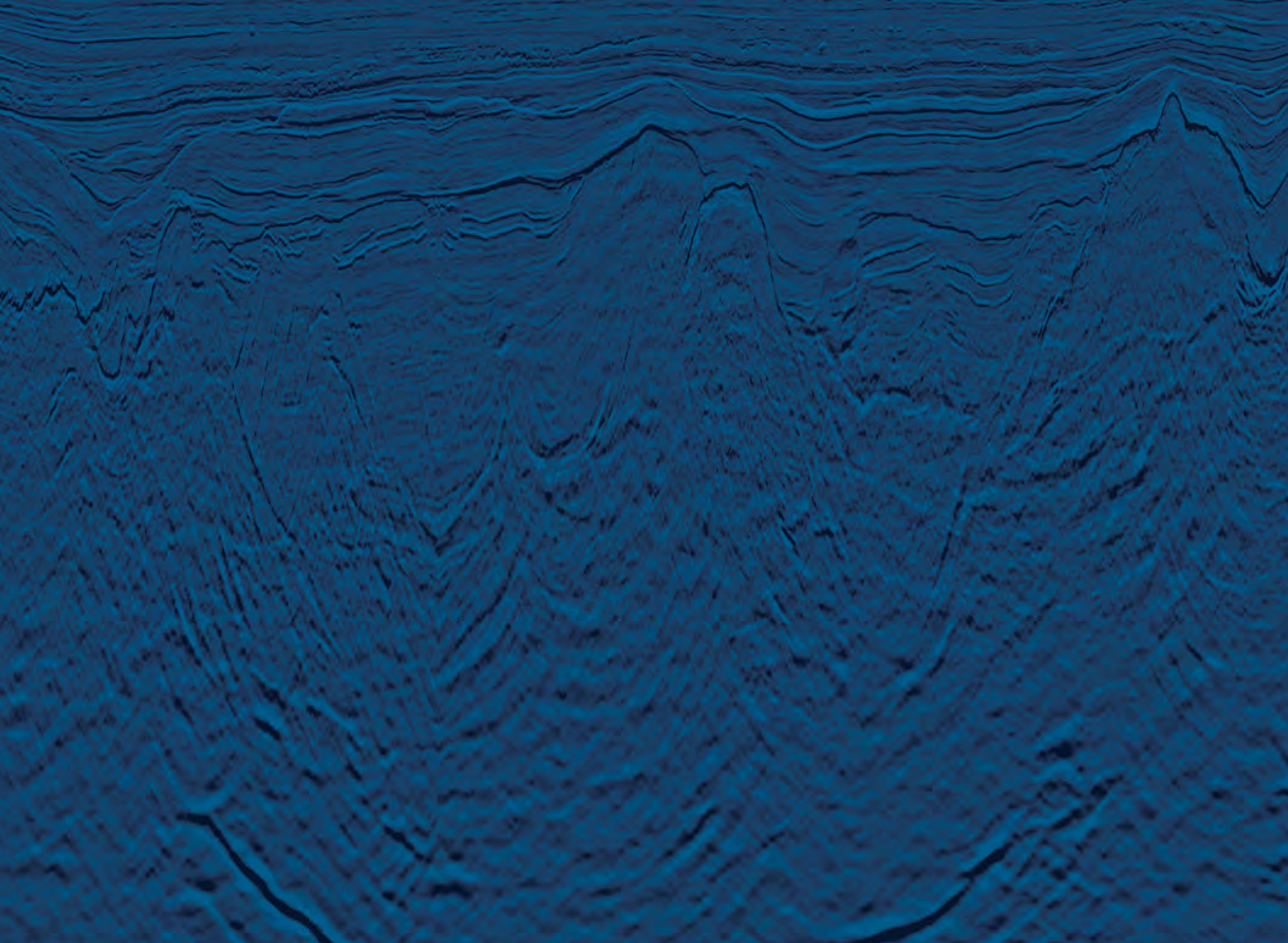
Mr. Sanness served as the Chairman of Lundin Norway from April 2015 to March 2017, when he moved to the board of International Petroleum Corp., a Lundin Group company. He previously served as the Managing Director of Lundin Norway from 2004 to 2015. From 2000 to 2004, he served as Managing Director of Det Norske Oljeselskap AS, and from 1972 to 2000, he served in various capacities for Saga Petroleum, working primarily in the exploration and development of Saga's oil and gas interests globally. Mr. Sanness serves as a board member for Panoro Energy ASA. He was first elected as a director of TGS in 2016.

Irene Egset
Director

Irene Egset has a 4-year degree in (Siviløkonom) business administration, from NHH, Norwegian School of Economics, Norway. Ms. Egset currently serves as the Chief Financial Officer of Posten Norge, joining in 2019. From 2008 to 2018, she served in various financial leadership roles in Statkraft and most recently as Executive Vice President and CFO from 2016 to 2018. From 2005 to 2008, she was a financial manager for J.F. Knudtzen and from 2000 to 2005, she served as Controller for Nera SatCom. Ms. Egset held a variety of financial roles at Statoil (now Equinor) from 1992 to 2000. Ms. Egset began her career in 1988 as a financial manager for Ulstein Elektro.

Christopher Finlayson
Director

C.G. Finlayson is a geologist and petroleum engineer, with nearly 40 years of technical and commercial experience in the oil and gas industry. He received his degree with First Class Honours in physics and geology from the University of Manchester in 1977. He joined Shell and during his career, held leadership roles in exploration and production and liquefied natural gas around the world. Mr. Finlayson joined BG Group in 2010 From 2013 to 2014, he served as Chief Executive Officer. Mr. Finlayson serves on the Board of Höegh LNG, is non-executive Chairman of Siccar Point Energy Ltd. and is a board member of two other privately held companies. Mr. Finlayson is a Fellow of the Energy Institute.



Board of Directors Report

With an efficient cost base, strong balance sheet and flexible business model, TGS is in a unique position to continue enhancing its status as the world's leading multi-client geophysical company.

2019 Board of Directors Report

TGS-NOPEC Geophysical Company ASA (the Parent Company and, together with its subsidiaries, TGS or the Company) is a leading provider of global geoscience data products and services to the oil and gas industry. TGS specializes in the design, acquisition and processing of multi-client seismic surveys worldwide. In addition to an extensive geophysical and geological data library – including multi-client seismic data, magnetic and gravity data, digital well logs, production data and directional surveys – the Company offers advanced processing and imaging services, interpretation products and data integration solutions. TGS operates globally and is presently active in North and South America, Europe, Russia, Africa, Asia and Australia.

The corporate headquarters of the Parent Company and TGS is currently in Asker, Norway (relocating to Oslo, Norway, effective June 2020). Its primary subsidiary, TGS-NOPEC Geophysical Company, is based in Houston, Texas, U.S.A. TGS also has regional offices in the United Kingdom, Canada, Australia, Singapore, Brazil, Mexico and elsewhere in U.S.A. All financial statements in this report are presented on a going concern basis in accordance with the Norwegian Accounting Act section 3-3a, and the Board of Directors confirms that the prerequisites for a going concern assumption are indeed present.

Mergers and acquisitions

On 2 May 2019, TGS announced that it had agreed the principle terms for the acquisition of Spectrum ASA (Spectrum), a Norwegian multi-client seismic company. The acquisition was conducted as a statutory merger pursuant to Norwegian corporate law, and the transaction closed on 14 August 2019.

The total purchase price was USD 354 million, settled by issuance of 16.1 million TGS shares to the Spectrum shareholders and a cash consideration of USD 4.3 million. USD 217 million was allocated to goodwill.

The acquisition of Spectrum further enhances TGS' position as a leading multi-client geophysical data provider with a 2D and 3D seismic data library covering all major mature and frontier basins worldwide. In particular, the transaction strengthens the Company's presence in the attractive South Atlantic basin (Latin America and West Africa).

Please refer to Note 3 of the consolidated financial statements for more details on the acquisition of Spectrum.

TGS announced the acquisition of Lasser, Inc. (Lasser) on 5 September 2019. Lasser, based in Fort Worth, Texas, provides historical and monthly oil and gas production data, further solidifying TGS' Well Data Products offering.

Changes to accounting principles

TGS implemented the IFRS 16 accounting standard for leases from 1 January 2019. Please refer to Note 7 of the consolidated financial statements for more details on IFRS 16.

Financial results, financial position and capitalization – IFRS

Revenues in 2019 amounted to USD 585.6 million, down 5% compared to the USD 614.2 million recognized in 2018. The decrease is mainly a result of fewer projects being completed during the year. Under IFRS revenue is recognized on completion of project, leading to more volatile results quarterly and annually.

Operating profit for 2019 was USD 129.0 million, corresponding to a margin of 22%, compared to USD 230.0 million (37% margin) in 2018. In addition to the described decrease in revenues, the lower operating profit is a result of higher amortization of our multi-client library. In 2019, amortization was USD 302.2 million versus USD 270.8 million in 2018. The increase is largely explained by straight line-amortization from projects that were completed during 2018 and 2019, as well as the inclusion of Spectrum from mid-August 2019.

Net financial items amounted to USD 2.2 million in 2019 (USD 6.7 million in 2018). The reduction was mainly a result of the introduction of IFRS 16, which means that part of operating leases is booked as interest costs.

Profit before taxes was USD 131.2 million (USD 236.8 million). Taxes decreased to USD 18.1 million from USD 58.0 million. This resulted in a net profit of USD 113.1 million, compared to USD 178.8 million in 2018.

At year-end 2019 cash and cash equivalents amounted to USD 323.4 million, up from USD 273.5 million at the end of 2018. TGS held current assets of USD 721.8 million and current liabilities of USD 584.8 million.

Goodwill increased to USD 284.8 million from USD 67.9 million as a result of the acquisition of Spectrum, concluded in August 2019.

As of 31 December 2019, total equity amounted to USD 1,545.8 million, corresponding to an equity ratio of 70% (78% in 2018). The reduction in equity ratio was mainly caused by an increase in multi-client projects in progress, where committed sales have not yet been recognized, the introduction of IFRS 16 and an increase in net working capital.

TGS is listed on the Oslo Stock Exchange. It had a market capitalization of USD 3.6 billion as of 31 December 2019. As of year-end, TGS was the 17th largest company on the Oslo Stock Exchange and is part of the OBX index consisting of the 25 most liquid stocks in Norway. TGS issued 16.3 million new shares in 2019, whereof 16.1 million was issued as settlement for the acquisition of Spectrum. The Board does not anticipate issuing any new shares in 2020 other than shares issued as part of employee long-term incentive programs or unless necessary to finance the acquisition of a company or a major business opportunity.

Cash flow from operations, investments, financing and dividends

TGS' operating cash flow was USD 560.6 million in 2019 compared to USD 390.0 million in 2018. Operating cash flow is significantly higher than the operating profit as non-cash expenses, in the form of amortization and impairments of our multi-client library, are the Company's largest expense item.

Net negative cash flow from investing activities amounted to USD 334.4 million in 2019 versus USD 289.0 million in 2018. This included cash investments in our multi-client library of USD 334.3 million, compared to USD 273.1 million in 2018.

TGS has paid quarterly dividends since 2016. The Annual General Meeting held on 8 May 2019 resolved to renew the Board of Directors' authorization to distribute quarterly dividends.

In 2019, TGS paid dividends totaling USD 114.6 million (equal to USD 1.08 per share), up from USD 81.4 million (equal to USD 0.80 per share) paid in 2018. In addition, the Company spent USD 43.2 million repurchasing 1.6 million own shares. In 2018 no shares were repurchased.

On 11 February 2020, the Board of Directors resolved to pay a quarterly dividend equal to the NOK equivalent of USD 0.375 per share (NOK 3.47).

Including dividends and other cash flows from financing activities, TGS' net cash flow amounted to USD 52.9 million in 2019, up from USD 23.6 million in 2018.

Shareholder Value Metrics	2019	2018
Revenues (MUSD)	585.6	614.2
Operating Profit (MUSD)	129.0	230.0
Operating Margin	22%	37%
Earnings Per Share Fully Diluted (EPS) (USD)	1.03	1.73
Net Multi-client Revenues / Average Net Book Value Ratio of Multi-client Library	58%	73%
Return on Average Capital Employed (ROACE)	12%	24%
Free Cash Flow from Operations after Multi-client Investments (MUSD)	226.4	117.0
Shareholders Equity / Total Assets	70%	78%

Operations

From 1 January 2018, TGS implemented the IFRS 15 accounting standard for Revenue from Contracts with Customers, meaning that revenue recognition for projects in progress shifted from a percentage of completion basis to the point in time when the project is completed and delivered to the customer(s). However, for internal management purposes, TGS continues to use the revenue recognition principles applied historically, referred to as "Segment reporting." The review of operations is based on "Segment reporting."

The global market for multi-client seismic data increased by approximately 5%[2] in 2019, while TGS' multi-client revenues were up 24%. Even when adjusting for the acquisition of Spectrum, effective 14 August 2019, TGS grew significantly more than the general multi-client market. The outperformance was mainly a result of favorable positioning in the best-performing markets, such as Latin America and the U.S.A., but there was also some growth related to the transfer of assets between oil companies, which in many cases creates additional sales opportunities.

Pre-funding revenues increased by 21% to USD 127.3 million from USD 105.1 million in 2018. Organic multi-client investments in new projects amounted to USD 327.6 million in 2019 compared to USD 256.9 million in 2018, implying a slight decline in the pre-funding rate to 39% in 2019 from 41% in 2018. The increase in pre-funding revenues and multi-client investments were mainly a reflection of higher activity in Brazil.

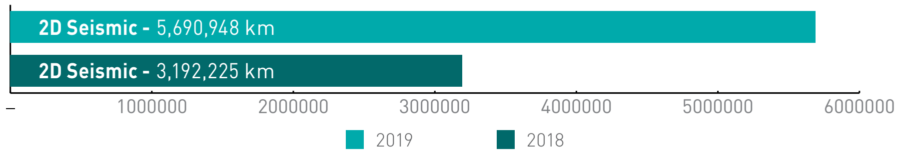
Late sales of vintage data and data in the development phase amounted to USD 627.0 million in 2019, up 23% from 508.2 million in 2018. The increase is largely due to the acquisition of Spectrum, but growth in Brazil, as well as transfer fees related to M&A activities among customers, also contributed positively.

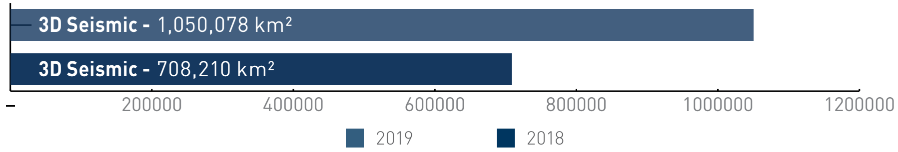
As a result of higher activity related to processing of data on behalf of third parties, proprietary revenues increased by 117% to USD 18.2 million from USD 8.4 million. Thus, total revenues amounted to USD 772.6 million, up 24% compared to the USD 621.7 million recognized in 2018.

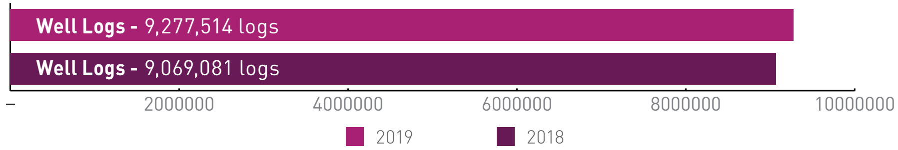
[2] Aggregate multi-client revenues as reported by TGS, Schlumberger, CGG, PGS, ION and Polarcus.

Multi-client Data Library

TGS' geoscientific data library is one of the industry's most comprehensive multi-client resources, encompassing a wide range of geophysical, geological, gravity, magnetic and bathymetry data. The following table summarizes our data inventory at year-end.







The following review of the multi-client library is based on "Segment reporting."

With a net book value of USD 830.8 million (USD 726.1 million in 2018) TGS' library of multi-client seismic data, geological data and integrated products represented 40% (49% in 2018) of total assets as of 31 December 2019. Seismic data, representing 92% of the library's net book value at year-end, is amortized on a project-by-project basis as follow:

- During the work in progress (WIP) phase, amortization is based on total cost versus forecasted total revenues of the project
- After a project is completed, it is amortized on a straight-line basis. The straight-line amortization is assigned over the remaining useful life, which for most offshore projects is four years. For most onshore projects, the useful life after completion is seven years

In 2019, TGS booked total investments in our multi-client library of USD 523.0 million (USD 270.8 million in 2018). Of this, USD 183.5 million (USD 6.5 million in 2018) was related to mergers and acquisitions, whereof the Spectrum transaction accounted for USD 180.2 million, and USD 11.9 million (USD 7.3 million in 2018) was for investments contingent on sales.

The well data library is amortized on a straight-line basis over seven years, while data purchased from third parties follows a straight-line amortization profile over the remaining useful life.

Commitments to Seismic Acquisition Capacity

TGS secures all seismic acquisition capacity from external suppliers for both offshore and onshore projects. As of the end of 2019, the Company had entered into commitments for five 3D vessels, two 2D vessels, three OBN vessels, one multibeam vessel and one coring vessel, in addition to four land crews.

All these commitments will expire in 2020, and the amount committed, including contractual lease agreements, totaled USD 160 million for marine capacity and USD 3 million for land capacity. (2018 total USD 75 million.)

Risk Management and Internal Control

TGS' activities are heavily dependent on the capital spending budgets of exploration and production (E&P) companies in the oil and gas industry. These budgets are, in turn, largely a function of actual and/or expected shifts in oil and gas prices. Consequently, TGS' activities, opportunities and profitability are linked to the fluctuations in these prices. Under TGS' business model, discretionary investments in new multi-client projects are by far the largest use of cash. As TGS does not itself own seismic vessels or onshore seismic crews, but rather outsources these acquisition services on short-term contracts to vendors, the Company can quickly adjust cash outflow in accordance with market changes, thereby mitigating part of the risk represented by movements in oil and gas prices.

TGS is exposed to financial risks such as currency, liquidity and credit risk. Our operational exposure to currency risk is low as significant portions of revenues earned and costs incurred are in USD. However, as significant parts of the Company`s taxes are calculated and paid in NOK, fluctuations between the NOK and the USD result in currency exchange gains or losses. From 2016 the quarterly dividend payments have been linked to USD, which has reduced the NOK exposure significantly.

Liquidity risk arises from a lack of correlation between free cash flow and financial commitments. As of 31 December 2019, TGS held current assets of USD 721.8 million, of which cash and cash equivalents represented USD 323.4 million, and current liabilities were USD 584.8 million. In addition, a USD 100 million Revolving Credit Facility, which remains undrawn at the date of this report, was established in January 2019. The Board considers the liquidity risk of the Company to be low.

TGS is exposed to credit risk through sales and receivables and uses its best efforts to manage this risk by monitoring receivables and implementing credit checks and other actions as deemed appropriate. In addition, excess cash is placed in either bank deposits or financial instruments that have a minimum rating of "investment grade." Our maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets, such as accounts receivables, other short-term receivables and other non-current assets. TGS evaluates the concentration of risk with respect to trade receivables as low due to the Company's credit rating policies and because our clients are mainly large energy companies, considered to be financially sound.

TGS is highly focused on maintaining adequate internal controls. The Company's primary business activity is building its multi-client geoscientific data library, which represents its largest financial asset, through multiple investments in new data for licensing to clients. TGS uses customized investment proposal models and reporting tools to assess and monitor the status and performance of our multi-client projects. Reference is made to Note 16 in the consolidated financial statements and to the more detailed information on risk management and internal control in the Corporate Governance section of the Annual Report.

Organization, Working Environment and Equal Opportunity

TGS' global workforce increased by 25% from year-end 2018 to year-end 2019, mainly as a result of the Spectrum acquisition.

The Board emphasizes the importance of employee engagement and has set relevant measures for Management. In 2019, focus has particularly been on communication, training and development, and compensation/rewards. Furthermore, TGS continued to maintain a staff turnover at an acceptable 8% and was successful in attracting high-performing individuals. The Board recognizes the importance of maintaining high employee engagement to ensure high levels of discretionary effort and employee retention. Therefore, employee engagement activities will continue to be a high priority.

The Parent Company had 46 employees as of 31 December 2019. At year-end, TGS had a total of 666 employees in the following locations: 400 employees in the United States, 133 employees in the United Kingdom, 52 employees in Norway, 53 employees in Canada, 13 employees in Brazil, 11 employees in Australia and 4 employees in other countries. The number of employees in the Group at the end of 2018 was 547.

The Board considers the working environment in the Company to be very good. The Board and Management believe that the diversity of our employees is a core strength of TGS, and that employees of diverse genders, ethnicity and nationality are provided with equal opportunity and treated fairly within the Company.

At the end of 2019, women comprised 35% of the total workforce in the Company (37% in 2018). The corresponding figure for managers is 28% at the end of 2018 (29% in 2018).

Health, Safety and Environmental Issues

TGS' interaction with the external environment involves a combination of marine seismic research vessels and land seismic acquisition crews, as well as specialized aircrafts rigged with equipment to collect seismic, gravity, magnetic, coring and/or multibeam data. As a strong supporter of environmental sustainability, TGS is fully committed to safeguarding and maintaining the environment in which we operate and live in, whilst also providing a safe and healthy workplace for its employees and contractors. TGS manages and monitors these activities and operations through the active implementation of a comprehensive HSE Management System. Built around Corporate policies and procedures, TGS' HSE Management System is designed to ensure that all company operations are conducted in the absence of significant risk, which is achieved by continuously identifying and controlling hazards which may arise through any aspect of the company's operations.

TGS understands the importance and value of working with local governments, regulatory authorities and non-government organizations. Therefore, TGS strives to maintain positive communication with all relevant stakeholders to help identify, understand and mitigate environmental risks associated with geophysical research activities. TGS complies with relevant laws and local regulations, while also working closely with several industry associations to investigate and implement ways to mitigate the potential impact from seismic operations on the environment. Furthermore, prior to initiating seismic data acquisition in the field, TGS typically conducts environmental impact assessments as part of the permitting process to ensure that all potential environmental impacts are identified, understood and properly mitigated. Once operations are underway, the Company monitors the environmental performance against comprehensive plans and is fully dedicated to the continuous improvement of environmental programs and standards across all our operations. Additionally, through the Contractor Management System, TGS works with vessel owners and seismic contractors to ensure compliance with TGS' Sustainability Program.

In 2019, TGS employees worked 952,627 man-hours and there were no recordable employee injuries. The TGS employee injury frequency rate for 2019 was 0.00 (2018: 0.00 per million man-hours). The sickness absence frequency for TGS employees in 2019 was 1.10 %, as compared to 0.97 % in 2018. On 14 August 2019, TGS acquired Spectrum ASA, and as a result increased its overall head- and office count. Through 31 December 2019, legacy Spectrum employees worked 104,198 man-hours through with no recordable injuries reported and a sickness absence frequency of 0.01%.

As part of its continuous improvement strategy, TGS' Executive Management team participated in HSE inspections of office locations and conducted site visits on ongoing marine or land projects. All TGS employees successfully completed their assigned HSE training modules and were also assessed on their active HSE commitment through the annual performance review and development process. The Environmental, Sustainability & Governance (ESG) Committee, which was established towards the end of 2018, continued to address challenges related to sustainability by identifying key areas for TGS to implement sustainable practices in its operations. Based on stakeholder analysis (as described in the Sustainability Report), the committee works closely with TGS' CEO and members of the Executive team. The committee have identified three United Nation's Sustainable Development Goals (SDGs) and are committed to develop and implement strategies to address these SDGs. The selected SDGs included Industry, Innovation and Infrastructure (SDG 9), Protect the Planet/Climate Action (SDG 13) and Life Below Water (SDG 14). Lastly, during the last quarter of 2019, TGS formalized and presented an ESG Strategy document, outlining high-level ambitions for adopting ESG factors in our business to continue to drive TGS' commitment to sustainability forward.

More detailed information on TGS' HSE initiatives may be found in the Sustainability Report, included as a separate section of the Annual Report and on TGS' website.

Sustainability and Corporate Social Responsibility

Ensuring that TGS' business is conducted in a sustainable manner is on top of the Board of Directors' agenda. During 2019 the Company has established a Sustainability Strategy, with the aim of improving the Company's impact on environmental, social and governance factors.

Please refer to the Sustainability Report, included as a separate section of this Annual Report and on TGS' website at www.tgs.com, for more information. The report has been prepared in accordance with the Norwegian Accounting Act, section 3-3c, and the Board of Directors believes that the Company complies with the reporting requirements.

Board Structure and Corporate Governance

The Board of Directors consists of eight directors, each serving a one-year term. The Board's Audit and Compensation Committees are composed exclusively of independent directors. No material transactions other than the remuneration disclosed in Note 10 have occurred in 2019 between the Company and its management, directors or shareholders.

The independent Nomination Committee, elected by the shareholders, consists of the following members: Tor Himberg-Larsen (Chairman), Christina Stray and Herman Kleeven.

Himberg-Larsen and Stray were elected for a two-year term at the Annual General Meeting on 8 May 2019, while Kleeven was elected for a two-year term on 8 May 2018.

TGS emphasizes independence and integrity in all matters relating to the Board, management and its shareholders.

The Company conducts an active compliance program designed to continually inform and educate employees on ethical and legal issues. The Company employs a full-time, Board-appointed compliance officer who reports quarterly on TGS' compliance activities and objectives.

TGS bases its corporate governance policies and practices on the Norwegian Code of Practice for Corporate Governance published on 17 October 2018. The Board of Directors believes that the Company complies in all areas relating to the Code of Practice and any subsequent amendments. A more detailed description of how the Company complies with the Code of Practice and the Norwegian Accounting Act's requirements for reporting on corporate governance is included in the Report on Corporate Governance included in this Annual Report and on TGS' website at www.tgs.com.

Salary and Other Compensation

TGS compensates its employees according to market conditions that are reviewed on an annual basis by the Compensation Committee. Compensation includes base salary, insurance and retirement benefits programs, a profit-sharing bonus plan based on the Company's performance and, in certain cases, stock –based, long-term incentive awards. For further details, please refer to section 12 of the Report on Corporate Governance and the Declaration on Executive Remuneration in this Annual Report.

The members of the Board of Directors do not participate in any bonus plan, profit-sharing plan or stock incentive plan. In recent years, the directors' compensation has been composed of both a fixed fee and a number of restricted TGS shares. The remuneration is not related to the Company's financial result. Refer to Note 10 to the Consolidated Financial Statements for details on the remuneration for 2019.

Significant Litigation

The Board is regularly updated on significant litigation matters. As a result, at each Board meeting the Board receives an update on the status of the proceedings resulting from the Økokrim criminal charges, as well as the related civil claims. See Note 24 to the Consolidated Financial Statements for further details. The Audit Committee also receives an update on a quarterly basis regarding other less significant potential and pending litigation matters.

Outlook

During the past year, the industry has been increasingly exposed to several key trends that impact long-term planning and TGS' strategy. First, increased pressure from communities, governments and shareholders to reduce carbon emissions is impacting how E&P companies allocate capital and manage their operations. The multi-client business model inherently assists the goal of lower carbon operations by reducing duplication and increasing efficiency of vessel and land crew allocation. TGS is committed to work with our clients to monitor and reduce emissions, while also looking for opportunities to support the oil and gas industry as it diversifies into renewable energy and other low-carbon strategies such as carbon capture and storage.

Secondly, a continuation of demand-driven oil price volatility with recent geopolitical events, trade negotiations and the impact of the coronavirus on the global economy are leading to increased oil price uncertainty going forward, thereby affecting E&P companies' investment plans.

Finally, there is a growing recognition among E&P companies, both big and small, that they need to replenish reserves and the world will still need more oil and gas to support economic development, even in future low-carbon scenarios. Following several large discoveries off the Brazilian coast and the west coast of Africa, we see a gradual shift in E&P companies' focus towards frontier prolific basins in the Southern Hemisphere.

Our clients' continued focus on cost, capital discipline and more efficient use of technology combined with increased interest in frontier basins in the Southern Hemisphere fits well with TGS' geographical footprint and strategy of making new generations of technology available on a large scale through the multi-client model. Recent examples are the newly announced 3D projects offshore Argentina and Senegal, the multi-client Ocean Bottom Node (OBN) projects initiated in the US GoM and the North Sea and the Declaration multi-wide azimuth reprocessing project that signals the start of next generation imaging in the US GoM.

Building on this strategy, TGS is continuing to develop its technology offering. Several initiatives have been launched within the imaging area to enhance TGS' position as a leading data processing company. Furthermore, TGS has added substantial resources to the data and analytics area over the past couple of years and will continue to do so. Through combining artificial intelligence (AI) and advanced data analysis capabilities with our strong geoscience knowledge and vast library of geophysical and geological data, we are further enhancing the value offering to our clients.

Over the past few years, the structure of the subsurface data industry has changed significantly. Most of the companies are now either pure vessel providers or pure multi-client companies. Greater discipline and cold stacking by vessel providers have reduced the available fleet to less than half of the 2014 level. Together, these changes should contribute to a healthier industry in the longer term, with more focus on quality and improved economics.

TGS continues to focus on strategies that maximize return on average capital employed (ROACE) and free cash flow (FCF). The Company's asset-light business model and capital discipline encourage capital efficiency and are designed to produce more predictable and superior long-term returns.

Events after the Balance Sheet Date

On 14 January 2020, TGS announced the purchase of four 3D seismic surveys in the North Slope region of Alaska. The newly acquired seismic surveys encompass 1,606 square kilometers of modern data. The surveys, which advance TGS' effort to expand into active frontier basins, are complemented by TGS' extensive well data library that will assist exploration companies to further evaluate new reservoir targets and rejuvenate historic discoveries.

On 11 February 2020, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.375 per shares (NOK 3.47) to shareholders. The dividend payment was made on 4 March 2020.

The first months of 2020 have proven how our industry can be impacted by unexpected events that have a dramatic impact on economic growth. The COVID-19 pandemic has led to an unprecedented decline in global demand for oil and gas. On top of that, the price war between Russia and Saudi Arabia has further exacerbated the situation. As a result, the oil price has seen a dramatic drop from trading in the high $60s per barrel in early January to a low of $25 per barrel on March 17. At these levels, there are few onshore or offshore projects generating profit.

E&P companies have reacted quickly to the market turmoil, and as of the date of this report, many have already announced significant cuts in capital expenditure. Subsurface data can be considered discretionary spending, hence there is an expectation that the Company's data products will be subject to significant cuts. As a result, TGS expects a very challenging market in 2020, where data licensing and pre-commitments to new projects may be deferred until clients have more visibility for an improvement in market conditions.

TGS' asset-light business model allows the Company to reduce investments quickly to adapt to changes in demand. Further, the Company's personnel costs have a high degree of variable pay which will adjust with the quarterly operating result. These characteristics have allowed the company to generate positive cash flow even in very challenging markets historically.

TGS' liquidity is considered healthy with a cash balance of USD 323 million as of the end of 2019. In addition, the Company has an undrawn credit facility of USD 100 million. Since the straight-line amortization of the Company's multi-client library was introduced in 2016, TGS' total amortization has exceeded new library investment by USD 187 million based on segment reporting. The Company estimates value in use based on discounted estimated future sales forecasts, hence a significant drop in demand could impact the impairment review for specific projects. See Note 9 for further details.

TGS' ambition of returning the Company's value creation to shareholders through a combination of quarterly cash dividends and share buybacks remain firm. The dividend policy states an ambition to maintain a stable quarterly dividend through the year, but the actual level paid will be subject to continuous evaluation of market outlook, cash flow expectations, and balance sheet development. Due to the unprecedented decline in client demand, the Board of Directors have decided to reduce the Q1 quarterly dividend payable in May from USD 0.375 per share to USD 0.125 per share. Before concluding on dividend distribution in the coming quarters, the Board will continue to evaluate the situation in accordance with the Company's dividend policy and further developments of COVID-19.

Annual Result of the Parent Company and Allocation of Profit

In 2019, revenues of the Parent Company decreased by 5% to USD 327.2 million from USD 344.1 million in 2018. 2019 operating profit amounted to USD 90.1million compared to USD 57.5 million. This increase is driven by a decrease in other operating expenses and a lower impairment of the multi-client library.

Net income for 2019 was USD 73.7 million, an increase of 91% compared to USD 38.5 million in 2018. The Board proposes that the Parent Company's net profit of USD 73.7 million shall be allocated as follows:

Allocated to Other Equity	USD 73.7 million

The Board of Directors resolved on 11 February 2020 to pay a quarterly dividend of USD 43.9 million (NOK equivalent of 3.47 per share) from the 2019 financial statements, which is covered by other equity.

The Board of Directors would like to thank all employees for their outstanding efforts throughout the year.

Asker, 27 March 2020

Henry H. Hamilton III
Chairman

Mark S. Leonard
Director

Wenche Agerup
Director

Irene Egset
Director

Christopher Finlayson
Director

Vicki Messer
Director

Tor Magne Lønnum
Director

Torstein Sanness
Director

Kristian Johansen
Chief Executive Officer

Confirmation from the Board of Directors and CEO

We confirm, to the best of our knowledge that the financial statements for the period 1 January to 31 December 2019 have been prepared in accordance with current applicable accounting standards and give a true and fair view of the assets, liabilities, financial position and profit or loss of the entity and the group taken as a whole. We also confirm that this report of the Board of Directors with references to the notes to the accounts and the Corporate Governance section of the Annual Report includes a true and fair review of the development and performance of the business and the position of TGS, together with a description of the principal risks and uncertainties facing the Company.

Asker, 27 March 2020

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Director

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Director

Irene Egset
Director

Christopher Finlayson
Director

Vicki Messer
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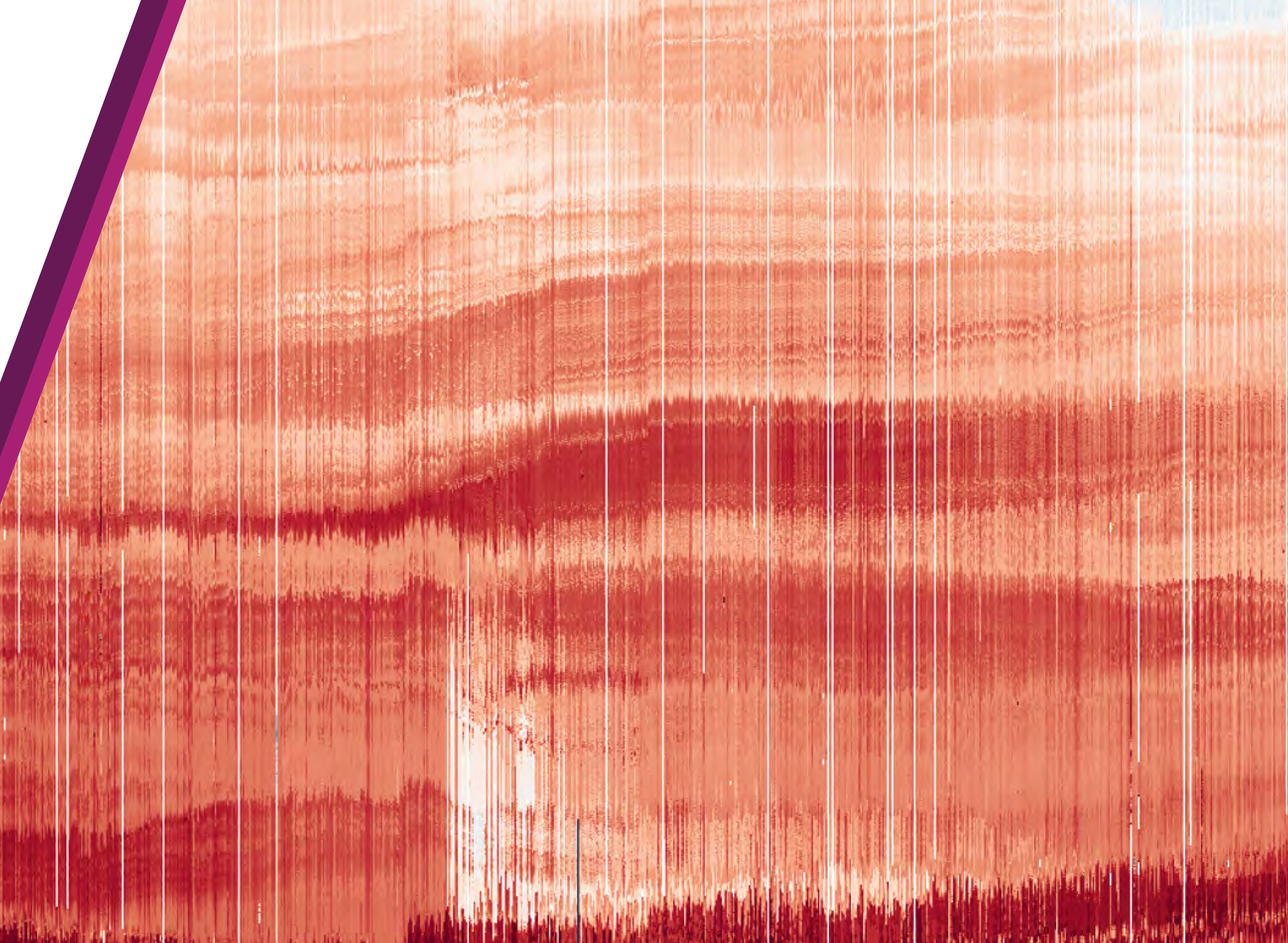
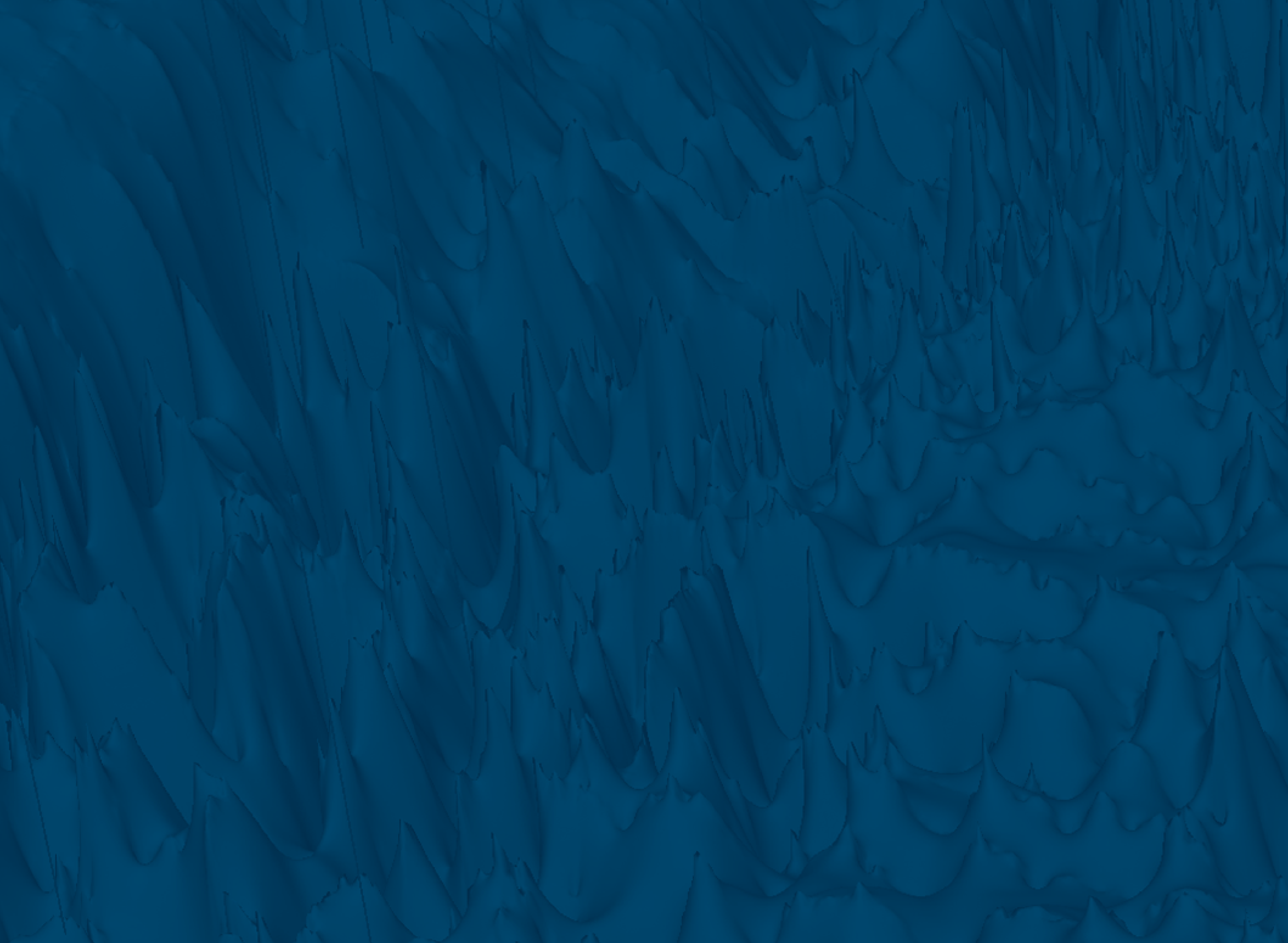
Chief Executive Officer





TGS Financials

TGS managed the cyclical downturn seen over the past few years through extraordinary focus on cost management and cash flow, combined with select counter-cyclical investments. This puts us in a good position to enhance our status as a leading provider of geoscience data to the oil & gas industry further.

Consolidated Statement of Comprehensive Income

(All amounts in USD 1,000s unless noted otherwise)

	Note	2019	2018
Revenue	4,5,18,25	**585,610**	614,239
Cost of goods sold - proprietary and other		**2,413**	584
Amortization and impairment of the multi-client library	8,9,18	**302,233**	270,776
Personnel costs	10	**86,345**	70,318
Other operating expenses		**42,120**	33,639
Depreciation, amortization and impairment	6,7,8	**23,503**	8,897
Total operating expenses		**456,613**	384,214
Operating profit		**128,998**	230,025
Financial income	26	**10,385**	6,980
Financial expenses	26	**(3,672)**	(991)
Net exchange gains (losses)	26	**(4,500)**	756
Net financial items		**2,213**	6,746
Profit before taxes		**131,211**	236,771
Taxes	27	**18,100**	57,971
Net income		**113,111**	178,800
Other comprehensive income:			
Other comprehensive income to be reclassified to profit or loss in subsequent periods			
Exchange differences on translation of foreign operations		**240**	(899)
Other comprehensive income, net of tax	27	**240**	(899)
Total comprehensive income for the period		**113,351**	177,901
Net income attributable to the owners of the parent		**113,111**	178,800
Net income attributable to non-controlling interests		**–**	–
		113,111	178,800
Total comprehensive income attributable to the owners of the parent		**113,351**	177,901
Total comprehensive income attributable to non-controlling interests		**–**	–
		113,351	177,901
Earnings per share (USD)	12	**1.05**	1.75
Earnings per share, diluted (USD)	12	**1.03**	1.73

Consolidated Balance Sheet

As of 31 December (All amounts in USD 1,000s unless noted otherwise)

	Note	2019	2018
Assets			
Non-current assets			
Goodwill	3,8,9	**284,753**	67,925
Multi-client library	3,8,9	**1,091,294**	870,495
Other intangible non-current assets	8	**13,703**	8,366
Deferred tax assets	27	**21,807**	884
Buildings	6	**2,396**	3,518
Machinery and equipment	6	**22,314**	19,308
Right of use asset	7	**23,445**	–
Sublease asset	7	**2,366**	–
Other non-current assets	17,24	**11,061**	180
Total non-current assets		**1,473,139**	970,676
Current assets			
Accounts receivable	16,19	**223,211**	215,046
Accrued revenues	16,19,28	**101,153**	91,442
Other receivables	19	**73,978**	31,353
Cash and cash equivalents	14	**323,408**	273,527
Total current assets		**721,750**	611,368
Total assets		**2,194,889**	1,582,044

	Note	2019	2018
Equity and liabilities			
Equity			
Paid-in capital			
Share capital	13	**4,127**	3,672
Treasury shares	13	**(49)**	(4)
Share premium	3	**416,878**	67,355
Other paid-in equity		**45,248**	45,248
Total paid-in capital		**466,204**	116,271
Other equity		**1,079,608**	1,116,341
Equity attributable to owners of the parent		**1,545,812**	1,232,613
Non-controlling interests		**(7)**	(7)
Total equity	28	**1,545,806**	1,232,606
Liabilities			
Non-current liabilities			
Long-term debt	16,17	**2,809**	2,500
Other non-current liabilities	16,17	**1,503**	2,514
Lease liability	7	**19,589**	–
Deferred tax liability	27	**40,375**	48,354
Total non-current liabilities	27	**34,275**	29,071
Current liabilities			
Accounts payable	16,20	**108,087**	39,922
Taxes payable, withheld payroll tax, social security	16,27	**32,784**	27,062
Lease liability	7	**11,057**	–
Other current liabilities	20,28	**432,878**	229,086
Total current liabilities		**584,806**	296,069
Total liabilities		**649,082**	349,437
Total equity and liabilities		**2,194,889**	1,582,044

Asker, 27 March 2020

Henry H. Hamilton III
Chairman

Mark S. Leonard
Director

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Director

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Director

Christopher Finlayson
Director

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Tor Magne Lønnum
Director

Torstein Sanness
Director

Kristian Johansen
Chief Executive Officer

Consolidated Statement of Changes in Equity

As of 31 December (All amounts in USD 1,000s unless noted otherwise)

	Share Capital (par value at NOK 0.25)	Treasury Shares	Share Premium	Other Paid-in Capital*	Foreign Currency Translation Reserve	Retained Earnings	Total	Non-controlling Interest	Total Equity
Opening balance 1 January 2019	**3,672**	**(4)**	**67,355**	**45,248**	**(22,473)**	**1,138,814**	**1,232,613**	**(7)**	**1,232,606**
Net income	–	–	–	–	–	113,111	113,111	–	**113,111**
Other comprehensive income	–	–	–	–	240	–	240	–	**240**
Total comprehensive income	–	–	–	–	240	113,111	113,351	–	**113,351**
Share issue Spectrum merger	449	–	349,523	–	–	–	349,972	–	**349,972**
Transaction cost share issues	–	–	–	–	–	(739)	(739)	–	**(739)**
Distribution of treasury shares	–	1	–	–	–	249	250	–	**250**
Purchase of own shares	–	(47)	–	–	–	(43,365)	(43,412)	–	**(43,412)**
Cost of equity-settled long-term incentive plans	5	–	–	–	–	8,411	8,416	–	**8,416**
Dividends	–	–	–	–	–	(114,640)	(114,640)	–	**(114,640)**
Balance 31 December 2019	**4,127**	**(49)**	**416,878**	**45,248**	**(22,233)**	**1,101,841**	**1,545,812**	**(7)**	**1,545,806**

	Attributable to the owners of the parent								
	Share Capital (par value at NOK 0.25)	Treasury Shares	Share Premium	Other Paid-in Capital*	Foreign Currency Translation Reserve	Retained Earnings	Total	Non-controlling Interest	Total Equity
Closing balance as of 31 December 2017	**3,663**	**(4)**	**62,771**	**39,722**	**(21,574)**	**1,115,531**	**1,200,109**	**(7)**	**1,200,102**
Adjustments IFRS 15	-	-	-	-	-	(54,895)	(54,895)	-	**(54,895)**
Adjustments prior years	-	-	-	-	-	(19,093)	(19,093)	-	**(19,093)**
Balance 1 January 2018	3,663	(4)	62,771	39,722	(21,574)	1,041,543	1,126,121	(7)	**1,126,114**
Net income	-	-	-	-	-	178,800	178,800	-	**178,800**
Other comprehensive income	-	-	-	-	(899)	-	(899)	-	**(899)**
Total comprehensive income	-	-	-	-	(899)	178,800	177,901	-	**177,901**
Paid-in equity through exercise of stock options	9	-	4,584	-	-	-	4,594	-	**4,594**
Distribution of treasury shares	-	0	-	-	-	377	377	-	**377**
Cost of equity-settled long-term incentive plans	-	-	-	5,526	-	-	5,526	-	**5,526**
Dividends	-	-	-	-	-	(81,906)	(81,906)	-	**(81,906)**
Balance 31 December 2018	**3,672**	**(4)**	**67,355**	**45,248**	**(22,473)**	**1,138,814**	**1,232,613**	**(7)**	**1,232,606**

* Other Paid-in Capital consists of costs related to share-based payments.

