# Annual Report 2018

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Supporting Exploration – Optimizing Production

A Clearer Image | www.pgs.com

Petroleum Geo-Services ASA and its subsidiaries ("PGS" or "the Company")* is a focused marine geophysical company that provides a broad range of seismic and reservoir services, including acquisition, imaging, interpretation, and field evaluation. The Company's MultiClient library is among the largest in the seismic industry, with modern 3D coverage in all significant offshore hydrocarbon provinces of the world.



* When the terms "PGS" and "the Company" are used in this report, these will as a main rule include both Petroleum Geo-Services ASA and its subsidiaries. However, in certain sections and paragraphs hereof, these references will only include Petroleum Geo-Services ASA as context indicates.

# Dear PGS Shareholders

2018 was the first full year we operated under the new organizational structure following a comprehensive streamlining of our organization, which significantly reduced our cost base. Despite a continued challenging market, I am pleased to report that we have substantially improved our financial performance during the year. While the market is still challenging, we saw some improvement during 2018. With our lower run-rate cost base and improved earnings potential, we are well positioned to deliver positive results and significant free cash flow going forward.

We had an encouraging start to 2018, with solid MultiClient sales from a geographically diverse MultiClient data library and a generally high prefunding level for ongoing MultiClient projects. The underlying sentiment was positive for most of the year, and the oil price steadily increased for the first nine months.

The marine contract market benefitted from a growing need among oil and gas companies to replace reserves and extract more from producing fields. We experienced a good year-over-year price increase for contract work, driven by a better market and more production seismic (4D) in the mix. Oil and gas companies recognized the value of higher quality data when surveying producing fields and were willing to pay a premium price for 4D data, which is usually higher density compared to exploration 3D surveys.

Going into the winter season, demand weakened with the increased oil price volatility. The order book reduced and it became challenging to build vessel continuity, leading to idle time, especially in the fourth quarter. Utilization towards the end of the year was also negatively impacted by factors that became more difficult than we anticipated, such as longer processes for formalizing projects, changes of project timing and permitting delays.

The oil price was lower and more volatile during the last three months of the year. However, we did not see any significant changes in clients' year-end spending plans, or any bids for contract work pulled from the market. Longer-term the oil price is of importance to how our clients prioritize and spend on seismic.

I am very pleased to report that we achieved an outstanding MultiClient performance, with late sales setting a new record, by a solid margin. This is concrete evidence of the attractiveness of our MultiClient data library, as well as demand for quality data among our clients.

Our revenues were flat in 2018, compared to the previous year, while our EBITDA and EBIT improved significantly, mainly because of the reorganization and a comprehensive cost reduction in all parts of the Company. We achieved our key financial goal for 2018 of becoming cash flow positive after debt service measured as Segment revenues less gross cash cost, capex, taxes, interest and scheduled debt repayments.

Over the last four years, our industry has changed and moved toward the MultiClient business model. This trend continued in 2018. At the start of the year, WesternGeco announced a plan to exit the marine acquisition market and, after the summer, Shearwater acquired their assets. A few months later, CGG communicated their plan of becoming asset light. Following these strategic moves, PGS is the only fully integrated offshore seismic company, which I believe will be a competitive advantage for us in an improving market.

**PGS will aggressively capitalize on digitalization to achieve its strategy:**
Technology | Cloud Computing | Data Protection | Automation | Turnaround Time

We experienced a fundamental market improvement for MultiClient in 2018, combined with encouraging developments in the contract market. However, the contract market was still challenging and the acceleration that we have experienced in earlier cycles is yet to materialize. We have a close dialog with clients and their feedback suggests that there are reasons to believe 2019 will be a better year than 2018. This is supported by improving cash flow among our customers. We also believe their looming challenge of maintaining and building reserves to meet energy demand will benefit the marine seismic market going forward.

During 2018, we revised our strategy. In the coming years, we will focus on debt reduction and improving profitability and efficiency in everything we do. We will continue to develop our MultiClient business and build a leadership position in the 4D market. By further developing our integrated position, it will be our target to image all the data we acquire, and to leverage our fleet productivity and technology. We will continue to innovate and R&D will be focused on developing differentiating technologies. We will aggressively capitalize on digitalization to achieve these goals. I look forward to delivering on our strategy and I believe this is the right way for PGS to create shareholder value.