Consolidated Statement of Cash Flow

(All amounts in USD 1,000s unless noted otherwise)

	Note	2019	2018
Cash flow from operating activities			
Received payments from customers		**786,035**	551,368
Payments for salaries, pensions, social security tax		**(87,216)**	(70,828)
Payments of other operational costs		**(99,879)**	(55,099)
Paid taxes	27	**(38,293)**	(35,419)
Net cash flow from operating activities [1]		**560,648**	390,022
Cash flow from investing activities			
Investments in tangible and intangible assets		**(20,969)**	(16,369)
Investments in multi-client library		**(334,289)**	(273,062)
Acquisition of subsidiaries, net of cash acquired	3	**14,627**	(6,501)
Interest received		**6,261**	6,980
Net cash flow from investing activities		**(334,370)**	(288,952)
Cash flow from financing activities			
Interest paid		**(778)**	(991)
Dividend payments		**(114,640)**	(81,440)
Repayment of interest bearing debt	13	**(16,283)**	–
Proceeds from share issuances	3	**1,512**	4,971
Purchase of own shares		**(43,151)**	–
Net Cash flow from financing activities		**(173,340)**	(77,460)
Net change in cash and cash equivalents		**52,938**	23,610
Cash and cash equivalents at the beginning of the period	14	**273,527**	249,917
Net unrealized currency gains/(losses)		**(3,057)**	–
Cash and cash equivalents at the end of the period	14	**323,408**	273,527
1) Reconciliation			
Profit before taxes		**131,211**	236,771
Depreciation/amortization/impairment	6,8,9	**325,736**	279,672
Disposals at cost price		**4,666**	–
Changes in accounts receivables and accrued revenues		**8,020**	(94,148)
Unrealized currency gains/(losses)		**240**	(899)
Changes in other receivables		**1,386**	6,135
Changes in other balance sheet items		**127,682**	(2,090)
Paid taxes	27	**(38,293)**	(35,419)
Net cash flow from operating activities		**560,648**	390,022

Notes to Consolidated Financial Statements

(All amounts in USD 1,000s unless noted otherwise)

1. GENERAL ACCOUNTING POLICIES

General Information

TGS-NOPEC Geophysical Company ASA (the Parent Company) is a public limited liability company incorporated in Norway on 21 August 1996. The address of its registered office is Lensmannslia 4, 1386 Asker, Norway. TGS-NOPEC Geophysical Company ASA is listed on the Oslo Stock Exchange under the trading symbol "TGS."

TGS-NOPEC Geophysical Company ASA and its subsidiaries (TGS or the Company) provide multi-client geoscience data to oil and gas exploration and production companies worldwide. In addition to extensive global geophysical and geological data libraries that include multi-client seismic data, magnetic and gravity data, digital well logs, production data and directional surveys, TGS also offers advanced processing and imaging services, interpretation products and data integration solutions. The consolidated financial statements of TGS were authorized by the Board of Directors on 27 March 2020.

Basis of Preparation

The consolidated financial statements of TGS have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) in effect as of 31 December 2019 and consist of the consolidated statement of comprehensive income, the consolidated balance sheet, the consolidated cash flow statement, the consolidated statement of changes in equity and notes to the consolidated financial statements. The consolidated financial statements have been prepared on a historical cost basis. The financial statements of the subsidiaries have been prepared for the same reporting year as the Parent Company, using consistent accounting policies.

Summary of Significant Accounting Policies

Principles of Consolidation

Companies Consolidated

The consolidated financial statements comprise the financial statements of the Parent Company and its subsidiaries as at 31 December 2019. Control is achieved when TGS is exposed, or has rights, to variable returns from its involvement with the investee and can affect those returns through its power over the investee. Specifically, TGS controls an investee if and only if TGS has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee),
- Exposure, or rights, to variable returns from its involvement with the investee, and
- The ability to use its power over the investee to affect its returns.

Consolidation of a subsidiary begins when TGS obtains control over the subsidiary and ceases when TGS loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of comprehensive income from the date TGS gains control until the date TGS ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the Parent Company and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of TGS are eliminated in full through consolidation.

If TGS loses control over a subsidiary, the Company derecognizes the related assets (including goodwill), liabilities, non-controlling interest and other components of equity while any resulting gain or loss is recognized in profit or loss. Any retained investment is accounted for in accordance with the applicable IFRS.

Presentation Currency

TGS presents its consolidated financial reports in USD. The majority of TGS' revenues and expenses are denominated in USD, and USD is the functional currency for most of the entities in TGS, including the Parent Company. The financial statements of the Parent Company are presented separately in this Annual Report.

For presentation in consolidated accounts, monetary assets and liabilities of subsidiaries with functional currency other than USD are translated into USD at the rate of exchange prevailing at the reporting date and their statements of profit or loss are translated at exchange rates prevailing at the dates of the transactions. Non-monetary assets are translated at historical exchange rates.

Exchange rate differences arising from the translation to presentation currency are recognized in OCI.

Foreign Currency

Transactions in foreign currency are translated to the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities in non-functional currencies are translated into functional currency spot rate of exchange ruling at the date of the balance sheet. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in non-functional currencies are recognized in the income statement.

Revenue from Contracts with Customers

Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customers at an amount which reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.

Unfinished data

Multi-client pre-funding contracts and contracts for late sales of unfinished data (i.e., contracts entered into after commencement of a survey, but prior to data being ready for delivery) are considered to be "right to use licenses" under IFRS 15, meaning that all revenues related to these contracts are recognized at the point in time when the license is transferred to the customer, which would typically be upon completion of processing of the survey and granting of access to the finished survey or delivery of the finished data, independent of services delivered to clients during the project phase.

Finished Data

Revenues for sale of finished data are recognized at a point in time, generally upon delivery of the data (i.e., when the client has gained access to the data under a binding agreement). Through the binding agreement the customer is granted a non-exclusive license to use the finished data. Sales of finished data are presented as part of late sales revenues together with sales of unfinished data in cases where the relevant survey had already commenced when the contract was entered into.

Revenue Sharing Arrangements

From time to time, TGS enters into contracts where revenues are shared with governments or other parties (see Joint Arrangements below). Revenues are recognized on a net basis in accordance with applicable recognition principles.

Proprietary Contracts

Revenues from proprietary contracts, where TGS delivers services for the exclusive benefit of the customer, are recognized over time, normally on a percentage of completion basis, measured according to the acquired and processed volume of data in relation to the total size of the project.

Royalty Income

Royalty income is recognized when the subsequent sale related to the royalty occurs.

Cost of Goods Sold (COGS) – Proprietary Contracts and Other

Cost of goods sold consists of direct costs related to proprietary contract work and costs related to delivery of geoscientific data.

Multi-client Library

The multi-client library includes completed and in-progress geophysical and geological data to be licensed on a non-exclusive basis to oil companies. The costs directly attributable to data acquisition and processing are capitalized and included in the library value. Costs directly attributable to data acquisition and processing includes mainly vessel costs, payroll and hardware/software costs. Data acquisition costs include mobilization costs incurred when relocating vessels to the survey areas. The library also includes the cost of data purchased from third parties. The library of finished multi-client seismic data and interpretations is presented at cost reduced by accumulated amortization and impairment.

Amortization of Seismic Data

Prior to implementing IFRS 15, the Company recognized revenue and amortization (expense) over time, in line with the project's progress. During the work in progress phase, amortization was based on total cost versus forecasted total revenues of the project, i.e., amortization was recorded in line with how revenues were recognized for each project during this phase; this is also consistent with the accounting treatment applied to segment information reported to management. Under IFRS 15, no amortization is recognized until the point in time when the license is transferred to the customer, which would typically be upon completion of processing of the survey and granting of access to the finished survey or delivery of the finished data. At this point in time a customary impairment test is performed (as described below) to determine if the net book value of the survey is equal or lower than the recoverable value. If this is not the case, an impairment is recognized immediately. After a project is completed, a straight-line amortization is applied. The straight-line amortization is assigned over the remaining useful life, which for most marine projects is four years. For most onshore projects, the remaining useful life after completion of a project is seven years.

Amortization Policy on Seismic Data Purchased from Third Parties

When purchasing seismic data from third parties, a straight-line amortization over the remaining useful life of the data is recognized. The straight-line amortization is based on the cost of the seismic data recognized on the date of the purchase.

Amortization Policy on Well Data Products

The library of multi-client well logs is presented at cost, reduced by accumulated amortization. Amortization is recorded as a straight-line amortization over seven years.

Impairment Evaluation Multi-Client Library

When there are indicators that the net book value may not be recoverable, the library is tested for impairment on the individual cash generating unit (CGU). Any impairment of the multi-client library is recognized immediately and presented as "Amortization and impairment of the multi-client library" in the statement of profit or loss.

For further information about impairment, see "Impairment of Non-Financial Assets" below.

For details about impairment of the multi-client library, see Note 9.

Joint Arrangements

A joint arrangement is a contractual arrangement providing that TGS and other parties undertake an economic activity that is subject to joint control (i.e., when the strategic, financial and operating policy decisions relating to the activities of the joint arrangement require the unanimous consent of the parties sharing control). Joint arrangements are classified as joint operations or joint ventures, depending on the rights to the assets and obligations for the liabilities of the parties to the arrangements. If the parties to the joint arrangement have rights to the net assets of the arrangement, the arrangement is a joint venture. However, if the parties have rights to the assets and obligations to the related liabilities of the arrangement, the arrangement is a joint operation. Interests in joint ventures are accounted for using the equity method.

For certain multi-client library projects, TGS invests in the project with other parties and has cooperation agreements whereby revenues and costs will be shared with other companies. These agreements are initiated and agreed as joint operations where both parties have rights to the assets and share in the liabilities. TGS recognizes its share of the investment in the multi-client library, its share of revenues from the sale of the multi-client survey, related amortization and expenses. When TGS has a right to market and sell the seismic project, TGS enters into the license contracts with customers and invoices and collects payments from the customers. The related account receivable presented as gross, with the portion due to the partner upon collection from the customer, is presented as debt to partners. Similarly, when a partner holds the right to market and sell the project and invoices and collects from the customers, TGS recognizes its share of related accounts receivables.

For further details on joint operations, see note 18.

Other Intangible Assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets in a business combination is its fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses, if any.

Internally generated intangibles, excluding capitalized development costs, are not capitalized and the related expenditure is expensed in the period in which the expenditure is incurred.

Intangible assets with finite life are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. The straight-line amortization method is used for most intangible assets as this best reflects the consumption of the assets.

Research and Development Costs

Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when TGS can demonstrate:

- It is technically feasible to complete the product so that it will be available for use;
- Management intends to complete the product and use it;
- There is an ability to use the software product;
- It can be demonstrated how the product will generate future economic benefits;
- Adequate technical, financial or other resources to complete the development and to use the product are available; and
- The expenditure attributable to the product during its development can be reliably measured.

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is complete, and the asset is available for use. It is amortized over the period of expected future benefit.

Business Combinations and Goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest in the acquiree. For each business combination, the acquirer measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed and included in administrative expenses.

When TGS 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 at the acquisition date. This involves recognizing identifiable assets (including previously unrecognized intangible assets) and liabilities (including contingent liabilities but excluding future restructuring) of the purchased business at fair value. This includes the separation of embedded derivatives in host contracts by acquiree.

Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date. Subsequent changes to fair value of the contingent consideration, which is deemed to be an asset or liability, will be recognized in profit or loss. If the contingent consideration is classified as equity, it will not be remeasured. Subsequent settlement is accounted for within equity. In instances where the contingent consideration does not fall within the scope of IFRS 9, it is measured at fair value at each reporting date and changes in fair value will be recognized in profit or loss.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interest over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized as a bargain purchase gain in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill from a business combination is, from the acquisition date, allocated to each of TGS' cash generating units that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of TGS are assigned to those units. Each unit, or group of units to which the goodwill is allocated, represents the lowest level within TGS at which the goodwill is monitored for internal management purposes.

Should part of an operation carrying goodwill be disposed of, the goodwill which is associated with the disposed operation is then included in book value of the operation when determining the gain or loss on the disposal. The goodwill disposed of in this circumstance is determined measured based on the relative values of the operation disposed of and the portion of the cash generating unit retained.

Goodwill is reviewed for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired.

Impairment is determined for goodwill by assessing the recoverable amount of the cash-generating unit (or group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit (or group of cash-generating units) is less than the book value of the cash-generating unit (or group of cash-generating units) to which goodwill has been allocated, an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

Tangible Non-Current Assets

Tangible non-current assets are presented at historical cost less accumulated depreciation and accumulated impairment losses. Purchases which are expected to have a technical and economic life of more than one year are capitalized as tangible non-current assets. Depreciation begins when the assets are available for use. Tangible non-current assets held for sale are stated at the lower of book value and presumed market value and are not subject to depreciation.

Impairment of Non-Financial Assets

Disclosures relating to impairment of non-financial assets are also provided in the following notes: Significant Accounting Judgments, Estimates and Assumptions – Note 2

Tangible Non-Current Assets – Note 6

Impairment Testing of Goodwill – Note 9

Impairment Testing Multi-client Library – Note 9

TGS assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, TGS estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows calculated in USD are discounted to their present value using a post-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

TGS bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of TGS' CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses are recognized in the statement of profit or loss in expense categories consistent with the function of the impaired asset.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, TGS estimates the asset's or the CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, or the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the statement of profit or loss.

Provisions and Contingencies

Provisions are made when TGS has a current obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, where appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

Contingent liabilities are possible obligations as a result of a past event where the existence of the liability depends on the occurrence, or not, of a future event. An existing obligation, in which it is not likely that the entity will have to dispose economic benefits, or where the obligation cannot be measured with sufficient reliability, is also considered a contingent liability. Contingent liabilities are not recognized in the financial statements, but if material, disclosed in the accompanying notes. A contingent asset is not recognized in the financial statement but disclosed if there is a certain degree of probability that it will be an advantage of TGS.

For a description of contingent liabilities, see Note 24.

Income Taxes

Current Income Tax

Current income 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. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the countries where TGS operates and generates taxable income.

Deferred Tax

Deferred tax is provided using the liability method on temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities have been recognized for all taxable temporary differences.

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward of unused tax credits and unused tax losses can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date 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 utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current income tax assets against current income tax liabilities and the deferred taxes relate to the same taxable company and the same taxation authority. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized, or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity.

The Parent Company pays its tax obligation in NOK and the fluctuations between the NOK and the USD impact the financial items. TGS' legal entities that do not have their tax base in USD are exposed to changes in the USD/tax base-currency rates. Effects within the current year are classified as tax expense.

Tax positions subject to uncertainty are identified and assessed either individually or in groups based on an estimate of the probability that the tax authorities will accept or reject a certain treatment. Where it is assessed that it is not probable the tax authorities will accept an uncertain tax treatment, the effect of the uncertainty is reflected in the calculation of the taxable profit, tax bases, unused tax losses or credits, or tax rates. The effect of the uncertainty is calculated by applying the most appropriate method (most likely amount or expected value). Changes in circumstances are assessed and reflected at each reporting date.

Share-based Payments

Key employees of TGS receive remuneration in the form of share-based payments pursuant to which employees render services as consideration for stock options, Performance Share Units (PSUs) and Restricted Share Units (RSUs).

The cost of equity-settled transactions (PSUs and RSUs) is measured by reference to the fair value at the date on which they are granted. The fair value is determined by an external valuator using an appropriate pricing model.

The expense of equity-settled transactions is recognized, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award (the vesting date). The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and TGS' best estimate of the number of equity instruments that will ultimately vest. The statement of profit or loss expense or credit for a period represents the movement in cumulative expense recognized at the beginning and end of that period. No expense is recognized for awards that do not ultimately vest. The dilutive effect of outstanding options is reflected as additional share dilution in the computation of diluted earnings per share (further details are given in Note 12).

Financial Instruments

A financial asset is any contract which gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial Assets

IFRS 9 contains three principal classification categories for financial assets: measured at amortized cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL).

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them. With the exception of trade receivables that do not contain a significant financing component, the Company initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs.

The Company's financial assets are trade and other receivables, accrued revenues (contract assets), and cash and cash equivalents. Based on the nature of these assets and how they are managed, the Company has evaluated that these qualify for classification as measured at amortized cost.

Financial Liabilities

The Company has financial liabilities measured at amortized cost. Financial liabilities at amortized cost comprise largely of accounts payable and debt to partners, taxes and some minor amounts of non-current liabilities and long-term debt. These obligations are initially recognized at fair value less transaction costs, and subsequently measured at amortized cost through using the effective interest method. The Company has no financial liabilities at fair value through profit or loss.

Impairment of Financial Assets

The Company recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Company expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

Loss allowances are deducted from the gross carrying amount of the financial asset. The gross carrying amount of a financial asset is written off when the Company has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. Receivables are written off if the customer goes bankrupt, collection by a debt collector has been unsuccessful for a period and in other concrete cases. The Company expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities.

Pensions

TGS operates defined-contribution plans in Norway, UK, USA (401k) and Australia where the Company covers the superannuation. Contributions are expensed to the income statement as they become payable.

Leases

Policy applied after 1 January 2019

As a lessee:

The Company mainly leases offices and data centers. The group previously classified leases as operating or finance leases based on its assessment of whether the lease transferred significantly all of the risk and rewards incidental to ownership of the underlying asset to the Company. Under IFRS 16, the Company recognises right-of-use assets and lease liabilities for most of the leases.

At the lease commencement date, the Company recognizes a lease liability and corresponding right-of-use asset for all lease agreements in which it is the lessee, except for short-term leases (defined as 12 months or less) and low value assets, for which the Company recognizes the lease payments as other operating expenses in the statement of profit or loss when they incur.

The lease liability is recognised at the commencement date of the lease. The Company measures the lease liability at the present value of the lease payments for the right to use the underlying asset during the lease term that are not paid at the commencement date. The lease term represents the non-cancellable period of the lease, together with periods covered by an option either to extend or to terminate the lease when the Company is reasonably certain to exercise this option.

The lease payments included in the measurement comprise of:

- Fixed lease 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;
- Amount expected to be payable by TGS under residual value guarantees;
- The exercise price of a purchase option, if TGS is reasonably certain to exercise that option;
- Payments of penalties for terminating the lease, if the lease term reflects TGS exercising an option to terminate the lease.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability, reducing the carrying amount to reflect the lease payments made and remeasuring the carrying amount to reflect any reassessment or lease modifications, or to reflect adjustments in lease payments due to an adjustment in an index or rate. The Company presents its lease liabilities as separate line items in the statement of financial position.

The Company does not include variable lease payments in the lease liability. Instead, the Company recognises these variable lease expenses in profit or loss.

The Company measures the right-of-use asset at cost, less any accumulated depreciation and impairment losses, adjusted for any remeasurement of lease liabilities The cost of the right-of-use asset comprises the amount of the initial measurement of the lease liability recognised, any lease payments made at or before the commencement date, less any incentives received, and any initial direct costs incurred by the Company. An estimate of the costs to be incurred by the Company in dismantling and removing the underlying asset, 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.

The Company applies the depreciation requirements in IAS 16 Property, Plant and Equipment in depreciating the right-of-use asset, except that the right-of-use asset is depreciated from the commencement date to the earlier of the lease term and the remaining useful life of the right-of-use asset.

The Company applies IAS 36 Impairment of Assets to determine whether the right-of-use asset is impaired and to account for any impairment loss identified.

As a lessor:

For contracts where the Company acts as a lessor, it classifies each of its leases as either an operating lease or a finance lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership of an underlying asset.

The Company sub-leases some of its right-of-use assets. On transition to IFRS 16, the right-of-use assets related to a financial sub-lease are de-recognized from the right-of-use asset and presented as a sub-lease asset and measured at fair value at that date. The Company assessed the classification of the sub-lease contracts with reference to the right-of-use asset rather than the underlying asset and concluded that they are finance leases under IFRS 16.

<u>Policy applicable before 1 January 2019</u>

As a lessee:

In the comparative period, as a lessee, leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases. The evaluation is based on the substance of the transaction at the inception date of whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset.

Finance leases in the comparative period are recorded as assets and liabilities, and lease payments are apportioned between the finance charges and reduction of the lease liability to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized in the income statement.

Operating lease payments in the comparative period are recognized as an expense in the income statement on a straight-line basis over the lease term.

Cash and Cash Equivalents

Cash and cash equivalents in the balance sheet comprise cash in bank accounts and on hand and short-term deposits with an original maturity of three months or less.

Accounts Receivable and Other Receivables

Receivables are measured at cost less any amounts of expected credit losses. Sales with deferred payments due to be settled more than twelve months or later are presented as non-current receivables.

Treasury Shares

TGS' equity instruments that are reacquired (treasury shares) are recognized at cost and deducted from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of TGS' own equity instruments. Any difference between the carrying amount and the consideration, if reissued, is recognized in the retained earnings.

Dividends

A dividend approved by TGS' shareholders is recognized as a liability in TGS' financial statements. A corresponding amount is recognized directly in equity.

Cash Flow Statement

The cash flow statement is compiled using the direct method.

Changes in Accounting Policy and Disclosures

In 2019, TGS applied for the first time, certain amendments to the standards, which are effective for annual periods beginning on or after 1 January 2019. The Company has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective. The nature and the impact of each amendment is described below.

IFRS 16 – Leasing

The Company initially applied IFRS 16 Leases from 1 January 2019. The Company applied IFRS 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognised in retained earnings at 1 January 2019. Accordingly, the comparative information presented for 2018 is not restated. Additionally, the disclosure requirements in IFRS 16 have not generally been applied to comparative information.

Previously, the Company classified property leases as operating leases under IAS 17. On transition, for these leases, lease liabilities were measured at the present value of the remaining lease payments, discounted at the Company's incremental borrowing rate as at 1 January 2019. The Company has tested its right-of-use assets for impairment on the date of transition and has concluded that no impairment of the right-of-use assets was necessary.

The group used a number of practical expedients when applying IFRS 16 to leases previously classified as operating leases under IAS 17. In particular, the group:

- did not recognise right-of-use assets and liabilities for leases for which the lease term ends within 12 months of the date of initial application;
- did not recognise right-of-use assets and liabilities for leases of low value assets
- excluded initial direct costs from the measurement of the right-of-use asset at the date of initial application; and
- used hindsight when determining the lease term.

Impact on transition:

On transition to IFRS 16, the Company recognised additional right-of-use assets, including sub-lease asset, and additional lease liabilities, recognising the difference in retained earnings. The impact on transition is summarised below:

Reconciliation of lease commitments to lease liabilities	1 January 2019
Non-cancellable operating lease commitments as at 31.12.2018	53,299
Adjustment for property tax and other lease related costs not incl in lease commitment	(11,370)
Discounting using the incremental borrowing rate	(6,607)
Lease liabilities recognised at initial application	**35,322**
The weighted average incremental borrowing rate applied	5%
The right-of-use asset recognized at initial application	**35,322**

IFRIC 23 Uncertainty over Income Tax Treatments

The interpretation clarifies how to consider uncertain tax treatment in IFRS accounts. Uncertainty over income tax treatments arises when it is unclear how the applicable tax regulations should be understood for a specific transaction or event, and when it is uncertain whether taxation authorities will approve an entity's tax treatment. The interpretation specifically addresses the following:

- Whether an entity considers uncertain tax treatments separately or together
- The assumptions an entity makes about the examination of tax treatments by taxation authorities
- How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates (how to reflect uncertainty in these positions)
- How an entity considers changes in facts and circumstances.

The interpretation is effective for annual reporting periods beginning on or after 1 January 2019, but certain transition reliefs are available.

There are no other IFRSs or IFRIC interpretations that are not yet effective that would be expected to have a material impact on TGS.

2. ESTIMATES AND ASSUMPTIONS

In the process of applying TGS' accounting principles, management is required to make estimates, judgments and assumptions that affect the amount reported in the consolidated financial statements and accompanying notes. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which will form the basis for making judgments on carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates. The key sources of judgment and estimation of uncertainties at the balance sheet date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

Impairment Evaluation of Multi-client Data Library

TGS performed impairment reviews and determined the value in use of the multi-client library during 2019. The Company estimated value in use based on discounted estimated future sales forecasts. The underlying estimates that form the basis for the sales forecast depend on variables such as the number of oil and gas exploration and production (E&P) companies operating in the area that would be interested in the data, overall E&P spending, expectations regarding hydrocarbons in the sector, whether licenses to perform exploration in the sectors exist or will be given in the future, expected farm-ins to licenses, relinquishments, etc. Changes in these estimates may potentially affect the estimated amount of future sales forecasts materially. The future sales forecasts are evaluated on a regular basis and impairments are recognized in the period they occur.

For details about the book value, amortization and impairment of the multi-client library, see Notes 8 and 9.

For a detailed description of the accounting policies for the multi-client library see Summary of Significant Accounting Policies above.

Impairment Evaluation of Goodwill

TGS tests the value of its goodwill on an annual basis or when there are indicators that the carrying amount may not be recoverable. This requires an estimation of the value in use or fair value less cost of disposal, whichever that is highest of the cash-generating units or groups of CGUs to which the goodwill is allocated. Estimating the value in use amount requires management to make an estimate of the expected future cash flows from the cash-generating unit and to choose a suitable discount rate in order to calculate the present value of those cash flows. Variables such as estimated future revenues, margins and estimated long-term growth are the key drivers for the basis of the value in use calculations. Future cash flows also depend on general development in E&P spending, the number of market participants and technological developments.

For details about goodwill and impairment, see Note 9.

Deferred Tax Assets, liabilities and uncertain tax positions

Uncertainties exist with respect to the interpretation of complex tax regulations, changes in tax laws, and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and 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.

Deferred tax assets are recognized for temporary deductible differences and carry forward tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits together with future tax planning strategies.

For details about deferred tax assets, see Note 27.

Contingent Liabilities

The preparation of the financial statements has required TGS to make judgment, estimates and assumptions that affect the reported amounts of liabilities and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount in future periods.

Share-based Payments

TGS measures the cost of share-based payment plans granted to employees by reference to the fair value of the equity instruments at the date at which they are granted (equity-settled transactions). Estimating fair value requires an appropriate valuation model to value the share-based instruments. The values are dependent on the terms and conditions of the granted share-based instruments. This also requires determining the appropriate assumptions in the valuation models including the expected life of the instruments, volatility and dividend yield.

For details about share-based payments, see Note 11.

3. BUSINESS COMBINATIONS

The Parent Company has acquired 100 % of the outstanding shares of Spectrum ASA through a merger transaction, with an effective date of 14 August 2019. The consideration for the acquisition was 0.28 ordinary share of the Parent Company for each Spectrum ASA share (the "exchange ratio"), plus cash consideration of USD 0.27 multiplied by the exchange ratio. The total number of shares of the Parent Company issued in the transaction was 16 076 047, representing a total consideration of USD 354.3 million (including the cash consideration).

Spectrum ASA and its subsidiaries (Spectrum) provide innovative multi-client seismic surveys and high-quality seismic imaging services to the global oil and gas industry from offices in Norway, UK, USA, Brazil, Australia and Singapore. Spectrum holds the world's largest library of multi-client 2D marine seismic data and a significant amount of 3D seismic data, with its strategy focused on both the major, established hydrocarbon-producing regions of the world as well as key frontier areas.

The transaction enhances TGS' position as a leading multi-client geophysical data provider with a 2D and 3D seismic data library covering all major mature and frontier basins worldwide. With Spectrum's substantial presence in the South Atlantic and other important frontier regions and TGS' extensive library and financial robustness, the combined entity is well-positioned to accelerate 3D seismic investment plans in an improving market. Furthermore, the combined libraries will have a scale that will help accelerate TGS' data analytics strategy.

As the transaction was effective from 14 August 2019, the sales and costs from Spectrum for the period 15 August to 31 December 2019 are reflected in the TGS consolidated balance sheet and in consolidated statement of comprehensive income.

The goodwill arising from the acquisition represents the excess purchase price after all the identifiable assets, liabilities and obligations are recognized. The goodwill consists mainly of synergies and economies of scale expected from combining the operations of TGS and Spectrum. None of the goodwill recognized is expected to be deductible for tax purposes.

In the period from 15 August 2019 to 31 December 2019, Spectrum contributed revenues of USD 51.0 million and profit after tax amounting to USD 7.6 million. This is reflected in the consolidated statement of comprehensive income for TGS. If the acquisition had been completed as of 1 January 2019, management estimates that consolidated revenue for the 12 months ended 31 December 2019 would have been USD 690.9 million and consolidated profit after tax for the same period would have been USD 130.5 million. These amounts have been determined by applying TGS' accounting policies and assumes that the fair values arising on the date of the acquisition would have been the same if the acquisition had occurred on 1 January 2019.

The following table summarizes the acquisition date fair value of each major class of consideration transferred.

Consideration transferred	14 August 2019
Cash	4,341
Equity instruments (16 076 047 shares)	349,972
Total consideration transferred	**354,312**

The fair value of the ordinary shares issued was based on the listed share price of the company at 14 August 2019 of NOK 194.65. The exchange rate applied is 8.94 NOK/USD.

TGS incurred acquisition-related costs of USD 2.0 million, consisting primarily of advisory and legal fees and due diligence costs. Costs of USD 1.3 million have been included in operating expenses and USD 0.7 million have been recorded in equity as share issuance costs.

The following table summarizes the preliminary fair value of assets acquired and liabilities assumed at the date of the acquisition.

Fair value recognized at acquisition	14 August 2019
	PPA
Assets	
Non-current assets	
Multi-Client library	180,249
Investment in Joint Ventures	2,524
Deferred tax assets	13,277
Software	1,466
Fixtures, fittings and office equipment	1,599
Right-of-use assets	7,699
Non-current other receivables	5,035
Total non-current assets	**211,850**
Current assets	
Restricted cash	2,291
Cash and cash equivalents	18,968
Total current assets	**21,259**
Equity	
Total equity	**–**
Non-current liabilities	
Deferred tax liability	(3,007)
Long term interest bearing debt	(8,545)
Other long term liabilities	(10,809)
Total non-current liabilities	**(22,361)**
Current liabilities	
Net working capital	(65,656)
Short term interest bearing debt	(8,465)
Other tax liabilities	(1,599)
Total current liabilities	**(75,720)**
Total identifiable net assets acquired	**135,028**

The adjustment between the purchase price allocation (PPA) and the segment opening balance relates to sales amortization of USD 18.0 million and net revenue of USD 30.6 million that are presented in the segment opening balance.

The Multi Excess Earnings Method (MEEM) has been applied for measuring the fair value of the multi-client library, as a market price for the individual assets does not exist. The MEEM has been estimated for each multi-client library by projecting the future cash flow for a period of four years for each multi-client library. The cash flow has been discounted with an average discount rate of 12.18%. The discount rate varies between the CGUs based on the geographical risks in the regions. The discount rate is based on, among other, a risk-free rate of 1.6 % and an asset beta ratio of 1.

The fair value of receivables is measured at USD 43.7 million (accounts receivable of USD 25.9 million and other receivables of USD 17.8 million classified as net working capital). The gross contractual amounts of the receivables are USD 44.6 million. The best estimate of contractual cash flows not expected to be collected are USD 0.9 million.

Liabilities are measured at fair value. There have not been identified any contingent liabilities that could be measured reliably, and therefore no such liabilities have been recognized.

Goodwill arising from the acquisition has been recognised as follows:

Consideration transferred	354,312
Fair value of identfiable net assets	(135,028)
Deferred tax liability	(2,456)
Goodwill	**216,829**

If new information is obtained within one year of the date of acquisition, relating to facts or circumstances that existed at the date of acquisition that requires adjustments to the above amounts, or relating to additional provisions that existed at the date of acquisition, the accounting for the acquisition will be revised. Such new information may include unidentified tax positions and other contingencies.

4. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Company's revenues from contracts with customers have been disaggregated and presented in the table below:

Revenue type - 2019	IFRS (As reported)	Adjustment	Segment
Pre-funding	78,104	49,227	127,332
Late sales – unfinished data	66,931	137,736	204,667
Late sales – finished data	422,390	–	422,390
Proprietary	18,186	–	18,186
Total	**585,610**	**186,964**	**772,574**

Revenue type - 2018	IFRS (As reported)	Adjustment	Segment
Pre-funding	117,429	(12,367)	105,062
Late sales – unfinished data	69,743	19,808	89,551
Late sales – finished data	418,671	–	418,671
Proprietary	8,397	–	8,397
Total	**614,239**	**7,441**	**621,680**

Performance Obligations Pre-funding and Late Sales of Unfinished Data

Multi-client pre-funding contracts and contracts for late sales of unfinished data (i.e., contracts entered into after commencement of a survey, but prior to data being ready for delivery) are considered to be "right-to-use licenses" under IFRS 15, meaning that all revenues related to these contracts are recognized at the point in time when the license is transferred to the customer, which would typically be upon completion of processing of the survey and granting of access to the finished survey or delivery of the finished data, independent of services delivered to clients during the project phase. The Company has generally concluded that it is the principal in its revenue arrangements, because it typically controls the goods or services before transferring them to the customer. Payment terms for sale of unfinished data vary for each contract and are generally paid in portions over a longer period with 30 days payment term.

Performance Obligations Late Sales of Finished Data

Revenue is recognized for sales of finished data at a point in time, generally upon delivery of the data, i.e., when the client has gained access to the data under a binding agreement. Sales of finished data are presented as late sales revenues together with late sales of unfinished data. Payment terms for finished data are mainly 30 days.

Performance Obligations Proprietary Sales

Revenue related to proprietary contracts is generally recognized over time in line with progress on the relevant projects. Payment terms for proprietary sales are mainly 30 days.

Other terms

The Company's refund liability, return liability and warranties are considered limited, and the Company has not recognized any such liabilities in the consolidated balance sheet.

Remaining performance obligations unsatisfied or partly unsatisfied are as of year-end:

Remaining performance obligations	2019	2018
Within one year	110,956	219,495
More than one year	98,573	–
Total	**209,529**	**219,495**

The following table provides information about receivables, contract assets and contract liabilities from contracts with customers.

Receivables, contract assets and contract liabilities	31.12.2019	31.12.2018 Restated
Account Receivables	223,211	215,046
Accrued unbilled revenue (Contract asset)	101,153	91,442
Contract liabilities:		
Debt to partners	(57,176)	(39,921)
Deferred revenue	(165,776)	(189,818)

Contract liabilities	2019
At 1 January	**(189,450)**
Deferred during the year	(123,735)
Arising from business combination	(29,864)
Recognized as revenue during the year	177,273
At 31 December	**(165,776)**
Current	(165,776)
Non-Current	–

The Company applies the practical expedient for short-term advances received from customers. That is, the promised amount of consideration is not adjusted for the effects of a significant financing component if the period between the transfer of the promised goods or service and the payment is one year or less. Further the Company applies the practical expedient to immediately expense costs to obtain a contract if the amortization period of the asset that would have been recognized is one year or less. Costs to obtain and costs to fulfill contracts are not considered significant by the Company, and these are therefore not capitalized.

5. SEGMENT INFORMATION

TGS has operating segments at a level below reportable segments as financial information is reported and monitored at lower for internal reporting purposes.

TGS reports monthly management information to executive management based on the defined operating segments. Where appropriate, these operating segments are aggregated into reportable segments that form the basis of the segment reporting. In 2019, following the acquisition of Spectrum, management has reassessed its reportable segments and reports North America, South America and Land separately due to the increase in the size of these segments in respect of the group. Previously these three operating segments were aggregated into one reportable segment, North and South America. Land represents onshore activities in North America. Comparative figures have been restated.

TGS has operating segments that do not individually meet the quantitative thresholds to qualify as reportable segments. The segments which are aggregated and form "Other segments/Corporate costs" include GPS Well Logs, GPS Interpretations, Global Services, Imaging, Data & Analytics, G&A and Corporate. GPS Wells Logs and GPS Interpretations provide well data products, interpretive studies and services to clients; Imaging processes data for multi-client and proprietary projects and continually develops new technology and workflows for seismic imaging as well as enhancing existing ones; Data & Analytics provides Geoscience AI, Data Management, Cloud Computing and Data Library products and services, Global Services provides project management, GIS and HSE functions.

Management monitors the operating results of its business units separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated using different principles for recognition of multi-client revenues and amortization of the multi-client library than the principles applied in the consolidated accounts, described in Note 1 and Note 4. In the segment information, revenues related to unfinished projects are recognized in accordance with percentage of completion of the relevant projects, while amortization in the work-in-progress phase is based on the ratio of forecasted total revenues to total forecasted cost. In the period after completion of the data, revenue recognition and amortization principles are consistent with those used for the consolidated accounts.

Group financing (including finance costs and finance income) and income taxes are managed on a group basis and are not allocated to the operating segments.

Transactions between operating segments are on an arm's-length basis in a manner similar to transactions with third parties. No inter-segment sales between the reportable segments have taken place during 2019 or 2018. Employee bonuses and cost related to share-based payments are recognized within "Corporate costs."

2019	North America	South America	Europe & Russia	Land	Africa, Middle East & Asia / Pacific	Other segments / Corporate costs	Total
Pre-funding	40,101	6,251	9,318	11,704	5,776	4,955	78,104
Late sales - unfinished data	27,994	8,474	11,495	5,145	6,586	7,237	66,931
Late sales - finished data	175,254	39,039	73,698	48,993	43,323	42,083	422,390
Proprietary	–	–	–	–	–	18,186	18,186
External revenues	**243,349**	**53,765**	**94,510**	**65,843**	**55,685**	**72,460**	**585,610**
APM adjustments (segment pre-funding) [1]	(11,588)	25,187	14,878	16,932	3,718	100	49,227
APM adjustments (segment late sales - unfinished data) [1]	(4,803)	137,057	3,767	(1,835)	3,552	(2)	137,736
Segment revenue	**226,958**	**216,009**	**113,156**	**80,940**	**62,954**	**72,558**	**772,574**
Costs of goods sold-proprietary & other	–	–	2	–	5	2,406	2,413
Amortization and impairment of multi-client library	124,948	123,901	58,987	42,170	25,872	21,394	397,272
Operational costs	3,266	10,108	4,066	3,513	9,925	97,313	128,192
Depreciation, amortization and impairment	73	944	213	340	687	21,247	23,504
Segment Operating profit/(loss)	**98,670**	**81,055**	**49,888**	**34,917**	**26,465**	**(69,803)**	**221,193**

[1] Relates to revenues from unfinished data that has been recognized over time in segment reporting. Impairments of the multi-client library totaled USD 2.8 million for 2019 under the segment reporting.

2018	North America	South America	Europe & Russia	Land	Africa, Middle East & Asia / Pacific	Other segments / Corporate costs	Total
Pre-funding	38,123	4,754	26,148	37,837	6,535	4,033	117,429
Late sales	154,487	39,283	148,811	50,933	39,931	54,970	488,414
Proprietary	29	–	(4)	–	48	8,323	8,396
External revenues	192,639	44,037	174,954	88,770	46,514	67,326	614,239
APM adjustments [1]	**13,295**	**8,802**	**(30,817)**	**8,890**	**6,204**	**1,068**	**7,441**
Segment revenue	**205,933**	**52,839**	**144,137**	**97,660**	**52,718**	**68,394**	**621,680**
Costs of goods sold-proprietary & other	–	1	144	103	6	330	584
Amortization and impairment of multi-client library	94,445	29,743	70,517	56,616	27,798	57,176	336,295
Operational costs	3,787	867	4,262	2,918	4,557	87,564	103,954
Depreciation, amortization and impairment	142	1	38	431	50	8,235	8,897
Segment Operating profit/(loss)	**107,558**	**22,226**	**69,175**	**37,591**	**20,306**	**(84,911)**	**171,946**

[1] Relates to revenues from unfinished data that has been recognized over time in segment reporting. Impairments of the multi-client library totalled USD 21.3 million for 2018 under the segment reporting.

A reconciliation of Operating profit/(loss) to Profit/(loss) before taxes is provided as follows:

	2019	2018
Operating profit for reportable segments	221,193	171,946
APM adjustment (amortization and revenue)	(92,196)	58,079
Operating profit according to IFRS	**128,998**	**230,025**
Financial income	10,385	6,980
Financial expenses	(3,672)	(991)
Exchange gains/losses	(4,500)	756
Profit/(loss) before taxes	**131,211**	**236,771**

Total assets are not a part of the information regularly provided to executive management. TGS does not report a measure of liabilities for the operating segments, and it is therefore not disclosed separately in these accounts. As the operating segments reported are broken down to geographic areas, TGS does not produce or disclose a further breakdown of revenues to the customer's country of domicile.

Revenue from one customer was above 10% of total revenues individually and amounted to USD 112.2 million in 2019. In 2018, revenue from one customer exceeded 10% of total revenues and amounted to USD 68.0 million.

Analysis of external revenues under segment reporting:

	2019	2018
Prefunding	127,332	105,062
Late sales	627,057	508,221
Proprietary	18,186	8,397
Total net revenues	**772,574**	**621,680**

6. TANGIBLE NON-CURRENT ASSETS

2019

Acquisition Cost and Depreciation:	Machinery and Equipment	Buildings [2]	Total
Cost as of 1 January 2019	**121,994**	**14,457**	**136,451**
Acquisition of a subsidiary	1,599	–	1,599
Additions	16,428	90	16,518
Disposals [1]	(17,495)	(631)	(18,126)
Cost as of 31 December 2019	**122,526**	**13,916**	**136,442**
Accumulated depreciation as of 1 January 2019	**102,686**	**10,939**	**113,625**
Depreciation for the year	954	1,269	2,223
Accumulated amortization/depreciation on disposals	(12,186)	(689)	(12,875)
Capitalized to the multi-client library	8,758	–	8,758
Accumulated depreciation as of 31 December 2019	**100,212**	**11,519**	**111,731**
Net book value as of 31 December 2019	**22,314**	**2,396**	**24,711**
Useful life	2 to 7 years	3 to 12 years	

[1] Losses on disposals during the year were recognized by USD 0.3 million

[2] Mainly leasehold improvements

Acquisition Cost and Depreciation:	Machinery and Equipment	Buildings [2]	Total
Cost as of 1 January 2018	**118,521**	**14,568**	**133,089**
Additions	12,305	(30)	12,275
Disposals [1]	(8,832)	(81)	(8,913)
Cost as of 31 December 2018	**121,994**	**14,457**	**136,451**
Accumulated depreciation as of 1 January 2018	**104,061**	**9,357**	**113,418**
Amortization for the year	–	–	–
Depreciation for the year	2,280	1,626	3,906
Accumulated amortization/depreciation on disposals	(8,855)	(44)	(8,899)
Capitalized to the multi-client library	5,200	–	5,200
Accumulated depreciation as of 31 December 2018	**102,686**	**10,939**	**113,625**
Net book value as of 31 December 2018	**19,308**	**3,518**	**22,826**
Useful life	2 to 7 years	3 to 12 years	

[1] Losses on disposals during the year were recognized by USD 0.6 million

[2] Mainly leasehold improvements

7. LEASES

Leases as a lessee

The Company mainly has primarily office and data center leases. The leases run for a period between one to six years. The Company has applied the exemption in IFRS 16 and not capitalized leases of low-value assets or short-term leases.

Additions for right-of-use assets are mainly related to the merger with Spectrum ASA (see Note 3).

Right-of-use asset	Office leases	Data centers	Total
Balance at 1 January 2019 (including sublease)	**19,847**	**15,475**	**35,322**
Depreciation charge for the year	3,370	9,212	12,582
Impairment charge for the year	3,699	153	3,852
Additions to right of use assets	7,361	309	7,670
Sub-lease asset	(3,114)	–	(3,114)
Derecognition of right of use asset	–	–	–
Balance at 31 December 2019 (excluding sublease)	**17,026**	**6,419**	**23,445**
Sub-lease asset	2,366	–	2,366
Balance at 31 December (including sublease)	**19,392**	**6,419**	**25,811**

An implementation effect of USD 221 thousand has been recognized.

Further, the Company has recognized an impairment of right-of-use assets of USD 3.9 million in 2019. The impairment is mainly related to office premises that will no longer be in use after the acquisition of Spectrum. The impairment charge recognized is net of expected sub-lease income.

Leases under IFRS 16	2019
Interest on lease liability	1,507
Income from sub-leasing right-of-use-asset presented in "other revenue"	(136)

Expenses related to low value asset leases and short-term leases for the Company are considered immaterial.

Operating leases under IAS 17	2018
Lease expense	13,355
Sub-lease income presented in "other revenue"	(103)

Amounts recognised in the statement of cash flow	2019
Total cash outflow for leases	(14,417)

Some leases include extension options exercisable near the end of the lease term. The Company assesses at lease commencement date whether it is reasonably certain to exercise the extension options. The Company reassesses whether it is reasonably certain to exercise the options if there is a significant event or significant changes in circumstances within its control.

The following table sets out a maturity analysis of lease payables, showing the undiscounted lease payments to be paid after reporting date.

Maturity analysis - lease payables	2019
Less than one year	(12,313)
Two to five years	(19,573)
More than five years	(1,925)
Total undiscounted lease payments	**(33,811)**
Unexpensed finance expense	3,165
Lease liability as of 31 December	**(30,646)**

Lease liability	2019
Current	(11,057)
Non-current	(19,589)
Lease liability as of 31 December	**(30,646)**

Both short- and long-term lease liabilities are presented in the consolidated balance sheet under the item "lease liability."

Leases as a lessor

The Company has sub-leased office space that is not in use by the Company itself.

The following table sets out a maturity analysis of lease receivables, showing the undiscounted lease payments to be received after reporting date. Under IAS 17, the Company did not have any finance leases as a lessor.

Maturity analysis - lease receivables	2019
Less than one year	1,233
One to two years	745
Two to three years	348
Three to four years	174
Four to five years	–
More than five years	–
Total undiscounted lease receivables	**2,499**
Unearned finance income	(133)
Net investment in the lease as of 31 December	**2,366**

8. INTANGIBLE ASSETS

2019

Acquisition Cost and Depreciation:	Goodwill	Multi-client Library	Multi-client Library In Progress	Other Intangible Assets	Total
Cost as of 1 January 2019	**118,538**	**4,463,503**	**240,948**	**90,361**	**4,913,350**
Acquisition of assets from third-parties	216,829	105,324	78,181	1,466	401,800
Additions [1]	–	–	339,527	9,187	348,715
Transfers		149,032	(149,032)	–	–
Disposals	–	–	–	(4,611)	(4,611)
Cost as of 31 December 2019	**335,367**	**4,717,859**	**509,624**	**96,402**	**5,659,254**
Accumulated amortization and impairment as of 1 January 2019	**50,615**	**3,833,956**	–	**81,994**	**3,966,565**
Adjustments related to implementation of IFRS 15	–	–	–	–	–
Amortization for the year	–	259,460	–	5,124	264,584
Impairment for the year	–	42,773	–	–	42,773
Accumulated amortization on disposals	–	–	–	(4,419)	(4,419)
Capitalized to the multi-client library	–	–	–	–	–
Accumulated amortization and impairment as of 31 December 2019	**50,615**	**4,136,189**	**-**	**82,700**	**4,269,504**
Net book value as of 31 December 2019	**284,753**	**581,670**	**509,624**	**13,703**	**1,389,750**
Useful life		4 to 7 years		3 to 7 years	

[1] Other intangible assets are internally developed software

2018

Acquisition Cost and Depreciation:	Goodwill	Multi-client Library	Multi-client Library In Progress	Other Intangible Assets	Total
Cost as of 1 January 2018	**118,538**	**4,441,022**	–	**92,389**	**4,651,949**
Opening balance adjustments	–	(44,617)	44,617		–
Cost as of 1 January 2018	**118,538**	**4,396,405**	**44,617**	**92,389**	**4,651,949**
Acquisition of assets from third-parties	–	6,507	14,101	–	20,608
Additions [1]	–	39,894	202,927	3,984	246,805
Transfers		20,697	(20,697)		–
Disposals	–	–		(6,012)	(6,012)
Cost as of 31 December 2018	**118,538**	**4,463,503**	**240,948**	**90,361**	**4,913,350**
Accumulated amortization and impairment as of 1 January 2018	50,615	3,642,007	–	79,247	3,771,869
Adjustments related to implementation of IFRS 15	–	(78,832)	–	–	(78,832)
Accumulated amortization and impairment as of 1 January 2018	**50,615**	**3,563,175**	–	**79,247**	**3,693,037**
Amortization for the year	–	249,504	–	4,159	253,663
Impairment for the year	–	21,277	–	–	21,277
Accumulated amortization on disposals 1)	–	–	–	(1,412)	(1,412)
Capitalized to the multi-client library	–	–	–	–	–
Accumulated amortization and impairment as of 31 December 2018	**50,615**	**3,833,956**	–	**81,994**	**3,966,565**
Net book value as of 31 December 2018	**67,925**	**629,547**	**240,948**	**8,366**	**946,784**
Useful life		4 to 7 years		3 to 7 years	

[1] Other intangible assets are internally developed software

9. IMPAIRMENT EVALUATION OF MULTI-CLIENT LIBRARY AND GOODWILL

Multi-client library

TGS performs impairment reviews and determines the value in use of the multi-client library during each financial year. The Company estimates value in use based on discounted estimated future sales forecasts.

For the multi-client library, the value in use has been determined based on revenue and cash flow projections from financial estimates prepared by management. The approved budget has been used for 2020. The underlying estimates that form the basis for the sales forecast depend on variables such as the number of oil and gas exploration and production (E&P) companies operating in the area that would be interested in the data, overall E&P spending, expectations regarding hydrocarbons in the sector, whether licenses to perform exploration in the sectors exist or will be given in the future, expected farm-ins to licenses, relinquishments, etc. Local tax rates and sales costs are applied.

TGS is operating in a global industry. TGS' customers are operating on a global scale, and the market for TGS' products is global. However, many local aspects affect the risk of the various cash generating units (CGUs) across the world, as each survey is considered a CGU. Based on this, TGS applies a country risk premium to determine the post-tax weighted average cost of capital (WACC) of all CGUs. The WACC varies between 8.4% to 19.4% for all the CGUs throughout the Company, with an average rate of 9.3%. The significant difference is due to the country risk added for the specific surveys in the multi-client library. In 2018 TGS used the same pre-tax WACC of 12% for all the CGUs throughout the Company.

The table below shows the impairment charges recognized for the multi-client library in the applicable year, reflected in line item "Amortization and impairment of the multi-client library" in the statement of comprehensive income, of which most are first day impairments as IFRS requires pre-funding revenues to be recognized upon delivery while no amortization charges are recognized at this point:

Impairment of multi-client library	2019	2018
North America	115	27,824
South America	–	–
Europe & Russia	613	2,093
Africa, Middle East and Asia Pacific	31,617	3,647
Land	9,892	4,337
Other	537	681
Total	**42,773**	**38,582**

The impairment review is sensitive to multiple inputs such as expected sales forecast, tax rates, gross margin of sales and WACC. A change in expected sales forecast can significantly impact the impairment review for a CGU. The impact will depend on the current value in use and carrying value of the relevant CGU. A change in WACC will also impact the impairment review, while other inputs are considered not to have a significant impact.

- 10% reduction of sales forecast would lead to increased impairment of USD 4.5 million
- 20% reduction of sales forecast would lead to increased impairment of USD 36.3 million
- 2.5% increase in WACC would lead to increased impairment of USD 0.7 million
- 5% increase in WACC would lead to increased impairment of USD 2.6 million

Management does not see any other reasonable changes in the key assumptions that would cause the value in use to be lower than its carrying value.

Goodwill

In accordance with IFRS, TGS tests goodwill for impairment annually at year-end, or more frequently if there are indications that goodwill might be impaired. A group of CGUs should be impaired if the carrying amount is higher than the recoverable amount. The recoverable amount is the higher amount of the fair value and the value in use of a CGU. The carrying amount is the carrying amount of all PPE, intangibles, multi-client library, net working capital and goodwill allocated to the groups of CGUs.

Specification of goodwill:	North America	Land	Europe & Russia	Africa Middle East	South America	Asia / Pacific	GPS	Data Analytics	Imaging	Corporate assets	Total
Net book value as of 1 January 2019	–	21,103	–	–	–	–	20,111	–	24,461	2,249	67,925
Spectrum acquisition	24,899	5,791	37,201	34,987	97,232	13,833	475	607	1,803	–	216,828
Impairment	–	–	–	–	–	–	–	–	–	–	–
Net book value as of 31 December 2019	**24,899**	**26,894**	**37,201**	**34,987**	**97,232**	**13,833**	**20,586**	**607**	**26,265**	**2,249**	**284,753**
WACC	**8.4 %**	**8.4 %**	**8.5 %**	**12.5 %**	**11.0 %**	**8.5 %**	**11.5 %**	**7.5 %**	**7.5 %**	**11.5 %**	

Goodwill acquired through business combinations has been allocated to individual cash generating units (CGU) as referred to in the table above.

Goodwill arising from cost synergies for the Spectrum acquisition has been allocated to the CGUs that is considered to benefit from the cost synergies. This allocation is based on various relevant allocation keys that are considered to give the best view of how the cost synergies will benefit the various CGUs, such as expected future activity, expected revenue distribution, etc. The goodwill not arising from cost synergies has been allocated to the specific CGUs that have gained additional geographic coverage based on the acquisition.

Based on the impairment testing performed, no impairments have been recognized during 2019 (2018: USD 0 million).

In assessing value in use, the estimated future cash flows both from current multi-client library and expected future investments are discounted to their present value using a post-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. The post-tax rate is calculated based on the local tax rates in the relevant tax jurisdictions and applying an average of the relevant country risks for the groups of CGUs as specified in the table above. TGS bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of TGS' CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year.

The impairment calculations are most sensitive to the changes in the forecasted sales, which depend on both the expected investments and expected returns of investments. These factors are mainly influenced by future E&P spending and demand for TGS' products. A change in expected sales forecast can significantly impact the impairment review for a CGU. The impact will depend on the current value in use and carrying value of the relevant CGU. In addition, the impairment calculations are sensitive to changes in WACC, as well as expected cost levels and expected development of working capital.

- 10% reduction of expected return of investments would lead to increased impairment of USD 10.6 million
- 20% reduction of expected return of investments would lead to increased impairment of USD 112.0 million
- 2.5% increase in WACC would lead to increased impairment of USD 4.7 million
- 5% increase in WACC would lead to increased impairment of USD 16.2 million

Management does not see any other reasonable changes in the key assumptions that would cause the value in use to be lower than its carrying value.

10. PERSONNEL COSTS / NUMBER OF EMPLOYEES / REMUNERATION TO EXECUTIVE MANAGEMENT, BOARD OF DIRECTORS AND AUDITORS

Personnel costs	2019	2018
Payroll	90,233	79,691
Social security costs	6,697	8,096
Pension costs	4,394	4,034
Other employee related costs	10,466	4,797
Salaries capitalized to developed software	(12,419)	(5,004)
Cost of RSU/PSU	8,411	5,526
Salaries capitalized to multi-client library	(21,439)	(26,822)
Personnel costs	**86,343**	**70,319**

The number of employees as of 31 December 2019 was 686 versus 547 as of 31 December 2018.

Cash bonus plans

In 2019, TGS had in place a Short-Term Incentive Bonus Plan that was funded by allocating 9.5% of operating profit among full-time employees. A similar plan is in place for 2020, funded with an allocation of 8.75% of operating profit. Employees are generally eligible to participate in the bonus plan after being employed for six months. The bonus is payable quarterly, and the amount paid is directly proportional to the actual operating profit of TGS. An individual employee's relative share of the bonus pool is based on level of responsibility, individual contribution, performance versus previous year goals, and benchmark data. All bonuses earned in respect of the 2019 bonus plan have been paid or accrued as of 31 December 2019. More information on the Short-Term Incentive is provided in the Company's Declaration on Executive Remuneration, published contemporaneously with the Annual Report.

In addition to the TGS Short-Term Incentive Bonus Plan, TGS continued the Spectrum cash bonus plan in place at the time of acquisition of Spectrum. The Spectrum cash bonus plan was an annual plan, with the bonus amounts based on various factors, including Spectrum performance during 2019, both before and after the acquisition, and individual criteria. Only employees of Spectrum were eligible to participate in the plan, and thus did not participate in the TGS Short-Term Incentive Bonus Plan in 2019.

Executive Management Stock Incentives

The following table provides the stock, incentive stock units [in form of Performance Share Units (PSUs) and/or Restricted Share Units (RSUs) and related warrants held by executive management:

Executive Management 2019

	No. of Shares Held 31/12/2019	Incentive stock units awarded in 2019	Total balance of free-standing warrants related to unvested incentive stock units
Kristian Johansen (CEO)	56,584	57,120	193,120
Dean Zuzic (CFO until February 2020)	–	21,000 [1]	– [1]
Jan Schoolmeesters (EVP Operations)	50,868	21,000	– [2]
Will Ashby (EVP North America)	11,929	21,000	69,000
Katja Akantieva (EVP Onshore & Well Data Products)	11,144	21,000	72,000
Tana Pool (EVP Legal)	9,232	21,000	69,000
Fredrik Amundsen (EVP Europe & Russia until February 2020, CFO from February 2020)	9,683	21,000	72,000
Rune Eng (EVP International)	363,452	36,000	15,000 [2]
Tanya Herwanger (EVP Staff & Support)	6,347	21,000	59,000

[1] Mr. Zuzic was awarded incentive stock units in the form of PSUs in 2019. His units were forfeited upon leaving employment with TGS in February 2020.
[2] Certain incentive stock units issued in 2019 will be funded through treasury shares and therefore no related warrants were issued.

The tables below show total expensed compensation to executive management in 2019:

	Salary	Bonuses	Other Benefits [5]	Payments from long-term incentive plans [6]	Total Remunerations
Kristian Johansen	571	1,579	142	644	2,936
Jan Schoolmeesters (joined Executive Team August 2019) [1, 2, 3]	119	–	9	–	128
Rune Eng (joined Executive Team August 2019) [1, 2, 3]	192	–	15	–	207
Will Ashby	270	261	43	218	792
Katja Akentieva	315	335	27	246	923
Tana Pool	327	323	25	218	893
Fredrik Amundsen [2]	213	312	24	274	823
Tanya Herwanger (returned to Executive Team in August 2019)[1, 4]	225	110	40	48	423
Dean Zuzic (joined Executive Team August 2019) [1, 2, 3]	102	–	8	–	110
Zhiming Li (left Executive Team August 2019)1) [1]	246	302	28	246	822
Erik Finnstrom (left Executive Team August 2019) [1, 2]	168	176	13	–	357
Knut Agersborg (left Executive Team August 2019) [1, 2]	115	97	22	242	476
Sven B Larsen (left Executive Team August 2019) [1, 2]	236	245	22	337	840

The amounts set forth in the table above reflect amounts paid to the executive during the year. With respect to bonus amounts, the Short-Term Incentive Bonus Plan is paid on a quarterly basis following reporting of the quarterly results. Therefore, bonuses paid in 2019 reflect bonus amounts for the fourth quarter of 2018 and the first three quarters of 2019.

[1] Compensation is only reflected for the period of time that the executive served as an executive of the Company. Messrs. Schoolmeesters, Eng and Zuzic joined the Company effective with the consummation of the acquisition of Spectrum and joined the executive team on August 30, 2019. Ms. Herwanger was an employee of the Company during all of 2019, joining the executive team on August 30, 2019. Messrs. Li, Agersborg and Larsen left the executive team on August 29, 2019, but remained employees of the Company through the balance of the year. Mr. Finnstrom retired from the Company on August 29, 2019. Compensation for each of the affected executives that was paid during the part of the year not reported above was consistent with that reported above.

[2] Compensation is paid in NOK, with the USD equivalent determined based on the average exchange rate during the year.

[3] Participated in the Spectrum annual bonus plan as described above; payments under the plan will be made in 2020.

[4] Compensation is paid in Euro, with the USD equivalent determined based on the average exchange rate during the year.

[5] Other benefits include certain benefits provided to all employees (such as Company matching contributions to pensions or 401K plans, Company-paid life insurance and welfare insurance). Other benefits also include certain expatriate benefits for applicable executives.

[6] Represents the value of shares issued during 2019 with respect to the 2016 Long-Term Incentive Plan, which vested in 2019.

Executive Management 2018

	Salary	Bonuses	Other Benefits[4]	Payments from long-term incentive plans	Total Remunerations
Kristian Johansen	558	1,490	109	–	2,157
Sven B Larsen [1]	412	407	16	–	836
John A. Adamick (Retired May 2018) [3]	254	339	40	–	634
Knut Agersborg [1]	201	163	31	–	395
Katja Akentieva	307	303	29	–	639
Zhiming Li	348	431	41	–	821
Tana Pool	320	266	29	–	615
Will Ashby	260	237	88	–	586
Fredrik Amundsen [1]	251	330	16	–	598
Erik Finnstrom [1]	143	106	–	–	249
Tanya Herwanger (Transitioned to a non-executive role in September 2018) [2, 3]	119	90	1	–	210

The amounts set forth in the table above reflect amounts paid to the executive during the year. With respect to bonus amounts, the Short-Term Incentive Bonus Plan is paid on a quarterly basis following reporting of the quarterly results. Therefore, bonuses paid in 2018 reflect bonus amounts for the fourth quarter of 2017 and the first three quarters of 2018.

[1] Compensation is paid in NOK, with the USD equivalent determined based on the average exchange rate during the year.

[2] Compensation is paid in Euro, with the USD equivalent determined based on the average exchange rate during the year.

[3] Compensation is only reflected for the period of time that the executive served as an executive of the Company. Ms. Herwanger left the executive team in September 2018, but remained an employee during the balance of 2019 at a consistent compensation level.

[4] Other benefits include certain benefits provided to all employees (such as Company matching contributions to pensions or 401K plans, Company-paid life insurance and welfare insurance). Other benefits also include certain expatriate benefits for applicable executives.

TGS awards its executive and senior leadership teams Long-Term Incentives with performance metrics measured over a three-year period. In 2019, performance share units (PSUs) were issued to the executive and senior leadership teams under the 2019 Long-Term Incentive Plan. The plan and status versus performance metrics is further described in the Declaration on Executive Remuneration. The 2019 plan is settled in TGS common shares, and each PSU represents the right to receive one common share. The total number of shares issuable is determined based upon the Company's achievement against the performance metrics, with the payout ranging from 0% to 100% of the PSUs awarded. The 2019 plan also provides for the issuance of RSUs to non-executive key employees, as further described in the 2019 Declaration on Executive Remuneration.

Termination benefits

The CEO, CFO and certain other executives have employment agreements that provide for certain benefits upon termination of employment. Pursuant to Mr. Johansen's employment agreement, the maximum amount payable to the CEO in case of termination of employment without cause or for good reason is one times the amount of his highest annual base salary in effect during the three years that immediately precede the date of termination, payable over an ensuing one-year period and conditional upon his continued compliance with restrictive covenants.

Pursuant to Mr. Eng's employment agreement, which has been continued from his prior position as CEO of Spectrum, the maximum amount payable upon termination of employment is one and half times annual base salary following a six-month notice period. In the event of Mr. Eng's resignation from employment, the maximum amount payable is one times annual base salary following a six-month notice period.

Mr. Larsen served as the Company's CFO until August 2019, and in February 2020, he returned to the executive team as EVP – Strategy and M&A. Under his employment agreement, which remains in place, the maximum amount payable to Mr. Larsen upon termination for any reason other than redundancy, gross misconduct or statutory retirement is one times the amount of his highest annual base salary in effect during the three years that immediately precede the date of termination, payable over an ensuing one-year period and conditional upon his continued compliance with restrictive covenants.

The amount payable in the case of termination for Mr. Johansen and Mr. Larsen, associated with a "change of control" event is one times the highest gross annual compensation received during the three years immediately preceding the "change of control" event, paid as a lump sum.

No other members of the executive management team have employment agreements providing termination benefits.

Board of Directors Fees and Other Fees

The following set forth the compensation paid to the Board of Directors:

Board of Directors Fees 2019

	Director's fee [1]	Value of Shares Received [2]	Total Remunerations
Hank Hamilton (Chairman of the Board)	200	–	200
Mark Leonard	35	35	70
Vicki Messer	35	35	70
Tor Magne Lønnum	34	35	69
Wenche Agerup	35	35	70
Torstein Sanness	35	35	70
Irene Egset (Director from May 2019)	18	35	53
Christopher Geoffrey Finlayson (Director from May 2019)	–	–	–
Elisabeth Grieg (Director until May 2019)	17	–	17
Nils Petter Dyvik (Director until May 2019)	17	–	17

[1] The table includes Directors fees paid during the year. Directors receive fees on a biannual basis as decided by the AGM, payable in NOK. Deviations in individual fees are related to the timing of the bi-annual payments.

[2] In May 2019, each of the Directors, other than the Chairman and Mr. Finlayson, received 1,650 restricted shares in TGS.

Board of Directors Fees 2018

	Director's fee [1]	Value of Shares Received [2]	Total Remunerations
Hank Hamilton (Chairman of the Board)	200	–	200
Mark Leonard	42	46	88
Vicki Messer	36	46	82
Tor Magne Lønnum	42	46	88
Wenche Agerup	36	46	82
Elisabeth Grieg	36	46	82
Torstein Sanness	36	46	82
Nils Petter Dyvik	36	46	82

[1] The table includes Directors fees paid during the year. Directors receive fees on a biannual basis as decided by the AGM, payable in NOK. Deviations in individual fees are related to the timing of the bi-annual payments.

[2] In May 2018, each of the Directors, other than the Chairman, received 1,650 restricted shares in TGS.

Board of Directors Stock Ownership

	No. of Restricted Shares Received during 2019	No. of Shares Held 31/12/2019
Hank Hamilton (Chairman of the Board)	–	1,352,400
Mark Leonard (Director)	1,650	17,800
Vicki Messer (Director)	1,650	14,700
Tor Magne Lønnum (Director)	1,650	11,500
Wenche Agerup (Director)	1,650	8,250
Torstein Sanness (Director)	1,650	6,600
Irene Egset (Director)	1,650	1,650
Christopher Geoffrey Finlayson (Director)	–	–

Compensation to the members of the Nomination Committee [1]

	2019	2018
Tor Himberg-Larsen (Chairman)	23	15
Christina Stray	14	6
Herman Kleeven	14	6

[1] The table shows compensation paid during the year. The members of the committee receive compensation per meeting held, and the amounts are paid in NOK.

Auditor's Fee

Audit and other services	2019	2018
KPMG		
Statutory audit	680	338
Other attestation services	4	3
Other Services	147	58
Total fees	**830**	**399**
EY		
Statutory audit	–	332
Tax advice services	–	41
Total fees	**–**	**373**

All amounts are exclusive of VAT.

The Company changed auditor during 2018 from EY to KPMG with the effect for the audit of the 2018 financial year.

11. SHARE-BASED PAYMENTS

Since 2015, TGS has issued awards of incentive stock units to its executive management, senior leadership team and other non-executive key employees. From 2015 to 2019, TGS awarded a limited number of performance share units (PSUs) to executive management, while a limited amount of restricted share units (RSUs) were awarded to non-executive key employees other than the executive management. In 2018 and 2019, TGS awarded PSUs to members of the senior leadership team. The awards are settled in common shares of TGS, and each of the PSUs and RSUs represent the right to receive the maximum of one common share. The PSUs and the RSUs vest three years after date of grant. During 2019, the 2016 PSU and RSU awards vested, and in 2018, the RSU awards granted in 2015 vested. The 2015 PSUs vested with a zero percent payout in 2018, with no shares issuable for the 2015 PSUs.

In 2019, TGS issued a total of 295,680 PSUs to members of the executive and senior leadership teams. The actual number of shares to be received by holders of the 2019 PSUs are dependent on three performance metrics which are measured for the period 1 January 2019 through 31 December 2021 (2018 plan: 1 January 2018 through 31 December 2020):

- Relative return on average capital employed
- Absolute return on average capital employed
- Health, social and environmental (HSE) metrics and sustainability metric (2019 only)

The performance metrics are described in more detail in the Declaration on Executive Remuneration. The payout percentage for the PSUs will depend on the Company's achievement all the performance metrics are fully earned, with payout ranging from 0% to 100%. If fully earned at 100% payout, a total of 295,680 PSUs would vest (2018 plan: 265,000 PSUs remaining at 31 December 2019). The fair value of the PSUs granted in 2019 is measured based on the market value at the grant date and expensed over the vesting period.

The holders of the RSUs are eligible to receive one share per RSU on the vesting date, and the fair value of the RSUs granted in 2019 is measured based on the market value of the shares on the grant day. A total of 129,130 RSUs were granted in 2019. (2018 plan: 143,900 RSUs.)

The expense recognized for incentive stock units awarded, which is considered expense for employee services during the year, is shown in the following table:

	2019	2018
Expense arising from equity-settled share-based payment plans	8,411	5,526

TGS' shares are traded in NOK at the Oslo Stock Exchange. TGS' functional currency is USD and the share-based payment plans will expose TGS to currency risk in relation to the amount of costs booked with fluctuations between NOK and USD.

The fair value of share-based payments granted is estimated at the date of the grant using the Black-Scholes model, taking into account the vesting pattern of each share-based award. Fair value of the share-based award has been determined by a level 3-technique from the fair value hierarchy (see also Note 15).

The following table illustrates the number of outstanding share-based awards expected to be vested (No.) and weighted average exercise prices (WAEP) of, and movements in, RSUs and PSUs:

	2019 No.	WAEP (NOK) [1]	2018 No.	WAEP (NOK)
Outstanding at 1 January	988,425	0.25	904,805	46.80
Granted during the year	427,810	0.25	433,900	0.25
Adjusted quantity due to performance criteria	(13,047)		–	
Forfeited during the year	(42,500)		(48,380)	
Exercised during the year	(182,978)	0.25	(301,900)	122.45
Expired during the year	–		–	
Outstanding at 31 December	1,177,710	0.25	988,425	0.25
Exercisable at 31 December				

[1] The WAEP for the incentive stock units is the par value of each share of stock, which must be paid by the holder of the units.

The weighted average remaining contractual life for the long-term incentive plans outstanding on 31 December 2019 is 1.71 years (2018: 1.68 years).

The weighted average fair value of the PSUs and RSUs granted during 2019 was NOK 219.42. The weighted average fair value of the PSUs and RSUs granted during 2018 was NOK 319.31.

The RSU and PSU plan is equity-settled and the fair values are measured at grant date.

The liabilities, Social Security taxes, arising from the plans amounted to USD 1.1 million as of 31 December 2019 (2018: USD 0.5 million).

Outstanding PSUs and RSUs as of 31 December 2019:

No. of PSUs/RSUs	Exercise dates	Holders	Price/ conditions	Granted
129,000	See below [1]	Key employees	Fair market value (FMV) of a share including expected dividends	4 August 2017
296,000	See below [2]	Executive management	Fair market value (FMV) of a share including expected dividends, adjusted for performance criteria	4 August 2017
136,900	See below [3]	Key employees	Fair market value (FMV) of a share including expected dividends	3 August 2018
265,000	See below [4]	Executive management and senior leadership	Fair market value (FMV) of a share including expected dividends, adjusted for performance criteria	3 August 2018
129,130	See below [5]	Key employees	Fair market value (FMV) of a share including expected dividends	30 August 2019
295,680	See below [6]	Executive management and senior leadership	Fair market value (FMV) of a share including expected dividends, adjusted for performance criteria	30 August 2019
1,251,710				

[1] The holders will receive maximum one share per unit on 4 August 2020.

[2] The holders will receive maximum one share per unit on 4 August 2020, subject to determination of payout percentage ranging from 0% to 100%.

[3] The holders will receive maximum one share per unit on 3 August 2021.

[4] The holders will receive maximum one share per unit on 3 August 2021, subject to determination of payout percentage ranging from 0% to 100%.

[5] The holders will receive maximum one share per unit on 30 August 2022.

[6] The holders will receive maximum one share per unit on 30 August 2022, subject to determination of payout percentage ranging from 0% to 100%.

12. EARNINGS PER SHARE

Basic earnings per share are calculated by dividing net profit for the year attributable to ordinary equity holders of TGS by the weighted average number of ordinary shares outstanding (net of treasury shares) during the year. Diluted earnings per share are calculated by dividing the net profit attributable to ordinary equity holders of TGS by the weighted average number of ordinary shares outstanding during the year plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares (RSUs and PSUs) into ordinary shares. The following reflects the income and share data used in the basic and diluted earnings per share computations:

	2019	2018
Net profit attributable to ordinary equity holders of the Parent	113,111	178,800
Weighted average number of ordinary shares (excluding treasury shares) for basic earnings per share	108,141	102,403
Effect of dilution:	1,252	1,069
Weighted average number of ordinary shares (excluding treasury shares) adjusted for effect of dilution	109,394	103,472
Basic earnings per share	1.05	1.75
Diluted earnings per share	1.03	1.73

13. EQUITY AND SHAREHOLDERS' AUTHORIZATIONS

Ordinary shares issued and fully paid

	Number of shares	USD
31 December 2017	102,345,890	3,663
Issued 28 February 2018 for cash on exercise of stock options	73,600	2
Issued 1 June 2018 for cash on exercise for stock options	129,500	4
Issued 23 August for cash on vesting of RSU	98,800	3
31 December 2018	102,647,790	3,672
Issued 14 August 2019 for Spectrum ASA acquisition, see note 3	16,076,047	449
Issued 27 August 2019 for cash on vesting of PSU and RSU	182,941	5
31 December 2019	118,906,778	4,127

Treasury shares

TGS, from time to time, buys back shares under authorizations given by the shareholders. The shares may be held in treasury, used as payment in M&A transactions, used in relation to exercise of employees' stock options or eventually cancelled. As of 31 December 2019, TGS held 1,742,100 treasury shares, 1.5% of the total shares issued (2018: 104,630 shares, 0.1%). The following table shows the movement of treasury shareholdings:

	Number of shares	USD
31 December 2017	116,180	4
9 May 2018, treasury shares distributed to Board members	(11,550)	(0.4)
31 December 2018	104,630	4
9 May 2019, treasury shares distributed to Board members	(9,900)	(0.3)
15 May 2019 - 20 December 2019, treasury shares bought back	1,647,370	47
31 December 2019	1,742,100	49

Shareholders' Authorization to the Board to Increase Share Capital in the Company and to Issue Convertible Loans

By resolution of the Annual General Meeting (AGM) held 8 May 2019, the Board is authorized to, on behalf of the Company, increase share capital of the Company by up to NOK 2,566,194.75 through one or more issuances of new shares or bonus issues. The subscription price and other subscription terms will be determined by the Board. The capital increase may be paid in cash, by set-off or by other contributions in kind. The authorization includes the right to incur special obligations on behalf of the Company, cf. Section 10-2 of the Norwegian Public Limited Liability Companies Act. The shareholders' pre-emptive rights pursuant to Sections 10-4, cf. Section 10-5 of the Norwegian Public Limited Liability Companies Act, to subscribe for any new shares may be deviated from by the Board. The authorization encompasses share capital increases in connection with mergers, cf. section 13-5 of the Norwegian Public Limited Liability Companies Act. The authorization is valid until the Annual General Meeting in 2020, but no later than until 30 June 2020. The authorization replaces previously granted authorizations to issue new shares.

By resolution of the AGM held 8 May 2019, the Board is also granted the authorization to issue loans for a total amount of up to NOK 2,250,000,000 with the right to require shares to be issued (convertible loans). The share capital may be increased by up to NOK 2,566,194.75, provided that the combined number of shares that are issued pursuant to this authorization and the authorization to increase the share capital will not exceed 10% of the Company's current share capital. The subscription price and other subscription terms will be determined by the Board. The shareholders' preemptive rights pursuant to section 11-4 of the Norwegian Public Limited Companies Act, cf. sections 10-4 and 10-5, may be deviated from by the Board. The authorization is valid until the Annual General Meeting in 2020, but no later than 30 June 2020. The authorization replaces previously granted authorizations to issue convertible loans.

By resolution of the Extraordinary General Meeting (EGM) held 21 June 2019, the issuance of maximum 16,589,679 new shares in connection with the merger transaction with Spectrum ASA was approved. Refer to Note 3 for additional information.

In addition, by resolution of the AGM held 8 May 2019, the issuance of maximum 360,000 shares, supported by freestanding warrants, to executives and key employees pursuant to the TGS 2019 Long-Term Incentive Plan (2019 LTIP), was approved. Furthermore, by resolution of the EGM dated 21 June 2019, the issuance of 75,000 shares, funded from treasury, to key employees joining the Company from Spectrum ASA pursuant to the 2019 LTIP was approved. Refer to Note 11 for a further description of the Company's long-term incentive plans.

During 2019, the Company increased the share capital by NOK 4,064,747, with all of the increase from share capital increases between 8 May 2019 and 31 December 2019. The Company did not issue any convertible loans between 8 May 2019 and 31 December 2019.

Shareholders' Authorization to the Board to Buy Back Shares in the Company

By resolution of the AGM held 8 May 2019, the Board is authorized to acquire, on behalf of the Company, the Company's own shares up to 10% of the nominal value of Company's share capital, which pursuant to the current nominal value is up to NOK 2,566,194.75. The limitations are adjusted in the event of share consolidation, share splits and similar transactions. The lowest price to be paid per share is NOK 0.25 and the highest price to be paid per share is the volume weighted average price as quoted on the stock exchange for the five business days prior to the time of the acquisition plus 5%. The lowest price is equal to the current nominal value and shall be adjusted in the event of share consolidation, share splits and similar transactions. Acquisition and sale of the Company's own shares can take place in the manner which the Board of Directors considers to be in the Company's best interest. The authorization can be used one or several times. This authorization is valid until the AGM in 2020, however no longer than until 30 June 2020. The authorization replaces previously granted authorizations to acquire own shares.

The Company acquired 1,647,370 shares for treasury between 8 May 2019 and 31 December 2020 pursuant to the above authorization. After 31 December 2019, until the date of authorization of these financial statements (27 March 2020), TGS acquired additional 268,900 shares on the Oslo Stock Exchange. As of 27 March 2020, TGS holds 2,011,000 treasury shares. TGS intends to seek authorization to cancel most of these shares in the 2020 Annual General Meeting.

There have been no transactions involving potential ordinary shares between 31 December and the date of authorization of these financial statements.

Shareholders' Authorization to the Board to Distribute Dividends

The AGM held 8 May 2019 renewed the Board of Directors' authorization to distribute quarterly dividends on the basis of the 2018 financial statements. The authorization shall be valid until the Company's AGM in 2020, but no later than 30 June 2020.

- On 8 May 2019, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.27 per share (NOK 2.36) to the shareholders.
- On 24 July 2019, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.27 per share (NOK 2.34) to the shareholders.
- On 29 October 2019, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.27 per share (NOK 2.49) to the shareholders.
- On 11 February 2020, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.375 per share (NOK 3.47) to the shareholders.

The 20 Largest Shareholders as of 31 December 2019 as Registered with VPS:

	NAME	COUNTRY		SHARES	%
1	FOLKETRYGDFONDET	NORWAY		11,241,056	9.6%
2	STATE STREET BANK AND TRUST COMP	U.S.A	NOM	10,098,273	8.6%
3	THE BANK OF NEW YORK MELLON SA/NV	THE NETHERLANDS	NOM	8,507,076	7.3%
4	VERDIPAPIRFONDET DNB NORGE	NORWAY		3,942,478	3.4%
5	RBC INVESTOR SERVICES TRUST	CANADA	NOM	3,654,892	3.1%
6	STATE STREET BANK AND TRUST COMP	U.S.A	NOM	2,924,415	2.5%
7	JPMORGAN CHASE BANK N.A. LONDON	U.S.A	NOM	1,931,803	1.6%
8	STATE STREET BANK AND TRUST COMP	U.S.A	NOM	1,828,452	1.6%
9	PARETO AKSJE NORGE VERDIPAPIRFOND	NORWAY		1,788,549	1.5%
10	JPMORGAN CHASE BANK N.A. LONDON	U.S.A	NOM	1,760,987	1.5%
11	VERDIPAPIRFOND ODIN NORDEN	NORWAY		1,388,719	1.2%
12	STATE STREET BANK AND TRUST COMP	UNITED KINGDOM	NOM	1,377,796	1.2%
13	HAMILTON HENRY HAYWOOD	U.S.A		1,352,400	1.2%
14	SWEDBANK ROBUR SMABOLAGSFOND	SWEDEN		1,343,228	1.1%
15	THE NORTHERN TRUST COMP LONDON BR	UNITED KINGDOM	NOM	1,334,263	1.1%
16	CITIBANK N.A.	IRELAND	NOM	1,330,792	1.1%
17	DANSKE INVEST NORSKE INSTIT. II.	NORWAY		1,319,190	1.1%
18	STATE STREET BANK AND TRUST COMP	U.S.A	NOM	1,156,954	1.0%
19	KLP AKSJENORGE INDEKS	NORWAY	NOM	1,150,235	1.0%
20	STATE STREET BANK AND TRUST COMP	U.S.A	NOM	1,089,730	0.9%
	20 LARGEST			**60,521,288**	**51.7%**
	Total number of shares, par value of NOK 0.25			**117,164,678**	**100.0%**

14. CASH AND CASH EQUIVALENTS

Cash and cash equivalents include demand deposits and high liquid instruments purchased with maturities of three months or less.

Cash and cash equivalent	2019	2018
Bank deposits	322,524	273,101
Restricted cash deposits	884	426
Total cash bank deposits	323,408	273,527

The bank deposits are mainly denominated in USD and NOK.

Restricted cash deposits are for employee tax withholdings in Norway.

15. RELATED PARTIES

No material transactions took place during 2019 or 2018 with related parties. See Note 10 for further information regarding remuneration of the Board of Directors and the executive management.

See Note 23 for further information about the Company's subsidiaries. Internal transactions are eliminated in the consolidated financial statements and do not represent transactions with related parties.

16. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

TGS has various financial assets. These are primarily held in USD, which is the functional currency for most of TGS' entities. TGS' principal financial liabilities comprise trade payables and other current liabilities. TGS does not hold any currency or interest rate swaps.

It is, and has been, TGS' policy that no trading in derivatives is undertaken. The primary risks arising from the financial risk management are currency risk, liquidity risk and credit risk.

The Board of Directors reviews and approves policies for managing each of the risks, which are summarized below.

Currency Risk

Substantial portions of TGS' revenues and costs are in US dollars. Due to this, TGS' operational exposure to exchange rate fluctuation is low. However, as the Parent Company pays taxes in Norwegian kroner to Norwegian Tax Authorities and dividends to shareholders in Norwegian kroner, fluctuations between the NOK and the USD impact currency exchange gains or losses on the tax expense and financial items of the consolidated accounts. A reasonably possible strengthening (weakening) of the USD against NOK at 31 December would have affected the measurement of financial instruments denominated in a foreign currency and affected profit or loss by the following amounts: For deferred tax liabilities calculated in NOK, a change of +10% on the NOK/USD currency exchange rate would have a positive impact on profit after tax of approximately USD 4.2 million (2018: USD 1.7 million). Further, the Company also holds financial instruments denominated in BRL. A change of +10% on the BRL/USD currency exchange rate would have a negative impact on profit before tax of approximately USD 2.6 million. This analysis assumes that all other variables remain constant.

Liquidity Risk

Liquidity risk arises from a lack of correlation between cash flow from operations and financial commitments. Per the balance sheet date, TGS held current assets of USD 721.8 million, of which cash and cash equivalents represented USD 323.4 million and other current assets represent USD 398.3 million. In comparison current liabilities amounted to USD 584.8 million. As of 31 December 2019, TGS considers the liquidity risk to be low.

The table shows a maturity analysis for the different financial liabilities:

2019	0-6 months	6-12 months	> 1 year	Total
Accounts payable and debt to partners	108,087	–	–	108,087
Taxes	–	32,784	–	32,784
Other non-current liabilities	–	–	1,503	1,503
Long-term debt	–	–	2,809	2,809
Total	**108,087**	**32,784**	**4,312**	**145,183**

2018	0-6 months	6-12 months	> 1 year	Total
Accounts payable and debt to partners	39,922	–	–	39,922
Taxes	–	27,062	–	27,062
Other non-current liabilities	–	–	2,514	2,514
Long-term debt	–	–	2,500	2,500
Total	**39,922**	**27,062**	**5,014**	**71,998**

Credit Risk

All placements of excess cash are either bank deposits or in financial instruments that at minimum carry an "investment grade" rating. TGS is exposed to credit risk through sales and uses best efforts to manage this risk. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in the table below and the carrying value of the accounts receivables and other short-term receivables disclosed in Note 19. TGS considers the concentration of risk with respect to trade receivables as low due to the Company's credit rating policies and as its clients are primarily large oil and gas companies considered to be financially sound.

TGS from time to time accepts extended payment terms on parts of firm commitments from clients. To the extent these terms do not carry an interest component to be paid by clients, the revenues recognized by TGS are discounted to reflect this element. TGS may also seek extra security from the clients in certain cases, such as pledges, overriding royalty interest agreements (ORRIs) or carried interests in an exploration license held by the client.

As of 31 December 2019, none of the outstanding accounts receivables were secured by ORRIs (2018: USD 0 million).

For details of the accounts receivables including aging, refer to Note 19.

For details on other financial assets, refer to Note 19.

Capital Management

The goals for TGS' capital management of funds held are to:

- Protect and preserve investment principal
- Provide liquidity and
- Return a market rate of return or better

As of 31 December 2019, total equity represented 70% of total assets (2018: 78%).

It is the ambition of TGS to pay a cash dividend that is in line with its long-term underlying cash flow. When deciding the dividend amount, the TGS Board of Directors will consider expected cash flow, investment plans, financing requirements and a level of financial flexibility that is appropriate for the TGS business model.

From 2016, TGS has paid quarterly dividends. The Annual General Meeting held 8 May 2019 renewed the Board of Directors' authorization to distribute quarterly dividends.

The aim will be to keep a stable quarterly dividend in US dollars through the year, but the actual level paid will be subject to continuous evaluation of the underlying development of the Company, its financial position and the market.

On 11 February 2020, the Board of Directors resolved to pay a quarterly dividend of USD 0.375 (NOK 3.47) per share. The dividend was paid to the shareholders on 4 March 2020.

Fair Value of Financial Instruments

Set out below is a comparison by class of the book value and fair value of the financial instruments that are carried in the financial statements.

The fair value of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. The following methods and assumptions were used to estimate the fair values:

- Cash and cash equivalents, accounts receivables and other short-term receivables approximate their carrying amounts largely due to the short-term maturities of these instruments.
- Fair value of other financial non-current assets is evaluated by TGS based on parameters such as interest rates and the individual creditworthiness of the counterparty.
- Fair value of other financial liabilities is estimated by discounting future cash flows using rates currently available for debt on similar terms, credit risk and remaining maturities.
- Fair value of the long-term debt is determined by using the discounted cash flow method that reflects the issuer's borrowing rate as at the end of the reporting period.

31.12.2019	Financial instruments at amortised cost	Total
Assets		
Accounts receivable	223,211	223,211
Accrued revenues	101,153	101,153
Cash and cash equivalents	323,408	323,408
Total Financial assets	**647,772**	**647,772**
Liabilities		
Interest bearing loans and borrowings		
Long term debt	2,809	2,809
Derivatives		
Other financial liabilities		
Trade and other payables	109,590	109,590
Total financial liabilities	**112,399**	**112,399**

31.12.2018 Restated	Financial instruments at amortised cost	Total
Assets		
Accounts receivable	215,046	215,046
Accrued revenues	91,442	91,442
Cash and cash equivalents	273,527	273,527
Total Financial assets	**580,015**	**580,015**
Liabilities		
Interest bearing loans and borrowings		
Long-term debt	2,500	2,500
Derivatives		
Other financial liabilities		
Trade and other payables	80,065	80,065
Total financial liabilities	**82,565**	**82,565**

Fair Value Hierarchy

TGS uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities
- Level 2: Other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly
- Level 3: Techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

Other non-current assets comprise accounts receivables with extended payment terms and loans. Any revenues allocated to other parties associated with these receivables are presented as "Other non-current liabilities." Fair values of the two loans to E&P Holding AS and Skeie Energy AS (see Note 16) and the receivables with extended payment terms have been determined by using a level 3-technique. The fair values are considered to be equal to net book values as the discount rate applied is consistent with the current interest rate. The fair value of the long-term debt has been determined by using a level 2-technique.

17. OTHER NON-CURRENT ASSETS AND LIABILITIES

Other Non-current Assets

Other non-current assets comprise accounts receivables with extended payment terms and loans. Any revenues allocated to other parties associated with these receivables are presented as "Other non-current liabilities."

None of the non-current receivables are due as per 31 December 2019.

Skeie Energy AS

TGS has interest-bearing loans to E&P Holding AS and Skeie Energy AS. The two loans have a total value of gross USD 42.1 million (net to TGS of USD 29.4 million). One of the loans has been fully reserved for and is recognized at USD 0 million as of 31 December 2019 (31 December 2018: USD 0 million). The second of the loans was written off as uncollectible in 2016.

Other non-current assets	2019	2018
Other non-current receivables	11,061	180
Interest bearing loans	21,100	21,100
- Provision for impairment of interest bearing loans	(21,100)	(21,100)
Total other non-current assets	**11,061**	**180**

PIS/COFINS tax credit filing in Brazil

In 2016, Spectrum (now part of TGS) filed credits for certain transaction taxes in Brazil (PIS/COFINS). The tax credit is recognized as other receivables and classified as current and non-current based on expected utilization. The credits recognized as current other receivables or current other liability are expected to be utilized within the next 12 months. However, new credits will arise through the year, and as such the total Brazilian tax credit is not expected to be fully utilized even if the credits recognized in the balance sheet as of 31 December 2019 are utilized.

Brazilian tax credits	2019
Non-current other receivables	6,016
Other current liability	(6,679)
Total Brazilian tax credit	**(663)**

Non-current Liabilities

USD 1.5 million are due during the years 2021-2025.

Long-term Debt

In 2017, subsidiaries of the Company, together with subsidiaries of Petroleum Geo-Services ASA (PGS), concluded the joint acquisition of a majority of the multi-client library of Dolphin UK Ltd. The total acquisition price paid by the TGS for the 50% interest acquired amounted to USD 5.8 million, USD 3.3 million of which was paid in cash at closing, with the balance of USD 2.5 million payable in January 2021 under a promissory note guaranteed by the Parent Company. The principal amount of USD 2.5 million bears interest at a fixed rate of 3.5% per annum.

18. JOINT OPERATIONS

As part of its multi-client business, TGS invests in some of the multi-client projects as joint operations. Projects considered as joint operations are typically seismic projects organized between two parties where a vessel owning company provides the vessel used to acquire the seismic, while TGS provides the data processing services. Both parties have rights to the assets and liabilities relating to these arrangements and share the costs of the project.

TGS has not established any material legal entities together with other companies with the purpose of acquiring a seismic project. The table below provides TGS' share of revenues, amortization, impairment and net book value of the multi-client library at year-end for projects considered as joint operations:

	2019	2018
Revenues joint operations (projects invoiced by TGS)	366,971	346,666
Revenues allocated to partners (projects invoiced by TGS)	(160,787)	(133,283)
Net revenues (projects invoiced by TGS)	**206,184**	**213,383**
Revenues allocated to TGS from partners (projects invoiced by partner)	36,180	36,062
Net revenues joint operations	**242,363**	**249,445**
Amortization	119,721	187,481
Impairment	4,113	20,710
Net book value of multi-client library (joint operations) at 31 December (recognized by TGS)	432,326	423,018

19. ACCOUNTS RECEIVABLES AND OTHER CURRENT RECEIVABLES

Accounts receivables are measured at cost less any amounts of expected credit losses.

The amount of revenues for in-progress projects not yet invoiced is presented as accrued revenues in the balance sheet.

Other short-term receivables consist primarily of prepayments made for multi-client projects during the seismic data acquisition phase.

For certain multi-client library projects, TGS has cooperation agreements pursuant to which revenues are shared with other companies and/or governments. In such situations, accounts receivables are presented gross for projects where TGS issues the license agreement and is responsible for invoicing, while the related partner share is presented within "Accounts payable and debt to partners." See Note 25 for a breakdown of gross revenues and revenues allocated to other parties and Note 18 for gross revenues and revenues allocated to other parties from projects considered as joint operations.

In cases where extended payment terms have been agreed, the implied interest is reflected in the stated amount.

	2019	2018
Accounts receivables	223,633	215,450
- Provision for impairment of accounts receivables	(422)	(404)
Accounts receivables - net	223,211	215,046
Accrued revenues	101,153	91,442
Other current receivables	73,978	31,353
Total	**398,342**	**337,841**

The aging of the accounts receivables and accrued revenue (nominal amounts) is as follows:

	Total	Not due	< 30 days	30 - 60 days	60 - 90 days	Over 90 days
2019	324,786	259,054	17,896	28,733	5,506	13,597
2018 Restated	306,893	274,635	15,059	7,659	7,711	1,828

TGS applies the simplified approach when calculating expected credit losses. When calculating expected credit loss TGS takes into account the aging of the outstanding amounts and other relevant information.

TGS has a credit assessment and payment terms policy. Credit assessments are required when signing or renegotiating a new master license agreement or supplemental license, changes occur in credit rating, payment terms on prior sales are not met due to potential financial difficulties, or insight or information indicates that an existing client is in a difficult financial situation. TGS use D&B as credit rating provider. When the credit rating is at a low level, an approval from the area Executive Vice President or the CFO will be required.

TGS also risk rates all clients. The credit risk rating is assessed in 4 levels, where risk category 1 is low risk (national oil companies, majors or supermajors, clients with superior reputation, clients with high credit rating), category 2 is medium risk (clients that do not fall into category 1 or 3), category 3 is high risk (companies with poor payment history and/or low credit rating or low transparency – regarding shareholder structure and financial information) and category 4 are receivables collected by Joint Venture partners. As of 31 December 2019, 83% of the TGS' customers are in category 1, 3% in category 2, 5% in category 3. For amounts above 90 days, 70% are within category 1, 6% in category 2 and 6% in category 3. Provisions for accounts receivables are based on an individual assessment. Receivables with impairment provisions are all within the aging group "Over 90 days."

Movements on TGS' provision for impairment of accounts receivables are as follows:

	2019	2018
At 1 January	404	1,421
Provision for receivables impairment	42	404
Receivables written off during the year as uncollectible	–	(1,421)
Amount collected	(24)	–
At 31 December	**422**	**404**

The provision for impaired receivables has been included in "Other operating expense" in the statement of comprehensive income. Amounts charged to the allowance account are generally written off when there is no expectation of recovering additional cash.

For a description of credit risk, see Note 16.

20. ACCOUNTS PAYABLES AND OTHER CURRENT LIABILITIES

	2019	2018 Restated
Accounts payable and debt to partners	108,087	39,922
Other current liabilities	432,878	229,086
Taxes	32,784	27,062
Total accounts payable and other payables	**573,749**	**296,069**

Accounts payables are non-interest-bearing and are normally settled on 30-day terms.

Other current liabilities consist of accrued expenses and deferred revenues.

For information regarding the restatement of 2018 figures, see Note 28.

21. BANK OVERDRAFT FACILITY AND GUARANTEES

3-Year Term Secured Revolving Credit Facility

In October 2018, TGS entered into a secured revolving credit facility of USD 100 million with an interest rate of LIBOR + 2% per interest period as determined by TGS and as per the defined terms of the revolving credit facility. The closing of the security granted under the credit facility occurred in January 2019. TGS paid an upfront fee of 0.60% of the facility amount and pays a commitment fee of 0.40 % per annum for the unused and uncancelled part of the facility. With respect to financial conditions, TGS must maintain (i) an equity ratio of 50% or more, (ii) a leverage ratio of no more than 1.00:1.00, (iii) EBITDA minus operational capex at zero or above, and (iv) must maintain a liquidity of USD 75 million on a consolidated basis. As of 31 December 2019, TGS had not drawn any amounts under the facility and was in full compliance with all of the financial covenants. The facility is secured by a lien on the assets of the Parent Company and subsidiaries having net revenues representing 5% or more of the group's net revenues as defined in the facility (as of year-end 2019, TGS AP Investment AS, TGS-NOPEC Geophysical Company, A2D Technologies Inc., TGS Geophysical Company (UK) Limited, TGS Canada Corp. and TGS AS). The same subsidiaries have also provided guarantees. Additional entities may be added as guarantors in 2020 based on an annual assessment of materiality or other requirements.

Guarantees

As of 31 December 2019, one bank guarantee has been issued on behalf of TGS of a total of USD 0.2 million related to a seismic program (2018: USD 0.2 million). TGS also provides from time to time parental guarantees of its subsidiaries' performance under certain projects. In addition, under section 479A of the UK Companies Act 2006, six of TGS' subsidiaries [TGS Geophysical Company (UK) Limited (Registration number: 05731700), TGS Geophysical Investments Limited (Registration number: 09281097), Spectrum Geo Limited (Registration number: 01979422), Aceca Limited (Registration number: 03672833), TGS-NOPEC Geophysical Company Limited (Registration number: 02896729) and Magsurvey Limited (Registration number: 04568744)] have claimed an exemption for audit of their statutory financial statements pursuant to guarantees issued by TGS to indemnify the subsidiaries for any losses towards third parties that may arise in the financial year ended 31 December 2019 by these subsidiaries. TGS may make an annual election to support such guarantees for each financial year.