**Rune Olav Pedersen**
*President and CEO*

# Business Highlights 2018

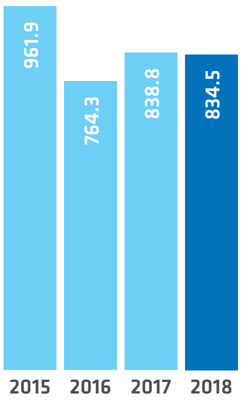
- PGS allocated two thirds of its active 3D vessel capacity to MultiClient and invested $277.1 million in 2018 to expand and further develop its portfolio of attractive MultiClient surveys.
- Overall MultiClient Segment revenues grew by 22% in 2018, compared to 2017.
- MultiClient late sales were record high and ended at $371.9 million, an increase of 58% from 2017.
- 2018 was the first year PGS operated in a centralized, simplified and streamlined structure, after a comprehensive reorganization in the fourth quarter 2017.
- The flexible fleet strategy, whereby the Company adjusts capacity according to seasonal demand swings, implemented as a part of the reorganization, proved to work as intended.
- PGS was able to achieve its primary financial target for the year of becoming cash flow positive after debt servicing*.
- Capital expenditures were kept at a low level in 2018.
- In November, PGS sold the fiber optic permanent monitoring solution, OptoSeis, as a part of the plan to divest non-core assets.
- PGS announced it was the preferred tenderer for sale of the *Ramform Sterling* to JOGMEC in Japan and a related service agreement of up to 10 years with annual renewals. The agreement to sell the vessel at a price of approximately $100 million was signed early 2019.

*Is measured as Segment revenues less gross cash cost, capital expenditures (as reported), taxes and interest paid and scheduled debt repayments.

## Financial Calendar

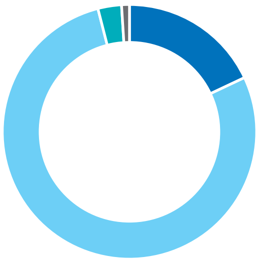
| | |
|---|---|
| Annual General Meeting | **April 24**, 2019 |
| Q1 2019 Earnings Release | **April 25**, 2019 |
| Q2 2019 Earnings Release | **July 18**, 2019 |
| Q3 2019 Earnings Release | **October 17**, 2019 |
| Q4 2019 Earnings Release | **January 30**, 2020 |

# Key Figures



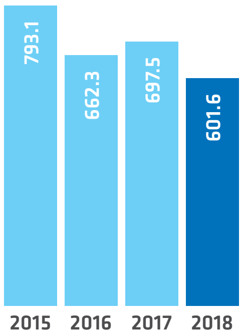

## PGS Segment Revenues

*USD millions*



## Segment Revenue Split

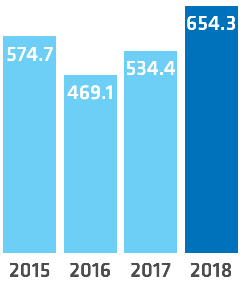
**18%** Contract **78%** MultiClient
**3%** Imaging **1%** Other




## PGS Gross Cash Cost

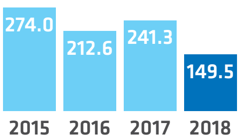
*USD millions*

## Segment Revenues by Business Activity



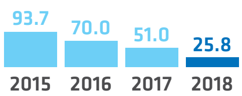

### MultiClient

*USD millions*




### Marine Contract

*USD millions*




### External Imaging

*USD millions*

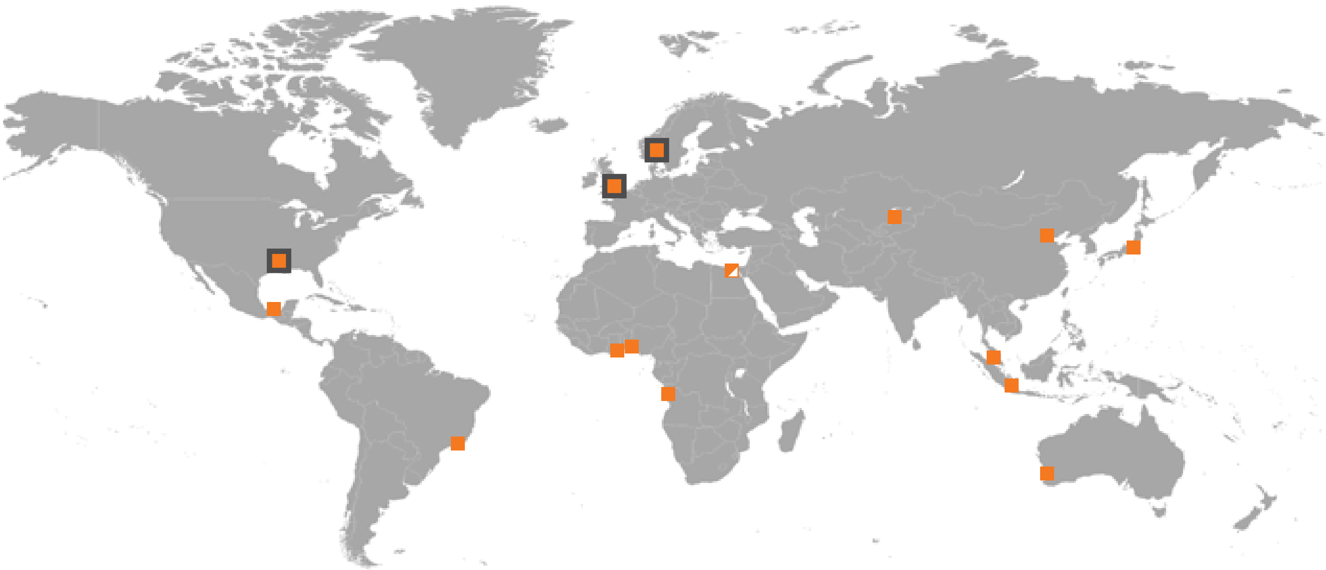
## Key Financial Figures

| In USD million | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|
| **Profit and loss numbers Segment Reporting** | | | | |
| Segment Revenues | 834.5 | 838.8 | 764.3 | 961.9 |
| Segment EBITDA | 515.9 | 374.1 | 313.3 | 484.4 |
| Segment EBIT ex. impairment and other charges, net | 36.3 | (147.1) | (137.5) | 15.8 |
| **Other key numbers As Reported** | | | | |
| Net cash provided by operating activities | 445.9 | 281.8 | 320.9 | 487.9 |
| Capital expenditures (whether paid or not) | 42.5 | 154.5 | 208.6 | 165.7 |
| Cash investment in MultiClient library | 277.1 | 213.4 | 201.0 | 303.3 |
| Total assets | 2 384.8 | 2 482.8 | 2 817.0 | 2 914.1 |
| MultiClient library | 654.6 | 512.3 | 647.7 | 695.0 |
| Cash and cash equivalents | 74.5 | 47.3 | 61.7 | 81.6 |
| Total shareholders' equity | 721.8 | 879.5 | 1 359.4 | 1 463.7 |
| Net interest bearing debt | 1 112.8 | 1 139.4 | 1 029.7 | 994.2 |

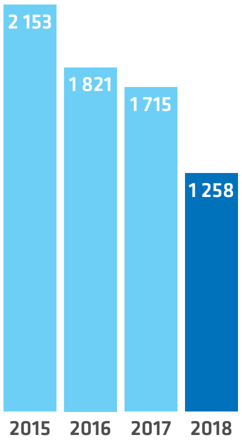
# Key Figures

## People & Places

Headquartered in Oslo, Norway, PGS has offices in 15 countries around the world as of year-end 2018 and operates regional centres in London and Houston.



Luanda, Angola | Perth, Australia | Rio de Janeiro, Brazil | Beijing, China | Cairo, Egypt | Accra, Ghana
Tokyo, Japan | Almaty, Kazakhstan | Cyberjaya & Kuala Lumpur, Malaysia | Villahermosa, Mexico | Lagos, Nigeria
Bergen, **Oslo** & Stavanger, Norway | Singapore, Singapore | **Weybridge**, UK | Austin & **Houston**, US




## Average Number of Employees by Year

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## Data you can drill on

Tailored seismic acquisition, expert imaging,
and library coverage in prospective areas.

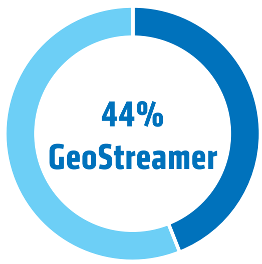
**Supporting exploration, optimizing production.**

PGS

# Building a MultiClient Data Library for the Future

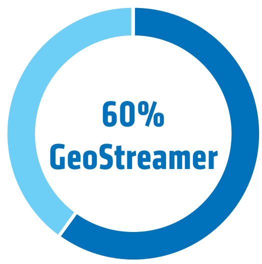
The PGS MultiClient data library contains advanced images of the subsurface that oil and gas companies use to explore for hydrocarbons. Better data enables more effective exploration and increases the chances of success.

The library focuses on areas of high prospectivity, where clients have good potential for accessing acreage. A range of commercial models for data licensing is available, designed to suit the exploration objectives and ambitions of any oil company.




**PGS MultiClient 3D Library**

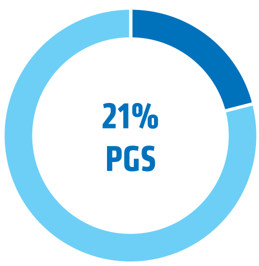
Comprising almost **850 000** sq. km, of which approximately **44%** is GeoStreamer 3D data.




**PGS MultiClient 2D Library**

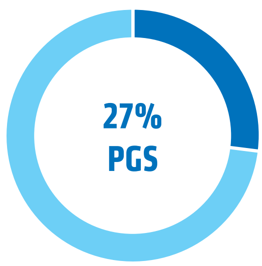
Comprising approximately **670 000** line kilometers, of which over **60%** is GeoStreamer 2D data.