22. COMMITMENTS

Operating Leases

As of the end of 2019, TGS had entered into commitments for five 3D vessels, two 2D vessels, three OBN vessels, one multibeam vessel, and one coring vessel, in addition to four land crews. All these commitments will expire in 2020, and the amount committed, including contractual lease agreements, totalled USD 160 million for marine capacity and USD 3.5 million for land capacity (2018 total marine and land capacity: USD 75 million). Following the implementation of IFRS 16, office leases and data center leases previously considered as operating leases are now recognized in the balance sheet. Please refer to Note 7.

23. SUBSIDIARIES

Company Name	Country of Incorporation	Shareholding and voting power
TGS-NOPEC Geophysical Company ASA	Norway	Parent Company
TGS AP Investments AS	Norway	100%
TGS AS	Norway	100%
Maglight AS	Norway	100%
TGS Contracting AS	Norway	100%
Marine Exploration Partners AS	Norway	100%
Aceca Norge AS	Norway	100%
OBS MC Investments I AS	Norway	100%
Spectrum Geo AS	Norway	100%
Spectrum Geo CH AS	Norway	100%
Carmot Seismic AS	Norway	100%
Carmot Processing AS	Norway	100%
TGS-NOPEC Geophysical Company , Ltd.	UK	100%
TGS Geophysical Investments, Ltd.	UK	100%
Spectrum Geo Ltd	UK	100%
Aceca Ltd.	UK	100%
TGS Geophysical Company (UK) Ltd	UK	100%
Magsurvey, Ltd.	UK	100%
TGS-NOPEC Geophysical Company	USA	100%
A2D Technologies, Inc.	USA	100%
Parallel Data Systems, Inc.	USA	100%
Volant Solutions Inc.	USA	100%
Digital Petrodata LLC	USA	100%
TGS Alaska Company	USA	100%
TGS Mexico Contracting LLC	USA	100%
Lasser, Inc.	USA	100%
Calibre Seismic Company	USA	50%
TGS do Brasil Ltda	Brasil	100%
Spectrum Geo do Brasil Servicos Geofisicos Ltda	Brasil	100%
TGS-NOPEC Geophysical Company PTY, Ltd.	Australia	100%
Spectrum Geo Pty Ltd	Australia	100%
Spectrum Pty Ltd	Australia	100%
TGS-NOPEC Geophysical Company PTE, Ltd.	Singapore	100%
Spectrum Geo Pte Ltd	Singapore	100%
TGS Canada Ltd.	Canada	100%
Arcis Seismic Solutions Corp.	Canada	100%
Arcis International Ltd.	Cyprus	100%
TGS-NOPEC Geophysical Company Moscow, Ltd.	Russia	100%
NOPEC Geophysical Company S. de R.L. de C.V.	Mexico	100%
Spectrum Geo S.A. de C.V.	Mexico	100%
Spectrum Geo Panama LLC	Panama	100%
Spectrum Geo GmbH	Switzerland	100%
Spectrum Geopex Egypt Ltd	Egypt	50%
TGS-Petrodata Offshore Services Ltd.	Nigeria	49%

24. CONTINGENT LIABILITIES

Økokrim Charges and Related Civil Matters

In May 2014, TGS was notified that Økokrim, the Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime, charged TGS for violations of the Norwegian Tax Assessment Act and the Norwegian Securities Trading Act related to a transaction entered into in May 2009 with Skeie Energy AS, later known as E&P Holding AS (Skeie). The charge claims that TGS contributed to unwarranted tax refunds received by Skeie under the Norwegian Petroleum Tax Act through licenses of seismic data to Skeie. Skeie paid for the licenses partially in cash, with the remaining amount of USD 42.1 million (net to TGS of USD 29.4 million) payable at the end of 2010. Skeie failed to pay the loan at the maturity date, and the loan was restructured into two loans from Skeie and an affiliated company during 2011. TGS has actively pursued collection of the loans, but despite these efforts, the loans were not repaid, and the Company has written off as uncollectible one of the loans and has taken a reserve for the full amount of the other loan. See also Note 17.

In March 2017, Økokrim issued a corporate fine of NOK 85 million against TGS based on the alleged violations of the Norwegian Tax Assessment Act. Økokrim dismissed the charges against TGS for market manipulation in violation of the Securities Trading Act due to insufficient evidence. The Company rejected the fine, and the trial regarding the alleged violations was held in early 2018.

In October 2018, the Oslo District Court released its decision, holding TGS guilty and assessing a corporate fine of NOK 90 million (approximately USD 11 million) (as expected, due to the rejection of the fine in 2017). The decision was split, with a majority of the court holding TGS guilty and the minority finding no guilt. TGS appealed the decision, which deferred the payment of any fine. The appellate trial before Borgarting Lagmannsrett began in November 2019 and concluded in February 2020, with a decision expected in April or May 2020. Despite the Oslo District Court's decision, the Company maintains that it acted diligently in connection with the transactions with Skeie and did not commit the alleged violations of the law. The Company also believes the Oslo District Court's reasoning in the case is both legally and factually inaccurate and is not reflective of the evidence presented. As a result, the Company believes it will be acquitted by the appellate trial before Borgarting Lagmannsrett. The Company does not, therefore, consider it probable that an outflow of resources embodying economic benefits will be required in connection with the criminal charges and, accordingly, no provisions have been made.

TGS has also been notified of various claims or potential claims asserting liability on TGS' part in relation to the 2009 transaction with Skeie. The claims are generally predicated on whether the parties making the claims are ultimately held responsible for all or any part of unwarranted tax refunds and suffer damages that can be attributed to TGS. The following summarizes the claims and potential claims:

- In March 2015, Christian Selmer, the former CEO of Skeie Energy, notified TGS of potential claims for losses arising from Skeie's tax debts in relation to the transactions with TGS. By judgment of 14 January 2019 from the Gulating Court of Appeal, Mr. Selmer was ordered to pay Skeie compensation in the amount of MNOK 20. His subsequent appeal to the Supreme Court was not accepted by the Supreme Court by the decision of 15 May 2019, and as a result, the Court of Appeal's judgment is now final. Mr. Selmer has one year from the Supreme Court's decision of 15 May 2019 to initiate claims against TGS in accordance with his notification in 2015. Mr. Selmer was declared personally bankrupt in November 2019. It cannot be entirely ruled out that Mr. Selmer will make claims against TGS within the deadline, but it seems highly unlikely.

- In July 2015, Skeie notified TGS of potential claims of joint responsibility for losses arising from the tax refunds received by Skeie. As with Mr. Selmer, Skeie's deadline for following up on their notice is 15 May 2020. It cannot be ruled out that Skeie will make a claim within the deadline, but it seems unlikely.

- In May 2016, the Norwegian Government notified TGS of a claim of compensation in connection with the Government's alleged losses arising from tax benefits received by Skeie under the Petroleum Tax Act for the purchase of seismic data from TGS. The Government alleges TGS aided and abetted Skeie in obtaining unwarranted tax refunds and claims the amount of the unwarranted tax refunds plus interest, which totalled approximately NOK 326 million at the time of the notice. In 2016, TGS granted the Government a three-year extension of the statute of limitations for legal actions relating to the claim. In 2019, the extension was renewed for a further three years. Similar claims were made by the Government against other parties involved with Skeie, including unsuccessful claims against Skeie Technology to cover its loss under the parent company guarantee from Skeie Technology (see below). The Government is now in a position where it has to decide whether to pursue DNB, TGS, or Bjarne Skeie – or all of them.

- In July 2015, Skeie Technology, an affiliate of Skeie and a guarantor of certain of Skeie's obligations, notified TGS of potential claims for losses that Skeie Technology may incur if it is held responsible for the tax refunds received by Skeie under its parent company guarantee, which was issued on behalf of Skeie in favor of the Norwegian Government for Skeie's oil and gas activities. In October 2016, Skeie Technology formalized its claims through a writ of summons against TGS and certain other parties, seeking a declaratory judgment of joint liability for losses claimed by the Norwegian Government against Skeie Technology pursuant to its parent company guarantee for the tax refunds obtained by Skeie. The Government's claims against Skeie Technology have been unsuccessful, with the judgment of the Norwegian Supreme Court issued in March 2020 in favor of Skeie Technology and precluding all further appeals. The proceedings in the case brought by Skeie Technology against TGS (and others) were stayed pending the resolution of the guarantee dispute between Skeie Technology and the Government, but given Skeie Technology's liability has been resolved as a result of the decision of the Supreme Court, TGS expects that no further proceedings in this case will occur.

- In March 2017, TGS received notice from DNB that it will hold TGS and other parties responsible for any amounts payable by DNB to the Norwegian Government. DNB received notice from the Norwegian Government in December 2016, claiming liability for repayment of the tax refunds under a provision in the Tax Payment Act due to DNB's status as pledgee of the tax refunds. In April 2017, the parties entered into a mutual standstill agreement to stop the tolling of the statute of limitations for three years. In November 2017, TGS received notification that, notwithstanding the standstill, DNB had filed a claim against TGS and various other parties for responsibility for any amounts that DNB may owe in relation to this matter. This claim initially arose out of the claims against Skeie Technology by the Norwegian Government in connection with Skeie Technology's parent company guarantee, but the DNB claim has now been severed as a separate case. In March 2018, the court stayed the proceedings by DNB, pending the resolution of the guarantee dispute between Skeie Technology and the Government described above. The Company expects that, following the conclusion of the appeals in the Skeie Technology case as described above, the DNB claims against TGS and the other parties will now proceed.

The civil matters that have arisen in relation to the transactions that form the basis for the Økokrim charges, and the outcome of these matters, will depend in large part on the outcome of the Økokrim matter. Given the early stage of these proceedings, it is impracticable to render an accurate assessment of the outcome. However, based upon the Company's belief that the Økokrim allegations lack merit and the appeal proceedings will confirm that TGS did nothing wrong, the Company also believes these civil claims of liability are not well-founded, and it intends to challenge the claims vigorously. As a result, the Company considers it less than probable that an outflow of resources embodying economic benefits will be required to settle the obligations and, accordingly, no provisions have been made.

Brazil service tax dispute

In December 2016, Spectrum Geo do Brasil Servicos Geofisicos Ltda, now a subsidiary of TGS, received a tax assessment for BRL 23.5 million (USD 5.8 million) for a municipal services tax (ISS) in Brazil related to licenses of multi-client data, which the Brazilian municipality consider a service. The applicability of the ISS to the license of multi-client data as a service is a controversial question in Brazil, with several other challenges related to this topic currently ongoing in the Brazilian administration and court system.

While Spectrum Brazil disputes whether ISS is owed on the basis that multi-client licenses are not services subject to ISS, it has adopted a conservative position and paid ISS on licensing revenues with certain exemptions, including the assessed amount. The total amount paid for past licenses of multi-client data is BRL 45.1 million (USD 11.2 million), and Spectrum Brazil has filed a legal action to recover the ISS paid. Since 2017 Spectrum Brazil has deposited the amount of ISS on multi-client licensing transaction in an interest-bearing bank account in Brazil, pending resolution of the dispute. The total amount deposited as of 31 December 2019 is the local currency equivalent of USD 2.5 million. Spectrum Brazil will continue this practice in the future as well. Amounts deposited will be released to Spectrum Brazil or paid to the Brazilian municipality, as applicable, depending on the ultimate ruling, which is not expected for several years. The deposit is presented as long-term restricted cash in the statements of financial position.

The view that licensing of multi-client data is not considered a service has been the outcome in the preliminary rulings made on the matter in Brazil and is considered to be the most likely outcome. In 2017, the municipality issued an update of the legislation specifying that ISS is due on licensing of multi-client data at a reduced rate, which may be considered as an admission that it was not applicable in earlier periods. In combination with the update of the legislation, an amnesty program was also available, in which ISS assessments claimed by the municipality could be settled at a discounted rate. Spectrum Brazil did not accept the terms of the amnesty and continues both to dispute the assessment and assert the legal claim to recover all ISS paid in the past on the licensing of multi-client data. TGS considers it more likely than not that this contingency will be resolved in favour of Spectrum Brazil, and no provision is recognized for any portion of the exposure. The ruling, both of the assessment and of the counterclaim, may take several years.

Tax contingencies

The Company is challenging a decision by the United States Internal Revenue Service (IRS) to disallow certain deductions taken by the Company under Section 199 of the United States Internal Revenue Code (IRC) in its US tax return filed for 2008. Following administrative appeals through the IRS, the challenge culminated in a trial before the United States Tax Court in May 2018, and a decision from the Tax Court is pending. An unsuccessful outcome of the trial would affect the Section 199 deductions taken in subsequent tax years, with the total tax benefit subject to challenge approximately USD 5.3 million. The timing of the decision from the Tax Court is not known. The Company believes it is more likely than not that the Tax Court will rule in its favor. Therefore, it does not consider it probable that an outflow of resources embodying economic benefits will be required in connection with the tax position taken by the Company under Section 199 and no provisions have been made or are deemed necessary.

The Company is also challenging determinations by the IRS regarding certain research and development (R&D) tax credits taken by the Company in its US tax returns filed for 2011 through 2017, which total approximately USD 7.1 million. Challenges are likely to initially be considered through the IRS appeals process, with a claim in the Tax Court if necessary, with a conclusion not expected for several years. The Company believes its position taken with respect to the R&D tax credits is correct and intends to vigorously defend its position. In addition, newly issued IRC regulations indicate an interpretation that is favorable to the Company's position. Accordingly, the Company does not consider it probable that the outcome will be unfavorable to it or result in an outflow of resources embodying an economic benefit. Thus, no provisions have been made or are deemed necessary.

Other contingent liabilities

As of 31 December 2019, TGS has entered certain agreements with suppliers whereby a liability will arise contingent on future sales. No obligation will arise until these future sales occur. Contingent liabilities related to these agreements totalled USD 39.1 million in 2019 (2018: USD 18.0 million).

25. GROSS AND NET REVENUES

TGS enters into multi-client contracts with other companies whereby revenue is shared proportionally and presented net. (See Note 18.) In some cases, TGS enters into multi-client contracts where a portion of revenue is shared with governments in certain countries. The table below provides the breakdown for 2019 and 2018.

	2019	2018
Gross revenues from sales	747,753	749,400
Revenue sharing	(162,143)	(135,161)
Revenues	**585,610**	**614,239**

	2019	2018
Revenues allocated to joint operation partners	(160,787)	(133,283)
Revenue allocated to other partners	(1,356)	(1,878)
Total	**(162,143)**	**(135,161)**

26. FINANCIAL ITEMS

	2019	2018
Interest income	6,748	6,980
Exchange gains	8,682	2,930
Other financial income	3,637	–
Total financial income	19,067	9,910
Interest expense	(3,185)	(991)
Exchange loss	(13,181)	(2,172)
Other financial expenses	(487)	0
Total financial expenses	(16,853)	(3,163)
Net financial items	**2,213**	**6,746**

27. TAX EXPENSE AND DEFERRED TAX

	2019	2018
Profit before taxes		
Norway	45,802	128,449
Outside Norway	85,409	108,321
Total profit before taxes	**131,211**	**236,771**
Current taxes		
Norway	23,477	11,284
Outside Norway	9,307	23,119
Total current taxes	**32,784**	**34,403**

Changes in deferred taxes		
Norway	(18,508)	21,519
Outside Norway	(10,394)	2,049
Changes in deferred taxes	**(28,902)**	**23,568**
Deferred tax change due to merger	14,762	-
Total changes in deferred taxes	**(14,140)**	**23,568**
Adjustments in respect of current income tax of previous years and estimates		
Norway	(407)	–
Outside Norway	(137)	–
Total adjustments in respect of current income tax of previous years and estimates	**(544)**	–
Income tax expense reported in the income statement	**18,100**	**57,971**

Tax expense related to other comprehensive income	2019	2018
Tax expense - other comprehensive income	–	–

	2019	2018
Profit before taxes:	131,211	236,771
Expected income taxes according to corporate income tax rate in Norway	28,894	54,452
Tax rates outside Norway different from 22%/23%	(783)	3,247
Adjustment in respect of current income tax of previous year	(662)	(1,376)
Deferred tax asset related to stock options	–	(43)
Change in deferred tax asset not recognized	(7,266)	2,089
Non-taxable income	(2,445)	(880)
Change in deferred tax branches	(9,273)	–
Withholding taxes expensed	2,219	–
Effect of change in tax rates	(503)	(128)
Non-deductible expenses	1,042	2,576
Currency effects	6,878	(1,964)
Income tax expense	**18,100**	**57,971**
Effective tax rate in %	**14%**	**24%**

Comments on Selected Line Items in the Preceding Table

Tax rates different from the Norwegian tax rate

The tax rates for subsidiaries outside Norway are different than the Norwegian tax rate of 22% (2018: 23% tax rate). The tax rates in the jurisdictions where TGS operates are between 19 % and 34 %.

Deferred Tax Asset Not Recognized

Deferred tax assets based on unused tax losses carried forward are not recognized when TGS cannot demonstrate that it is probable that taxable profit will be available against which the losses carried forward can be utilized. TGS has unused tax losses and deductible temporary differences of USD 30.0 million (2018: 9.8 million) where no deferred tax assets were recognized in the balance sheet, all of these unused tax losses sit in entities outside Norway.

Effect of change in tax rates

The tax rate in United Kingdom will be adjusted from 19% to 17% in 2020, and all deferred tax assets and liabilities have been recognized using a 17% rate.

Non-deductible expenses

Non-deductible expenses consist of various types of expenses and payments of various local taxes, which are not deductible for tax purposes in the tax jurisdictions where TGS operates.

Currency Effects

TGS entities that do not have their tax base in USD are exposed to changes in the USD/tax base-currency rates. Effects within the current year are classified as tax expense.

Tax Effect of Temporary Differences and Tax Loss Carryforwards as of 31 December

	2019	2018 Restated	2018
Differences that give raise to a deferred asset or a deferred tax liability:			
Multi-client library/well logs	(84,352)	(34,672)	(15,579)
Fixed assets	(10,214)	(17,288)	(17,288)
Goodwill and intangibles	(2,497)	(4,082)	(4,082)
Accruals	14,960	7,092	7,092
Accounts receivable	–	253	253
Other long term items	4,899	–	
Lease asset vs. Liability	724	–	
Tax losses carried forward	2,652	1,547	1,547
Deferred revenue	55,208	(1,250)	(1,250)
Withholding taxes carried forward	–	408	408
Other	51	522	522
Total net deferred tax liability	**(18,568)**	**(47,470)**	**(28,377)**
Of which:			
Deferred tax asset	**21,807**	**884**	**884**
Deferred tax liability	**40,375**	**48,354**	**29,261**

Change in net deferred tax liability	2019	2018
As of 1 January [1]	47,470	4,048
Recognized in profit or loss	(28,902)	23,568
Currency effects	-	761
As of 31 December	**18,568**	**28,377**

Comments on Selected Line Items in the Preceding Table

Recognition of Deferred Tax Assets on Tax Losses Carried Forward

Deferred tax assets are capitalized to the extent it is probable that TGS will have taxable profits and the carryforward tax losses can be utilized. Deferred tax asset on carryforward tax losses which are recognized are mainly related to United Kingdom (USD 2.4 million).

Temporary Differences Group's subsidiaries

No deferred tax has been recognized in respect of temporary differences related to unremitted earnings of the Group's subsidiaries where remittance is not contemplated and where the timing of distribution is within the control of the Group.

Draft Taxation Ruling in Australia:

On 20 December 2017, the Australian Tax Office (ATO) released for public comment a draft taxation ruling (2017/D11 Income tax: capital allowances: expenditure incurred by a service provider in collecting and processing multi-client seismic data). The final ruling was issued 18 September 2019 (TR 2019/4). The comments made by the seismic industry to the draft tax ruling have to a significant degree been considered, and the conclusions of the final tax ruling have been adjusted compared to the draft version. TGS considers that the conclusions in the final tax ruling will not lead to a different tax position compared to the current practice. Therefore, it is not probable that there will be an outflow of resources embodying economic benefits necessary to settle an obligation, and no provisions have been made. Multi-client data will now be considered capital in nature and as such is not a deductible cost. However, seismic companies are also considered to be first users of the data, and can therefore deduct the cost of acquiring the multi-client data in the income year the expenditure was incurred.

28. CORRECTIONS FROM PRIOR YEARS

1 January 2018	Previously reported	Adjustment	Restated
Deferred tax liability	23 721	19 093	42 814
Total non-current liabilities	**29 071**	**19 093**	**48 164**
Total paid-in capital	106 152	–	106 152
Other equity	1 093 957	(19 093)	1 074 864
Equity attributable to owners of the parent	1 200 109	(19 093)	1 181 016
Non-controlling interest	(7)	–	(7)
Total equity	**1 200 102**	**(19 093)**	**1 181 009**

31 December 2018	Previously reported	Adjustment	Restated
Accrued revenues	133 810	(42 368)	91 442
Total current assets	**653 736**	**(42 368)**	**611 368**
Total assets	**1 624 412**	**(42 368)**	**1 582 044**
Total paid-in capital	116 271	–	116 271
Other equity	1 135 435	(19 093)	1 116 341
Equity attributable to owners of the parent	1 251 706	(19 093)	1 232 613
Non-controlling interest	(7)	–	(7)
Total equity	**1 251 699**	**(19 093)**	**1 232 606**
Deferred tax liability	29 261	19 093	48 354
Total non-current liabilities	34 275	19 093	53 368
Other current liabilities	271 454	(42 368)	229 086
Total current liabilities	**338 436**	**(42 368)**	**296 068**
Total liabilities	**372 711**	**(42 368)**	**349 436**
Total equity and liabilities	**1 624 412**	**(42 368)**	**1 582 044**

During 2019, TGS discovered errors in the technical computation of temporary differences arising for non-monetary items in other currencies than USD when assessing tax positions. The Company has previously applied spot rates to calculate temporary differences in the tax calculations; in accordance with IAS 12 the historical rate shall be applied. This has been recognized as an opening balance adjustment of USD 8.9 million in the financial year 2018.

Further TGS has adjusted the deferred tax liability related to TGS' Mexican branch. Due to timing differences between taxable revenue and costs between Norway and Mexico, part of the tax liability in the Mexican branch of one of the Company's Norwegian subsidiaries will not be deductible under Norwegian taxation. This tax liability has been recognized in the balance sheet as an opening balance adjustment of USD 10.1 million for the financial year 2018.

In addition, the Company has revised the classification of accrued unbilled revenue and deferred revenue as of 31 December 2018. In the restated amounts as of 31 December 2018, accrued unbilled revenue is shown net of deferred revenue of USD 42.4 million.

There is no material impact on the Company's basic or diluted earnings per share in 2018 and no impact on the total operating, investing or financing cash flows for the year ended 31 December 2018.

29. EVENTS AFTER THE BALANCE SHEET DATE

On 6 January 2020, TGS announced the purchase of all US onshore petrophysical log database and associated intellectual property from Petrophysical Solutions, Inc. These petrophysical interpretations, derived from well log and core analysis relationships in approximately 1,400 wells within key unconventional basins, have been added to the current TGS data library. Customers will benefit from high-quality interpretation to aid in reducing risks, increase the probability of drilling successes and increase production by optimizing landing zones, wellbore trajectories and completion designs.

On 14 January 2020, TGS announced its completion of the purchase of four 3D seismic surveys in the North Slope region of Alaska. The newly acquired seismic programs provide modern high-resolution imaging which encompasses 1,606 square kilometers with an additional 632 square kilometers to be acquired in 2020. The surveys are further complemented by TGS' extensive well data library that will assist exploration companies to further evaluate new reservoir targets and rejuvenate historic discoveries.

On 11 February 2020, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.375 per share (NOK 3.47) to the shareholders. The dividend payments were made to the shareholders on 4 March 2020. To the best of the management's and the directors' knowledge, there are no other significant subsequent events not described in this Annual Report that have occurred since 31 December 2019 that would impact the financial statements as presented for 2019.

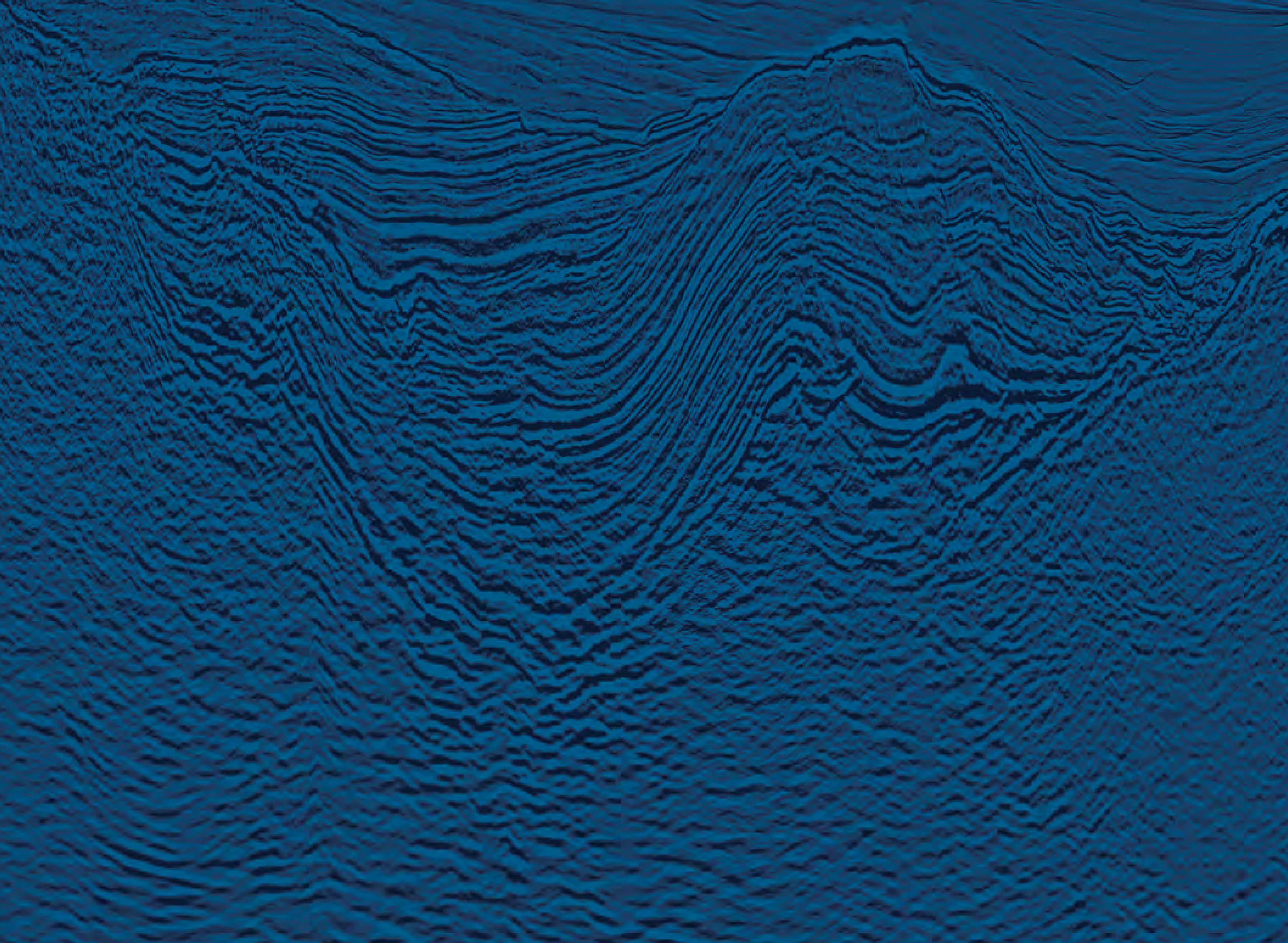
The first months of 2020 have proven how our industry can be impacted by unexpected events that have a dramatic impact on economic growth. The COVID-19 pandemic has led to an unprecedented decline in global demand for oil and gas. On top of that, the price war between Russia and Saudi Arabia has further exacerbated the situation. As a result, the oil price has seen a dramatic drop from trading in the high $60s per barrel in early January to a low of $25 per barrel on March 17. At these levels, there are few onshore or offshore projects generating profit.

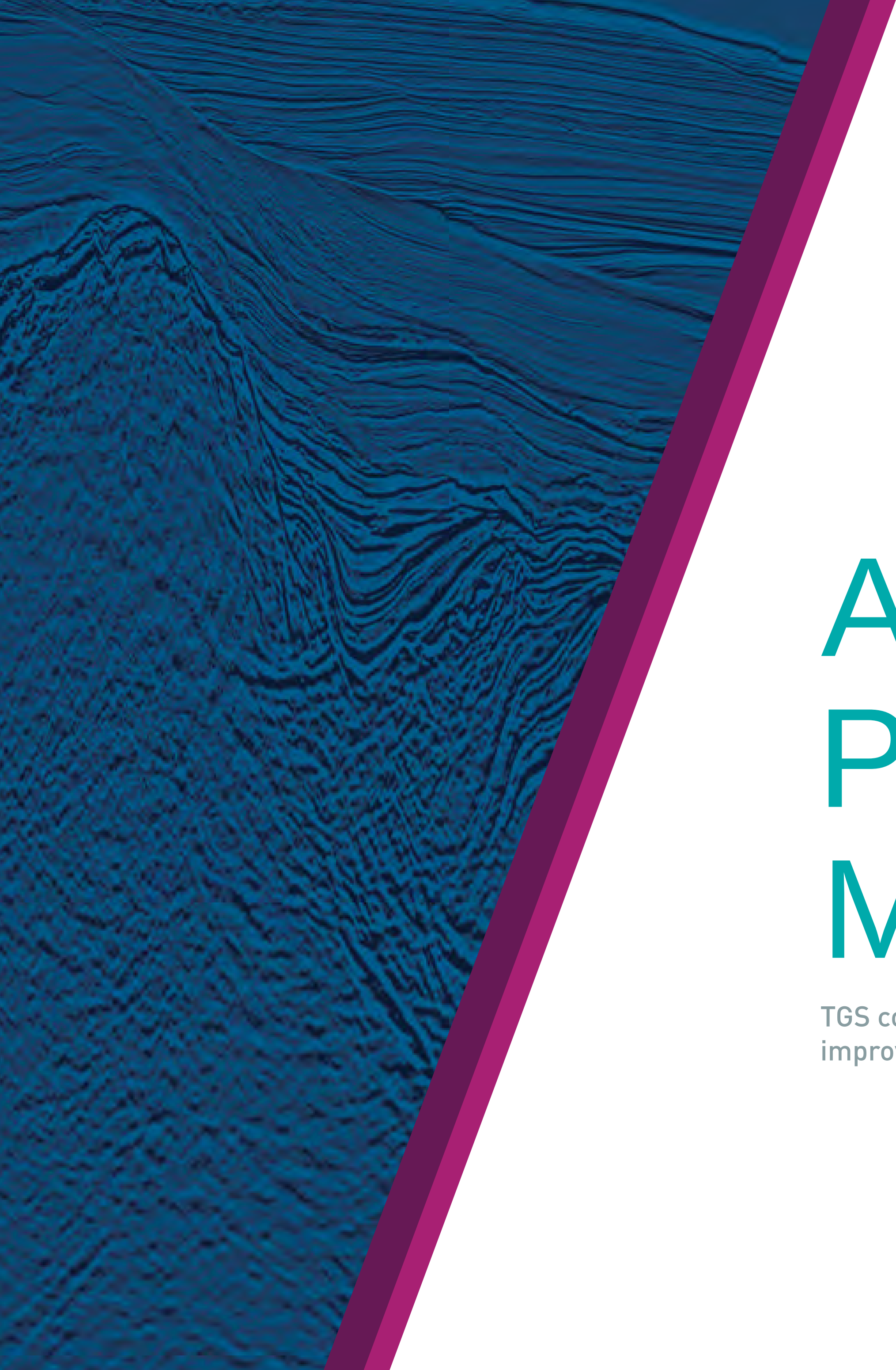
E&P companies have reacted quickly to the market turmoil, and as of the date of this report, many have already announced significant cuts in capital expenditure. Subsurface data can be considered discretionary spending, hence there is an expectation that the Company's data products will be subject to significant cuts. As a result, TGS expects a very challenging market in 2020, where data licensing and pre-commitments to new projects may be deferred until clients have more visibility for an improvement in market conditions.

TGS' asset-light business model allows the Company to reduce investments quickly to adapt to changes in demand. Further, the Company's personnel costs have a high degree of variable pay which will adjust with the quarterly operating result. These characteristics have allowed the company to generate positive cash flow even in very challenging markets historically.

TGS' liquidity is considered healthy with a cash balance of USD 323 million as of the end of 2019. In addition, the Company has an undrawn credit facility of USD 100 million. Since the straight-line amortization of the Company's multi-client library was introduced in 2016, TGS' total amortization has exceeded new library investment by USD 187 million based on segment reporting. The Company estimates value in use based on discounted estimated future sales forecasts, hence a significant drop in demand could impact the impairment review for specific projects. See Note 9 for further details.

TGS' ambition of returning the Company's value creation to shareholders through a combination of quarterly cash dividends and share buybacks remain firm. The dividend policy states an ambition to maintain a stable quarterly dividend through the year, but the actual level paid will be subject to continuous evaluation of market outlook, cash flow expectations, and balance sheet development. Due to the unprecedented decline in client demand, the Board of Directors have decided to reduce the Q1 quarterly dividend payable in May from USD 0.375 per share to USD 0.125 per share. Before concluding on dividend distribution in the coming quarters, the Board will continue to evaluate the situation in accordance with the Company's dividend policy and further developments of COVID-19.





Alternative Performance Measures

TGS continued to perform in 2019 with 24% growth in segment revenues and improving margins.

Alternative Performance Measures

TGS' financial information is prepared in accordance with IFRS. In addition, TGS provides alternative performance measures to enhance the understanding of TGS' performance. The alternative performance measures presented by TGS may be determined or calculated differently by other companies.

EBIT (Operating Profit)

Earnings before interest and tax is an important measure for TGS as it provides an indication of the profitability of the operating activities.

The EBIT margin presented is defined as EBIT (Operating Profit) divided by net revenues.

Pre-funding percentage

The pre-funding percentage is calculated by dividing the multi-client pre-funding revenues by the operational investments in the multi-client library, excluding investments related to projects where payments to the vendors are contingent on future sales. The pre-funding percentage is considered as an important measure as it indicates how the Company's financial risk is reduced on multi-client investments.

EBITDA

EBITDA means earnings before interest, taxes, amortization, depreciation and impairments. TGS uses EBITDA because it is useful when evaluating operating profitability as it excludes amortization, depreciation and impairments related to investments that occurred in the past. Also, the measure is useful when comparing the Company's performance to other companies.

All amounts in USD 1,000s.

	2019	2018
Net income	113,111	178,800
Taxes	18,100	57,971
Net financial items	(2,213)	(6,746)
Depreciation, amortization and impairment	23,503	8,897
Amortization and impairment of multi-client library	302,233	270,776
EBITDA	**454,734**	**509,699**

Return on average capital employed

Return on average capital employed (ROACE) shows the profitability compared to the capital that is employed by TGS, and it is calculated as operating profit divided by the average of the opening and closing capital employed for a period of time.

Capital employed is calculated as equity plus net interest-bearing debt. Net interest-bearing debt is defined as interest-bearing debt minus cash and cash equivalents. TGS uses the ROACE measure as it provides useful information about the performance under evaluation.

All amounts in USD 1,000's.

	31 December 2019	31 December 2018
Equity	1,545,806	1,232,606
Interest bearing debt	2,809	2,500
Cash	323,408	273,527
Net interest-bearing debt	(320,599)	(271,027)
Capital employed	**1,225,207**	**980,672**
Average capital employed	**1,102,940**	**966,679**
Operating profit	128,998	230,025
ROACE	**12%**	**24%**

Free cash flow (after MC investments)

Free cash flow (after MC investments) when used by TGS means cash flow from operational activities minus cash investments in multi-client projects. TGS uses this measure as it represents the cash that the Company is able to generate after investing the cash required to maintain or expand the multi-client library.

All amounts in USD 1000's.

	2019	2018
Cash flow from operational activities	560,648	390,022
Investments in multi-client library	(334,289)	(273,062)
Free cash flow (after MC investments)	**226,360**	**116,960**

Multi-client net revenues/average net book value ratio

The ratio is defined as the net revenues from multi-client revenues divided by the average of the opening and closing balance of the multi-client library.

All amounts in USD 1000's.

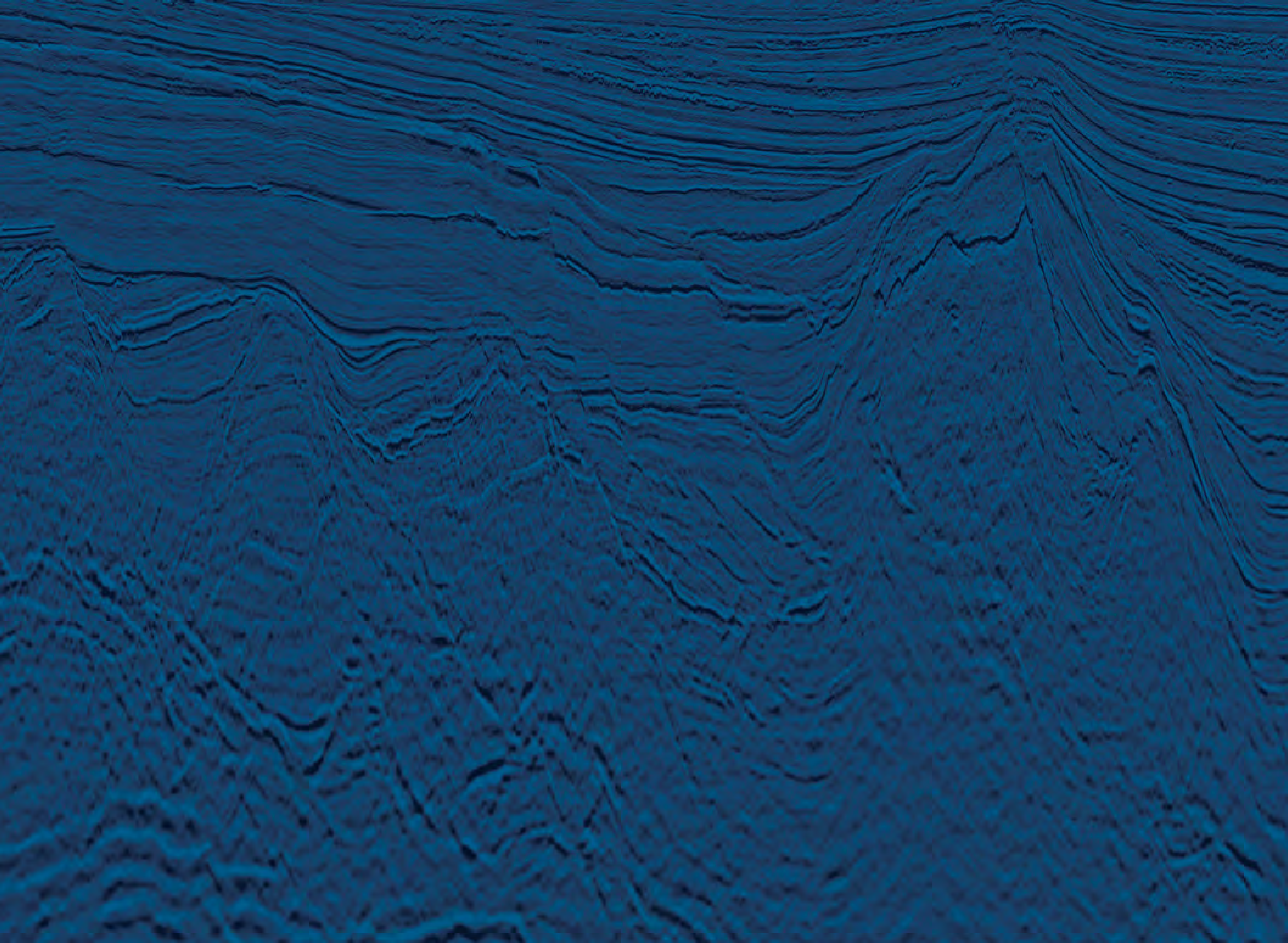
	2019	2018
Prefunding	77,289	117,429
Late sales – unfinished data	67,812	69,743
Late sales – finished data	**422,390**	**418,671**
Multi-client net revenues	**567,491**	**605,844**
Opening balance multi-client library	870,495	799,015
Closing balance multi-client library	1,091,294	870,495
Average net book value	980,895	834,755
Multi-client net revenues/average net book value ratio	**0.58**	**0.73**

Backlog

Backlog is defined as the total value of future net revenues from signed customer contracts.

Yield

Yield is defined as the dividend per share divided by the share price at the time of the dividend announcement. The 2019 dividend yield is annualized based on the weighted yield at the time of announcement of quarterly dividends.



Parent Company Financials

TGS continues to generate multi-client revenues from a well-balanced mix of products across a geographically diverse portfolio, including 2D seismic, 3D seismic and a range of geological products.

Income Statement

As of 31 December (All amounts in USD 1,000s unless noted otherwise)

	Note	2019	2018
Revenue	17	327,239	344,054
Revenue		**327,239**	**344,054**
Cost of goods sold - proprietary and other		437	283
Amortization and impairment of the multi-client library	3	182,150	207,354
Personnel costs	4	13,700	12,808
Other operating expenses	13, 18	40,158	65,707
Depreciation, amortization and impairment	2	669	439
Total operating expenses		**237,115**	**286,590**
Operating profit/(loss)		**90,124**	**57,464**
Interest income	15	6,647	4,096
Financial income	15	3,211	-
Exchange gains	15	7,241	833
Interest expenses	15	(12,813)	(11,767)
Financial expenses	15	(104)	(633)
Net financial items		**4,181**	**(7,472)**
Profit before taxes		**94,305**	**49,992**
Tax expense	16	20,631	11,456
Net income		**73,674**	**38,536**
Profit/(loss) for the year is proposed allocated as follows:			
Provision for dividend		43,937	27,687
To/(from) other equity	6	29,738	10,849
Total allocated		**73,674**	**38,536**

Balance Sheet

As of 31 December (All amounts in USD 1,000s unless noted otherwise)

	Note	2019	2018 restated
Assets			
Non-current assets			
Intangible non-current assets			
Multi-client library	3	393,229	440,983
Deferred tax asset	16	338	408
Total intangible non-current assets		**393,567**	**441,391**
Tangible non-current assets			
Machinery and equipment	2	4,335	2,290
Total tangible non-current assets		**4,335**	**2,290**
Financial non-current assets			
Investments in subsidiaries	7	150,677	119,562
Other non-current assets	19	-	-
Total financial non-current assets		**150,677**	**119,562**
Total non-current assets		**548,579**	**563,243**
Current assets			
Receivables			
Accounts receivable	9	49,285	58,548
Accrued revenues	9	83,486	59,975
Current receivables group companies	10	567,771	79,489
Other receivables	9	44,001	8,076
Total receivables		**744,543**	**206,089**
Cash and cash equivalents	8	45,633	35,940
Total current assets		**790,176**	**242,029**
Total assets		**1,338,755**	**805,273**

Balance Sheet

As of 31 December (All amounts in USD 1,000s unless noted otherwise)

	Note	2019	2018 restated
Equity and Liabilities			
Equity			
Paid-in capital			
Share capital	5, 6	4,127	3,672
Treasury shares held	5, 6	(50)	(4)
Share premium	6	359,032	67,355
Other paid-in capital	6	11,929	9,060
Total paid-in capital		**375,038**	**80,084**
Retained earnings			
Other equity	6	5,349	48,155
Total retained earnings		**5,349**	**48,155**
Total equity		**380,387**	**128,239**
Liabilities			
Non-current liabilities			
Other non-current liabilities	19	–	–
Deferred tax	16	89,544	22,667
Total non-current liabilities		**89,544**	**22,667**
Current liabilities			
Accounts payable and debt to partners		74,897	29,549
Current liabilities group companies	10	690,800	538,806
Taxes payable	16	23,028	11,090
Social security, VAT and other duties		3,368	3,271
Provisions for dividends	6	43,937	27,687
Other current liabilities	11	32,795	43,963
Total current liabilities		**868,823**	**654,366**
Total liabilities		**958,367**	**677,034**
Total equity and liabilities		**1,338,755**	**805,273**

Asker, 27 March 2020

Henry H. Hamilton III
Chairman

Mark S. Leonard
Director

Wenche Agerup
Director

Irene Egset
Director

Christopher Finlayson
Director

Vicki Messer
Director

Tor Magne Lønnum
Director

Torstein Sanness
Director

Kristian Johansen
Chief Executive Officer

Statement of Cash Flow

(All amounts in USD 1,000s)

	Note	2019	2018
Cash flow from operating activities			
Profit/(loss) before taxes	16	94,305	49,992
Depreciation/amortization/impairment	2, 3	182,820	207,793
Impairment shares in subsidiaries and receivables	7, 10	24	(757)
Changes in accounts receivables and accrued revenue		(14,246)	46,694
Changes in other receivables		(492)	(250)
Changes in other balance sheet items		83,274	(93,030)
Paid taxes		(10,470)	–
Net cash flow from operating activities		**335,215**	**210,442**
Cash flow from investing activities			
Investment in tangible assets	2	(2,714)	(1,682)
Investments in multi-client library	3	(157,852)	(157,833)
Investments in subsidiaries	7	(743)	–
Interest received	15	6,647	4,096
Net cash flow from investing activities		**(154,662)**	**(155,419)**
Cash flow from financing activities			
Interest paid	15	(12,813)	(11,767)
Dividend payments	6	(114,640)	(81,906)
Purchase of treasury shares	6	(43,412)	–
Proceeds from share offerings	6	5	4,593
Net cash flow from financing activities		**(170,860)**	**(89,080)**
Net change in cash and cash equivalents		**9,693**	**(34,057)**
Cash and cash equivalents at the beginning of the period	8	35,940	69,974
Exchange rate effects		–	23
Cash and cash equivalents at the end of the period		**45,633**	**35,940**

Notes to Parent Company Financials

1. GENERAL ACCOUNTING POLICIES

General Information

TGS-NOPEC Geophysical Company ASA (TGS or the Company) is a public limited company incorporated in Norway on 21 August 1996. The address of its registered office is Lensmannslia 4, 1386 Asker, Norway. The Company is listed on the Oslo Stock Exchange (TGS).

The Company's financial statements were authorized by the Board of Directors on 27 March 2020.

TGS has been granted exemption from the Norwegian Tax Authority to publish its Annual Report in English only.

Reporting Currency

The Parent Company, TGS-NOPEC Geophysical Company ASA, reports its financial results in USD, which is the Company's functional currency.

General Accounting Policies

The financial statements are prepared in accordance with the Norwegian Accounting Act and generally accepted accounting principles in Norway. The notes are an integral part of the financial statements.

Significant Accounting Judgments, Estimates and Assumptions

In the process of applying the Company's accounting principles, management is required to make estimates, judgments and assumptions that affect the amount reported in the financial statements and accompanying notes. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which will form the basis for making judgments on carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates. The key sources of judgment and estimation of uncertainty at the balance sheet date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

Impairment Evaluation of Multi-client Data Libraries

TGS performed impairment reviews and determined the value in use of the multi-client library during 2019. The Company estimated value in use based on discounted estimated future sales forecasts. The underlying estimates that form the basis for the sales forecast depend on variables such as the number of oil and gas exploration and production (E&P) companies operating in the area that would be interested in the data, the overall E&P spending, expectations regarding hydrocarbons in the sector, whether licenses to perform exploration in the sectors exist or will be given in the future, expected farm-ins to licenses, relinquishments, etc. Changes in these estimates may potentially affect the estimated amount of future materially. The revenue estimates are evaluated on a regular basis and impairments are recognized in the period they occur.

For details about the book value, amortization and impairment of the multi-client library, see Note 3.

Provision for Impairment Losses of Accounts Receivables

The Company has made provisions for impairment losses of specific accounts receivables deemed uncollectible. When assessing the need for provisions, the Company uses all available information about the various outstanding receivables, including the payment history and the credit quality of the actual companies.

Share–based Payments

The Company measures the share-based payment plans granted to employees by reference to the fair value of the equity instruments at the date at which they are granted (equity-settled transactions) or at the end of each reporting period (cash-settled transactions) in accordance with NRS 15A (IFRS 2). Estimating fair value requires appropriate valuation model to value the share-based instruments. The values are dependent on the terms and conditions of the granted share-based instruments. This also requires determining the appropriate assumptions in the valuation models including the expected life of the instruments, volatility and dividend yield.

Contingent Liabilities

The preparation of the financial statements has required TGS to make judgment, estimates and assumptions that affect the reported amounts of liabilities and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount in future periods.