**PGS MultiClient Performance: 2018 Peer Group Comparison**



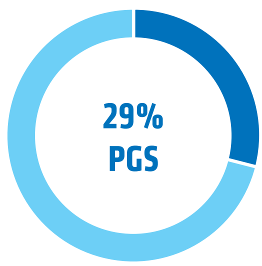

**Net Book Value**

**21%** PGS
**79%** Rest of Peer Group*




**Revenues**

**27%** PGS
**73%** Rest of Peer Group*




**Cash Investment**

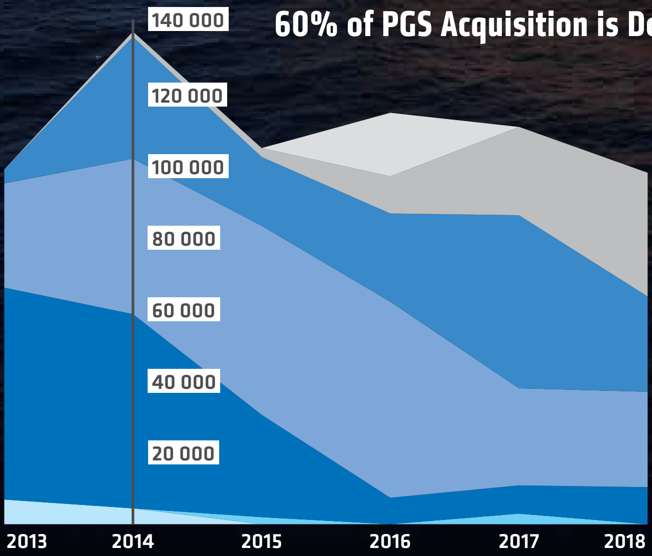
**29%** PGS
**71%** Rest of Peer Group*

*Peer group comprise WesternGeco, TGS, CGG, Spectrum and PGS

# Utilizing the Capabilities of the PGS Fleet

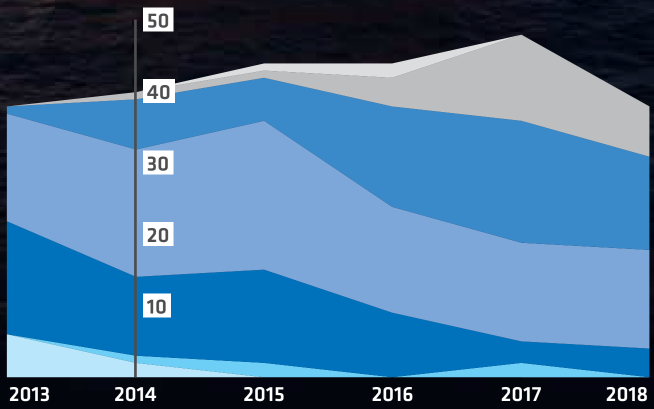
PGS has a unique advantage in being the only seismic operator to use vessels of the Ramform design. The ability to tow large, dense streamer spreads, as well as rapid streamer deployment and retrieval, are critical factors for high productivity. The capability to complete large surveys in short time spans is a significant PGS advantage.

## 60% of PGS Acquisition is Done with 14 Streamers or More



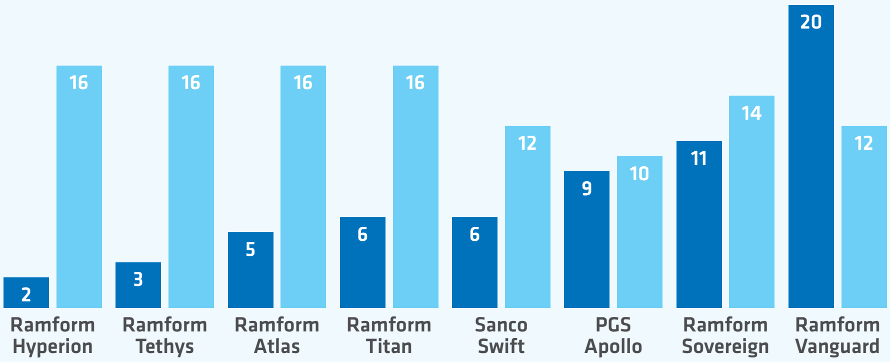

**Area in Square Kilometers by Configuration**

6 Streamers 8 Streamers 10 Streamers 12 Streamers 14 Streamers 16 Streamers 17-18 Streamers




**Number of Projects by Configuration**

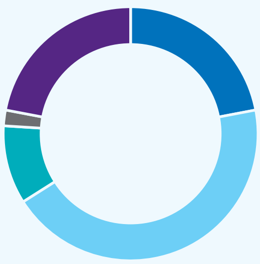
6 Streamers 8 Streamers 10 Streamers 12 Streamers 14 Streamers 16 Streamers 17-18 Streamers