Summary of Significant Accounting Policies

Revenue Recognition

Revenue is recognized when it is probable that the economic benefits from a transaction will flow to the Company and the revenue can be reliably measured. Revenue is measured at fair value of the consideration received, net of discounts and sales taxes or duty. The following describes the specific principles:

Work in Progress (WIP)

Sales in the form of pre-funding commitments from customers under binding contracts are recognized as revenue on a percentage of completion (POC) basis normally measured according to the acquired and processed volume of data in relation to the estimated total size of the project. Sales made prior to commencement of acquisition for each project are recognized on a POC basis and presented as pre-funding revenues. Sales after the commencement, but while projects are in progress are also recognized on a POC basis progress and presented as POC late sales revenues. The amount of revenues for in- progress projects not yet invoiced is presented as accrued revenues in the balance sheet.

Finished Data

Revenue is recognized for sales of finished data at the time of the transaction, i.e., when the client has gained access to the data under a binding agreement.

Revenue Sharing Arrangements

TGS shares certain multi-client revenues with other companies and governments. Revenues are recognized on a net basis in accordance with applicable recognition principles.

Proprietary Contracts

Revenue from proprietary contracts for clients is recognized in the same way as work in progress (POC) in accordance with the specific agreement.

Interest Income

Interest income is recognized as interest accrues. Interest income is included in the financial items in the income statement.

Royalty Income

Royalty income is recognized on an accrual basis in accordance with the substance of the relevant agreements.

Cost of Goods Sold (COGS) – Proprietary Contracts and Other

Cost of goods sold includes only direct cost related to proprietary contract work and costs related to delivery of geoscientific data.

Multi-client Library

The multi-client library includes completed and in-progress geophysical data to be licensed on a non-exclusive basis to oil and gas exploration and production companies. The costs directly attributable to data acquisition and processing are capitalized and included in the inventory value. Costs directly attributable to data acquisition and processing include mainly vessel costs, payroll and hardware/software costs. Directly attributable costs also include mobilization costs when relocating a vessel to the survey area. The library also includes the cost of data purchased from third parties. The library of finished multi-client seismic data and interpretations is presented at cost reduced by accumulated amortization.

Amortization of Seismic Data

TGS is amortizing the cost of its seismic data library as follows:

- During the work in progress phase, amortization is based on total cost versus forecasted total revenues of the project. Amortization is recorded in line with how revenues are recognized for each project during this phase.
- After a project is completed, a straight-line amortization is applied. The straight-line amortization is assigned over a remaining useful life, which for most marine projects is four years. For most onshore projects, the remaining useful life after completion of a project is seven years.

Impairment Test Multi-client Library

When there are indicators that the net book value may not be recoverable, the library is tested for impairment individually per project. Any impairment of the multi-client library is recognized immediately and presented as "Amortization and impairment of the multi-client library" in the statement of profit or loss.

TGS assesses, at each reporting date, whether there is an indication that a project may be impaired. If any indication exists, TGS estimates the project's recoverable amount. A project's recoverable amount is the higher of a project's fair value less costs of disposal and its value in use. When the carrying amount of a project exceeds its recoverable amount, the project is considered impaired and is written down to its recoverable amount. 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 project.

Contingent Rent Agreements

The Company has entered into agreements on rental of seismic vessels where a part of the rental payment is paid during the rental period, while the other part of the rent is deferred and contingent on a future sale. The balance of the other part of the rent will be paid as/if sales occur. The deferred payment is not considered to be a current liability, and no provision has been recognized as future payment based on a future sales event. When sales occur, TGS will recognize revenues with a corresponding investment recognition. The obligation to pay the remaining vessel rent will be recognized as a liability when the sales transaction occurs.

Goodwill

Goodwill is depreciated over ten years. In addition, goodwill is reviewed for impairment, annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired.

Tangible Non-current Assets and Principles of Depreciation

Tangible non-current assets are presented at historical cost less accumulated depreciation and impairment charges. If an indication of impairment exists, an impairment test is performed. If the fair value of a tangible non-current asset is lower than book value, the asset will be written down to the higher of fair value less cost to sell and value in use. Depreciation is determined in light of the asset's economic life. Purchases which are expected to have a technical and economic life of more than one year are capitalized as tangible non-current assets. Depreciation begins when the assets are available for use.

Exchange Rate Adjustments

Transactions in foreign currency are translated at the rate applicable on the transaction date. Monetary assets, receivables and liabilities are translated at the exchange rate on the balance sheet date. Changes to exchange rates are recognized in the income statement as they occur during the accounting period. Non-monetary assets are translated at historical exchange rates.

Research and Development Costs

Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when the Company can demonstrate:

- It is technically feasible to complete the product so that it will be available for use;
- Management intends to complete the product and use it;
- There is an ability to use the software product;
- It can be demonstrated how the product will generate future economic benefits;
- Adequate technical, financial or other resources to complete the development and to use the product are available; and
- The expenditure attributable to the product during its development can be reliably measured.

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is complete and the asset is available for use. It is amortized over the period of expected future benefit.

Provisions

Provisions are made when the Company has a current obligation (legal or constructive) as result of a past event, it is probable that the Company will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

If the effect of the time value of money is material, provisions are discounted using a pre-tax rate that reflects, where appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

Contingent liabilities are possible obligations as a result of a past event where the existence of the liability depends on the occurrence, or not, of a future event. An existing obligation, in which it is not likely that the entity will have to dispose economic benefits, or where the obligation cannot be measured with sufficient reliability, is also considered a contingent liability. Contingent liabilities are not recognized in the financial statements, but if material, disclosed in the accompanying notes. A contingent asset is not recognized in the financial statement but disclosed if there is a certain degree of probability that it will be an advantage of the Company.

Income Taxes

Current Income Tax

Current income 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. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date.

Deferred Tax

Deferred tax is provided using the liability method on temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities have been recognized for all taxable temporary differences.

Deferred tax assets are recognized for all deductible temporary differences, the carryforward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward of unused tax credits and unused tax losses can be utilized.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable company and the same taxation authority. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized, or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date.

The Company pays its tax obligation in Norwegian Kroner (NOK), and the fluctuations between the NOK and the USD impact the financial items. Exchange rate fluctuations related to the basis for current year income tax expense are classified as tax expense.

Share-based Payments

Key employees of the Company receive remuneration in the form of share-based payment, whereby employees render services as consideration for Performance Share Units (PSUs) and Restricted Share Units (RSUs).

The cost of equity-settled transactions (PSUs and the 2015-2019 plans of RSUs) is measured by reference to the fair value at the date on which they are granted. The fair value is determined by an external value using an appropriate pricing model.

The cost of equity-settled transactions is recognized, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award (the vesting date). The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Company's best estimate of the number of equity instruments that will ultimately vest. The income statement expense or credit for a period represents the movement in cumulative expense recognized at the beginning and end of that period.

No expense is recognized for awards that do not ultimately vest.

The fair value of the RSUs are measured at the end of each reporting period and are distributed over the period until the employees have earned an unconditional right to receive them. These fair values are expensed over the period until the vesting date with recognition of a corresponding liability. The ultimate cost of such a cash-settled transaction will be the actual cash paid by the Company, which will be the fair value at settlement date. The fair values of the vested part of the RSUs are recognized as personnel costs.

Pensions

The Company operates defined-contribution plans in Norway. Contributions are expensed to the income statement as they become payable.

Leases – TGS as lessee

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases. The evaluation is based on the substance of the transaction at the inception date of whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset.

Finance leases are recorded as assets and liabilities, and lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized in the income statement.

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

Cash and Cash Equivalents

Cash and cash equivalents in the balance sheet comprise cash in bank accounts and on hand and short-term deposits with an original maturity of three months or less.

Accounts Receivable and Other Receivables

Receivables are measured at cost less any amounts expected to be uncollectible. Sales with deferred payments due to be settled more than twelve months or later are presented as non-current receivables.

Investments in Subsidiaries and Associated Companies

Investments in subsidiaries and investments in associates are valued at cost in the Company's financial statements. The investment is valued as cost of the shares in the subsidiary, less any impairment losses. An impairment loss is recognized if the impairment is not considered temporary, in accordance with the generally accepted accounting principles. Impairment losses are reversed if the reason for the impairment loss disappears in a later period.

Dividends, group contributions and other distributions from subsidiaries are recognized in the same year as they are recognized in the financial statement of the provider. If dividends/group contributions exceed withheld profits after the acquisition date, the excess amount represents repayment of invested capital, and the distribution will be deducted from the recorded value of the acquisition in the balance sheet for the Parent Company.

Dividends

The dividends are recognized as a liability in the financial statements when proposed by the Board of Directors.

Financial Instruments

Financial instruments are valued at the lower of historical cost and market value.

Loans are recognized at the amount received, net of transactions costs. The loans are thereafter recognized at amortized costs using the effective interest rate method.

Treasury Shares

TGS' equity instruments that are reacquired (treasury shares) are recognized at cost and deducted from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of TGS' own equity instruments. Any difference between the carrying amount and the consideration, if reissued, is recognized in the share premium.

Cash Flow Statement

The cash flow statement is compiled using the indirect method.

2. TANGIBLE NON-CURRENT ASSETS

2019

Acquisition cost and depreciation:	Machinery and Equipment
Cost as of 1 January 2019	**6,329**
Additions	2,714
Disposals	–
Cost as of 31 December 2019	**9,042**
Accumulated depreciation as of 1 January 2019	**4,038**
Depreciation for the year	669
Accumulated depreciation on disposals	–
Accumulated depreciation as of 31 December 2019	**4,708**
Net book value as of 31 December 2019	**4,335**

Straight-line depreciation percentage	14% - 33.3%
Useful life	3 - 7 years

2018

Acquisition cost and depreciation:	Machinery and Equipment
Cost as of 1 January 2018	**4,804**
Additions	1,682
Disposals 1)	(157)
Cost as of 31 December 2018	**6,329**
Accumulated depreciation as of 1 January 2018	**3,757**
Depreciation for the year	439
Accumulated depreciation on disposals 1)	(157)
Accumulated depreciation as of 31 December 2018	**4,039**
Net book value as of 31 December 2018	**2,290**

Straight-line depreciation percentage	14% - 33.3%
Useful life	3 - 7 years

[1] Profit on disposals during the year was USD 0.

3. INTANGIBLE NON-CURRENT ASSETS

2019

Acquisition cost and depreciation:	Goodwill	Multi-client Library	Total
Cost as of 1 January 2019	**3,073**	**3,421,188**	**3,424,261**
Additions	–	134,396	134,396
Cost as of 31 December 2019	**3,073**	**3,555,584**	**3,558,658**
Accumulated amortization as of 1 January 2019	**3,073**	**2,980,205**	**2,983,278**
Amortization for the year	–	182,150	182,150
Accumulated amortization as of 31 December 2019	**3,073**	**3,162,355**	**3,165,428**
Net book value as of 31 December 2019	**–**	**393,229**	**393,229**

Straight-line amortization percentage	10%		
Useful life	10 years [2]	4 to 7 years [1]	

[1] Multi-client Library: See the "General Accounting Policies", for the policies on amortization of this asset.

[2] Goodwill paid for in acquisitions of companies is amortized over the first ten years after the date of the acquisition.

Amortization for the year includes impairments of USD 1.8 million.

2018

Acquisition cost and depreciation:	Goodwill	Multi-client Library	Total
Cost as of 1 January 2018	**3,073**	**3,270,571**	**3,273,645**
Additions	–	150,617	150,617
Cost as of 31 December 2018	**3,073**	**3,421,188**	**3,424,261**
Accumulated amortization as of 1 January 2018	**3,073**	**2,772,851**	**2,775,924**
Amortization for the year	–	207,354	207,354
Accumulated amortization as of 31 December 2018	**3,073**	**2,980,205**	**2,983,278**
Net book value as of 31 December 2018	–	**440,983**	**440,983**

Straight-line amortization percentage	10%		
Useful life	10 years [2]	4 to 7 years [1]	

[1] Multi-client Library: See the "General Accounting Policies", for the policies on amortization of this asset.

[2] Goodwill paid for in acquisitions of companies is amortized over the first ten years after the date of the acquisition.

Amortization for the year includes impairments of USD 14.2 million.

4. SALARIES/NUMBER OF EMPLOYEES / BENEFITS / EMPLOYEE LOANS / PENSIONS

	2019	2018
Payroll	11,136	10,913
Social security costs	1,419	1,017
Pension costs	355	329
Other employee related costs	950	548
Salaries capitalized	(160)	-
Personnel costs	**13,700**	**12,808**
Number of employees at 31 December	46	42
Average number of employees	45	42

As of 31 December 2019, the Company had 46 employees: 28 male employees and 18 female employees.

The Company operates defined contribution plans in Norway. The plans fulfill the requirements of the Norwegian law.

Auditor Fees	2019	2018
KPMG		
Statutory audit	205	166
Other attestation services	4	3
Other services outside the audit scope	34	58
Total fees	**243**	**227**
EY		
Statutory audit	–	226
Tax advisory services	–	41
Total fees	**–**	**267**

The Group changed auditor during 2018 from EY to KPMG with the effect of being auditor for the 2018 financial year.

Information about remuneration of the Board of Directors and the executive management is included in Note 10 to the Consolidated Financial Statements.

For information about share-based payment plans, see Note 11 to the Consolidated Financial Statements.

5. SHARE CAPITAL AND SHAREHOLDER INFORMATION

The share capital of TGS-NOPEC Geophysical Company ASA as of 31 December 2019 was NOK 29,726,694.50, consisting of 118,906,778 ordinary shares at NOK 0.25 per share. The Company's shares have equal voting rights.

For information of treasury shares, shareholders' authorization and the 20 largest shareholders, see Note 12 to the Consolidated Financial Statements.

6. EQUITY RECONCILIATION

Equity Reconciliation	Share Capital	Treasury shares	Share premium	Other Reserves	Retained Earnings	Total Equity
Balance 1 January 2019	3,672	(3)	67,355	9,060	48,155	128,239
Share issue Spectrum merger	449	–	349,522	–	–	349,972
Purchase of treasury shares	–	(47)	–	–	(43,366)	(43,412)
Treasury shares distributed	–	0	–	–	250	250
RSU/PSU	5	–	–	2,869	–	2,874
Quarterly dividends resolved and paid	–	–	(13,909)	–	(73,364)	(87,273)
Provisions for quarterly dividends (USD 0.375 per share) [1]	–	–	(43,937)	–	–	(43,937)
Profit/(loss) for the year	–	–	–	–	73,674	73,674
Balance 31 December 2019	4,127	(50)	359,032	11,929	5,349	380,387
Balance 31 December 2017	3,663	(4)	62,771	6,992	111,260	184,682
Adjustments prior years [2]	–	–			(13,191)	(13,191)
Balance 1 January 2018	3,663	(4)	62,771	6,992	98,069	171,490
Capital increase during 2018	9	–	4,584	–	–	4,594
Treasury shares distributed	–	0	–	–	377	377
Cost of stock options, RSU/PSU	–	–	–	2,069	–	2,069
Quarterly dividends resolved and paid	–	–	–	–	(61,140)	(61,140)
Provisions for quarterly dividends (USD 0.20 per share) [1]	–	–	–	–	(27,687)	(27,687)
Profit/(loss) for the year	–	–	–	–	38,536	38,536
Balance 31 December 2018	3,672	(4)	67,355	9,060	48,155	128,238

[1] The Annual General Meeting held 8 May 2019 authorized the Board of Directors to distribute quarterly dividends based on the 2018 statements. The authorization shall be valid until the Company's next Annual General Meeting. On 11 February 2019, the Board of Directors resolved to pay quarterly dividend of the NOK equivalent of USD 0.375 per shares (NOK 3.47) to the shareholders.

[2] Adjustments to prior years relates to correction of errors in the technical computation of temporary differences arising for non-monetary items in other currencies than USD when assessing tax positions. See note 28 to the consolidated financial statements for further description. Of the amount included in this note, USD 13.2 million relates to correction of prior errors in the Company.

7. INVESTMENTS IN SUBSIDIARIES

As of 31 December 2019, the Parent Company had the following investments in subsidiaries:

Included in the Balance Sheet as:	Registered Office	Share Capital of Company	No. of Shares	Book Value	Net Income	Total Equity	Shareholding and Voting Power
Maglight AS	Asker, Norway	NOK 100,000	100,000	184	0	22	100%
TGS AP Investments AS	Asker, Norway	NOK 200,000	1,000	51,980	(10,243)	58,316	100%
Marine Exploration Partners AS	Asker, Norway	NOK 800,000	800,000	–	–	(483)	100%
TGS Contracting AS	Asker, Norway	NOK 100,000	1,000	2,648	0	114	100%
TGS AS	Asker, Norway	NOK 30,000	30,000	13,332	4,459	(102,691)	100%
TGS-NOPEC Geophysical Company (UK) Ltd.	Bedford, UK	GBP 50,100	50,100	–	–	(24)	100%
Aceca Ltd.	Surbiton, UK	GBP 50,762	507,620	–	–	(72)	100%
TGS Geophysical Investments Ltd.	Surbiton, UK	USD 100,000	100,000	–	–	–	100%
TGS Geophysical Company (UK) Ltd.	Surbiton, UK	GBP 166,035.34	16,603,534	162	15,879	18,421	100%
TGS-NOPEC Geophysical Company Pty Ltd	Perth, Australia	AUD 1	1	0	1,413	16,119	100%
TGS-NOPEC Geophysical Company Pte Ltd	Singapore	SGD 0	0	–	29	389	100%
TGS do Brasil Ltda.	Rio de Janeiro, Brazil	BRL 43,400,200	39,060,180	9,900	42,210	49,396	90%
TGS Canada Corp.	Calgary, Canada	CAD 73,945	100,000	72,471	(355)	117,901	100%
TGS-NOPEC Geophysical Company Moscow Ltd	Moscow, Russia	RUB 300,000	1	–	(85)	(3,326)	100%
Nopec Geophysical Company, S. de R.L. de C.V.	Mexico City, Mexico	MXN 1,000	1	–	(57)	(57)	90%
Balance sheet value				**150,677**			

The Parent Company has direct or indirect 100% voting rights in all subsidiaries.

The negative equity in TGS AS arises as a result of the accounting of the merger liability, and the difference between the nominal value of the merger liability and the fair value of the net assets acquired.

8. RESTRICTIONS ON BANK ACCOUNTS

As of 31 December 2019, USD 0.8 million of cash and cash equivalents are restricted to meet the liability arising from payroll taxes withheld (2018: USD 0.4 million).

9. ACCOUNTS RECEIVABLE AND OTHER RECEIVABLES

Accounts receivable, including accrued revenues, is stated in the balance sheet at net realizable value and totaled USD 132.8 million as of 31 December 2019 (2018: USD 118.5 million). The Company has made a bad debt provision of USD 0 million in 2019 (2018: USD 0 million). The Company expects to collect the stated balance of receivables as of 31 December 2019. Realized losses on trade receivables in 2019 amounted to USD 0.0 million (2018: USD 0.8 million). Prepayments to suppliers and other short-term receivables totaled USD 44.0 million as of 31 December 2019 (2018: USD 8.1 million).

10. CURRENT RECEIVABLES AND LIABILITIES GROUP COMPANIES

	2019		2018	
Company	Receivables	Liabilities	Receivables	Liabilities
Maglight AS	–	21	–	21
TGS AP Investments AS	22,315	–	39,132	–
Aceca Norge AS	–	5,249	–	5,179
TGS AS	475,043	–	–	–
TGS-NOPEC Geophysical Company	–	644,588	–	506,147
A2D Technologies Inc.	208	–	–	100
TGS Geophysical Company (UK) Ltd.	–	40,894	–	25,193
TGS-NOPEC Geophysical Company PTY Ltd	100	–	104	–
TGS-NOPEC Geophysical Company Pte	–	–	6	–
OBS MC Investments I AS	9,713	–	29,197	–
TGS Moscow	210	–	130	
Nopec Geophysical Company, S. de R.L. de C.V.	212	–	–	–
Arcis Seismic Solutions Corp.	–	49	–	2,167
TGS do Brasil Ltda.	59,969	–	10,921	–
Total	**567,771**	**690,800**	**79,489**	**538,806**

Realized losses on intercompany receivables in 2019 amounted to USD 0 million (2018: USD 0 million).

Receivable from TGS AS includes receivable of USD 440 million related to merger with Spectrum.

For information about Spectrum acquisition, see Note 3 to the Consolidated Financial Statements.

3-Year Term Secured Revolving Credit Facility

In October 2018, TGS entered into a secured revolving credit facility of USD 100 million with an interest rate of LIBOR + 2% per interest period as determined by TGS and as per the defined terms of the revolving credit facility. The closing of the security granted under the credit facility occurred in January 2019. TGS paid an upfront fee of 0.60% of the facility amount and pays a commitment fee of 0.40 % per annum for the unused and uncancelled part of the facility. With respect to financial conditions, TGS must maintain (i) an equity ratio of 50% or more, (ii) a leverage ratio of no more than 1.00:1.00, (iii) EBITDA minus operational capex at zero or above, and (iv) must maintain a liquidity of USD 75 million on a consolidated basis. As of 31 December 2019, TGS had not drawn any amounts under the facility and was in full compliance with all of the financial covenants. The facility is secured by a lien on the assets of the Parent Company and subsidiaries having net revenues representing 5% or more of the group's net revenues as defined in the facility (as of year-end 2019, TGS AP Investment AS, TGS-NOPEC Geophysical Company, A2D Technologies Inc., TGS Geophysical Company (UK) Limited, TGS Canada Corp. and TGS AS). The same subsidiaries have also provided guarantees. Additional entities may be added as guarantors in 2020 based on an annual assessment of materiality or other requirements.

11. OTHER CURRENT LIABILITIES

	2019	2018
Deferred revenues	5,979	17,102
Accrued project costs	10,174	10,646
Other accrued expenses and provisions 1)	16,641	16,215
Total other current liabilities	**32,795**	**43,963**

[1] Provisions have been made for legal and tax cases in accordance with Norwegian Generally Accepted Accounting Principle

12. GUARANTEES

Parent Company Guarantee

In 2017, subsidiaries of the Company, together with subsidiaries of Petroleum Geo-Services ASA (PGS), concluded the joint acquisition of a majority of the multi-client library of Dolphin UK Ltd. The total acquisition price paid by the TGS entities for the 50% interest acquired amounted to USD 5.8 million, USD 3.3 million of which was paid in cash at closing, with the balance of USD 2.5 million payable in January 2021 under a promissory note guaranteed by the Company. The principal amount of USD 2.5 million bears interest at a fixed rate of 3.5% per annum.

Bank Guarantees

As of 31 December 2019, one bank guarantee has been issued on behalf of the Company of USD 0.2 million for one country's authorities related to seismic work program.

Under section 479A of the UK Companies Act 2006, six of TGS' subsidiaries [TGS Geophysical Company (UK) Limited (Registration number: 05731700), TGS Geophysical Investments Limited (Registration number: 09281097),Spectrum Geo Limited (Registration number: 09281097) Aceca Limited (Registration number:

03672833), TGS-NOPEC Geophysical Company Limited (Registration number: 02896729) and Magsurvey Limited (Registration number: 04568744)] have availed exemption for audit of their statutory financial statements pursuant to guarantees issued by TGS to indemnify the subsidiaries of any losses towards third parties that may arise in the financial year ended 31 December 2019 in these subsidiaries. TGS can make an annual election to support such guarantees for each financial year.

13. COMMITMENTS AND CONTINGENCIES

Operating leases – Company as lessee

At the end of 2019, TGS has entered into commitment for three OBN vessels. These commitments will expire in 2020, and the amount committed, including contractual lease agreements, totaled USD 23 million (2018: USD 75 million).

The Company has an operating lease commitment relating to premises. The commitment expires 31 January 2022 with no termination before expiry date.

Rental expense for operating leases was USD 0.5 million for the year ended 31 December 2019 (2018: USD 0.5 million). Future minimum payments for operating leases as of 31 December are as follows:

	2019	2018
Within one year	500	509
After one year but not more than five years	542	1,060
More than five years	–	–
	1,041	**1,569**

The Company does not have any financial leases.

Contingent commitments

As of 31 December 2019, the Company has certain commitments whereby liability will arise to certain suppliers contingent on future sales. The Company recognizes this liability on future sales totaled of USD 0.7 million (2018: 3.0 million).

14. RELATED PARTIES

No material transactions took place during 2019 with related parties, other than operating business transactions between the companies in the TGS Group. All companies within TGS are 100% owned, directly or indirectly, by the Company, except for Calibre Seismic Company which is owned 50% by one of the subsidiaries. Business transactions between the entities of TGS were performed according to arm's length principles. The main business transactions can be aggregated as follows:

	2019	2018
Data processing costs	17,041	27,133
Brokerage fees	17,988	34,927
Management fees	14,942	13,892

For information about intercompany interest income and expense, see Note 15.

The Company has no liabilities in form of mortgages of entities within the TGS Group. For information about guarantees, see Note 12.

For a specification of intercompany receivables and liabilities, see Note 10.

15. FINANCIAL ITEMS

Financial income/expense:	2019	2018
Interest income	2,598	2,593
Interest income subsidiaries	4,049	1,503
Exhange gain	9,742	2,786
Other financial income	3,211	4
Total financial income	**19,599**	**6,887**
Interest expense	(193)	(322)
Interest expense subsidiaries	(12,620)	(11,445)
Exchange loss	(2,501)	(1,954)
Other financial expenses	(104)	(638)
Total financial expense	**(15,418)**	**(14,358)**
Net financial items	**4,181**	**(7,472)**

16. TAX EXPENSE

Current tax:	2019	2018 restated
Profit/(loss) before taxes	94,305	49,992
Permanent differences	64	10,391
Changes in temporary differences	(4,782)	(3,464)
Currency exchange effects on base for current tax	53,916	(8,704)
Basis for current tax	**143,503**	**48,215**

Total tax expense for the year:		
Deferred tax - changes	66,876	366
Taxes payable	31,594	11,090
Adjustment in respect of current income tax of previous year	(14)	-
Deferred tax liability on merger [3]	(77,826)	-
Total tax expense for the year	**20,631**	**11,456**
Effective average tax rate	22%	23%

Taxes payable	2019	2018
Taxes payable on current year profit	31,594	11,090
Group Contribution	(8,567)	-
Total taxes payable	**23,028**	**11,090**

Specification of basis for deferred taxes: Temporary differences:	2019	2018
Multi-client library	(32,896)	3
Revenues on seismic projects in the work in progress phase	92,101	115,554
Accounts receivable	(270)	(976)
Accruals	(11,657)	(11,314)
Other	579	(231)
Merger receivable	359,161	-
Total	**407,018**	**103,036**
Deferred tax liability/(asset) based on temporary differences	89,544	22,668
Withholding taxes carried forward [2]	(338)	(408)
Deferred tax liability/(asset)	89,206	22,259

Explanation of total tax expense versus nominal tax rate on pre-tax profit:	2019	2018
Tax calculated using nominal tax rate on pre-tax profit	20,747	11,498
Effect of permanent differences	14	2,494
Adjustment tax of previous year	(14)	-
Effect of change in tax rate [1]	-	(1,018)
Exchange gain/loss reported as tax expense	(117)	(1,518)
Total tax expense recorded in income statement	**20,631**	**11,456**

[1] From the income year 2019, the Norwegian nominal tax rate on ordinary income has been reduced to 22%. The basis for deferred taxes per 31 December 2018, was calculated with the new tax rate.

[2] Withholding taxes carried forward has to be utilized no later than 2022.

[3] Deferred tax on receivable from merger with TGS AS recongnized 14 August 2019. See Note 3 in Group Financials.

17. GROSS AND NET REVENUES

TGS enters into multi-client contracts with other companies whereby revenue is shared proportionally and presented net. In some cases TGS enters into multi-client contracts where a portion of revenue is shared with governments in certain countries. The table below provides the breakdown for 2019 and 2018.

	2019	2018
Gross revenues from sales	422,270	397,088
Revenue allocated to other parties	(95,031)	(53,034)
Revenues	**327,239**	**344,054**

18. FINANCIAL RISK MANAGEMENT

Currency Risk

Functional currency for the Company is USD. Major portions of the Company's revenues and costs are in US dollars, except for personnel and administrative costs. Due to this, the Company's operational exposure to exchange fluctuations is low. However, as the Company pays taxes in Norwegian kroner to Norwegian Tax Authorities and dividends to shareholders in Norwegian kroner, fluctuations between the NOK and the USD impact currency exchange gains or losses on tax expense and financial items.

Liquidity Risk

Liquidity risk arises from lack of correlation between cash flow from operations and financial commitments. As of balance sheet date, the Company held current assets of USD 790.2 million, of which cash and cash equivalents represents USD 45.6 million, and current liabilities of USD 868.8 million, of which debt to subsidiaries represents USD 690.8 million. As of 31 December 2019, TGS considers the liquidity risk to be low.

Credit Risk

All placements of excess cash are either bank deposits or in financial instruments that at minimum carry an "investment grade" rating. The Company's clients are oil and gas companies. The Company is exposed to credit risk through sales and uses best efforts to manage this risk. The maximum exposure to credit risk at the reporting date is the carrying value of the financial assets, the carrying value of the accounts receivables and other short-term receivables. TGS considers the concentration of risk with respect to trade receivables as low due to the Company's credit rating policies and because the clients are mainly large oil and gas companies, considered to be financially sound.

From time to time, the Company accepts extended payment terms on parts of firm commitments from clients. To the extent these terms do not carry an interest compensation to be paid by clients, the revenues recognized by the Company are discounted to reflect this element.

19. OTHER NON-CURRENT ASSETS AND LIABILITIES

Other non-current assets comprise accounts receivables with extended payment terms and loans. Any revenue share associated with these receivables is presented as other non-current liabilities.

TGS has an interest-bearing loan to Skeie Energy AS. The loan has a total value of gross USD 21.1 million (net to TGS of USD 8.7 million). The loan has been fully reserved for and is recognized at USD 0 million as of 31 December 2019 (31 December 2018: USD 0 million).

20. CONTINGENT LIABILITIES

Økokrim Civil Matters

The civil matters that have arisen in relation to the transactions that form the basis for the Økokrim charges, and the outcome of these matters, will depend in large part on the outcome of the Økokrim matter. Given the early stage of these proceedings, it is impracticable to render an accurate assessment of the outcome. However, based upon the Company's belief that the Økokrim allegations lack merit and the appeal proceedings will confirm that TGS did nothing wrong, the Company also believes these civil claims of liability are not well-founded, and it intends to challenge the claims vigorously. See Note 24 in Group financials.

21. EVENTS AFTER THE BALANCE SHEET DATE

On 14 January 2020, TGS announced its completion of the purchase of four 3D seismic surveys in the North Slope region of Alaska. The newly acquired seismic programs provide modern high-resolution imaging which encompasses 1,606 square kilometers with an additional 632 square kilometers to be acquired in 2020. The surveys are further complemented by TGS' extensive well data library that will assist exploration companies to further evaluate new reservoir targets and rejuvenate historic discoveries.

On 11 February 2019, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.375 per shares (NOK 3.47) to the shareholders. The dividend payments were made to the shareholders on 4 March 2020.

The first months of 2020 have proven how our industry can be impacted by unexpected events that have a dramatic impact on economic growth. The COVID-19 pandemic has led to an unprecedented decline in global demand for oil and gas. On top of that, the price war between Russia and Saudi Arabia has further exacerbated the situation. As a result, the oil price has seen a dramatic drop from trading in the high $60s per barrel in early January to a low of $25 per barrel on March 17. At these levels, there are few onshore or offshore projects generating profit.

E&P companies have reacted quickly to the market turmoil, and as of the date of this report, many have already announced significant cuts in capital expenditure. Subsurface data can be considered discretionary spending, hence there is an expectation that the Company's data products will be subject to significant cuts. As a result, TGS expects a very challenging market in 2020, where data licensing and pre-commitments to new projects may be deferred until clients have more visibility for an improvement in market conditions.

TGS' asset-light business model allows the Company to reduce investments quickly to adapt to changes in demand. Further, the Company's personnel costs have a high degree of variable pay which will adjust with the quarterly operating result. These characteristics have allowed the company to generate positive cash flow even in very challenging markets historically.

TGS' liquidity is considered healthy with a cash balance of USD 323 million as of the end of 2019. In addition, the Company has an undrawn credit facility of USD 100 million. Since the straight-line amortization of the Company's multi-client library was introduced in 2016, TGS' total amortization has exceeded new library investment by USD 187 million based on segment reporting. The Company estimates value in use based on discounted estimated future sales forecasts, hence a significant drop in demand could impact the impairment review for specific projects. See Note 9 for further details.

TGS' ambition of returning the Company's value creation to shareholders through a combination of quarterly cash dividends and share buybacks remain firm. The dividend policy states an ambition to maintain a stable quarterly dividend through the year, but the actual level paid will be subject to continuous evaluation of market outlook, cash flow expectations, and balance sheet development. Due to the unprecedented decline in client demand, the Board of Directors have decided to reduce the Q1 quarterly dividend payable in May from USD 0.375 per share to USD 0.125 per share. Before concluding on dividend distribution in the coming quarters, the Board will continue to evaluate the situation in accordance with the Company's dividend policy and further developments of COVID-19.

To the best of the management's and the directors' knowledge, no other significant subsequent events not described in this Annual Report have occurred since 31 December 2019 that would impact the financial statements as presented for 2019.

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To the Annual Shareholders' Meeting of TGS-NOPEC Geophysical Company ASA

Independent auditor's report

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of TGS-NOPEC Geophysical Company ASA. The financial statements comprise:

- The financial statements of the parent company TGS-NOPEC Geophysical Company ASA (the Company), which comprise the balance sheet as at 31 December 2019, and the income statement and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and
- The consolidated financial statements of TGS-NOPEC Geophysical Company ASA and its subsidiaries (the Group), which comprise the balance sheet as at 31 December 2019, and the statement of comprehensive income, statement of changes in equity and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion:

- The financial statements are prepared in accordance with the law and regulations.
- The accompanying financial statements give a true and fair view of the financial position of the Company as at 31 December 2019, and its financial performance and its cash flows for the year then ended in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway.
- The accompanying consolidated financial statements give a true and fair view of the financial position of the Group as at 31 December 2019, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the EU.

Basis for Opinion

We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company and the Group as required by laws and regulations, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

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

Purchase price allocation from the merger with Spectrum ASA

Refer to Note 1 General Accounting Policies and Note 3 Business Combinations

The key audit matter	*How the matter was addressed in our audit*
On 14 August 2019, the group acquired Spectrum ASA (Spectrum), which was accounted for as a business combination in accordance with IFRS 3. IFRS 3 requires the Group to measure the identifiable assets acquired and the liabilities assumed at their fair values. The acquired business is complex in terms of areas of operations and number of surveys included within the multi-client library. There is no active market for multi-client library data and there is significant inherent uncertainty in assumptions used for estimating fair values of the multi-client library acquired. The calculation of goodwill is performed based on the residual fair value not allocated to identified assets and liabilities. The purchase price of Spectrum's net assets was USD 354 million consisting of USD 137 million for the net assets acquired, resulting in recognition of USD 217 million in goodwill. USD 180 million was allocated to the multi-client library. The figures presented are preliminary and may be subject to adjustments until one year from the acquisition date or earlier if all information is received. Due to the significance of the transaction and the judgement involved in measurement of the fair values acquired, primarily the multi-client library, this is considered a key audit matter.	Our audit procedures in this area included: • Reading and understanding the merger agreement and other relevant documents, including the approval by the relevant competition authorities to establish the date of acquisition, to obtain external confirmation of the purchase price and to identify other factors pertaining to the transaction which may impact the financial statements; • Comparing share price information used by management to determine the purchase price to external market sources and assessing the accounting for transaction costs through testing a sample of invoices and inspecting management's documentation; • Examining key assumptions in determining the fair values of the net assets acquired and assessing the credibility and substance of these assumptions also taking into consideration the expected synergies resulting from the transaction; • Engaging our own valuation specialists to assist us in critically challenging the valuation methodology applied and calculations made by the group in the allocation of the purchase price; • Assessing the completeness and valuation of the identified intangible assets (multi-client library) by challenging management and considering potential revenue streams generated from the assets, including underlying market assumptions, approved budgets, and other factors which could affect forecasts; • Assessing the completeness of other assets and liabilities identified and the assessments of fair value prepared by management through inquiry and specific audit procedures over selected account balances such as accounts receivable, tax assets and liabilities and provisions; • Examining the rationale to support the allocation of goodwill to groups of cash generating units;

	• Evaluating the adequacy and appropriateness of the disclosures in the financial statements.

Revenue recognition

Refer to Note 1 General Accounting Policies, Note 4 Revenue from Contracts with Customers and Note 5 Segment Information

The key audit matter	*How the matter was addressed in our audit*
For the year ended 31 December 2019, the Group reported revenues of USD 586 million, of which USD 78 million pertained to pre-funding contracts, USD 67 million to late sales of unfinished data and USD 441 million to late sales of finished data and sales of proprietary data. For prefunding contracts and contracts for late sales of unfinished data, customers commit to purchasing licenses from TGS prior to the acquisition and processing of data or after commencement of a survey but prior to data being ready for delivery. Under IFRS 15, revenue from these contracts is recognised at a point in time upon delivery of the finished multi-client data license to the customer. The Group applies different revenue recognition principles in the Consolidated Statement of Comprehensive Income and the disclosed segment information for pre-funding contracts and contracts for late sales of unfinished data. In the disclosed segment information, revenue from these contracts is presented based on a percentage of completion model according to the progress of the multi-client survey. Revenue recognition for these contracts under IFRS 15 was considered to be a key audit matter due to the application of different revenue recognition principles in the income statement and in the disclosed segment information which adds complexity to the financial reporting process. Late sales of finished data and proprietary data are treated consistently under IFRS 15 and the segment information.	Our audit procedures in this area included: • Assessing the consistency in application of the Group's revenue recognition principles across the Group under IFRS 15 and under the segment reporting principles for purposes of the note disclosures; • Assessing the appropriateness of the timing of revenue recognition based on the deliveries of finished multi-client data based on testing of a sample of contracts pertaining to pre-funding and late sales of unfinished data; • Assessing and reconciling differences in revenue recognition in the Consolidated Statement of Comprehensive Income and in Note 5 Segment Information; • Evaluating the adequacy and appropriateness of the disclosures in the financial statements related to revenues from contracts with customers and segment information.

Impairment assessment of the multi-client library

Refer to Note 1 General Accounting Policies, Note 2 Estimates and Assumptions, Note 8 Intangible Assets and Note 9 Impairment Evaluation of Multi Client Library and Goodwill

The key audit matter	*How the matter was addressed in our audit*
As at 31 December 2019 the Group has reported a multi-client library balance of USD 1.1 billion. Management uses judgment in determining whether the carrying amount of the multi-client library exceeds the recoverable amount by making assumptions related to expected discounted future cash flows. There is significant inherent uncertainty in forecasting future sales of the multi-client library which is impacted by the overall exploration and production spending within the oil and gas industry, interest in specific regions, whether licenses to perform exploration in the various regions exist or will be awarded in the future and other factors. Changes in assumptions, together with the discount rate can significantly impact impairment assessments and conclusions. Due to the potential impact on the financial statements given the significance of the multi-client library balance and the judgment required when assessing future market conditions and the other key factors included in the forecasting of future sales, the assessment of the carrying amount of the multi-client library is considered to be a key audit matter. An impairment of USD 43 million was recorded in 2019.	Our audit procedures in this area included: • Evaluating management's overall impairment assessment process, documentation and controls including the assessment of impairment indicators, through inspection and testing of underlying documentation and inquiries with key management personnel and senior sales personnel across the group; • Evaluating, with assistance from our valuation specialists, the discount rates applied and the mathematical accuracy of the models used to assess the recoverable amount; • Performing retrospective reviews to assess the accuracy of management's estimates and assumptions; • Testing the sensitivity of movements in key assumptions for selected surveys within the multi-client library based on our risk assessment, and evaluating and challenging management on the forecasted cash flows, underlying market assumptions, approved budgets, and other factors which could affect forecasts; • Evaluating the adequacy and appropriateness of the disclosures in the financial statements.

Other information

Management is responsible for the other information. The other information comprises information in the annual report, except the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon, with the exception of our report on Other Legal and Regulatory Requirements below.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the 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 Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director (Management) are responsible for the preparation in accordance with law and regulations, including fair presentation of the financial statements of the Company in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, and for the preparation and fair presentation of the financial statements of the Group in accordance with International Financial Reporting Standards as adopted by the EU, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's and the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern. The financial statements of the Company use the going concern basis of accounting insofar as it is not likely that the enterprise will cease operations. The financial statements of the Group use the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

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

As part of an audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error. We 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 Company's or the Group's internal control.

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company and 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 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 Company and the Group to cease to continue as a going concern.

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

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

We communicate with the Board of Directors 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 Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

Opinion on the Board of Directors' report

Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Board of Directors' report and in the statements on Corporate Governance and Corporate Social Responsibility concerning the financial statements, the going concern assumption, and the proposal for the allocation of the profit is consistent with the financial statements and complies with the law and regulations.

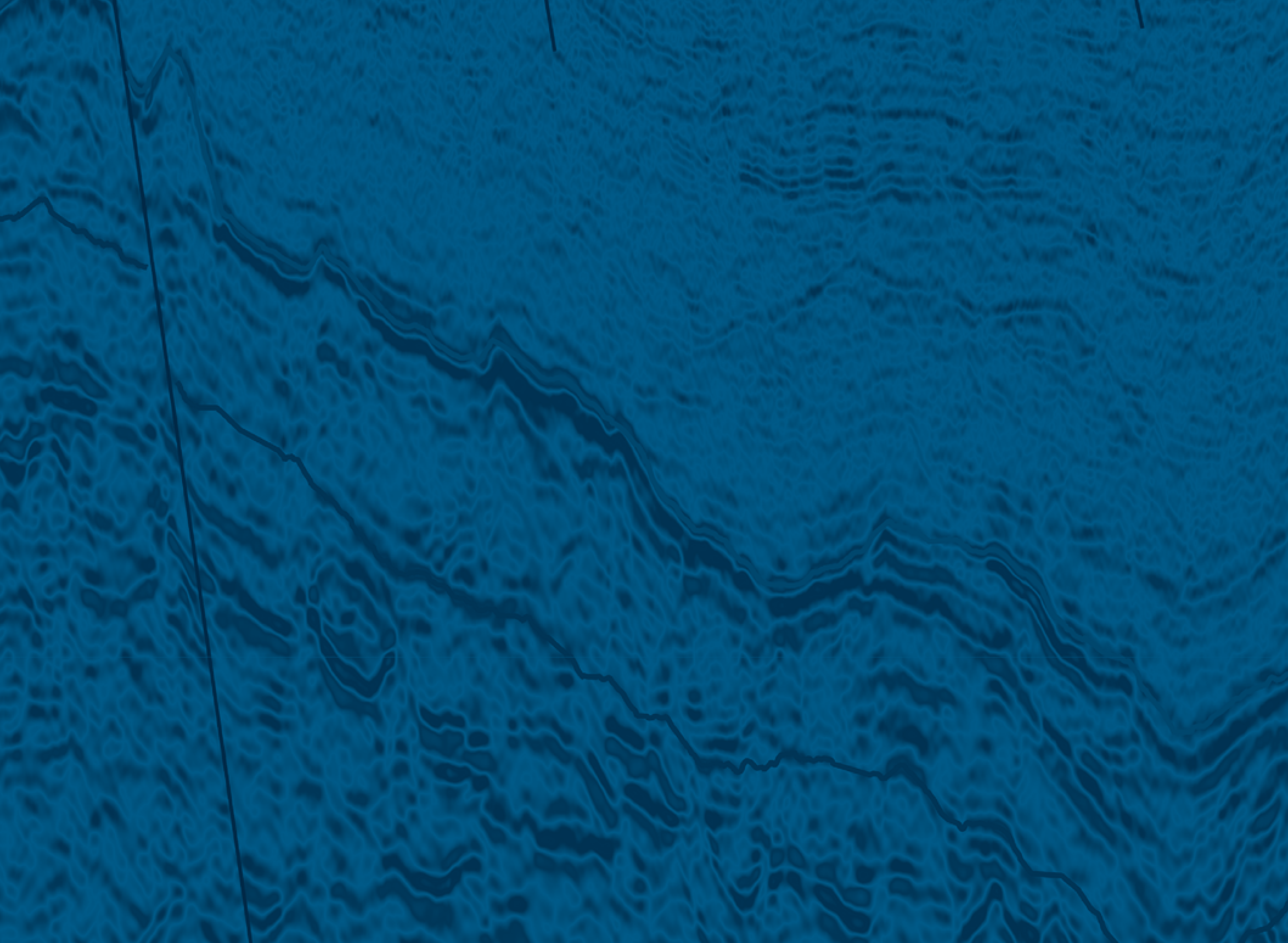
Opinion on Registration and Documentation

Based on our audit of the financial statements as described above, and control procedures we have considered necessary in accordance with the International Standard on Assurance Engagements *(ISAE) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, it is our opinion that management has fulfilled its duty to produce a proper and clearly set out registration and documentation of the Company's accounting information in accordance with the law and bookkeeping standards and practices generally accepted in Norway.

Oslo, 27 March 2020
KPMG AS

Julie Berg

Julie Berg
State Authorized Public Accountant



Corporate Governance

TGS actively promotes a culture designed to build confidence and trust among its stakeholders. Key elements of this culture include open and honest communication, a well-developed system of controls and policies and a compliance program.

Report on Corporate Governance

1. IMPLEMENTATION AND REPORTING ON CORPORATE GOVERNANCE

TGS-NOPEC Geophysical Company ASA (TGS or the Company) actively promotes a culture designed to build confidence and trust among its stakeholders. Key elements of this culture include open and honest communication, a well-developed system of controls and policies, and a compliance program.

It is the opinion of the Board of Directors that TGS complies with the Norwegian Code of Practice of Corporate Governance, dated 17 October 2018, found at www.nues.no. This Report on Corporate Governance details how TGS operates in accordance with each of the topics covered by the Code of Practice, including any deviations. Furthermore, in accordance with the Norwegian Accounting Act section 3-3b, an account of the principles and practices related to corporate governance is included in the Board of Directors' Report in this Annual Report.

The Company emphasizes independence and integrity in all matters between its Board of Directors, management and shareholders. These same principles of independence and integrity also apply in business relations with all interest groups, including customers, suppliers and other business partners

Code of Conduct

TGS' Statement of Values and a Code of Conduct, available on the TGS website at www.tgs.com, define the expectations of ethical behavior and fair business conduct that is expected of members of our Board and all employees. These documents form the foundation of TGS' compliance program, which is managed by a compliance officer appointed by the Board. TGS' compliance program continually informs and educates employees on ethical issues. Each employee of the Company must read and acknowledge our Code of Conduct, Statement of Values and Policy on Insider Trading on an annual basis and complete a related training course. In addition, all high-risk third parties, officers and key employees working for the Company must complete an annual anti-corruption compliance training and certification program.

It is important for the Company to be aware of potential problems as early as possible, and the Code of Conduct requires employees to report any known or suspected ethical irregularities. TGS has in place appropriate whistleblower procedures for individuals to report concerns of non-compliance, including a hotline that allows for anonymous reporting and assurances that no retaliation will be levied against employees who file reports or cooperate in investigations into misconduct. A more detailed description of our compliance program is also included in our Sustainability Report in the Annual Report and on the TGS website

Corporate Social Responsibility

TGS believes that sustainable business practices are fully compatible with successful business conduct. TGS' long-standing Statement of Values recognizes that the Company is responsible to a number of stakeholder groups, and describes the principles to which the Company adheres. A more detailed description of TGS' Corporate Social Responsibility Policy is included as a separate section in the Annual Report and on TGS' website: www.tgs.com.

2. BUSINESS

TGS provides global subsurface data products and services to the energy industry through investments in multi-client data projects in frontier, emerging and mature markets worldwide. Our extensive onshore and offshore libraries include seismic data, magnetic and gravity data, multi-beam and coring data, digital well logs and production data from deep water offshore to conventional and unconventional onshore plays worldwide. Additionally, TGS offers advanced processing and imaging services, interpretation products and data integration solutions.

The business objective of TGS is defined in the Company's Articles of Association, which state that the principal business of the Company is in the provision, procurement and sale of seismic and geophysical data. The Company's Articles of Association are published in the Investor Relations Section of the TGS website, and further information about TGS' operations may be found in the Board of Directors Report and the Annual Report for 2019, as well as the TGS website.

3. EQUITY AND DIVIDENDS

As of 31 December 2019, total equity amounted to USD 1,544.9 million (including a share capital of USD 4.1 million). This corresponds to an equity ratio of 71%, which the Board considers to be satisfactory. The adequacy of the Company's capital is monitored closely with respect to the Company's objectives, strategy and risk profile.