## Most Productive Fleet in the Industry

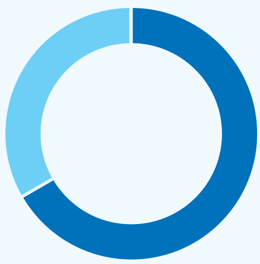
**Vessel Age (years)** **Normal Streamer Count**

*All available streamers are GeoStreamer*



## 66% Vessel Utilization in 2018

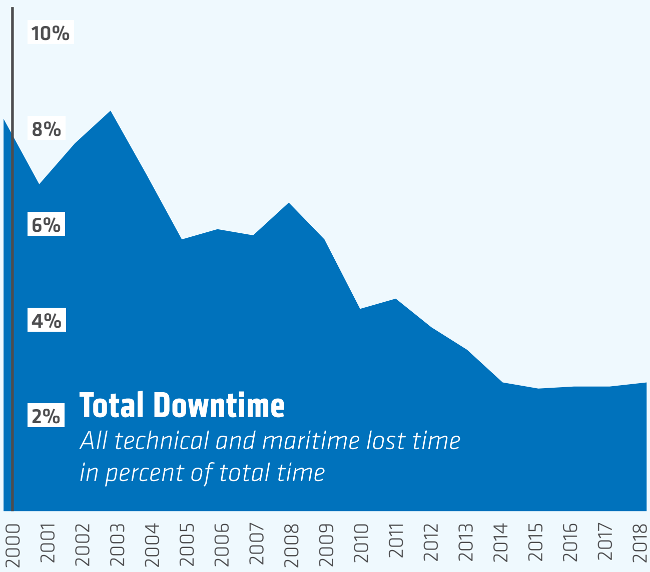
**22%** Contract **44%** MultiClient
**10%** Steaming **2%** Yard
**22%** Stacked/standby

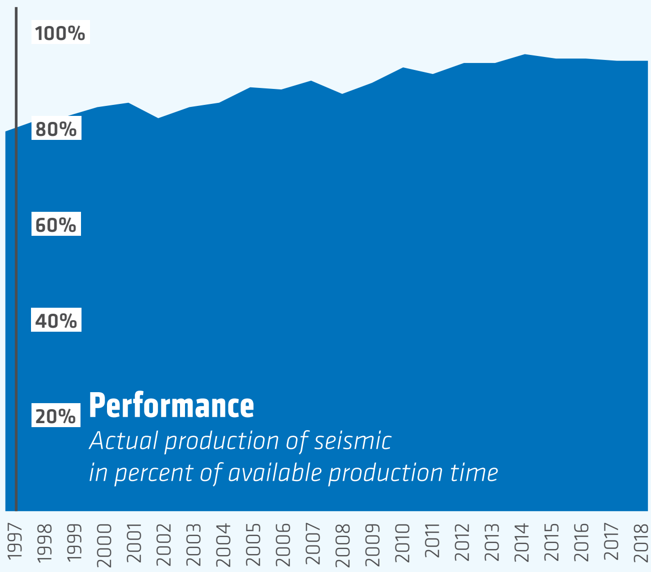


## Active Vessel Time in 2018

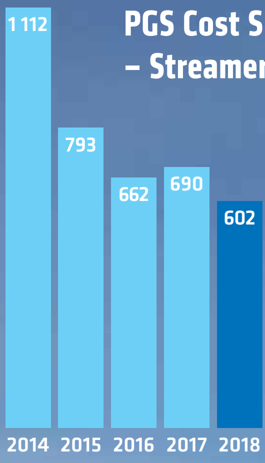
**66.6%** Marine Contract
**33.3%** MultiClient

## Decreased Downtime – Increased Performance



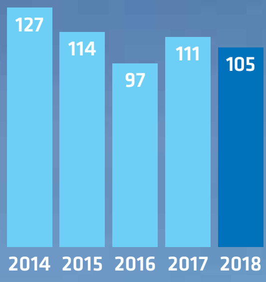



## PGS Cost Significantly Reduced – Streamer Capacity Maintained




**Gross Cash Cost**

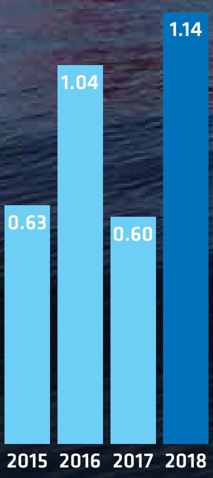
*USD millions*




**Number of Streamers**

*Average through the year*

Thor Magni is one of four purpose built support vessels PGS is using.




**Total Recordable Case Frequency ("TRCF")***

*Per million man-hours.*


**Lost Time Injury Frequency ("LTIF")***

*Per million man-hours.*

# Executive Team*

**Rune Olav Pedersen**
President & CEO

**Gottfred Langseth**
Executive Vice President
& CFO

### Sales & Imaging

*MultiClient, Contract and Imaging*

### New Ventures

*Building new MultiClient programs and strategic positioning in new basins*

### Operations & Technology

*Project Planning & Bidding*
*Project Delivery*
*Seismic Acquisition & Support*
*Geoscience & Engineering*

**Nathan Oliver**
Executive Vice President,
Sales & Imaging

**Berit Osnes**
Executive Vice President,
New Ventures

**Per Arild Reksnes**
Executive Vice President,
Operations & Technology

*Sverre Strandenes retired as the EVP Sales & Services at the end of 2018.
He was succeeded by Berit Osnes, EVP New Ventures and Nathan Oliver, EVP Sales & Imaging.

# Executive Team Biographies

## Rune Olav Pedersen

*President & CEO*

**Rune Olav** has been with PGS since October 2010. He joined the Company as General Counsel and head of legal. In September 2014 he also became responsible for Group Communication, Strategic Customer Relations and Marketing. His responsibilities were further expanded in September 2015 to also include Corporate Development.

Prior to joining the Company, Rune Olav was, for more than four years, a partner in the law firm Arntzen de Besche and previous to that Lawyer and Associate in the same firm. He started his career as a Junior Research Fellow at the University of Oslo, and has also served as a Deputy Judge in a District Court of Norway. Rune Olav earned his law degree from the University of Oslo, and enhanced his expertise within European competition law with a post graduate diploma from Kings College London. In 2014 Rune Olav earned an Executive MBA from London Business School.

## Gottfred Langseth

*Executive Vice President & CFO*

**Gottfred** joined the Company in November 2003 and was appointed Executive Vice President and Chief Financial Officer as of January, 2004. Before joining PGS he was Chief Financial Officer of the information technology company Ementor ASA from 2000 to 2003. Gottfred was Senior Vice President of Finance and Control at the offshore engineering and construction company Aker Maritime ASA from 1997 to 2000. Gottfred worked at Arthur Andersen Norway from 1991 to 1997. Gottfred was certified as a Norwegian state authorized public accountant in 1993 and holds a Master of Business Administration degree from the Norwegian School of Economics and Business Administration.

## Nathan Oliver

*Executive Vice President, Sales & Imaging*

**Nathan** joined PGS in 1993 and was named EVP Sales and Marketing in January 2019. He has served PGS globally in various locations, managing international teams in London, Houston, Singapore and KL, with regional responsibilities for Europe, West Africa, North and South America, and Asia Pacific, running a range of PGS activities from advanced imaging to MultiClient. Prior to joining PGS he worked at Digicon Geophysical. Nathan holds an MSc Geoscience from the University of Sheffield, and a BSc in Geology from Kingston University.

## Berit Osnes

*Executive Vice President, New Ventures*

**Berit** joined PGS in 2006 and assumed her current position in January 2019. She has served in various MultiClient sales management roles, including Vice President Geophysics Europe, Africa and Middle East, Vice President MultiClient Europe, Senior Vice President MultiClient, and SVP Strategic Projects. She was also an employee-elected member of the PGS Board of Directors in 2015 and 2016. Before joining PGS she held technical management positions with Geoteam AS and Veritas DGC Ltd. Prior to this, she spent 11 years with Norsk Hydro working within field development, exploration and geophysical operations. Berit holds an MSc Geophysics from the Norwegian University of Science and Technology (NTNU).

## Per Arild Reksnes

*Executive Vice President, Operations & Technology*

**Per Arild** joined PGS in 2001 and assumed his current position in 2018. Per Arild has been a member of the executive management team since 2010 with spheres of responsibility including operations, new ventures, and marine contract. He has served as business unit president for Europe, Africa, Middle East and CIS, and held senior roles within technology, profiling and marketing, and separately technical marketing. Prior to his employment in PGS, he worked for Norsk Hydro for 16 years in both geophysical and management positions. Mr Reksnes holds an M.Sc. Applied Geophysics from the University of Oslo, and an MSc. Technology Management from Massachusetts Institute of Technology / NTNU.

# Sales & Imaging

**Nathan Oliver**

Executive Vice President,
Sales & Imaging

The Sales & Imaging unit promotes and sells MultiClient library data and products, as well as contract acquisition services and imaging solutions to E&P companies on a proprietary basis.

Sales & Imaging work closely with the New Ventures and Operations & Technology divisions in PGS to deliver competitive products and solutions that meet customers' needs in a safe and efficient manner.