Because of the highly cyclical nature of the oil services industry, the Board of Directors remains convinced that the Company's unique business model, strong balance sheet and cash position are essential to its financial health, risk management and future growth. It is the ambition of TGS to pay a quarterly cash dividend in line with its long-term underlying cash flow. When deciding the quarterly dividend amount, the Board of Directors will consider factors such as expected cash flow, investment plans, financing requirements and a level of financial flexibility that is appropriate for the TGS business model. The aim is to keep a stable quarterly dividend in US dollars through the year, but the actual level paid will be subject to continuous evaluation of the underlying development of the Company and the market.

The ex-dividend date will normally be seven days after the announcement of the dividend in connection with the release of quarterly financial statements, with the payment date 14 days after the ex-dividend date. In addition to paying a cash dividend, TGS may also buy back its own shares as part of its plan to distribute capital to shareholders.

TGS has paid quarterly dividends since 2016, based on authorization from the General Meeting.

The Board of Directors is currently authorized to buy back up to 10% of the nominal value of the Company's share capital. In addition, the Board of Directors has authorization to increase the Company's share capital by up to 10%, currently NOK 2,566,194.75 for the purposes of potential acquisitions, organic growth and to strengthen the Company's balance sheet. The authorizations are valid until the 2020 AGM, but no later than 30 June 2020.

For further information on these shareholder authorizations, please refer to Note 13 of the Consolidated Financial Statements.

4. EQUAL TREATMENT OF SHAREHOLDERS AND TRANSACTIONS WITH RELATED PARTIES

The Company has only one class of shares. All shares have one vote each and otherwise equal rights in all respects.

TGS may, from time to time, buy back shares under authorizations given by the General Meeting. Such shares may inter alia be held in treasury or cancelled, used as transaction consideration or to settle employees' long-term incentive programs. The Company held 1,742,370 treasury shares on 31 December 2019.

During 2019, the Company increased its share capital by NOK 4,019,012 in connection with the merger transaction with Spectrum ASA, as approved by the Extraordinary General Meeting on 21 June 2019. For further information, refer to Notes 3 and 13 of the Consolidated Financial Statements. In addition to shares issued in connection with the merger transaction and the Company's long-term incentive programs, the Board may, from time to time, issue new shares under authorizations given by the General Meeting. For such issuances, the Board may depart from the pre-emptive right of existing shareholders, if justified by the interest of the Company and the shareholders. A justification will be publicly disclosed should the Board choose to authorize a waiver of its pre-emptive rights in connection with a share issue.

Any transaction with close associates is required to be conducted on market terms. Information about transactions with related parties is also disclosed in Note 15 of the Consolidated Financial Statements. The Board has implemented guidelines to ensure that employees inform their manager and/or the Board if they have a material interest, directly or indirectly, in any agreement entered into by the Company.

5. FREELY NEGOTIABLE SHARES

All TGS shares carry equal rights and are freely transferable. No special limitations on transactions are described in TGS' Articles of Association.

6. GENERAL MEETINGS

The General Meeting is the Company's ultimate corporate body. The Board of Directors, the Nomination Committee and the Chief Executive Officer are typically present at the Annual General Meeting, as well as the Company's auditor. Given the extraordinary situation caused by the Covid-19 pandemic, and in light of travel and meeting restrictions currently in place and that may remain at the time of the 2020 AGM, the Company may make appropriate adjustments to its normal AGM process for 2020. The minutes from the General Meeting are made available on the Company's website shortly after the date of the General Meeting and are also available for inspection at the Company's corporate offices in Norway.

The 2020 AGM will be held on 12 May. The notices for the AGM and any Extraordinary General Meeting and all supporting documentation are made available on the Company's website no later than three weeks in advance of the meeting. The notice is also mailed (post or email) to registered shareholders.

In accordance with the Company's Articles of Association, the deadline for shareholders to notify the Company of their intention to attend the General Meeting is no later than three days before the day of the meeting.

Each General Meeting appoints a chairperson for the meeting. The Board seeks to facilitate the appointment of an independent chairperson.

The General Meeting is open to all shareholders, and any shareholder not in attendance may appoint a proxy to vote on its behalf. Proxy forms are made available together with the notice and allow for separate voting instructions to be given for each matter to be considered. Shareholders are currently not allowed to participate in the

General Meeting through the internet. The Board of Directors may also resolve that the shareholders, within a limited time period prior to the General Meeting, deliver their votes in writing and delivery shall include the use of electronic means. The right to vote in writing prior to the General Meeting is conditional upon the existence of an adequately secure method to authenticate the sender and will be subject to guidelines specified by the Board. The notice to the General Meeting will provide information about whether the shareholders may vote in advance in writing and about the guidelines that apply to such voting.

In accordance with the Norwegian Public Limited Liability Companies Act, the AGM is required to approve the annual financial statements, the Board of Directors' report and the distribution of dividends. The AGM should also deal with the Board of Directors' declaration relevant to the guidelines for determination of compensation to executive personnel. An advisory vote shall be held at the AGM, following the Board of Directors' guidelines, for the determination of salary and other remuneration to senior managers. The AGM shall also deal with the Corporate Governance Report. Shareholders are also given the opportunity to vote separately for each candidate nominated for election to the Board.

The last AGM was on 8 May 2019, the minutes from which are available on the Company's website.

Any other matters to be dealt with at a General Meeting will follow from the notice.

7. NOMINATION COMMITTEE

The Nomination Committee is responsible for the nomination of directors to the Board and the recommended remuneration payable to the directors. The AGM stipulates guidelines for the duties of the Nomination Committee.

The Nomination Committee consists of a Chairperson and two members elected by and amongst the shareholders who also determine the Nomination Committee's own remuneration. The members serve for a period of two years. The Board of Directors intends to propose to the 2020 AGM that the size of the Nomination Committee be increased to up to four members, consisting of a Chairperson and up to three members.

The Company posts an invitation to shareholders on the TGS website prior to the AGM every year to propose to the committee candidates as directors and members of the Nomination Committee.

As part of its work, the Nomination Committee meets at least annually with the Board of Directors and members of the Executive Management. The committee also consults selected shareholders to ensure that its recommendations have their support. In accordance with Section 6 above, the Nomination Committee's recommendations and report are made available in accordance with the 21-day deadline for the notice calling a General Meeting.

8. BOARD OF DIRECTORS: COMPOSITION AND INDEPENDENCE

The Board of Directors currently consists of eight members, all of whom are deemed independent of TGS' management, major shareholders and counterparties.

The members of the Board of Directors are proposed by the Nomination Committee and elected by the AGM for a term of one year. The Chairman of the Board is also elected by the AGM.

The members of the Board balance experience from the geoscience industry and the general oil and gas industry, with broader industrial, financial and management experience.

Information on shares in TGS held by members of the Board can be found in Note 10 of the Consolidated Financial Statements. A biography of each board member can be found in the Annual Report and on the TGS website.

9. THE WORK OF THE BOARD OF DIRECTORS

The Board of Directors is responsible for the overall management and supervision of the Company. The Board is responsible for establishing control systems and ensuring that TGS operates in compliance with laws and regulations and TGS' Statement of Values and Code of Conduct. The Board emphasizes the safeguarding of the interests of all shareholders, as well as the interests of TGS' other stakeholders.

The Board prepares an annual plan for its work, emphasizing goals, strategies, company performance and execution.

The Board operates under specific rules of procedure, which define the duties, tasks and responsibilities of the Board of Directors and individual members of the Board. The Board also states guidelines for the CEO's work and duties of oversight by the Board of Directors.

The Board of Directors carries out an annual evaluation of its own performance, working arrangements and competence. The assessment is made available to the Nomination Committee. The Board also carries out an annual evaluation of the CEO's performance.

The Board conducted a total of ten meetings in 2019. Former board member Elisabeth Grieg was unable to attend three meetings, and Wenche Agerup and Irene Egset were each unable to attend one of the meetings. All other directors attended all meetings.

Board Committees

The following committees have been established by the Board to monitor and guide certain activities. Each committee operates under a defined charter that may be viewed at: https://www.tgs.com/investor-center/corporate-governance.

Audit Committee

The Audit Committee is appointed by the Board, and its primary responsibility is to supervise the Company's internal controls over financial reporting and to ensure that the Company's external auditor is independent. Further, the responsibility of the committee is to ensure that the annual accounts provide a fair and accurate picture of the financial results and financial condition of the Company in accordance with generally accepted accounting practices. The Audit Committee receives reports on the work of the external auditor and the results of the audit. With effect from the 2019 AGM, the members of the Audit Committee are:

- Tor Magne Lønnum, Chairman
- Vicki Messer
- Irene Egset

The Audit Committee conducted a total of six meetings in 2019, and all members (including former members) attended all meetings during the period of time they served on the Board.

Compensation Committee

The Compensation Committee reviews the compensation practices of TGS and its peer group and makes proposals to the Board on the employment terms and conditions and total remuneration of the CEO and other executive personnel. These proposals are also relevant for other employees.

The members of the Compensation Committee with effect from the 2019 AGM are:

- Mark Leonard, Chairman
- Wenche Agerup
- Chris Finlayson
- Torstein Sanness

The Compensation Committee conducted a total of six meetings in 2019. Former member of the committee, Elisabeth Grieg, was unable to attend one of the meetings. All other members (including former members) attended all meetings during the period of time they served on the Board.

10. RISK MANAGEMENT AND INTERNAL CONTROL

The Board of Directors monitors TGS' risk exposure and the Company continually strives to maintain and improve its internal control processes.

The Executive Management carries out an annual risk evaluation process to assess total enterprise risk in the Company. Through risk workshops involving key TGS employees, the Executive Management identifies strategic and operational risk factors and prioritizes these risks based upon their likelihood of occurrence, significance of impact, year-over-year trends, and current mitigation factors. Action plans are developed to manage those significant risk factors where further action may be needed, and quarterly and annual updates are provided to the Board of Directors. The key risk factors and related action plans are part of the Board's annual presentation on risk management and internal control by the CEO and CFO. The Board also considers the need for any further measures in relation to the risk factors identified.

The Company's Audit Committee oversees the routines related to financial risk management, financial reporting and related internal controls. The Audit Committee receives regular reports from management regarding the assessment of the internal control environment pertaining to financial reporting and proposed changes and improvements. The Company is continuously assessing the adequacy of the internal control systems in place, and this is an area of focus in particular following the recent merger in order to adapt to the increase in size and complexity of the group, including the formalization of the internal control framework over financial reporting and structured monitoring activities over the effectiveness of key controls.

TGS has a separate legal department, managed by the corporate General Counsel who reports to the CEO. Procedures and guidelines are in place to ensure that the legal department is involved in matters that could represent a material legal risk for the Company, including entering into material agreements and managing claims, disputes and litigation. The Company has standard policies for contract terms and conditions.

TGS is committed to fair business conduct and compliance with all legal and ethical requirements and standards of the geoscientific industry and the communities in which TGS employees live and work. TGS considers its values, culture and environment a key element in its continued success as a company.

11. REMUNERATION OF BOARD OF DIRECTORS

The remuneration to the Board of Directors is designed to attract and retain an optimal Board structure in a competitive environment. The directors' compensation is recommended by the Nomination Committee and determined by the shareholders at the AGM each year.

In recent years, the directors' compensation has comprised both a fixed fee and a number of restricted TGS shares. The remuneration is not related to the Company's financial result. Note 10 of the Consolidated Financial Statements details the directors' remuneration for 2019. TGS believes the remuneration reflects the Board's responsibility, expertise, time commitment and the complexity of the Company's activities.

No member of the Board has taken on specific assignments for the Company in addition to his/her appointment as a member of the Board or committees of the Board.

12. REMUNERATION OF EXECUTIVE PERSONNEL

TGS has prepared a Declaration on Executive Remuneration that is released alongside the Annual Report and is available for download at the TGS website.

Pursuant to the Norwegian Public Limited Liability Companies Act, section 6-16 a (2), the Board will present the Declaration on Executive Remuneration to the 2019 AGM.

The Declaration describes:

- TGS' Executive Remuneration Policy Statement
- 2020 executive remuneration, including proposals and implementation
- 2019 remuneration results and assessment

The Compensation Committee of the Board is responsible for reviewing executive remuneration and making recommendations to the Board.

The CEO proposes the compensation packages (excluding his own) for all executives for Compensation Committee review and Board approval. The CEO's proposal will be based on performance assessed against pre-defined goals.

The Compensation Committee proposes the CEO's compensation package to the Board for final review and approval. This includes the CEO's target bonus, which is specifically set by the Board.

13. INFORMATION AND COMMUNICATIONS

TGS' investor relations (IR) policy is designed to inform the stock market and stakeholders of the Company's activities and status in a timely and accurate manner in compliance with applicable listing rules. The Company submits quarterly and annual financial reports to the Oslo Stock Exchange. In addition, any interim information of significance for assessing the Company's value is distributed as stock exchange announcements through InPublic – Nasdaq OMX, a commercial publisher of financial information. This information is also available on the Company's website.

The Company uses the Code of Practice for reporting of IR information issued by Oslo Stock Exchange and the Norwegian Investor Relations Association (NIRA) as a guideline for IR reporting. Announcements are published in English only and the Company has been granted exemption from the Norwegian Tax Authority to publish its Annual Report in English only.

The Company's quarterly earnings presentations are recorded and made available as webcasts or slide presentations in real-time. The Company also makes presentations and conducts roadshows throughout the year to inform existing and potential investors about TGS.

The financial calendar setting out the dates for the coming year's interim reports and General Meetings for shareholders is posted on the TGS website.

14. TAKEOVERS

The Board of Directors has established guiding principles for how it will act in the event that a takeover bid is received.

During the course of a takeover process, the Board of Directors and management of both the party making the offer and the target company are responsible for ensuring that shareholders in the target company are treated equally and that the target company's business activities are not disrupted unnecessarily. The Board is particularly responsible for ensuring that shareholders are given both sufficient information and time to assess the offer.

The Board of Directors will not hinder or obstruct takeover bids for the Company's activities or shares.

In the event of a takeover bid for the Company's shares, the Board of Directors will not exercise mandates or pass any resolutions with the intention of obstructing the takeover bid unless this is approved by the General Meeting following announcement of the bid.

Any agreement with the bidder that limits the Company's ability to arrange other bids for TGS shares will only be entered into where such agreement is considered to be in the common interest of TGS and its shareholders. This also applies to any agreement for the payment of financial compensation to the bidder if the bid does not proceed.

If an offer is made for TGS' shares, the Board of Directors will issue a statement evaluating the offer and, where appropriate, make a recommendation as to whether shareholders should accept the offer. The Board's statement will set out whether the views expressed are unanimous. The Board may arrange for a valuation of TGS from an independent expert, the conclusion of which will be made public no later than at the time of the public disclosure of the Board's statement. This will also apply if the bidder is a major shareholder, a member of the Board or Executive Management, close associates of such individuals, or anyone who has recently held such a position. Any such valuation will be either appended to the Board's statement, be reproduced in the statement or be referred to in the statement.

Any transaction that is in effect a disposal of the Company's total activities shall be decided by a General Meeting.

15. AUDITOR

The Board of Directors has determined the procedure for the external auditor's regular reporting to the Board. The auditor attends at least one meeting each year with the Audit Committee of the Board and the Board of Directors in executive session where the Company's management is not represented. In addition, the auditor participates at meetings of the Board relating to the preliminary annual financial statements. If there are any significant changes from the preliminary accounts, the auditor will also participate in the meeting that approves the annual financial statements. The audit engagement partner is also present in all Audit Committee meetings, and in 2019, the auditor participated in all Audit Committee meetings.

The Company's external auditor presents to the Audit Committee the primary features of the plan for the execution of the audit and reports on the key accounting principles and estimates and the results of the audit to the Audit Committee and the Board of Directors. The auditor also presents any internal control weaknesses and improvement opportunities to the Audit Committee and the Board.

TGS has established guidelines for use of the external auditor for services other than auditing. The Audit Committee receives an annual summary from the external auditor of services other than auditing that have been provided to TGS. The auditor also presents any threats to his/her independence and documents measures implemented to reduce these, as required by the Audit and Auditors Act Section 5a-3 3. The external auditor provides the Audit Committee with an annual written confirmation of independence. The Board of Directors reports the remuneration paid to the auditor at the AGM, including details of the fee paid for audit work and any fees paid for other assignments.

The auditor's fee is determined at the AGM. Refer to Note 10 of the Consolidated Financial Statements for auditor's compensation for 2019.

The auditor is required to attend a General Meeting if the business to be transacted is of such a nature that his or her attendance must be considered necessary. In addition, the auditor is, in any case, entitled to participate in the General Meeting.

Investor Relations

TGS has a proven track record of generating healthy free cash flow through both up and down cycles in our industry. As a result, TGS has been one of a few oil services companies worldwide that has kept up dividends through the severe cyclical downturn experienced over the past few years.

Investor Relations

TGS Shareholder Facts

Symbol: TGS

Listing: Oslo Stock Exchange (member of the OBX index)

ADR: TGSGY (traded on the U.S. over-the-counter market)

Analyst coverage: 16 firms, for list, see www.tgs.com/investor-center/investor-relations/shareholder-information/analyst-coverage-tgs

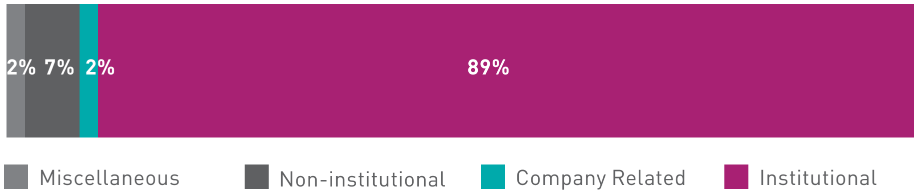
Average daily trading volume in 2019: 414,541 shares

Shareholder Facts	2019	2018	2017	2016	2015
Market Value at 31 December (USD 1000s)	**3,617,189**	2,466,807	2,421,840	2,271,400	1,637,076
Shareholder Equity at 31 December (USD 1000s)*	**1,625,595**	1,265,465	1,200,102	1,169,124	1,198,088
Shares Outstanding 31 December	**118,906,778**	102,647,790	102,345,890	102,135,990	102,135,990
of which Treasury Shares 31 December	**1,742,100**	104,630	116,180	533,500	673,600
Volume Traded on the OSE	**103,220,804**	112,023,226	95,527,192	119,425,966	146,884,972
Average Daily Trading volume	**414,541**	449,892	380,586	472,039	585,199
Share Price at 31 December (NOK)	**267.10**	208.80	194.2	191.7	141.40
Share Price High (NOK at close)	**281.60**	350.10	208.5	193.8	201.70
Share Price Low (NOK at close)	**194.64**	184.95	157.7	107.0	136.20
Earnings per Share (Fully Diluted)*	**1.57**	1.33	0.73	0.28	(0.28)
Dividend per Share (paid in year)	**USD 1.08**	USD 0.80	USD 0.60	USD 0.60	NOK 8.5
Yield (% closing price at day of announcement)	**3.9%**	2.6%	2.8%	3.7%	5.2%
Market Price/Earnings per Share (P/E)*	**18.53**	17.93	32.04	82.14	(57.75)
Market Price/Equity per Share (P/B)	**2.31**	1.95	2.02	1.94	1.37
Enterprise Value/Operating profit (EV/EBIT)*	**16.76**	12.77	22.29	39.23	(69.45)

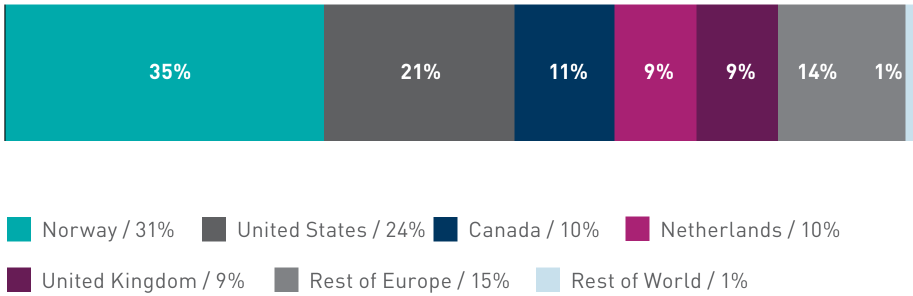
* Segment reporting for 2019

Distribution of Share Holdings*

TGS Shareholder Composition



TGS Institutional Shareholder Composition



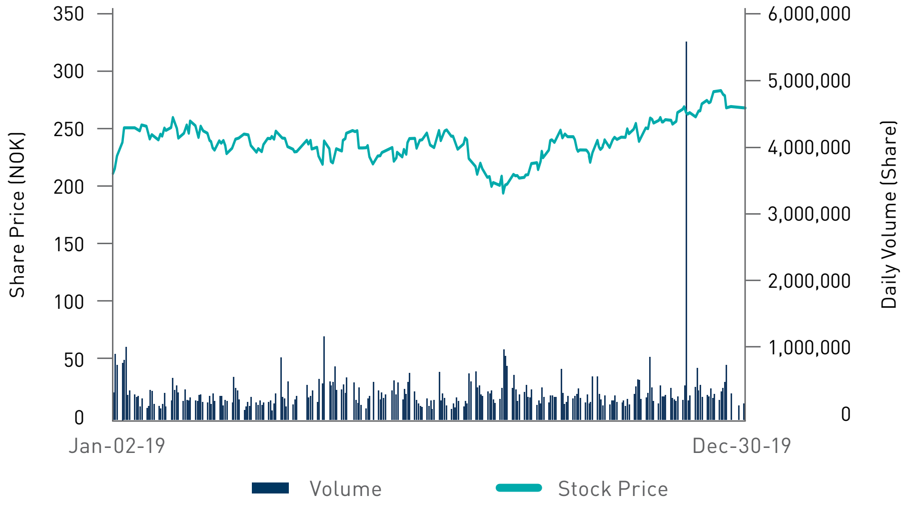
*Based on location of beneficial owners at 31/12/2019.
Source: Nasdaq Advisory Services.

Stock Performance and Total Return to Shareholders

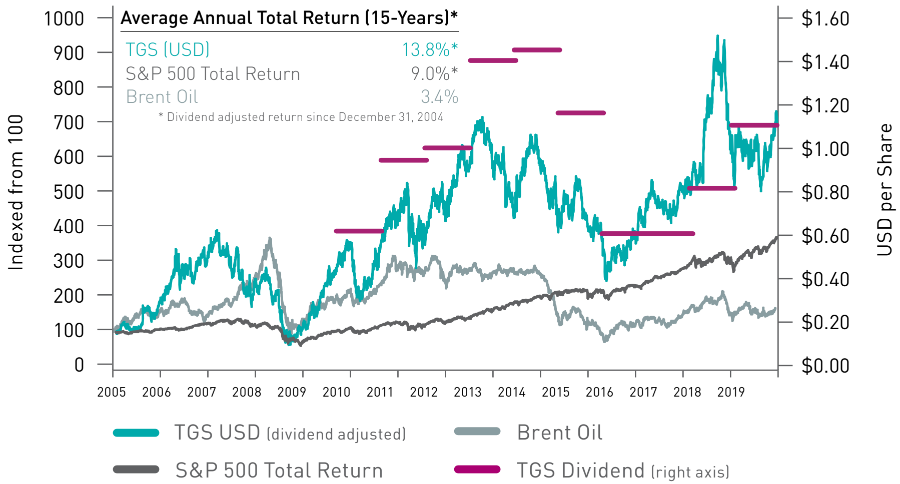
TGS is listed on the Oslo Stock Exchange and also has an American Depository Receipt (ADR) facility managed by The Bank of New York Mellon. TGS is part of the OBX index, being among the 25 most liquid stocks in Norway.

During 2019, the TGS share price increased by 28%, closing at NOK267.1 (30 December 2019).

TGS Share Price and Volume



TGS Share 15 Year Total Return vs. Benchmarks

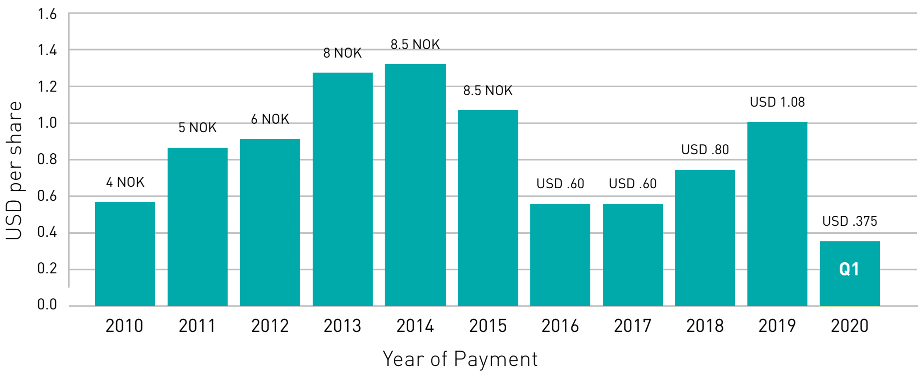


The total return from TGS stock has proven very attractive over the long term. The Total Return chart above shows total return from TGS stock over a 15-year period with share price adjusted for dividend distributions. The average annual total return during this period is 13.8% which is significantly above the total return from the S&P 500 (+9.0%) and Brent oil (+3.4%).

Capital Distribution to Shareholders

TGS is constantly evaluating the best use of its cash flow from operations for continued shareholder growth. The Company uses cash for organic investments in its multi-client library, historically providing healthy returns. In addition, the Company from time to time uses cash for inorganic investment opportunities. This can include the acquisition of third-party libraries or complementary businesses that adds value to the TGS offering.

Dividend Paid* (2010-2020)

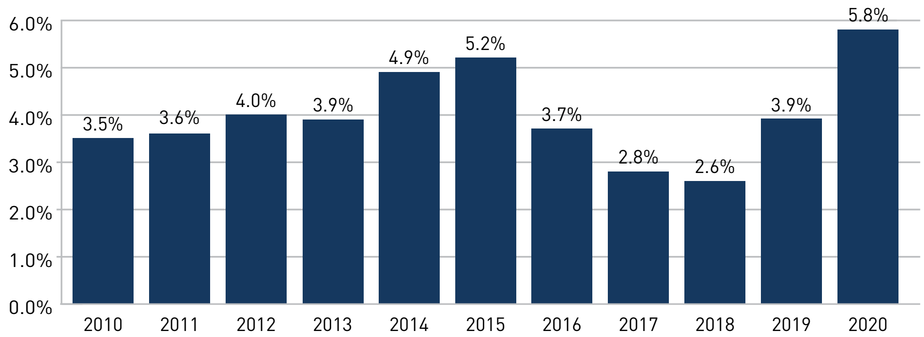


*Quarterly dividends defined in USD from 2016. Historical NOK dividends converted to USD using FX rate on ex-dividend date

It is the ambition of TGS to pay a cash dividend that is in line with its long-term underlying cash flow. When deciding the dividend amount, the TGS Board of Directors will consider expected cash flow, investment plans, financing requirements and a level of financial flexibility that is appropriate for the TGS business model.

In addition to paying a cash dividend, TGS may also buy back its own shares as part of its plan to distribute capital to shareholders. During 2019, TGS bought back 1,647,370 shares in the market as part of the program approved at the Annual General Meeting in May 2019.

Dividend Yield (2010-2019)



*2016– 2020 Dividend Yield annualized based on the weighted yield at the time of announcement of quarterly dividends

From 2016, TGS started paying quarterly dividends in accordance with the resolution made by the Annual General Meeting on 6 May 2015 and renewed on 9 May 2017. The aim is to keep a stable quarterly dividend through the year, but the actual level paid will be subject to continuous evaluation of the underlying development of the Company and the market.

The ex-dividend date will normally be seven days after the announcement of the dividend in connection with the release of the quarterly financial statements, with the payment date 14 days after the ex-dividend date.

In 2019, TGS paid quarterly dividends of USD 0.27 per share, amounting to USD 1.08 per share (NOK 9.3 per share) for the year, and repurchased 1,647,370 shares at an average price of NOK 234.73 per share.

On 11 February 2020 the TGS Board of Directors resolved to increase the quarterly dividend by 39% to USD 0.375 per. The share traded ex-dividend on 19 February 2020 and the dividend was paid on 4 March 2020.

Investor Relations at TGS

TGS places great emphasis on providing accurate and timely information to the market and shareholders. The earnings reports and press releases are issued only in English to ensure simultaneous and consistent information to all shareholders.

The full-year financial reporting calendar is published and posted on the TGS website. This calendar is updated annually following the second quarter earnings release. Each quarter TGS pre-announces the quarterly revenues no later than the sixth trading day after quarter close, at the Oslo Stock Exchange.

The full quarterly financial statements are typically released 4–6 weeks after quarter close and at the same day the results are presented and webcast live in Oslo, Norway. There is a –and-answer session following each presentation where the CEO and CFO respond to both live questions and questions asked through the webcast. All presentation material, including the question-and-answer sessions, are published on the TGS website in near real-time.

In addition to the quarterly and annual financial reports, TGS also provides interim information of significance through press releases to aid in the assessment of the Company's value. TGS management maintains a quiet period on discussing significant business during intervals spanning the last weeks of a financial quarter and up to the pre-announcement of revenues for that financial period.

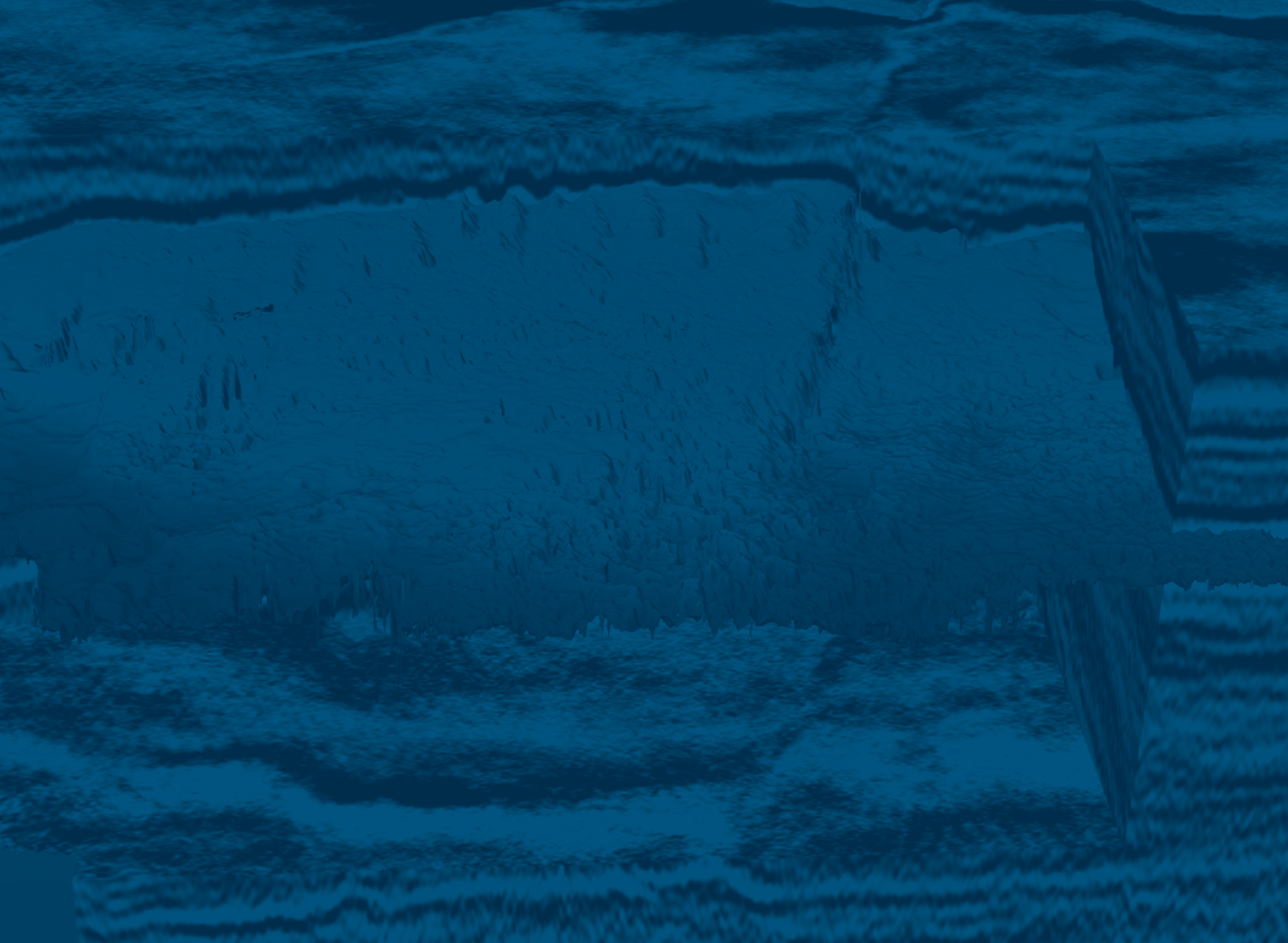
The general shareholders meetings for TGS are held in Oslo, Norway. All shareholders are invited to attend. Shareholders who wish to attend shareholder meetings must notify the Company of their attendance, at the latest, three business days before the day of the meeting. Shareholders who have not given notice of attendance can be denied the right to meet and vote at shareholder meetings. Documents concerning matters to be considered at the general shareholder meetings are made available on the Company's website prior to the event. To vote at an annual or extraordinary general meeting, a shareholder must be registered as a holder of title to the shares to be voted in the share register maintained at the Norwegian Central Securities Depository (VPS) in due time before the shareholders meeting.

TGS Executive Management is available for direct contact with investors, potential investors and analysts on an ongoing basis and regularly participates in road shows and investor conferences in both Europe and North America. Historical financial reports can be found on the TGS website at www.tgs.com/presentations/tag/earning-releases.

For more information regarding TGS, contact CFO Fredrik Amundsen or EVP Sven B. Larsen.

Fredrik Amundsen
CFO / Asker, Norway

Sven B. Larsen
EVP / Strategy & M&A



Sustainability Report

"TGS is responsible to our customers, our employees, the communities in which we live and work, to the world community and to our shareholders. Living the TGS Values every day, in everything that we do, helps us to meet or exceed the expectations of our stakeholders both today and in the future, and is critical to delivering sustainable growth over the long term."

– Hank Hamilton, Chairman

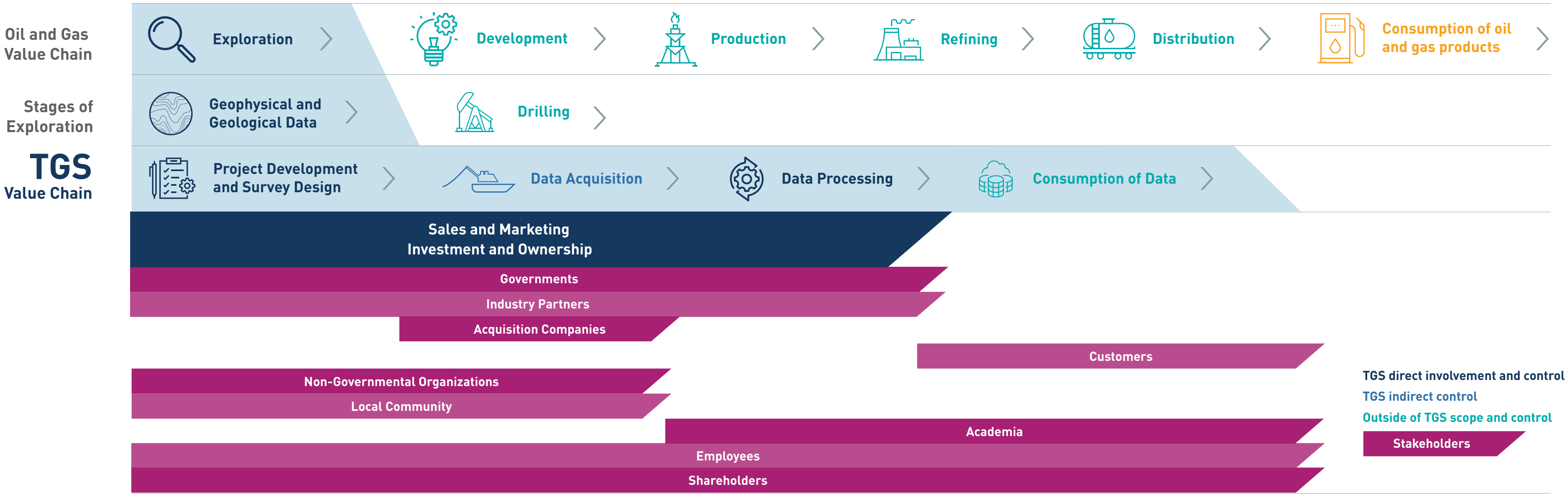
Sustainability Report

1. COMMITMENT TO SUSTAINABILITY

1.1 What TGS Believes

TGS believes that conducting our operations in a sustainable manner is not only essential to our success, but also to the prosperity of our customers, shareholders and the communities in which we live and work. Energy starts with us, and to be the leading energy information company with the best people, quality and service means our geoscientific data and solutions, including the multi-client model and data reprocessing, must help our customers be more sustainable when exploring energy opportunities. We must continue to take particular care to minimize and mitigate the impact our activities have on the marine and land environments and communities around them. TGS must continue to prioritize safety, ethics and human rights in our onshore and offshore projects. Finally, TGS must continue to give back to the communities in which we operate by providing educational opportunities and sharing geoscience and technological developments.

This sustainability report communicates to our investors, customers, suppliers and other stakeholders how TGS incorporates sustainable practices into our operations and strategy. It is the opinion of the Board of Directors that this report complies with Norwegian Accounting Act section 3-3c, and we view this report to be our Communication on Progress to the United Nations (UN). We have used recommendations from the Task Force on Climate-related Financial Disclosures. On August 14, 2019, TGS finalized its acquisition of Spectrum Geophysical and this report incorporates its relevant sustainability data from August 15, 2019 to December 31, 2019, in the calculations.



2019 Sustainability Highlights

- Zero lost-time injuries, medical treatment cases or restricted work cases in the office environment in 2019
- Decrease in the recordable case frequency for contractors between 2018 and 2019, despite logging over 2 million additional manhours
- Zero recordable spills or unplanned releases to the marine environment, and zero reportable spills to the land environments during seismic operations
- Zero human rights or modern slavery cases
- Upgraded TGS' Compliance Hotline to include web-intake form and add numbers for all countries where TGS employees reside

1.2 Stakeholder Engagement

1.2.1 Materiality

TGS impacts its surroundings both directly and indirectly through stakeholders, customers, vendors and partners. Understanding our role, and the role of our stakeholders in the value chain, helps TGS prioritize the sustainability topics that are significant to us and our stakeholders in 2019.

As part of our ordinary business practice, TGS engages with various stakeholders so that we clearly understand their priorities and the impact our business activities have upon them. In addition to the governments, customers and suppliers noted above, other key stakeholder groups include our employees, shareholders and the communities in which we operate, including non-governmental organizations and academia.

When ascertaining the impact of our activities on our stakeholders, we considered global sustainability issues, relevant reporting standards, feedback and dialogue from investors, media analysis, conversations with our customers and our participation in the International Association of Geophysical Contractors (IAGC). In addition, we engaged with our employees through global quarterly meetings, conducting TGS' annual risk assessment, and planning regular strategy sessions, which also assisted in our materiality determination include.

This chart helps TGS understand and prioritize the sustainability issues by identifying where there are strong synergies between TGS and stakeholders on certain issues, such as impact to marine and land environment, and which issues have a stronger impact to TGS, such as a safe and healthy working environment. In addition, there are some sustainability issues where TGS recognizes that its impact to TGS and ability to control is already fairly well mitigated and managed, such as office emissions.

1.2.2 TGS' Commitment to the UN Global Compact and Sustainable Development Goals

TGS remains committed to the UN Global Compact, its universal sustainability principles, and the Sustainable Development Goals (SDGs). TGS remains dedicated to incorporating the Global Compact's principles on human rights, labor, environment and anti-corruption into our strategy, culture, and operations. In addition, TGS has identified the following SDGs as being aligned with our business practices and key areas for TGS to prioritize and contribute.

SUSTAINABLE DEVELOPMENT GOALS

un.org/sustainabledevelopment	TGS Priorities	2019 Actions
8	• Safe & Healthy Office and Project Environments (3.2) • Respecting Human Rights (3.3) • Diversity & Equality in the Workforce (3.1)	• Zero lost -time injuries, medical treatment cases or restricted work cases in the office environment in 2019 • Despite logging over 2 million more man-hours, there was a decrease in the recordable case frequency for contractors between 2018 and 2019 • All employees trained on (i) anti-harassment and discrimination and (ii) diversity and inclusion in the workplace
9	• Community Engagement (4.1) • Training & Development (3.1) • Knowledge-sharing (4.2)	• Employees participated in over 1,854 hours of in-house geological and imaging courses and lunch-and-learn sessions • Capitalized research & development spending corresponded to approximately 4.4% of the operating result and 1% of net revenues • 103 weeks of training provided to governments as part of projects in Africa • Participation in 23 academia and industry consortia to share technological developments and learnings
13	• Sustainable Business Model (2.2) • Office & Project Emissions (2.3) • Mitigate Environmental Impact in Land Operations (2.5)	• Multi-client business model reduces the demand for multiple operations sourcing the same geoscience data in an area, thus reducing emissions and mitigating environmental impact • Scope 1 emissions: .02 ktonnes CO_2, .07 kg CH_4, and .25 kg N_2O • Scope 2 emissions: 29,774,317 kwh and 21 ktonnes CO_2 • Average emissions on 2D marine surveys: .5mt CO_2, 3g CH_4, and 22g N_2O per km • Average emissions on 3D marine surveys: 2.66mt CO_2, 16.55g CH_4, and 1118.73g N_2O per km^2 • Average emissions on marine node surveys: 14.93mt CO_2, 87.76g CH_4, and 658.17g N_2O per km^2 • Average emissions on multibeam marine surveys: .03mt CO_2, .15g CH_4, and 1g N_2O per km^2 • Average emissions on 3D land surveys: 1.97mt CO_2, 92.24g CH_4, and 45g N_2O mt per km^2
14	• Mitigate Environmental Impact in Marine Operations (2.4)	• Zero recordable spills or unplanned releases to the marine environment, and zero reportable spills to the land environments during seismic operations • Committed to the IAGC's Ghost Net Initiative (marine seismic industry-wide effort to collect lost fishing lines and nets entangled in sea equipment) • TGS commissions environmental impact assessments (EIAs) to understand potential impacts to the environment in which we operate • TGS employs protected species observers (PSOs) and utilizes passive acoustic monitoring (PAM) in our operations to ensure we do not have a detrimental effect on the marine environment
17	• Business Ethics & Anti-corruption (1.3) • Sustainable Business Model (2.2) • Industry Contributions (2.6)	• Supporting initiatives to promote transparency and anti-corruption, e.g., UN Global Compact • Participation in the IAGC to promote safe, environmentally sound, and sustainable practices in our indusProvide e-learning to key suppliers and third parties on anti-corruption • Provide e-learning to key suppliers and third parties on anti-corruption

1.2.3 Integrating Sustainability into TGS

TGS' Board of Directors regularly review and monitor sustainability issues, including those related to business risks and opportunities, as well as investment decisions. In 2019, health and safety in both the workforce and our operations, cyber security, anti-corruption and business transparency, environmentally responsible offshore and onshore operations, and other climate-related risks were discussed extensively at board meetings. At the end of 2019, TGS' Board of Directors approved a 2020 sustainability strategy targeting carbon emissions, sustainability in the supply chain and gender diversity which will be implemented by the relevant departments. In addition, as set forth in our Declaration on Remunerations, TGS' long-term incentive plan (LTIP) for management includes sustainability and HSE goals.

Corporate level functions responsible for sustainability related issues include TGS' leadership, compliance, health, safety and environment (HSE), operations, and human resources. In addition to implementing TGS' 2020 sustainability strategy, each of these departments are responsible for setting goals and strategies, and reporting on the risk and performance of each, to TGS' executive and senior leadership teams and Board of Directors.

We believe that geoscience data, analytics and imaging processes will be useful for solving energy transition challenges, and TGS continues to look for opportunities for utilizing our core skills outside of traditional oil and gas exploration. For example, TGS leveraged our world-class basin evaluation expertise, subsurface data library, and geological knowledge in British Columbia and created a framework for carbon storage assessment with its Geological Carbon Storage Atlas for British Colombia, Canada. TGS' environmental, social and governance committee (ESG Committee) works directly with the CEO and heads of compliance and HSE to identify these types and other opportunities for TGS to diversify into other sustainable industries. The ESG Committee presents its findings to TGS' executive and senior leadership teams and the Board of Directors, who review those plans with promise for continued development, and potential implementation by the appropriate business group.

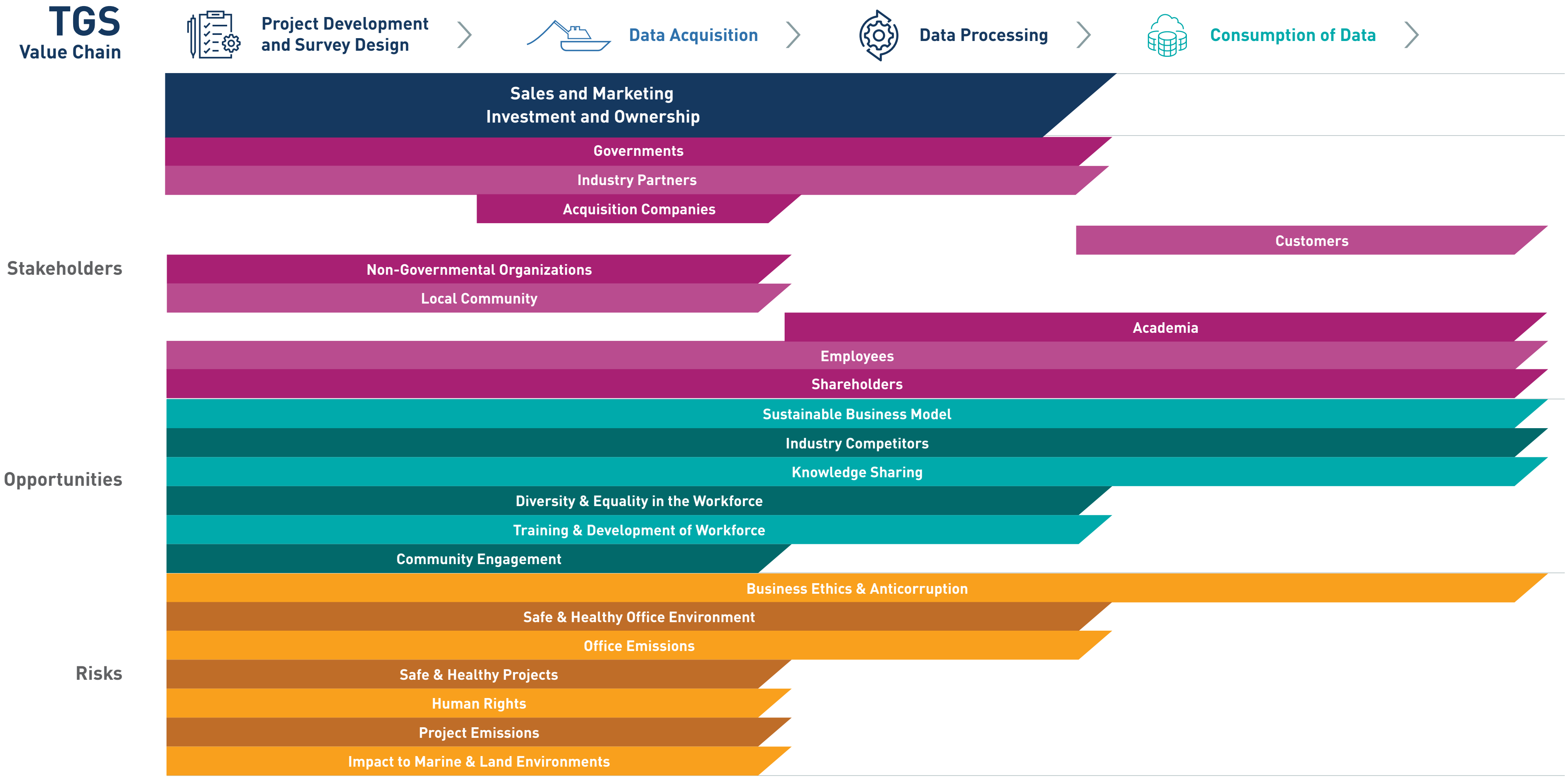
1.2.4 Managing Sustainability Risks and Opportunities in TGS' Value Chain

TGS evaluates sustainability risks as part of its annual enterprise risk management process, which is implemented by the Compliance Officer and overseen by the Board of Directors and CEO. This process includes feedback from key employees across the organization and offices to identify, evaluate and prioritize the risks TGS faces.

The standardized framework of the risk management process allows for year-over-year comparison of results to identify and understand risk trends. Through this process, we determine where further action may be needed if a risk's materiality, impact or probability of occurring increases (i.e., cybersecurity), and where our risk management efforts have been effective resulting in decreased materiality, impact or probability scores.

To address those risks that have been identified through this process, and embed sustainable solutions within our organization, TGS relies upon policies, procedures and guidelines, as well as targeted action plans with key performance indicators to measure progress. TGS uses key performance indicators on its sustainability efforts, for example, to measure safety performance and impact on marine environment.

This process, along with our corporate governance principles, provides the necessary underpinnings for monitoring risk and incorporating sustainability within our organization and operations.



TGS
Value Chain
Project Development and Survey Design
Data Acquisition
Data Processing
Consumption of Data
Stakeholders
Sales and Marketing
Investment and Ownership
Governments
Industry Partners
Acquisition Companies
Customers
Non-Governmental Organizations
Local Community
Academia
Employees
Shareholders
Opportunities
Sustainable Business Model
Industry Competitors
Knowledge Sharing
Diversity & Equality in the Workforce
Training & Development of Workforce
Community Engagement
Risks
Business Ethics & Anticorruption
Safe & Healthy Office Environment
Office Emissions
Safe & Healthy Projects
Human Rights
Project Emissions
Impact to Marine & Land Environments

1.3 TGS' Commitment to Ethical and Transparent Behavior

1.3.1 Integrating Business Ethics into TGS

TGS is committed to complying with all applicable laws, including fair competition and antitrust, export controls and trade sanctions, anti-corruption and anti-bribery, and insider trading. We engage in ethical and fair business practices with our clients, partners, suppliers and other third parties. In return, TGS expects the highest levels of personal conduct and fair dealing from all its employees, the Board of Directors, partners and any third parties retained on behalf of TGS. TGS believes in competition and endeavors to not take an unfair advantage in a business situation by acting illegally, unethically, or by abusing or misusing confidential information.

The TGS Code of Conduct, which is publicly available at www.tgs.com, sets the standard of responsible conduct and fair business practices for every TGS employee and serves as the company's ethical roadmap – ensuring all employees perform their duties with honesty and integrity and in accordance with the law. TGS' compliance program attempts to foster an open, transparent and ethical environment centered around its Code of Conduct. The TGS Compliance Officer reports to the Board of Directors and provides updates on at least a quarterly basis.

The Compliance Officer aims to educate TGS employees on potential compliance concerns as well as implement policies, procedures and guidelines to detect and prevent potential compliance concerns. TGS holds in-person workshops with various business groups to discuss the key compliance risks relevant to their departments to ensure understanding, build awareness and foster dialogue. In addition, there is mandatory e-learning of key topics within our Code of Conduct, including anti-corruption, that employees must complete each year. In 2019, TGS upgraded its e-learning tool to incorporate hypothetical situations and examples for employees to work through that are tailored to real-life TGS situations, as well as assessments that test the participant's understanding of the material. Due to the timeline of acquisition of Spectrum Geophysical and integration of the workforces, TGS decided to conduct the Code of Conduct e-training and anti-corruption e-training at the outset of 2020 to ensure all employees start off understanding TGS' policies and procedures. In 2019, Compliance workshops were conducted with TGS' offices and departments to go through TGS' compliance program, Code of Conduct, hotline, and key policies and procedures.

1.3.2 TGS' Anti-Corruption Efforts

TGS recognizes that preventing bribery and corruption in its operations is essential in today's business environment. TGS works to ensure that its employees, as well as our partners and third parties, understand and are sensitive to the legal requirements that apply to our operations, including the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, the OECD Convention on Combating Bribery of Foreign Public Officials in International Business, and the anti-bribery and anti-corruption laws of the various countries in which TGS operates or conducts projects.

TGS' anti-corruption policy, which applies to TGS employees and all third parties acting on behalf of TGS, expressly prohibits bribery, kickbacks and other illegal payments, as well as facilitation payments and political contributions on behalf of the company. Review and prior approval are required for gifts, entertainment or travel expenses provided to government officials, as well as charitable or social welfare contributions to be made by or on behalf of TGS.

TGS expects its partners and third parties (suppliers, vendors, agents and consultants) to share its commitment to ethical, lawful conduct and takes a zero-tolerance position with third parties who fail to understand and abide by their compliance obligations. In 2019, TGS's efforts with respect to third parties included conducting due diligence on partner and third-party relationships based upon various risk factors (geographic location and nature of services) at the outset of the relationship and updating that information on a regular basis throughout the relationship. TGS also incorporates compliance provisions in the agreements that prohibit bribery and corruption and requires third parties to certify their compliance with TGS' anti-corruption policy and complete online anti-corruption training. All of TGS' international agents completed their certification and training in 2019. Finally, TGS conducts quarterly reviews of payments to third parties and reports any irregularities or concerns about payments to these third parties to the Board and the Audit Committee. TGS will remain focused on ensuring compliance with anti-corruption, anti-bribery laws, standards in its partner and third-party relationships to ensure its operations are conducted under the highest ethical standards.

Finally, TGS periodically conducts assessments of its policies, procedures, and guidelines to identify gaps and areas for improvements.

1.3.3 TGS' Compliance Reporting Process

TGS provides multiple avenues for TGS' internal and external stakeholders to discuss or report potential non-compliance. Employees are encouraged to report any violation of TGS' values or policies to their supervisor, the Compliance Officer, or through the TGS hotline, which allows employees to report suspected instances of non-compliance anonymously. Policies are in place that prohibit retaliation against reporting employees. TGS investigates all potential violations of the law and its Code of Conduct, such as insider trading, conflicts of interest, financial fraud and corruption issues. The number and types of cases are reported quarterly to the Board of Directors.

In 2019, TGS upgraded its compliance hotline, which is publicly available for employees and TGS' third parties at www.tgs.com, to now include a web-intake form and local numbers for all countries where TGS has employees. This new hotline was promoted to employees at company-wide quarterly meetings and through email communications and trainings throughout 2019. These efforts will continue in 2020.

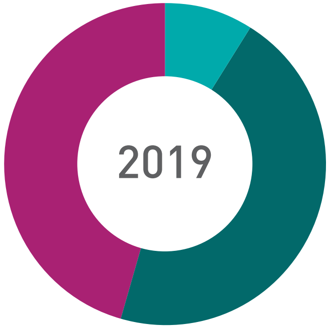
TGS investigated and resolved 11 matters in 2019 that were raised either through the TGS hotline or directly or indirectly to the Compliance Officer. This is an increase from 2018 (two matters) and contributing factors to this increase could be the promotion of the TGS hotline through training and communication efforts in 2019, and the integration of additional employees into the company as a result of the acquisition of Spectrum Geophysical.

Compliance Matters

Hotline / **1 matter**

Directly to compliance department / **5 matters**

Indirectly to compliance department
(via another department or manager) / **5 matters**



TGS Compliance Goals

TGS has set the following compliance-related goals for 2020 and beyond:

- Achieve 100% completion on assigned employee compliance training
- Conduct a company-wide assessment to measure (i) how well TGS' Code of Conduct and compliance program is understood and enacted by employees on a daily basis; (ii) how TGS' employees perceive the ethical leadership at TGS; (iii) what are the typical compliance challenges and strengths of TGS, as perceived by its employees; and (iv) how openly, and through what channels, are employees willing to report concerns, and whether employees feel comfortable reporting these concerns
- Create targeted action plans that may include training, round tables and/or updating policies to address any areas where improvement or further education is needed based upon the results of the compliance assessment
- Achieve 100% completion on assigned third-party anticorruption training

2. ENVIRONMENT

2.1 Integrating Environmental Sustainability into TGS

In 2019, TGS started to incorporate climate risk into its business and operational strategy by using the "Task Force on Climate-related Financial Disclosures" (TCFD, set up by the Financial Stability Board) so that it can be both a better supplier to its customers and a better contributor to the community. The following chart shows TGS' status and goals with respect to climate risk:

Governance	Strategy	Risk Management	Metrics and Targets
TGS' Board of Directors oversees TGS' sustainability strategy, and in particular, TGS' efforts when it comes to mitigating our impact on climate. Corporate level functions responsible for implementing TGS' efforts include TGS' leadership, operations, sustainability and HSE departments.	Conducting our business while minimizing harm on the environment is essential for the long-term sustainability of the business. A business that is based on practices that have negative impacts on the environment runs the risk of increasing costs, loss of reputation, and declining business opportunities. For TGS, it is therefore important to take environmental impact into account during the decision-making process.	TGS maintains robust practices for minimizing impacts on the marine environment through its environmental policy, risk management procedures and the environmental management procedures.	Relative to its peers and the oil and gas industry, TGS' Scope 1 and Scope 2 carbon emissions are limited. Most of the emissions are indirect (Scope 3) and are accumulated through vendors providing a variety of services to TGS.
Action Plan	**Action Plan**	**Action Plan**	**Action Plan**
a) In 2019, TGS' Board of Directors approved a 2020 sustainability strategy addressing carbon emissions, and will be updated on its progress throughout the year b) The responsibility for incorporating climate risk will lie with operations and sustainability departments, who will work in close collaboration with one another. TGS' board and executive team want to be close to this work and will receive periodic updates throughout the year in 2020.	a) TGS will develop a detailed business plan outlining how the ambition should be achieved, including the selection and definition of Key Performance Indicators (KPIs). This business plan will be implemented in 2020. b) TGS must work together with its vendors in order to devise more efficient ways of conducting the operations. Furthermore, contracts with the vendors should contain obligations to measure and report carbon emissions, as well as outline restrictions on maximum emission levels.	a) Climate-related risks are identified and assessed through environmental impact assessments (EIAs), site surveys, public or social consultations, engaging with environmental consultants, participation and membership in industry trade organizations (e.g. IAGC, IOGP), project-specific hazard assessments, and consultation with regulators and permitting agencies. b) TGS commissions EIAs to understand potential impacts on the environment it may operate in. TGS also employs protected species observers (PSOs) and utilizes passive acoustic monitoring (PAM) on its operations in order to ensure our operations do not have a detrimental effect on the environment in which we operate. TGS employs various other environmental mitigation measures including conducting soft starts or ramp-ups and placing buffer zones around environmentally sensitive areas.	a) In 2018, TGS started tracking Scope 2 electricity consumption and Scope 1 vehicle emissions with the aim of establishing more robust and complete reporting, benchmarking and setting of appropriate targets in the coming years. In 2019, TGS is aiming to measure and track key Scope 3 emissions from business travel and operational vendors. b) For 2019, TGS was successful in gathering the same type of 2018 emission information for Scope's 1 and 2. Furthermore, through fuel consumption information for land and marine seismic projects, TGS was able to calculate the following carbon emissions: CO2, CH4, SO2, NOx, N20. c) When it comes to its Scope 1, Scope 2 and Scope 3 emissions, TGS is planning to determine what emission targets to set for managing climate-related risks and opportunities

2.2 Sustainable Business Model

TGS believes its multi-client business model not only benefits customers commercially, but also is a more sustainable, environmentally friendly business model than the alternative of proprietary acquisition. Allowing multiple companies to license the same set of data over a region decreases the need for each client to acquire similar data on a proprietary basis. By reducing the demand for multiple operations sourcing the same geoscience data in an area, the multi-client approach not only reduces the environmental impact to a region, it also has the potential to minimize the likelihood of health and safety or anti-corruption risks.

We are also working to leverage our imaging technology, data analytics and artificial intelligence to improve the quality of data we provide with minimal impact to the environment. By reprocessing older data sets using today's technology, TGS is able to provide a better product without having to impact the marine or land environments to acquire new data. In addition, TGS is using its data analytics and artificial intelligence, such as cloud computing, to make our processing of data faster and more efficient, which will minimize our emissions output. For example, in 2019, TGS announced a multi-year agreement with Google Cloud, which secures TGS access to cloud-based on-demand, compute power and complements TGS' on-premise compute capability. This solution enables TGS to help customers be more efficient and de-risk their exploration activities faster by allowing TGS to deliver on complex, compute-intensive projects and focus on cycle-time reduction while preserving superior data quality.

2.3 Climate

2.3.1 2019 Office Emissions

TGS is an office-based company that does not operate or own vessels, manufacturing plants or factories. Nevertheless, TGS is committed to working towards understanding the energy consumption and greenhouse gas emissions in its operations and finding ways to reduce its impact. In 2018, TGS started tracking Scope 1 and Scope 2 emissions for our offices with the aim of establishing more robust and complete reporting, benchmarking and setting of appropriate goals or targets in the coming years. For 2019, TGS was able to successfully repeat this level of reporting for all of its offices. Energy consumption for data processing and high-performance computing are responsible for the bulk of the emissions related to the generation of purchased energy (Scope 2).

Scope 1 Emissions	2019	2018
CO_2 (kTonnes)	0.02	0.03
CH_4 (kg)	0.07	1.8
N_2O (kg)	0.26	1

*TGS' scope 1 emissions are derived from one vehicle maintained by the company for deliveries in Houston

Scope 2 Emissions	2018 (kWh)	2019 (kWh)*	2018 (kTonnes)	2019 (kTonnes)*
Offices	4,380,081	4,131,468	3.1	2.9
Data Centers	21,676,330	25,642,849	15.3	18.1
Total	**26,056,411**	**29,774,317**	**18.4**	**21**

*2019 numbers include data from August 15, 2019 to December 31, 2019, related to the Spectrum Geophysical acquisition.

TGS continued to promote environmental awareness in office locations by encouraging employees to minimize waste and manage waste output, minimize carbon emissions by survey design, guard against accidental and operational pollution, and mitigate any active or operational pollution. In terms of environmental efforts by TGS offices and their employees, TGS encouraged sustainability through several initiatives. For instance, recycling bins for paper and cardboard, glass, plastic, batteries and print toner cartridges are available in TGS offices and employees were encouraged to follow proper recycling procedures, which are displayed above the associated recycling bins. TGS reduced energy consumption in its offices by utilizing light sensors to switch lights off when spaces are not in use. As another example, TGS' UK offices encouraged employees to cycle to work, unplug electricity-consuming devices when they are not in use, and use reusable bags (available on site) for shopping or transport needs in an effort to cut down on the use of plastic bags.

2.3.2 2019 Operations Emissions

TGS is committed to supporting the Protect the Planet SDG, where reduction of carbon emissions plays an essential role. Relative to its peers in the oil and gas industry, TGS' Scope 1 and Scope 2 carbon emissions are quite limited. Most of the emissions are indirect (Scope 3) and are accumulated through vendors providing a variety of services to TGS. The bulk of the Scope 3 emissions are related to the acquisition of seismic data, where TGS is indirectly responsible for emissions from vessels and land crews owned and operated by contractors.

As the world's largest buyer of seismic acquisition capacity, TGS has a unique opportunity to influence the industry in a positive manner and TGS aims to eventually reduce and/or offset the amount of carbon emissions per unit of seismic data that is acquired. In 2019, TGS took several important steps towards deriving Scope 3 carbon emission figures, from both fuel consumption and fuel type, so that we and our vendors may better understand and target the next steps in reducing our impact to climate change. As illustrated in the following charts and graphics, the emissions vary between land and marine surveys, and whether the survey is 2D, 3D or multibeam. Depending on client input, survey economics and geological/geophysical considerations, marine seismic surveys are acquired through varying vessel setups and configurations. 2D surveys generally involve a single, relatively smaller seismic vessel towing one cable and emissions are measured in units per kilometer. For 3D surveys, emissions are measured in units per square kilometers and generally involve one or more seismic vessels, which are typically larger than

2D vessels and towing a greater amount of equipment, resulting in a greater total emission output versus 2D operations. Ocean Bottom Node or Ocean Bottom Cable (OBN/OBC) surveys generate a higher quality 3D subsurface image that is similar to conventional 3D operations but are acquired with ocean bottom nodes and require a node layout vessel and seismic source vessels. Finally, multibeam and coring surveys involve relatively smaller boats than a 2D seismic operation and carry less equipment and gear, leading to less fuel consumption and lower emissions per square kilometer.

In 2020, this data will continue to be developed so that we both better understand and are transparent about the emissions used in our operations and are more informed when planning projects.

2019 Survey Emissions

	CO_2 (mt)	CH_4 (mt)	N_2O (mt)
Total Marine Seismic	212,392	1	9
Total Land Seismic	6,649	0.31	0.15
Total All Seismic	**217,137**	**2**	**10**

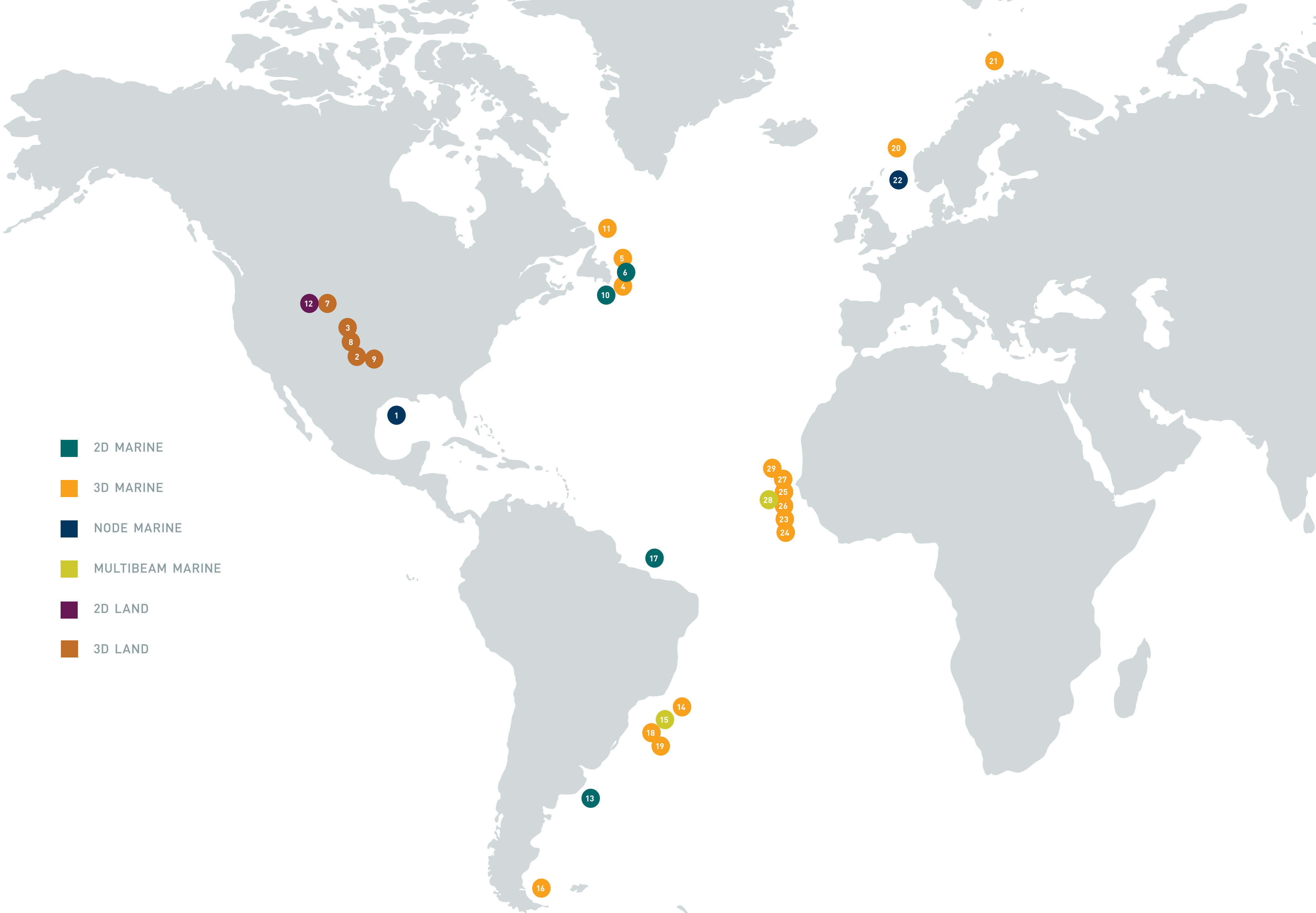
	CO_2 (mt/unit)	CH_4 (g/unit)	N_2O (g/unit)	SO_2 (tons/unit)	NO_x (tons/unit)
Average 2D Survey – Marine	.51	3	22	.007	.015
Average 3D Survey – Marine	2.66	16.55	118.73	.026	.074
Average Node Survey – Marine	14.93	87.76	658.17	.137	.423
Average Multibeam Survey – Marine	.03	.15	1	.39	<0.01
Average 3D Survey – Land	1.97	92.24	45	NA*	NA*

*At this time TGS is unable to calculate the SO2 and NOx for land surveys due to the varying equipment used

Emissions calculations were done based upon guidance provided by an external environmental consultant using the following:

- For GHG: EPA Simplified GHG Emission Calculator, Version 5, EPA Center for Corporate Climate Leadership, March 2018
- For NO_x: EMEP/EEA Air Pollutant Emission Inventory Guidebook 2016, European Environment Agency. NO_x emission factors from Table 3-1 (Tier 1 Emission Factors for Ships Using Bunker Fuel Oil) and Table 3-2 (Tier 1 Emission Factors for Ships using Marine Diesel Oil (MDO) and Marine Gas Oil (MGO))
- For SO_2: Marine Fuel specification: Chevron Global Marine Products (June 2012) and Total HSFO and Distillate Fuel Characteristics (2020)

	2019 Marine and Land Seismic Projects	Study Size	CO_2 (mt/unit)	CH_4 (g/unit)	N_2O (g/unit)	SO_2 (tons/unit)	NO_x (tons/unit)
1	AMENDMENT 3D PH I	2,750.57 km²	7.90	46.41	348.09	0.12	0.24
2	CANTON 3D	1,404 km²	0.41	17.76	9.28	NA*	NA*
3	GLOSS MOUNTAIN 3D	901 km²	2.03	97.55	47.45	NA*	NA*
4	JEANNE D' ARC 3D	4,709.49 km²	3.63	21.31	159.82	0.03	0.10
5	NORTH TABLELANDS 3D	4,608.26 km²	2.29	19.24	110.51	0.03	0.04
6	NORTHEAST NEWFOUNDLAND 2D	575.68 km	0.68	4.00	30.00	0.01	0.02
7	RAILGUN 3D	715 km²	2.52	123.43	56.22	NA*	NA*
8	SOUTH GLOSS 3D	606 km²	2.82	126.12	61.66	NA*	NA*
9	SOUTH HACKBERRY 3D	352 km²	2.05	96.37	48.44	NA*	NA*
10	SOUTHEAST GRAND BANKS 2D	10,518.66 km	0.42	2.47	18.53	0.01	0.01
11	TORNGAT 3D	3,698.88 km²	3.44	20.23	151.73	0.02	0.10
12	VOYAGER 2D TEST	5.6 km	0.53	8.39	2.50	NA*	NA*
13	ARGENTINA BASIN 2D	2395.3 km	0.41	2.41	18.09	0.01	0.01
14	CAMPOS 3D	11,840.69 km²	2.62	15.41	115.60	0.04	0.08
15	CAMPOS 2019 MULTIBEAM	31,502 km²	0.03	0.20	1.52	<0.01	<0.01
16	MALVINAS 3D	1,854.77 km²	3.24	19.01	142.59	0.02	0.09
17	PARA MARANHAO 2D	5,638.95 km²	0.53	3.13	23.51	<0.01	0.01
18	SANTOS 3D	4,268.37 km²	2.72	15.97	119.79	0.04	0.08
19	SANTOS 3D PH III	4,794.8 km²	3.08	18.09	135.68	0.05	0.09
20	ATLANTIC MARGINS 19 3D	6,059.83 km²	2.28	20.76	112.67	0.04	0.07
21	GREATER CASTBERG 19 3D	5,168.46 km²	4.23	25.55	187.75	0.03	0.12
22	UTSIRA OBN	815 km²	21.97	129.10	968.26	0.15	0.61
23	JAAN 4B5B18 3D	4,682.84 km²	0.31	1.81	13.59	<0.01	0.01
24	JAAN 6B19 3D	2,152.28 km²	2.36	13.89	104.15	0.02	0.07
25	JAAN AGCP19 3D	877.73 km²	2.55	14.97	112.28	0.02	0.07
26	JAAN AGCS19 3D	970.88 km²	3.16	18.57	139.30	0.02	0.09
27	JAAN SO19 3D	2,671.35 km²	2.17	12.73	95.50	0.02	0.06
28	MSGBC 2019 MULTIBEAM	11,4698 km²	0.02	0.10	0.73	<0.01	<0.01
29	SENEGAL ULTRA-DEEP OFFSHORE 3D	2,151.05 km²	1.81	10.66	79.93	0.01	0.05


2D MARINE
3D MARINE
NODE MARINE
MULTIBEAM MARINE
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3D LAND
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TGS Climate Goals

TGS has set the following climate-related goals for 2020 and beyond:

- Work with our vendors to devise more efficient ways of measuring and reporting carbon emissions to be better informed when planning and conducting our survey operations. This will include selecting and defining Key Performance Indicators (KPIs) related to tracking, reporting and reducing or offsetting carbon emissions with the goal of outlining restrictions on maximum emission levels or offsetting emission
- Understand and track our emissions related to business travel and develop a plan to reduce or offset those emissions through better planning, more use of video conference systems, and offsetting the emissions generated from our business travel

2.4 Marine Operations

2.4.1 2019 Actions

TGS recognizes the importance of mitigating environmental impacts to the marine environment. As a proponent of the Life Below Water SDG, TGS is committed to protecting marine and coastal ecosystems. Since TGS utilizes contractors for its marine operations, it is important that TGS work closely and set clear requirements with our vessel providers on the environmental expectations for our marine operations. TGS requires that its contractors report all spills, regardless of quantity and whether it entered the marine environment or was contained onboard a vessel. TGS continually aims for zero recordable spills and unplanned releases to the marine environment on offshore operations and again met this goal in 2019. Through TGS' charters of the seismic vessels, TGS' contractors must comply with all applicable environmental laws and regulations. Seismic vessels chartered by TGS must undergo audits from the International Marine Contractors Association or Offshore Vessel Inspection Database (IMCA or OVID). These audits are conducted either by TGS, the vessel, or another third party that evaluates compliance with all applicable health, safety and environmental regulations and industry requirements, and ensures that all required health, safety and environmental permits and certificates are valid. In 2019, TGS chartered 26 vessels, including seismic, multibeam and coring, node layout and source vessels, and each of these vessels underwent the required audits.

When planning and conducting our marine operations, TGS assesses and reports on biologically important areas, which includes marine mammal migration paths, spawning grounds, sanctuary areas or other ecologically sensitive locations where TGS had activities. TGS commissions environmental impact assessments (EIAs) to understand potential impacts on the environment it may operate in and employs protected species observers (PSOs) and utilizes passive acoustic monitoring (PAM) on its operations to ensure our operations do not have a detrimental effect on the environment. Other examples of environmental mitigation measures include socialization efforts with fisheries and local communities to minimize operational conflicts and ensure ongoing communication throughout the duration of the seismic surveys. In 2019, TGS initiated the practice of hiring and placing third-party HSE advisors onboard several of its operations, particularly in environmentally sensitive areas such as Brazil. Reporting to the marine project managers, the HSE advisors were tasked with managing all aspects of health, safety and the environment onboard their respective vessels.

Finally, TGS committed to supporting the IAGC's Ghost Net Initiative in 2019 by proposing to contractually require that all vessels acquiring seismic data for TGS report their ghost net catches. Led by the IAGC, the Ghost Net Initiative is a marine seismic industry-wide effort to collect lost fishing lines and nets that become entangled on the in-sea equipment. This fishing gear is removed from the marine environment to mitigate possible fishing gear entanglement with turtles, birds, mammals, fish, etc.

TGS Marine Operations Goals

TGS has set the following marine operations goals for 2020 and beyond:

- Develop contractual requirements for vessel providers and third parties to report Ghost Net Initiative-related marine debris as part of its 2020 sustainability strategy
- Continue to aim for zero spills and unplanned releases to the marine environment during seismic vessel operations
- Continue to require that each chartered vessel undergo an IMCA/OVID audit within six months of hire, and every twelve months thereafter
- Ensure that its marine contractors abide by TGS' environmental standards and, where appropriate, third-party HSE advisors will be placed onboard marine seismic operations to ensure that this is carried out appropriately in the field

2.5 Land Operations

2.5.1 2019 Actions

As with our marine operations, TGS is heavily dependent on contractors for its onshore acquisition projects and works with them to ensure alignment in our efforts to mitigate our impact to the land environment. This includes requiring documented audits of field equipment and HSE procedures for all new surveys to ensure that all equipment is in proper working order and that HSE procedures adequately mitigate potential environmental impacts. In addition, every spill, regardless of the amount spilled, must be reported, cleaned up and properly disposed of. All spills are tracked by TGS within its HSE management software system, there were no reportable spills or releases in 2019.

In Canada, TGS engaged extensively with First Nation Communities to understand all potential environmental impacts stemming from land seismic operations. Being the predominant indigenous community in Canada, TGS recognized the importance of sitting down with local communities to understand their concerns and ensure minimal disturbance to their land. In planning its onshore seismic operations in Canada, TGS often times took additional measures and precautions beyond those set by law or regulation, including:

- Choosing hand-cutting with chainsaws to further reduce the number and density of tree's cut over the survey area instead of utilizing mulching vehicles to cut travel paths for seismic acquisition
- Using minimal and single access routes to seismic acquisition lines, which limits the amount of traffic on these lines and allows the forest to naturally regenerate over time
- Avoiding riparian areas instead of just reducing line widths through, as required by permitting agencies
- Planning and designing land surveys utilizing Lidar imagery, which helps identify environmentally sensitive areas, chart routes of least or minimal impact, and avoid tree cutting and vegetation disturbance

Similar mitigation measures were implemented in the US land operations, where TGS worked with local farmers and ranchers in Oklahoma to better understand the local environment and minimize TGS' environmental footprint. In addition, TGS successfully carried out reclamation programs for rehabilitating areas that might have been disturbed by vehicles operating over the survey area.

TGS Land Operations Goals

TGS has set the following land operations goals for 2020 and beyond:

- Continue to aim for no recordable spills to the environment and efforts to contain all spills, regardless of how much was spilled, will continue in 2020 and beyond
- Require documented audits of field equipment and HSE procedures for all new surveys to ensure that all equipment is in proper working order and that HSE procedures adequately mitigate potential environmental impacts
- Ensure that land contractors and service providers participate in, and abide by, TGS' environmental standards.

2.6 Industry Contributions

TGS is a strong proponent of working with local governments, regulatory authorities and non-government organizations to understand its impacts on the environment. Therefore, TGS maintained positive communication with regulatory authorities and other governmental and non-governmental organizations in 2019 to help identify, understand and mitigate environmental risks associated with geophysical activities. TGS supports the IAGC, both financially and through employee participation, by actively engaging in various committees, workgroups and projects throughout 2019. TGS fully supports the IAGC's efforts to create standards and protocols for seismic operations in frontier areas, liaise with stakeholders (including local fishing industry) and to plan seismic surveys so that environmental implications are appropriately mitigated. In 2019, TGS employees, including the EVP Onshore, General Counsel, Director Marine Acquisition and HSE Manager, actively served and participated in IAGC boards and committees. As the largest purchaser of seismic vessel capacity, TGS is well-positioned to support the IAGC's initiatives, like the Ghost Net Initiative, and aims to make a meaningful impact towards protecting marine life and ensuring marine debris is removed from that environment. TGS was also involved with the International Association of Oil & Gas Producers (IOGP) and supported its efforts to improve safety, environment and social performance, and promote responsible and sustainable operations within the oil and gas industry. As a long-standing leader in seismic industry, TGS will continue to work with the IAGC and IOGP to develop and ensure environmentally sound practices within the seismic industry.

3. PEOPLE

3.1 Investing in Human Capital

TGS' single greatest asset is our employee base. To that end, TGS creates and ensures we operate in an environment where our employees have the opportunity to achieve excellence every day. We do this by ensuring each individual is working in a business-like atmosphere that promotes equal employment opportunities and is free of unlawful bias or prejudice. In addition, we encourage our employees to constantly develop and improve their skills so that they may grow with the company.

In 2019, TGS acquired Spectrum Geophysical, and there was a significant focus on combining the workforce to recognize synergies and ensure we are a unified company sharing the same mindset, understanding and goals. This new combined workforce also affected the 2019 employee numbers, as evidenced, for example, by an increase in the total number of employees. The focus in 2019 following integration was making sure TGS was able to be one company both functionally and operationally, and TGS prioritized establishing a clear management structure and ensuring departments were fully integrated and operating on the same internal IT and communication systems. Going into 2020, the focus is continuing to ensure we are one unified organization culturally using the engagement survey and the One-TGS campaign by marketing and human resources.

3.1.1 Diversity and Equality

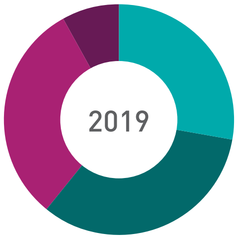
TGS strives to promote and maintain a work environment in which our people are treated with dignity, decency and respect. TGS expects all relationships among persons in the workplace will be business-like and free of unlawful bias, prejudice, and harassment. It is TGS' policy to ensure equal employment opportunity without discrimination or harassment on the basis of race, color, national origin, religion, sex, age, disability or any other status protected by law.

The TGS Code of Conduct prohibits discrimination and harassment in the workplace, and all TGS employees receive annual training on TGS' anti-discrimination and anti-harassment policies.

Employee Statistics	2019	2018
Total # of Employees at Year End	666	547
New Hires	64	30
Employee Turnover	8%	6%

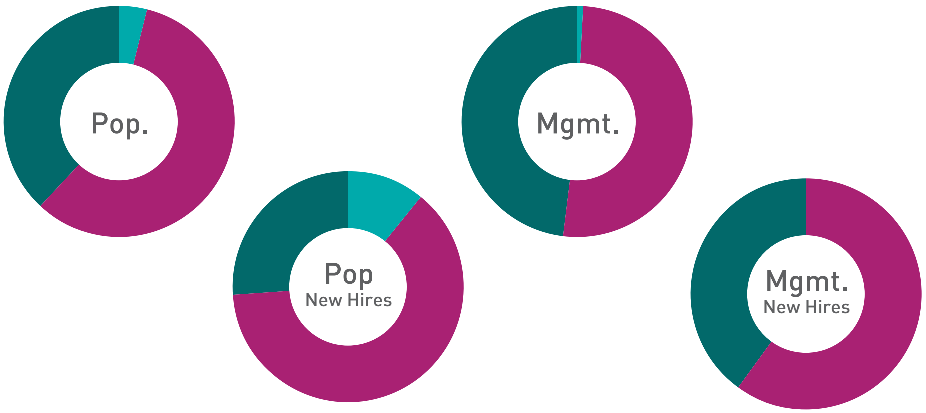
Tenure

0 - 5	2018 / 21%	2019 / **28%**
5 - 10 years	2018 / 34%	2019 / **33%**
10 - 20 years	2018 / 36%	2019 / **31%**
+20 years	2018 / 9%	2019 / **8%**



Age / 2019

- 30 y/o	Total Pop. / **3.5%**	New Hires / **11%**	Mgmt. / **1%**	New Hires / **0%**
30 – 50 y/o	Total Pop. / **59%**	New Hires / **63%**	Mgmt. / **50%**	New Hires / **60%**
50+ y/o	Total Pop. / **37.5%**	New Hires / **26%**	Mgmt. / **49%**	New Hires / **40%**



Gender – Total Employee Population

65% **79%** **35%** **21%**

2019 / Male **65%** New Hires **79%**
2018 / Male 63%

2019 / Female **35%** New Hires **21%**
2018 / Female 37%

Gender – Management

72% **70%** **28%** **30%**

2019 / Male **72%** New Hires **70%**
2018 / Male 71%

2019 / Female **28%** New Hires **30%**
2018 / Female 29%

*2019 numbers include data related to Spectrum acquisition

TGS recognizes the heavier proportion of men to women in the industry, and TGS' workforce and new hires in 2019 reflect a higher male population than female. For this reason, as part of its 2020 sustainability strategy, TGS is developing a plan to focus on increasing gender diversity in the workforce, both in hiring and in promotions.

3.1.2 Training and Development

Employee engagement is critical to the long-term sustainability of TGS. TGS seeks to maintain high levels of employee engagement while complying with labor rights and providing favorable work conditions. In 2019, TGS continued the focus on improving employee engagement through communication and training and development.

In 2019, TGS focused on continued enhancement of digital communications, primarily through ODIN – the Company's intranet site which serves as a platform to communicate globally with all employees. Through this platform, TGS' CEO announced the Company's 2019 corporate goals, industry updates and company programs. ODIN was also used to highlight company events, introduce new hires and communicate any other relevant information to employees. In addition, ODIN played a critical role in the integration of Spectrum Geophysical by ensuring all employees were connected to the same platform and had access to the same information. Finally, TGS aims to conduct surveys on a biannual basis to understand

and assess employee engagement and to identify gaps in the global workforce and specific locations or departments.

Through the annual Performance Development Plan, individual employee goals were tied directly to the Company's corporate goals. This ensured alignment of employee incentives with TGS goals and drove a sense of common purpose in the work environment. As part of this process, each employee and his/her manager discuss the progress of last year's goals, establish goals for the upcoming year, evaluate the employee's performance over the past year, review the employee's career aspirations and identify opportunities for further development. TGS also encourages managers and employees to meet quarterly to discuss these goals in an effort to foster more cohesion between employee and Company objectives. TGS recognizes that this process is critical to ensuring that its employees continue to develop the necessary skills to grow with the Company.

TGS recognizes the importance of having its workforce recognize the evolving global risks and issues relevant to TGS' operations, understand how to prevent or address them, and know what to do should they arise. In 2019, TGS provided company-wide training on key areas to ensure that all employees had baseline knowledge in areas globally relevant and critical to our success. TGS trained employees through our e-learning platform on diversity, inclusion, and workplace conduct, anti-harassment and discrimination, and information technology, which included a strong focus on cyber security, as well as provided the HSE and compliance training discussed elsewhere in this report.

Finally, TGS provides departmental cross-training opportunities to employees, and where possible, secondments in other departments. TGS continues to ensure its employees receive technical training and have opportunities to improve their imaging and geoscience skills. This year, employees participated in over 1,854 hours of in-house geological and imaging courses and lunch-and-learn sessions (compared to 1,950 hours in 2018). The decrease in courses is due in part to the focus on operationally integrating Spectrum with TGS.

TGS' Goals for Investing in Human Capital

TGS has set the following goals for investing in its human capital for 2020 and beyond:

- Develop a plan to increase the representation of women in the workforce, both in general population and in management positions that is aligned our diversity and inclusion initiatives and allows the Company to further stand out from peer groups
- Conduct an employee engagement survey in 2020 to identify areas for improvement and actions that can be taken at all levels in the organization to improve employee engagement
- Incorporate employee feedback and continue to enhance our internal communication platform, ODIN, to enable employees to better communicate with each other, provide timely feedback, and allow for more project collaboration, both vertically and horizontally, throughout the organization
- Identify opportunities to improve engagement, provide professional development, encourage career discussions, and maintain open communication

3.2 Health and Safety

3.2.1 Integrating Health and Safety into TGS

TGS is committed to providing a safe, healthy and sustainable workplace for our employees, contractors, vendors and clients while protecting the environment in which we live and work. TGS management continually strives to eliminate risk and reduce hazards, but successful operations can only be achieved through the full cooperation and commitment of all TGS employees and contractors. To achieve this, TGS defines safe operating procedures and guidelines in its HSE Management System (HSE-MS). These procedures are designed to meet or exceed all appropriate legal requirements and, in the absence of any defined standards, to meet or exceed industry-wide best operating practices. TGS actively engages with relevant trade associations and authorities to develop, implement and update our HSE standards.

The HSE manager reports to senior management and updates both the management team and the Board of Directors on at least a quarterly basis. The HSE manager is responsible for implementing the HSE-MS and providing HSE information, training and resources to employees. TGS' HSE-MS is communicated to the company through regularly scheduled safety meetings, internal auditing, HSE review meetings and general company-wide communications. All employees and contractors are actively encouraged to participate in the conduct, management and continuous improvement of safety. TGS requires all employees and contractors to be accountable for, and committed to, their own health and safety, as well as for those they work with. Employees and contractors are empowered to intervene and STOP any operation or activity that they feel is unsafe or hazardous, with the knowledge that such action will be supported by management.

3.2.2 2019 Actions

3.2.2.1 Employees

In 2019, TGS updated its corporate HSE policies, including the health and safety, drug and alcohol and environmental policies, all of which are publicly available at www.tgs.com. These updated policies were distributed to all employees and TGS continues to share them with all new TGS employees during the onboarding process.

TGS promotes a top-down message of health and safety by requiring that each member of TGS' executive management conduct at least one HSE facility inspection and one field visit. TGS' executive management and operations managers conducted 40 field visits during 2019 (compared to 30 in 2018) and performed 43 inspections at

TGS office locations. Finally, TGS achieved full compliance with vessel and land crew HSE audit requirements.

All employees completed one HSE training course during 2019 (100% training compliance) that included modules on healthy working, workplace safety, fire emergencies, evacuations and shelter-in-place, and sustainable environment. In addition, office locations performed at least two HSE-related lunch and learn activities, which included topics such as first aid and cardiopulmonary resuscitation (CPR) training, stress awareness, and office ergonomics.

At the end of 2019, TGS kicked-off a gap analysis of its entire HSE-MS. This process was commissioned to align TGS and Spectrum's post-integration HSE documentation and processes. TGS aims to update and modernize its entire HSE-MS by the end of 2020, ensuring that it's aligned with industry best practices and client HSE expectations.

Employee Health & Safety Statistics	2019**	2018
Man-hours	1,056,825	937,044
Fatalities	-	-
Lost Time Injuries (LTI)	-	-
Medical Treatment Cases	-	-
Restricted Work Cases	-	-
Recordable Case Frequency*	-	-
LTI Frequency*	-	-
Working Days Lost	1,413	1,135
Sickness Absence Frequency	1.07%	0.97%

*Per million manhours

**2019 numbers include data related to Spectrum acquisition from August 15 to December 31, 2019

3.2.2.2 Contractors

At the outset of any project or operation, TGS engages with its subcontractors in reviewing a range of HSE-related documents, including HSE project plans, hazard assessments, crew HSE plans, and emergency preparedness documents. Furthermore, TGS monitors and assesses contractor performance by tracking and reviewing a range of leading and lagging HSE indicators. Project and HSE managers tracked all HSE incidents as well, ensuring that adequate and correct incident information was collected, and action items were properly closed out. Where necessary, TGS assists and participates in incident investigations. TGS encourages contractors to report all near miss and high-potential events to maximize lessons learned, ensure adequate mitigation measures were implemented and to safeguard project-related personnel and equipment.

Upon completion of a survey, TGS reviews all aspects of HSE performance internally and with its contractors to identify and discuss areas for improvement, lessons learned and additional hazards identified during the acquisition phase. HSE performance is tracked and catalogued through TGS' health and safety management software application, allowing TGS to continuously monitor its contractor's performance over time. Lastly, as part of TGS' commitment to continuous HSE improvement, HSE statistics and performance are reviewed with the senior management team on a quarterly basis.

In 2019, TGS operated with several established land and marine seismic contractors, all of which were selected based on their experience, technology, sustainability, commitment to the environment, HSE performance and track record. TGS ensured that these contractors' HSE programs met proper industry standards, and when gaps were identified, TGS took additional steps to ensure adequate mitigation measures were implemented. For instance, in November 2019 TGS hosted an HSE workshop onboard a seismic vessel with the chiefs and other senior members of the crew to improve the overall HSE culture amongst the crew, align the contractor's HSE program with industry standards and promote TGS' commitment to strong operational HSE performance in the field.

Contractor Health & Safety Statistics	2019**	2018
Man-hours	4,693,364	2,607,162
Fatalities	1	0
Lost Time Injuries (LTI)	3	0
Medical Treatment Cases	7	9
Restricted Work Cases	1	3
Recordable Case Frequency*	2.55	4.6
LTI Frequency*	0.64	0

*Per million man-hours

**2019 numbers include data related to Spectrum acquisition from August 15 to December 31, 2019

Despite recording over 2,000,000 additional contractor man-hours, TGS' recordable case frequency, number of restricted work cases and medical treatment cases decreased from 2018. TGS' motor vehicle accident rate was under the 2019 target of <2.0 (per 1,000,000 miles) for land seismic operations (0.5 for 2019). TGS' 2019 total recordable incident rate (TRIR, per 200,000 man-hours) was less than the 2019 target of <2.0 (1.18 for 2019) and the TRIR for marine operations was less than the 2019 goal of <3.0 (.31 for 2019). TGS had no lost-time incidents (LTIs) in the office, but TGS' contractors did record one fatality and three LTIs. While these incidents did not involve any TGS employees or facilities, TGS worked closely with affected contractors to ensure that appropriate and adequate mitigation measures were implemented and actively participated through all phases of the incident investigation process.

TGS' Health & Safety Goals

TGS has set the following health and safety goals for 2020 and beyond:

- Review the existing contractor management system and ensure it is correctly implemented
- Ensure that all TGS land and marine contractors participate in our contractor management system, for both land and marine surveys and continue to monitor their HSE performance for each project
- Continue to have marine and land project managers, as well as the HSE Manager, attend on-site startup meetings and perform field inspections
- Require all TGS employees to complete a minimum of one HSE training course and have each TGS office location hold at least two HSE lunch-and-learn events
- Aim for: (i) zero lost-time injuries across all of our operations; (ii) a total recordable incident rate of < 2.5 for marine operations and <2.0 for land operations (per 200,000 manhours); and (iii) a motor vehicle accident rate goal of < 2.0 for land seismic operations in 2020 (per 1,000,000 miles)

3.3 Human Rights

TGS remains committed to the UN Universal Declaration of Human Rights and undertakes to operate in recognition of the freedom, the rights, the dignity and the worth of the human person and promotion of equality irrespective of gender, race or religion. As a signatory to the UN Global Compact, TGS incorporates into its strategy, culture and operations the UN principles on human rights, labor, environment and anti-corruption.

TGS' Statement of Values and Code of Conduct define the expectations of ethical behavior that is expected of TGS' Board of Directors, employees, vendors and suppliers. TGS embraces diversity and equality in its workforce and suppliers and will not use or tolerate child labor or slavery in any of its offices or operations. As set forth in TGS' Modern Slavery Act Transparency Statement on www.tgs.com, TGS sets policies at the group level and is committed to ensuring that there is no modern slavery or child labor used in its operations or by its supply chain.

TGS expects its supply chain to share its commitment to human rights and modern slavery laws and conducts risk-based due diligence on our supply chain to understand ownership and management structures, business relationships, and their human rights and modern slavery policies and procedures. In addition, TGS incorporates the necessary compliance provisions in the agreements and takes a zero-tolerance position with third parties who fail to understand and abide by their compliance obligations.

As noted above, TGS provides multiple avenues for TGS' internal and external stakeholders to report potential non-compliance with the law or TGS' Code of Conduct, including modern slavery or human rights abuses including through the TGS hotline, which allows for anonymous reporting, directly to the compliance department or indirectly a manager. TGS prohibits retaliation and investigates all potential violations of the law or the Code of Conduct.

In 2019, TGS had zero incidents of child labor or forced labor. This is in part due to TGS' workforce being made up of highly skilled and highly trained employees, and also in part due to working with a small pool of known suppliers.

TGS' Human Rights Goals

TGS has set the following human rights goals for 2020 and beyond:

- Updating our human rights and modern slavery policies, procedures and practices, including developing a specific human rights and modern slavery policy
- Provide human rights and modern slavery training to our workforce
- Developing and implementing a formal supplier code of conduct, certification process and standard contract language

4. COMMUNITIES

4.1 Community Engagement

TGS actively supports reputable charitable programs and organizations that serve people in need in countries where TGS has offices or projects by providing ongoing financial donations as well as encouraging employees to donate their time and energy to help those in society who are less fortunate. TGS is committed to supporting local, nonprofit community organizations and charities that focus their services on people and are dedicated to (i) providing access to healthcare, medical services and helping to fight disease; (ii) assisting underprivileged, underrepresented, or at-risk communities or groups; (iii) providing humanitarian aid or disaster relief; (iv) addressing environmental issues; or (v) promoting geophysics and geoscience educational experiences to children.