### MultiClient Data Sales

PGS has a modern and diversified global MultiClient data library in areas of high prospectivity. Accessing PGS' data library enables customers to evaluate the hydrocarbon potential more rapidly when compared to commissioning and acquiring a seismic survey through a proprietary contract arrangement. The rapid access to high quality seismic data enables oil companies to assess the subsurface risks before applying for licenses over open acreage, guide for nearfield exploration efforts in more mature areas, or evaluate equity-based opportunities.

License rounds serve as important sales triggers for the PGS MultiClient library and guide long-term investment decisions for new 2D and 3D data. The geographical diversity and unique positioning of its global MultiClient library enables PGS to benefit from license rounds around the globe.

By the end of 2018, the PGS MultiClient data library comprised several hundred individual 3D surveys with a combined size of more than 850 000 square kilometers, 44% of which were acquired with the multisensor GeoStreamer® technology. In addition, a total of 670 000 kilometers of 2D data were available to customers globally, of which 60% are GeoStreamer data.

### Exclusive Contract Acquisition

Contract work is seismic data acquisition under exclusive contracts with customers, where the oil company owns the acquired data. PGS meets the customers' requirements for efficient acquisition and cost-effective delivery of seismic data, while at the same time maintaining safe and environmentally sound operations. Contract acquisition leverages the full capabilities of the PGS high-end seismic fleet, GeoStreamer technology and its superior imaging solutions.

### Imaging Services

PGS operates a network of imaging centers globally through which the Company images all new MultiClient data it acquires. In addition, PGS uses its state-of-the-art imaging technology to rejuvenate existing MultiClient library data. The Company's external imaging activities are directed towards supplying high-end, high-value services to a wide range of E&P companies. Imaging services comprise proprietary GeoStreamer-based imaging technology, as well as reservoir characterization and 4D-oriented processing solutions.

# New Ventures

**Berit Osnes**

Executive Vice President, New Ventures

## New Ventures is responsible for developing new MultiClient projects and securing prefunding from oil companies.

To build and maintain the MultiClient data library, PGS makes significant investments in developing, acquiring and processing new MultiClient surveys. In this way, PGS positions itself in both frontier and mature geo-markets.

MultiClient is the dominant acquisition business model for PGS, where the ability to identify and initiate new MultiClient programs with solid economics over the life of the survey is the key to success. PGS derisks new programs by securing prefunding commitments from oil companies, with a targeted prefunding level for the portfolio as a whole in the range of 80-120% of the capitalized MultiClient cash investment.

### How PGS Initiates MultiClient Surveys

PGS initiates attractive new MultiClient projects by capitalizing on its existing data library, applying in-house imaging and reservoir expertise, and through feedback from the sales force. The MultiClient data library provides information about geology in all major hydrocarbon basins. By analyzing these datasets and open file data available around the world, PGS imaging and reservoir experts are able to propose both extensions to the existing library and new areas of hydrocarbon resource potential that are likely to be of interest to oil and gas companies. These findings are assessed against feedback from the sales force, as to where customers would like to explore. These resources are combined with an overall risk analysis of the area and the likelihood of future license rounds or other triggering events.

A key part of the MultiClient business is to assist governments to explore and promote their resource potential in the best way possible, noting that every country and basin requires a slightly different approach. Currently, PGS is proud to be supporting several governments through the provision of high-quality data and bespoke advice on how to optimize the outcome.

### Exploiting a Fully Integrated Business Model

Following the decisions by WesternGeco and CGG to exit the marine seismic acquisition market, PGS is the only company offering the full range of seismic services and business models. Being in full control of acquisition and imaging technology makes PGS uniquely positioned to deliver the best and most flexible solutions.

Full vertical integration allows PGS to control all aspects of the process of identifying new projects, building the relationships that enable those projects to proceed, through to supplying the vessels and the financial backing to ensure that projects go ahead on the optimal timeline without the need to balance the commercial drivers of third-party suppliers. This is particularly important when making commitments on optimum time and quality to host governments.

Consistent quality of services and data is also highly valued by end users. There are other advantages for a vessel-owning company in the MultiClient market. Easy access to capacity at cost is an obvious one, whereas pure MultiClient companies are subject to the going charter rate in the market. Commercial flexibility is another. In mature areas, contract jobs can be included in larger MultiClient surveys, an opportunity that is not available to the asset-light competitors.

# Operations & Technology

**Per Arild Reksnes**

Executive Vice President,
Operations & Technology

## Operations & Technology is responsible for project planning, seismic data acquisition, as well as research and development of new technology.

PGS has a productive core fleet of Ramform vessels, comprising four Ramform Titan-class vessels, one Ramform S-class vessel and one Ramform V-class vessel. All models have delta-shaped hulls and uniquely wide back decks, enabling highly efficient seismic acquisition. The breadth of the Ramform back decks, 40 meters on S-class and V-class, and 70 meters on Titan-class, provides unparalleled streamer handling capability. These vessels deliver industry-leading performance in deployment, acquisition and streamer recovery.