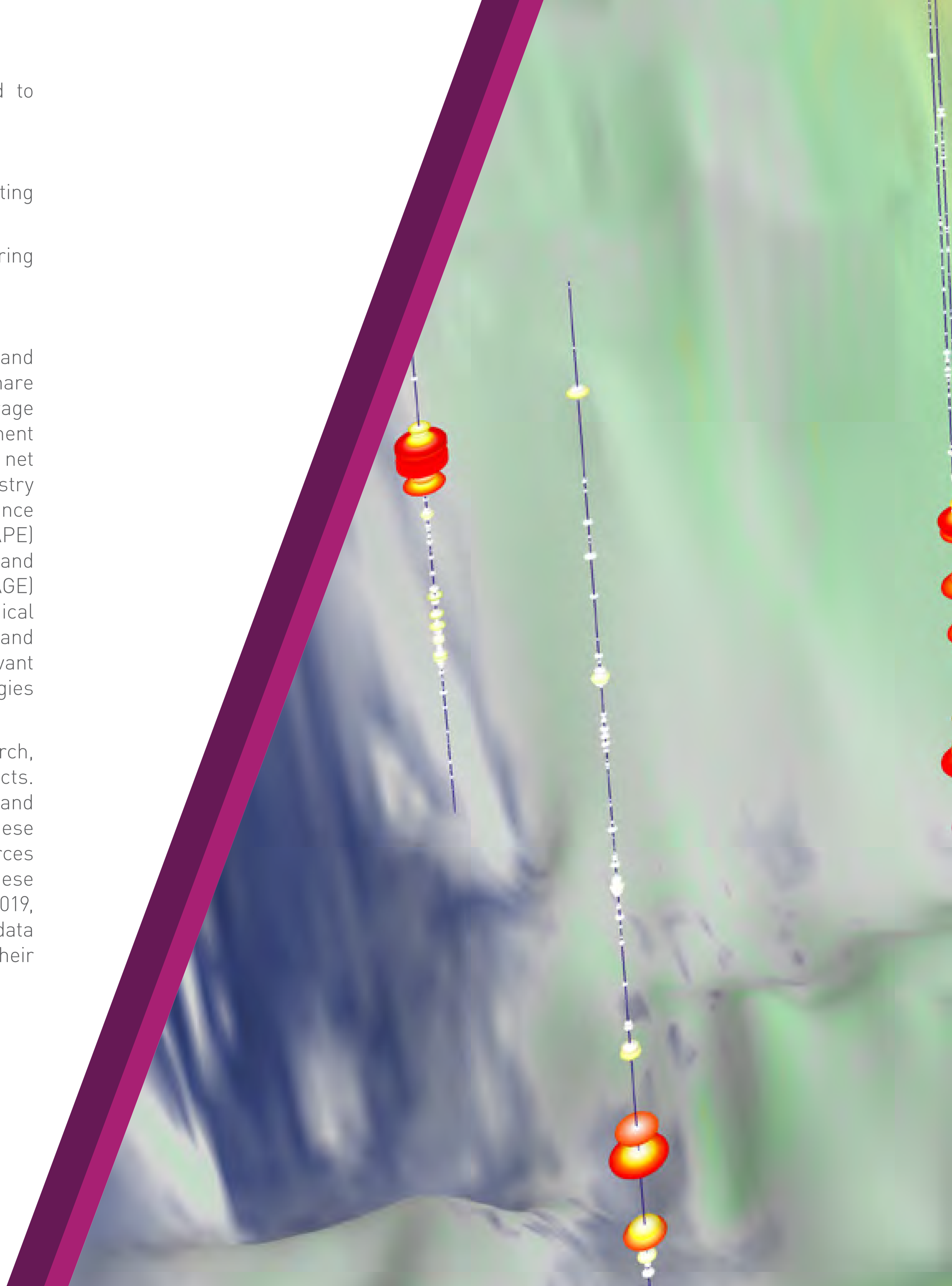
In 2019, TGS made charitable contributions to organizations that help underprivileged youth, fund medical research and access to healthcare, provide humanitarian aid and organizations promoting geophysics and geoscience educational experiences to children in Norway, the United States, Canada and the United Kingdom. To assist those devastated by the destructive bush fires in Australia, TGS made monetary donations to the Australian chapters of the Red Cross and Salvation Army. TGS also continued to recognize its employees' charitable spirit by matching employees' monetary donations or making monetary donations to charities in recognition of an employee's work with an organization, which includes:

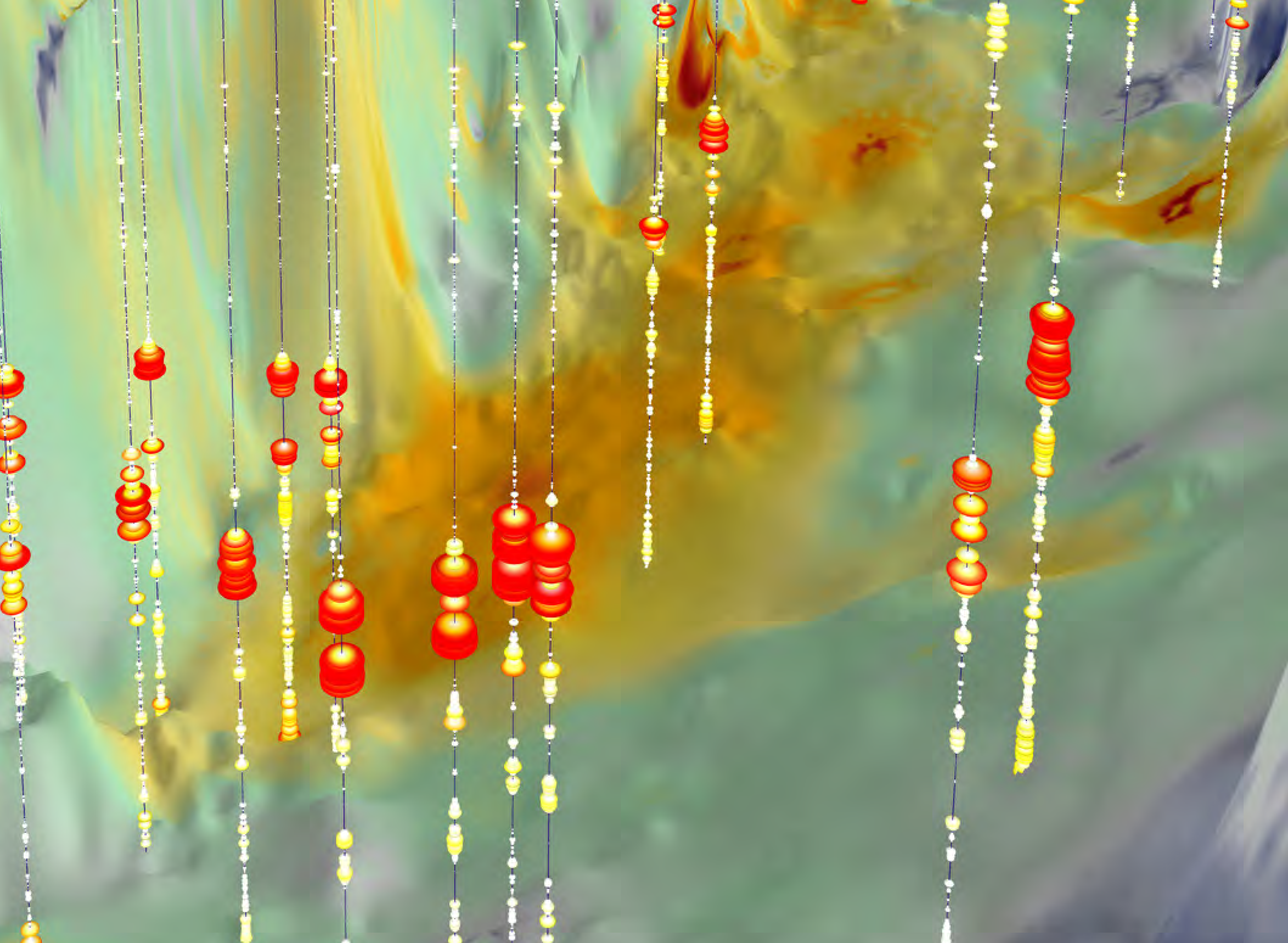
- Participating in fun runs to raise money for organizations dedicated to improving medical diagnostic research
- Donating their time to local food banks
- Holding board positions in charitable organizations aimed at assisting underprivileged and at-risk communities
- Providing learning experiences to students and children interested in furthering their geoscience and geophysical knowledge

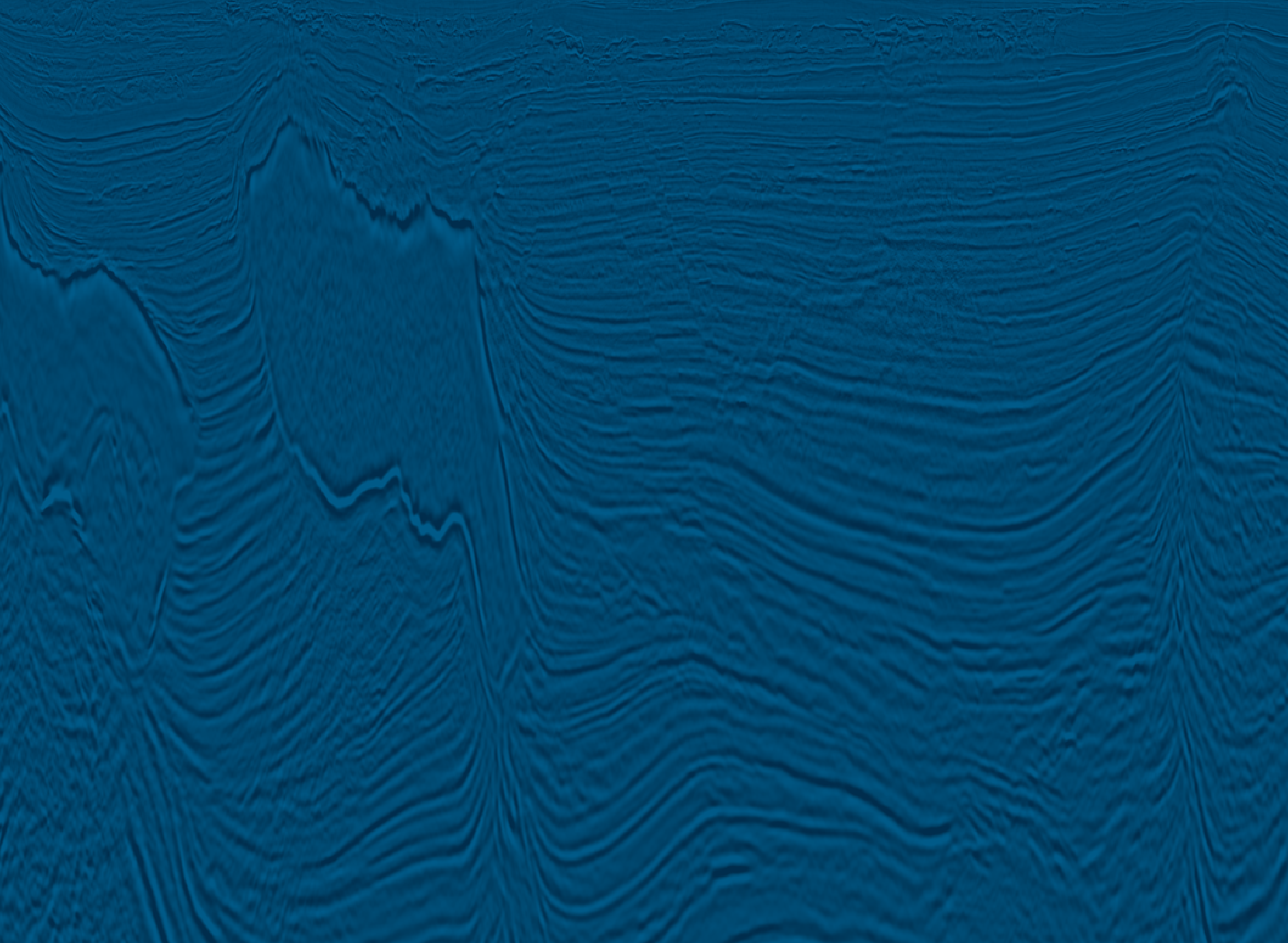
4.2 Sharing Our Knowledge

It is imperative that our employees not only understand the latest data and technological developments within geoscience and data analytics, but also share and collaborate with other geologists, geoscientists, and engineers to encourage innovation within our industry. In 2019, TGS' capitalized research and development spending corresponded to approximately 4.4% of the operating result and 1% of net revenues. TGS hosted, sponsored and/or presented at over 23 geoscience industry events designed to share advancements in imaging, data analytics, and geoscience technologies including the National Association of Petroleum Engineers (NAPE) Summit, Society of Exploration Geophysicists (SEG), International Exposition and Annual Meeting, and European Association of Geoscientists and Engineers (EAGE) Leadership Summit. In addition, TGS almost doubled the number of technical papers (42 papers in 2019 versus 22 papers in 2018) accepted at conferences and other industry publications in 2019. These papers covered a variety of topics relevant to the industry, including key developments in acquisition and imaging technologies and the use of these technologies in different basins or regions.

TGS recognizes that it has a social obligation to improve the existing research, development and technical capabilities in the areas in which we conduct projects. To that end, TGS has partnered with several African governments to promote and advance their geoscience knowledge and technical capabilities. Through these partnerships, TGS provides geoscience training, as well as technological resources that include software and related equipment, for the purpose of ensuring these countries are equipped to manage and promote their oil and gas resources. In 2019, TGS provided over 103 weeks of training on imaging technologies and seismic data interpretation to African governments as part of our projects and to advance their in-country geoscience knowledge.







Declaration on Executive Remuneration

Declaration on Executive Remuneration

From the Compensation Committee

As has happened for the last several years, I had very good, constructive discussions with most of our major investors in late February representing 40% of our outstanding shares. Thank you for your input. However, since the beginning of March, the global outlook for our business has completely changed, driven by the impact of the COVID-19 pandemic coupled with the collapse of world oil prices. TGS is well positioned to weather this crisis, but it will require us to adapt. TGS has put in place a number of measures in response to the COVID-19 situation. These include, global and local response teams, remote working arrangements across all offices, travel restrictions and converting client events, like technical symposiums to web-based events. Measures to adjust cost and capital expenditure have also been put in place and TGS is well prepared to take the necessary actions to implement these measures quickly.

In the context of this rapidly changing business environment, we also need to adapt the way we had intended to remunerate our executives. We believe our remuneration system of "low base pay plus quarterly STI" for all employees allows us to react quickly to changing market conditions in reducing salary expenses.

It remains the Board's belief that attracting and retaining highly engaged executives with great vision, global experience, a passion for business and a strong drive for results is critical to TGS' continued success, and is especially important in challenging times such as we are currently experiencing. Consistent with this belief, the Board has adopted a total compensation philosophy for executives that aligns executives and shareholders to share in the same risk and reward. While base salaries are targeted at a relatively low level versus peers, our remuneration is heavily weighted in variable, performance-linked pay, which reflects our "results-driven" approach. In years where the company performs above market, total cash compensation, defined as base salary and a variable cash bonus linked to operating profit, will be between the 50th and 75th percentile of the market average, providing a competitive element of total compensation. All employees, at all levels in the organization, participate in the same Short-Term Incentive Plan, which is directly linked to the Company's operating profit. From 1st of January 2020, all legacy Spectrum employees also participate in the 2020 Short Term Incentive Plan. This alignment of reward fits well with the "teamwork" culture of the Company.

In 2019, the Company once again, demonstrated its industry-leading ability to generate cash flow and returns, outperforming expectations. The strong performance resulted in a very good payout from the Short-Term Incentive Plan. In addition, the three-year measurement period for the 2017 Long-Term Incentive Plan was completed on 31 December 2019, with a preliminary determination of payout at approximately 95% of the maximum payout under the plan. The 2016 Long-Term Incentive Plan, which vested in August 2019, resulted in a 39.38% payout.

For 2020, following consultation with some of the Company's largest shareholders, the Board proposes to keep the structure of the 2020 Long-Term Incentive Plan generally unchanged from the 2019 but to adjust the metrics in response to the consulation process and the current market turmoil. First, the Board proposes expanding the peer group against which the company is measured for its Relative ROACE metric. The peer group will be expanded to include three additional companies which have historically performed similar to or better than the Company. This will improve the robustness of the relative metric. Second, after much consideration, the Board proposes lowering the Absolute ROACE metric to levels similar to those set during 2016. The Board recognizes that this is an exception to previous years where it has set targets based on the prior year's achieved ROACE. This approach of setting the current year's threshold as the achieved ROACE for the previous year has worked well in recent years to drive profitability and value creation. It is a practice the Board intends to resume in a normalized market. However, the Board believes that in 2020 the targets should reflect the current uncertain business environment. The unknown duration and severity of the COVID-19 pandemic on the Company's customers and the uncertainty around the geopolitical factors driving the oil price decline present unprecendented challenges in 2020. The Board will review the 2020 Long-Term Incentive Plan absolute metric at the end of 2020. Should the Company achieve results higher than the current proposed threshold, the Board retains discretion to adjust the metric threshold upward to reflect actual 2020 ROACE achieved.

Mark Leonard / Director and Chair of the Compensation Committee
March 2020

Pursuant to the Norwegian Public Limited Liability Companies Act, section 6-16a, the Board will present the following declaration regarding the remuneration of TGS' executive team to the 2020 annual general meeting.

1. Executive Remuneration Policy Statement

1.1. Total Compensation Philosophy

TGS is an international company operating in the global geoscience industry with operations worldwide. As a result, the Company's employment base, including its executive team, is and needs to be largely international. To attract and retain talented people, the total compensation package for the Company's employees must be competitive within the markets in which TGS operates. As its total compensation philosophy, TGS uses a blend of components: base salary, incentive compensation (short-term and long-term awards) and non-financial benefits. TGS targets base salaries at the 25th percentile of the compensation peer group, with total actual cash compensation, defined as base salary and a variable cash bonus directly linked to TGS' operating profit, targeted between the 50th and 75th percentile of the market average in years where the Company performs above market. This mix of base salary and cash bonus for executives is heavily weighted to variable pay so that they share in the same risk and rewards as its shareholders. The various compensation elements are balanced in a way that recognizes the individual executive's responsibilities and his or her abilities to influence the short and long-term profitable growth of the Company. Compensation is reviewed annually with performance assessed based on the fulfilment of pre-defined goals.

1.2. Governance

The Board of Directors has established a Compensation Committee with responsibility for reviewing executive remuneration and making recommendations to the Board. The Compensation Committee is composed solely of independent directors: Mark Leonard (Chair), Wenche Agerup, Torstein Sanness and Christopher Finlayson.

The Compensation Committee is responsible for recommending the CEO's compensation package to the Board for final review and approval. This includes the CEO's target bonus, which is specifically set by the Board. The CEO is responsible for proposing the compensation packages (excluding his own) for all executives for Compensation Committee review and Board approval. His proposal is based on each executive's performance assessed against pre-defined goals, including goals that support the corporate goals, as described in section 2.2. The Compensation Committee retains an independent third-party compensation benchmarking firm to assess and recommend changes to TGS' executive compensation practices relative to its peer group. The 2019 peer group was composed of several competitors and international oil and gas services companies (18 companies in total, seven of which arewere U.S. and five Norwegian). The peer group is determined by considering a combination of relative factors that include annual revenue, profit, market capitalization, return on equity (ROE) and return on average capital employed (ROACE). This independent executive compensation analysis is conducted annually. The table to the right shows the peer group for executive remuneration in 2019. The peer group is assessed annually in connection with the benchmarking process based on the factors referenced above. In 2020, the peer group remains the same except for Fred Olsen Energy, which was removed.

Aker Solutions	Fred Olsen Energy	Kvaerner
CARBO Ceramics	Fugro N.V.	Oil States International
CGG Veritas	Helix Energy Solutions	Pason Systems
Core Laboratories	Hunting PLC	Petroleum Geo-Services
Dril-Quip	ION Geophysical	Prosafe
Forum Energy Technologies	James Fisher & Sons	Shawcor

1.3. Components of 2019 Executive Remuneration

The following table summarizes the primary elements of remuneration to TGS' executives in 2019.

Remuneration Element	Objective	Award Level	Performance Criteria
Base Salary (cash component)	Base salary in combination with STI and LTI should attract and retain executives	Around 25th percentile of our peer group	Base salary is subject to annual review with performance assessed based on the fulfilment of pre-defined goals
Short Term Incentive (STI) (cash component)	Drive and reward individuals for annual achievement of business objectives and maintain a strong link between compensation and the Company's financial performance	Target Total Cash Compensation (Base Salary + STI) above 50th and up to 75th percentile of the market in years where the Company performs above market	Target STI is set based on individual level of responsibility, individual contribution and performance. Actual pay-out is a direct function of the Company's operating profit.
Long Term Incentive (LTI) (equity component)	Strengthen the alignment of top management and shareholder interests and retention of key employees	Target award at 1.5x base salary for CEO and 1x average of base salary for CFO and other executives	Participation in the LTI Plan and the size of the award is reflective of the level and impact of the position. Performance criteria for pay-out based on ROACE target, Relative ROACE, and HSE and ESG performance
Benefits	Industry competitive pension and insurance plans	U.S: 6% 401k matching; Norway: between 5.6%/15% below/above 7G (12G cap); UK: up to 7.5%	N/A

1.4. Review of Results of 2019 AGM Remuneration Proposals

The TGS total compensation philosophy and the specific structure and metrics of the Long-Term Incentive Plan are reviewed annually with the Company's largest shareholders. At the 2019 annual general meeting, the Company's shareholders were requested to provide a non-binding advisory vote to approve the remuneration principles for executives and a binding vote to approve the 2019 Long-Term Incentive Plan together with the issuance of free-standing warrants to fund the plan. Both motions were approved with 95.6% and 97.7%, respectively, of votes cast in favor.

Additionally, at the extraordinary general meeting of 21 June 2019 to approve the acquisition of Spectrum, the Company's shareholders approved an increase in rights to shares that may be granted to employees under the 2019 Long Term Incentive Plan. The approved increase was in the amount of 75,000 additional shares, bringing the aggregate number of shares available under the plan for allocation as performance share units (PSUs) and restricted share units (RSUs) to 435,000 shares.

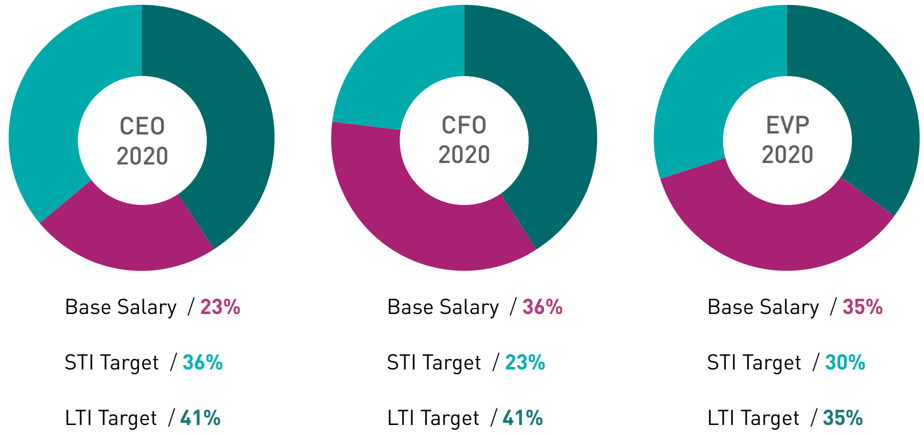
2. Executive Remuneration in 2020

2.1. Overview

Consistent with the TGS total compensation philosophy, executive compensation for 2020 consists of base salary, short-term Incentives, long-term Incentives and health and retirement benefits. These components are consistent with the primary elements of executive compensation in 2019, as detailed in the chart in section 1.3 above.

Consistent with the TGS compensation philosophy, target total cash compensation for 2020 for the executive team averages slightly above the 50th percentile based on the third-party benchmarking data. The Long-Term Incentive Plan for executives (see section 2.4 below) is intended to strengthen the alignment of executive and shareholder interests and aid retention in a competitive marketplace. Third-party compensation benchmarking indicates that the target award level for 2020 is in line with the 50th percentile for the CEO, below the median for the CFO and slightly above, on average, for the remaining executives with wide variations by position. In 2020, the aggregate number of share units to be issued under the Long-Term Incentive Plan (performance share units and restricted share units) is in line with 2019. Under the 2020 Long- Term incentive plan, the total number of share units that may be issued to the executive team is 225,120 shares in line with the shares issued to the executive team in 2019.

The following charts highlight the distribution of the various 2020 compensation components at target levels for the CEO, CFO and an Executive Vice President (EVP). The 2020 Long-Term Incentive is valued based on performance at the target level and a beginning-of-the-year share price of NOK 263.50 with a NOK: USD exchange rate of 0.115. For illustrative purposes, one EVP was selected.



Executive Pay Overview 2015 – 2020

The table to the right reflects the total target compensation for the CEO, CFO and an Executive Vice President (EVP) from 2015 to 2020. The purpose of the table is to allow a simple comparison of the total targeted compensation that is established for executives each year, removing variances caused by the timing of actual payments from the Short- and Long-Term Incentive Plans. The Short-Term Incentive numbers shown are based on what can be earned (accrued) for the full plan year. This will differ from actual bonus payments made in the year (reflected in Note 9 of the 2019 Consolidated Financial Statements), as bonus payments are made approximately two months after the end of the relevant quarter (i.e., a proportion of the Short-Term Incentive will be paid in the following year). The Long-Term Incentive targets, shown in each year, reflect the three-year plan that is implemented in that year with payout, if any, occurring three years later. The 2016 Long-Term Incentive Plan vested in 2019 with a payout to executives of 39.38% of total. For long-term incentives, it should be noted that the comparability of the target award to the expected payout is affected by variations in stock price and the exchange rate between different dates.

	Year	Base Salary at 1st January (USD) [1]	Annual Target STI (USD) [2]	Actual Plan Year STI (USD) [2, 3]	Annual LTI Target, to vest in 3 yrs. (USD)	Total Target Compensation (USD
CEO	2018	550,000	785,250	1,631,592	1,320,843	2,656,093
	2019	565,000	850,000	1,175,466	861,218	2,276,218
	2020	576,300	900,000	TBD	381,781	1,858,081
CFO	2018	383,850	248,978	475,953	621,573	1,254,400
	2019	362,863	251,972	338,132	316,624	931,459
	2020	329,394	210,000	TBD	140,360	679,754
EVP	2018	346,968	226,404	470,416	485,604	1,058,976
	2019	353,040	237,724	328,749	316,624	907,388
	2020	382,550	320,000	TBD	140,360	842,910

[1] Base Salary as of 1st January of each year for the executive holding the position on that date, except that for 2020 where the data relates to the new CFO appointed on 17 February 2020. .

[2] Amount reflected is for a plan year and not actual amounts received during a year; bonus amounts are paid quarterly two months after quarter end (ex: Q4 bonus paid in Q1 of the following year). .

[3] Based on the achievement of metrics at mid-level targets. Exchange rates and the stock price calculated at the date of AGMs, except for 2020, where stock price of NOK 116.95 and the exchange rate of 0.0953 was applied, being the stock price and exchange rate on 4/1/2020.

2.2. Performance Criteria for Base Salary and Short-Term Incentive Awards

Salary increases and target Short-Term Incentive awards for all employees, including executives, are based upon a review of performance against individual goals. Individual goals include goals that are intended to support TGS corporate goals, as well as performance goals specific to the individual. TGS establishes its corporate goals at the start of each year and shares these across the organization. The goals for 2020 include specific targets relative to financial performance, sustainability, and delivery of milestones relative to the TGS three-year strategic plan. Examples of targets include, return on capital employed (ROACE), free cash flow as a percentage of reveune, lowering carbon emissions, and technology intiatives in relation to continued improvement of Imaging performance and reputation. The CEO's goals for 2020 are aligned with the corporate goals, emphasizing ROACE, cash flow, strategic technology initiatives and sustainability.

2.3. Short Term Incentives 2020

The TGS Short-Term Incentive Plan provides a cash bonus for employees that is directly proportional to the actual operating profit of TGS. This plan has been successfully used by TGS for over 20 years to focus all employees on generating operating profit. The 2020 plan will be funded by allocating 8.75% of TGS operating profit (reduced from 9.5% in 2019) to be shared among all eligible employees (approximately 1.1% designated for executives and the remaining 7.65% designated for all other employees). The percentage of operating profit designated is determined by the amount of operating profit in the budget and the amount of bonus needed to compensate employees in line with the TGS total compensation philosophy and peer group comparison.

Compared to earlier years, short -term incentive target awards for 2019 were more in line with, but still slightly below, pre-2016 targets. Short-Term incentive target awards for 2020 are slightly higher than in 2019 but continue below, pre-2016 targets. Target total cash compensation for executives in 2020 is on average, slightly above the market 50th percentile based on third-party benchmark data with wide variation by position. Variation is mainly due to the impact of historical pay/role at Spectrum, and retention of Spectrum executives on the TGS executive team, for example, the former Spectrum CEO now serves as the Executive Vice President for Southern Hemisphere and Europe.

Individual Short-Term Incentive bonus targets are set at the beginning of each plan year. The target for each executive is based on the individual's level of responsibility in the organization, individual contribution, performance versus previous year goals and benchmark data. In 2020, the CEO bonus target is set at approximately 156% of base salary. The other executives have bonus targets between 34% and 137% of base salary. The broadening of the range for other executives is a combination of the impact historical pay/role at Spectrum and new executives joining the team from the legacy TGS organization.

The actual bonus amounts paid over a plan year, representing the designated percentage of operating profit, are paid quarterly following announcement of quarterly financial results. If the Board anticipates that the upcoming quarter(s) will result in a negative operating profit, the plan includes a withholding provision that may be instituted at the Board's discretion. The actual payout is limited to a multiple of two times (2x) target bonus. This is the same as in 2019 and a reduction from three times (3x) target in 2017. Since 2005, the average payout has been 115% of target, with the lowest payout being 27% of target (2015) and the highest payout being 213% of target (2017).

For executives, TGS reserves the right to demand the repayment of any cash performance bonus that has been paid on the basis of facts that were self-evidently incorrect or as the result of misleading information supplied by the individual in question.

2.4. Long Term Incentives 2020

Long-Term Incentives Generally

Since 2015, the Company has issued Long-Term Incentives through an annual equity-based Performance Share Unit (PSU) Plan, with performance against various metrics measured over a three-year period. A limited number of share-based Long-Term Incentive awards are usually issued each year upon authorization from shareholders at the annual general meeting. For 2020, TGS is seeking approval from the AGM for a total of around 420,000 shares under the Long-Term Incentive Plan, with 300,520 allocated to the 2020 PSU Plan and the remaining 119,480 allocated to the Restricted Share Unit (RSU) Plan. Assuming all 420,000 shares were earned under the Long-Term Incentive Plan, this would create less than 0.4% dilution.

Share Ownership Guidelines

In 2014, the Board implemented share ownership guidelines for executives. These guidelines are designed to encourage long-term share ownership by requiring each executive to retain the equity granted through the Long-Term Incentive Plans, such that the awarded equity (once vested), together with any other shares that may be held by the executive, meet certain ownership levels. The following are the required levels: CEO – three times (3x) base salary, CFO – two times (2x) base salary, and all other executives – one times (1x) base salary. An executive has five years from the date the executive is first subject to the guidelines to meet the required level of ownership. If an executive does not meet the share ownership guidelines, the executive must retain all shares awarded from any Long-Term Incentive Plan until the requirement is satisfied. In 2018, the Board expanded the guidelines to include certain non-executive senior management, with the level set at one times (1x) base salary.

Once an executive satisfies the ownership requirement, he or she will be deemed to continue to satisfy the ownership requirement without regard to (i) any increases in Base Salary (unless and until the executive is subject to a higher multiple) and (ii) any change in the value of his or her Shares, provided that the executive continues to hold at least the number of shares that he or she held at the time he or she met the ownership requirement. If an executive becomes subject to a higher multiple, he or she has three years from the effective date of the promotion to acquire ownership of the incremental shares.

For the purposes of calculating the value of the shares held, the greater of (a) the average of the closing prices of the shares on each trading day in December on the Oslo Stock Exchange and (b) the closing price of the shares on the Oslo Stock Exchange on the date the shares were acquired, is used.

2020 PSU Plan

In 2020, the executive team members (currently nine staff) will be eligible to participate in the 2020 PSU Plan, as well as thirteen non-executive senior managers with substantial responsibility at the business unit level. It is proposed that the twenty-two participants will be granted PSUs based on his or her individual performance, span of responsibility and ability to execute the TGS business plan. The PSUs will vest three years after the date of grant and will be converted to a number of TGS shares depending on the achievement of specific metrics.

A threshold, target and stretch (cap) is set for each metric, and no shares will be earned in each category if final values are below the performance threshold. A cash bonus in an amount equivalent to dividends paid on TGS common shares will accrue on PSUs that are ultimately awarded.

In 2020, following consultation with some of the Company's largest shareholders representing around 40% of issued stock, the Board proposes keeping the structure of 2020 Long -Term Incentive Plan generally unchanged from 2019 but adjusting the metrics to reflect the feedback and the current market environment. Recognizing the uncertainty in the global energy industry due to the collapse of global oil prices, the Board proposes reducing Absolute ROACE targets. The Board retains the right to adjust the targets upward at the end of 2020 should the Company achieve ROACE for 2020 higher than the current proposed threshold. If the threshold is adjusted upward, the target and stretch elements will also be adjusted to preserve the range. The Board also proposes expanding the peer group for Relative ROACE. Three data companies, with historically superior ROACE, IHS, CoreLab, and Verisk, will be added to the overall Relative ROACE peer group.

The following table describes the specific metrics with target payout set at 60% of the PSU grant and stretch target set at 100% of the PSU grant.

Proposed 2020 PSU Plan	Performance	Percentage Payout	
Metric 1: Relative ROACE *TGS ROACE relative to a mixed peer group of 11 peer companies –(ION, CGG, PGS, Polarcus, Shearwater (Rieber), Seabird, EMGS, Schlumberger*	Below 50th percentile	0%	Below Threshold
IHS, Verisk, Core Lab)	50th to 75th percentile	20%	Target
	3rd	30%	
	2nd	35%	
	1st	40%	Stretch (Max)
Metric 2: Absolute ROACE	4%	0%	Below Threshold
EBIT EBIT / Average capital employed	10%	20%	Target
(2020+2021+2022) / 3	16%	40%	Stretch (Max)
	Zero LTIs	6.66%	Target
Metric 3: HSE / Sustainability	Safety Inspections Crew Safety Visits	6.66%	11,090
	ESG Metrics	6.66%	Target

The Board believes that the proposed target metrics are sufficiently challenging and should align with shareholder expectations. Historical performance is provided in the following table.

Metric	2020 Threshold	2020 Target	2020 Stretch	2019	2018	2017	2016
Relative ROACE	50th percentile	50th to 75th	1st	2nd	1st	1st	1st
Absolute ROACE	4%	10%	16%	19%	17%	10%	5%
HSE/ESG	Target	Target	Target	Target	Target	Target	Fail

For 2020, TGS proposes the following grant amounts: (i) CEO, up to 57,120 PSUs, (ii) CFO up to 21,000 PSUs, (iii) remaining eight executives, an average of 21,000 PSUs each, and (iv) the thirteen senior managers, an average of 5,880 PSUs each (300,520 maximum combined grant to the executive team and senior leaders). The value of the plan is subject to the share price and exchange rate at the time of valuation.

2020 RSU Plan

TGS is also proposing that 119,480 units are allocated to the RSU Plan for other key employees (around 85 staff or approximately 12% of the workforce). Executives will not qualify for RSUs. Key employees in the RSU plan must achieve satisfactory performance against their goals over the three-year plan period to earn the RSUs. The individual performance goals will be based on the performance criteria described in section 2.2 above with a focus on goals that support the corporate targets for ROACE, sustainability and strategic initiatives. On average, since the company started issuing restricted stock units (RSU) in 2015, 85% of issued RSUs have vested or are expected to vest. Several employees have lost their yearly grant due to not achieving satisfactory performance against their goals. Of the vested RSUs 78% are retained by employees.

2.5. Employee Share Purchase Plan

In February 2019, TGS implemented an Employee Share Purchase Plan (ESPP) pursuant to which eligible employees are allowed to purchase common shares of the Company at a discount through payroll deductions. The ESPP intends to encourage broader share ownership among TGS employees to further increase alignment with shareholders. The plan is currently in its third round with approximately 32% participation.

Under the ESPP, participating employees will save money through voluntary, after-tax payroll deductions over a period of six months (the Offer Period). Upon completion of the Offer Period, employees will have the option to use the savings to purchase TGS stock at a 15% discount to the market price at the time of purchase. The plan sets a maximum amount of savings that can be accumulated during each Offer Period, resulting in a maximum purchase of approximately 100 shares per employee per Offer Period (approximately 200 shares per participant per year). The ESPP is limited to 1,000,000 shares that may be acquired during the life of the plan. Shares will be purchased from the open market, and no shares will be issued by TGS; therefore, there will be no dilution of existing shareholders. The cost for TGS to administer the plan and fund the discount in 2019 was USD 95,000.

All employees (other than a small number of employees inAustralia) may participate in the ESPP, subject to meeting a short service requirement for eligibility. All executives are permitted to participate in the ESPP.

2.6. Pension and Insurance Plans

The TGS executive team is part of the TGS general pension plan (401k in the U.S.) as administered in accordance with local custom and policy in Norway, U.S. and U.K. The pension plan is assessed annually based on a review of market and peers in each geography, and no special or additional pension contributions are given to executives. In 2020, TGS will make the following maximum pension contributions (as a percentage of cash compensation) to executives depending on location:

- 6% 401k matching (cap at USD 19,000) in U.S.;
- between 5.6%/15% below/above 7G (12G cap) pension in Norway; and
- Up to 7.5% contribution in U.K.

The TGS executive team and their dependents are also provided with the option to participate in health and death insurance benefits as generally available to employees of TGS and in accordance with local custom and policy. In addition, executives are offered an annual medical / health assessment.

2.7. Severance Pay Arrangements

The maximum amount payable to the CEO in case of termination of employment without cause or for good reason is one times the amount of his highest annual base salary in effect during the three years that immediately precede the date of termination, spread over an ensuing one-year period conditional upon his continued compliance with restrictive covenants.

As a result of historical Spectrum terms, the maximum payable to the EVP Southern Hemisphere and Europe (former Spectrum CEO) on termination is one and a half times base salary, and the maximum payable to him on resignation is one times base salary.

Additionally, the maximum amount payable to the previous TGS CFO now holding the position of EVP for Strategy and M&A, in case of termination for any reason other than redundancy, gross misconduct or statutory retirement is one times the amount of his highest annual base salary in effect during the three years that immediately precede the date of termination, spread over an ensuing one-year period conditional upon his continued compliance with restrictive covenants.

The amount payable to the CEO and the EVP for Strategy and M&A (previous CFO) in the case of termination associated with a "change of control" event is one times the highest gross annual compensation received during the three years immediately preceding the "change of control" event, paid as a lump sum.

No other members of the executive team have employment agreements providing termination benefits.

3. 2019 Remuneration Results and Assessment

3.1. Results from the 2019 AGM

In accordance with section 6-16a of the Norwegian Public Limited Companies Act, the Board prepared a statement during 2019 with respect to the principles for remuneration of executives of the Company, which was noted and approved at the annual general meeting. In addition, the Board presented the 2019 Long-Term Incentive Plan to the annual general meeting, which was also approved.

The Board of Directors believes that the compensation awarded to executives in 2019 fully complies with the statements, proposals and approvals from the 2019 annual general meeting.

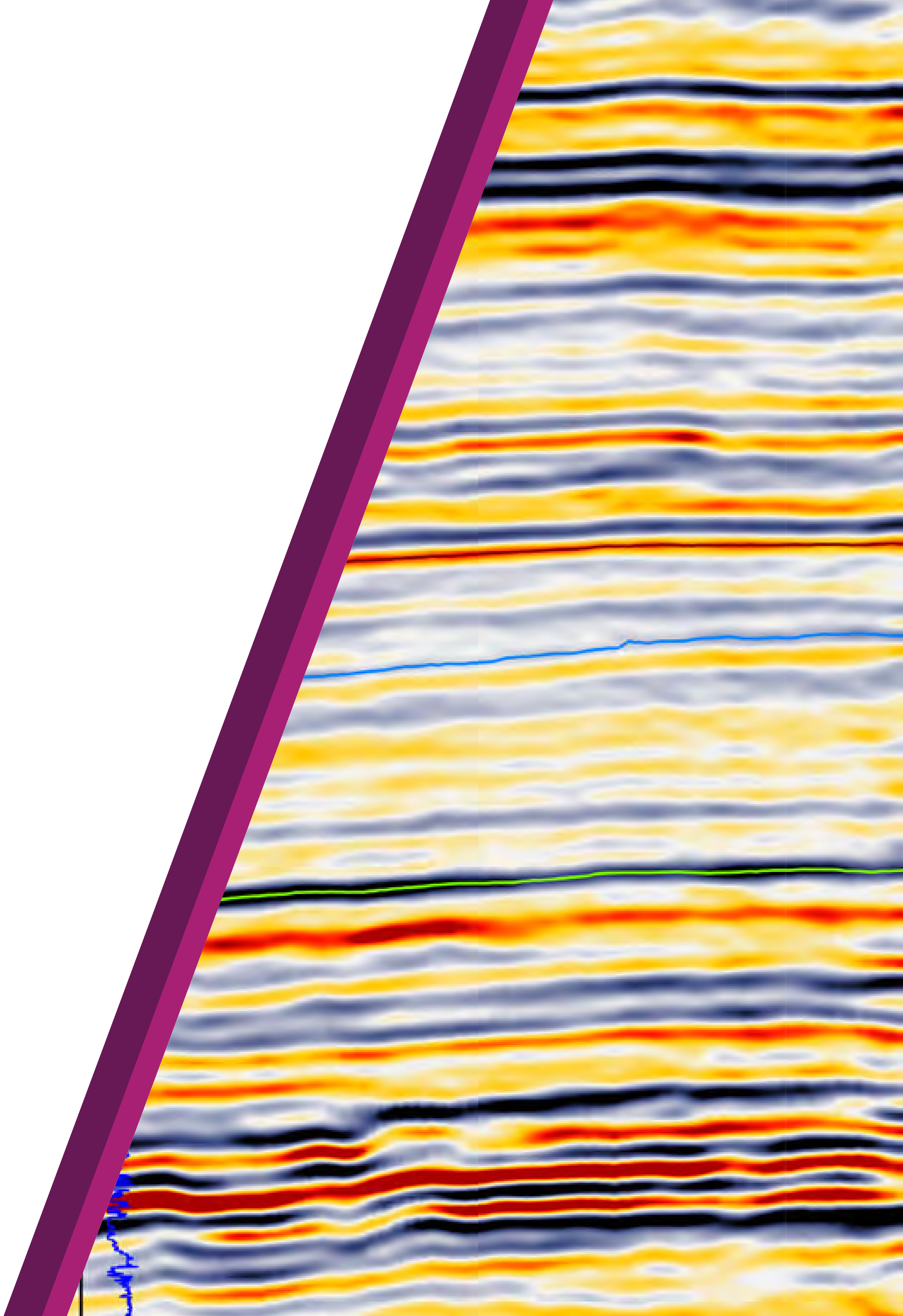
Approved at 2019AGM	2019 Actual
Executive base salaries are consciously set low (around 25th percentile of our peer group)	Third-party benchmark data from December 2019 indicated that actual base salaries in 2019 were on average at the 25th percentile
9.5% of operating profit allocated to Short Term Incentive bonus pool	Actual pay-out was at 9.5% of operating profit
Long Term Incentive Plan with Relative ROACE, Absolute ROACE and HSE and Sustainability metrics	Long Term Incentive Plan implemented as proposed to AGM and as amended at the EGM of 21 June 2019
Issue 435,000 warrants to fund Long Term Incentive Plan	434,180 warrants issued relating to 2019 Long Term Incentive (305,680 PSUs and 129,130 RSUs)
Stock Ownership Guidelines	All Executives where in compliance with the guidelines as at 1/1/2020

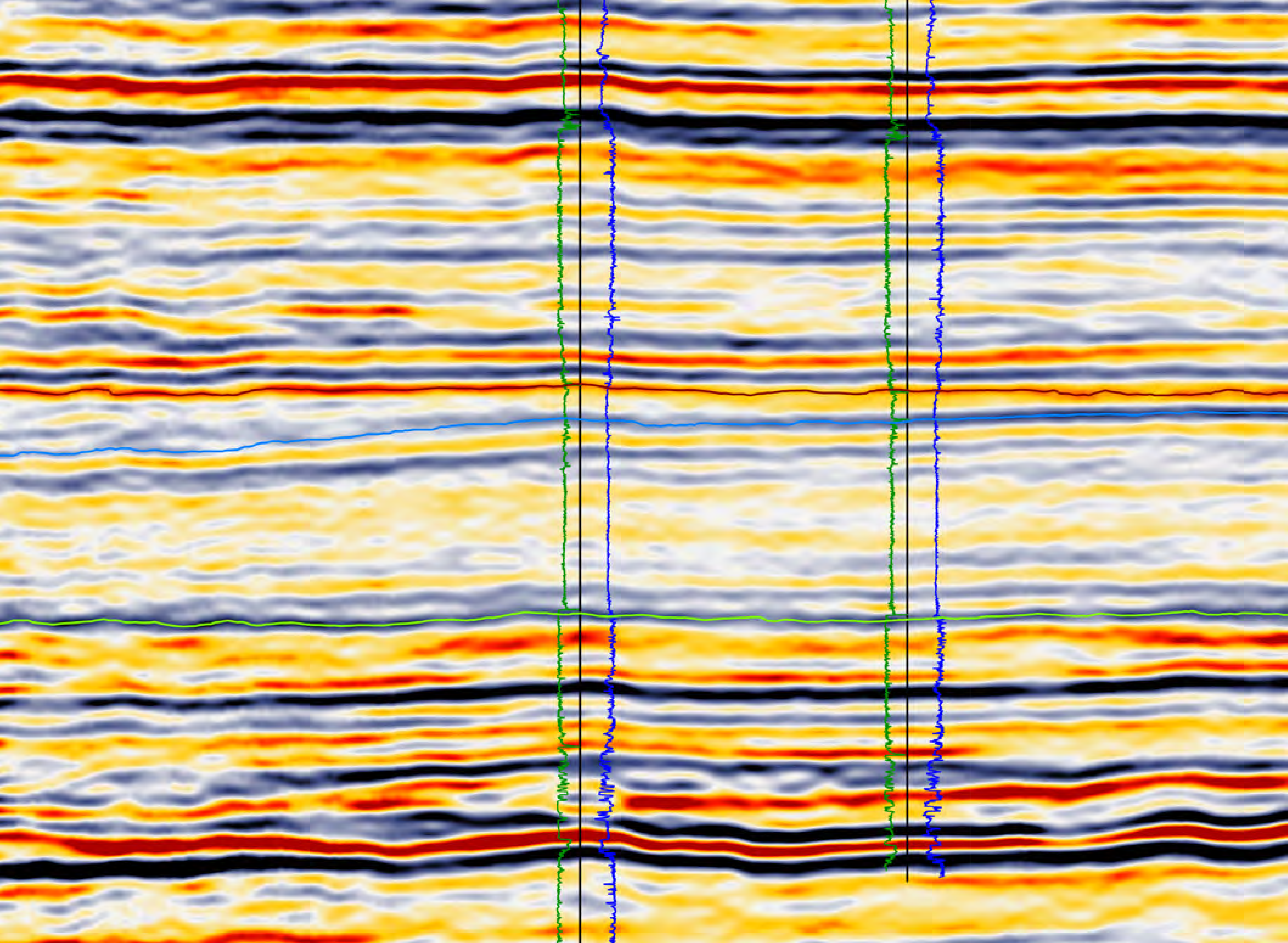
3.2. Performance in 2019

In its assessment of the CEO and executive performance in 2019, and consequently their annual base salary and Short-Term Incentive awards, the Board emphasized financial goals (including specific targets for cash flow, revenue, operating profit and ROACE), strategic goals (including the development of technology initiatives), employee engagement, customer engagement and cost control. Performance against these goals was either at or ahead of target.

3.3. Total Executive Compensation for 2018 and 2019 (IFRS Basis)

Reference is made to Note 9 of the Consolidated Annual Financial Statements as of and for the year ended 31 December 2019 for certain information regarding historical cash compensation and Long-Term Incentives for executives, presented in accordance with IFRS standards.



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