The Company also operates two conventional-hulled vessels on long-term charters, which are used selectively depending on seasonal demand swings.

Operational performance is a measure of how well PGS utilizes the time available to acquire seismic data. Downtime (technical and maritime) as a percentage of total PGS fleet time has decreased steadily over 20 years, matched by improving performance over the same period. To deliver the best possible product in the most effective manner for all stakeholders, each acquisition project requires cooperation between the commercial business areas, and a streamlined organization within Operations & Technology, which includes the four main areas: dedicated project-focused planning; delivery and support teams; robust and professional vessel operations; and cutting-edge marine and imaging technology development.

PGS leads the industry in HSEQ performance and aims to sustain and improve this, with a focus on operational and safety culture. PGS prioritizes safe, ergonomic office and work spaces, good health and recreation facilities for all employees.

### GeoStreamer

GeoStreamer multisensor streamer technology is unique to PGS. In addition to delivering superior seismic data quality, GeoStreamer significantly widens the operational window in which data acquisition can be performed, since it can be towed significantly deeper than a conventional streamer, escaping weather effects without compromising data quality.

Customer benefits include shorter cycle times and more reliable images of the subsurface. The enhanced operational characteristics of the Ramform Titan-class vessels exploit the full potential of the improved weather window created by GeoStreamer technology.

Reliable GeoStreamer data is better for reservoir interpretation and characterization, and PGS has developed several imaging products that build on that advantage. Separated Wavefield Imaging ("SWIM"), Complete Wavefield Imaging ("CWI") and Full Waveform Inversion ("FWI") technologies all benefit from GeoStreamer data by exploiting surface multiple wavefields, refractions and diving waves, and primary reflection wavefields. PGS' advanced imaging solutions create new play opportunities and reduce cycle times to recovery. PGS' robust visualization tools enhance customers' target interpretation, characterization, and decision-making processes.

### Research & Development

PGS invests in research and development that can be commercialized, targeting geophysical and engineering solutions that improve operational efficiency, enhance data quality or shorten data delivery lead times. PGS aims to create sustainable competitive advantages and solid return on the investments.

Visit www.pgs.com for further documentation and regulations

# The PGS Share

The PGS share has its primary listing on the Oslo Stock Exchange in Norway. In the United States, PGS' shares are traded as ADS.

### Share Facts

PGS has 338 579 996 shares outstanding, including American Depository Shares ("ADS"), all of which are of the same class, and carry equal voting and dividend rights. Each share has a par value of NOK 3. The ticker code for PGS at the Oslo Stock Exchange is "PGS" and the shares are denominated in Norwegian kroner ("NOK").

The Company's ADS are traded over the counter in the US, have the ticker code "PGSVY" and are denominated in US dollars ("USD"). Each ADS represents one share. An American Depository Receipt, with the acronym ADR, is the actual physical certificate confirming ADS ownership. The term ADR is often used for both the certificates and the securities themselves.

On average, approximately 3.6 million PGS shares were traded daily on the Oslo Stock Exchange in 2018.

The liquidity of PGS' ADS is significantly lower; the average daily ADS trading volume was approximately 5 575 in 2018.

### Shareholders

PGS had 6,801 shareholders on record as of December 31, 2018, according to the Norwegian Central Securities Depository ("VPS"). By year-end 2018 Norwegian investors owned approximately 40% of the outstanding PGS shares. US based investors had the second largest holding and accounted for 25% ownership, while UK based investors held approximately 17% of the outstanding shares. The remaining 18% were mainly held by investors in other Western European countries.

As of December 31, 2018, DNB Asset Management was the largest PGS shareholder, owning 33.3 million shares or 9.8% of the Company. As of year-end 2018, the Company held 1 739 own shares.

### Distribution of Information and IR Activities

All Company information considered material to the capital markets is published via the Oslo Stock Exchange's news service: www.newsweb.no, and posted on the Company's website: www.pgs.com. PGS holds public presentations and arranges conference calls in connection with quarterly earnings releases. The Company hosts an annual capital markets day for the investment community, and management regularly meets with investors and participates at investor conferences.

### Analyst Coverage

As of December 31, 2018, there were 17 sell-side analysts covering PGS on a regular basis, with market updates and estimates of PGS' financial results. Of these, four are based in the UK, one in France, one in India and the rest in Norway. An updated list of analyst coverage is published on the Company's website: www.pgs.com.

### 2019 Annual General Meeting

PGS' 2019 Annual General Meeting is scheduled for April 24, 2019 at 15:00 CET at the Company's headquarters at Lilleakerveien 4C, 0216 Oslo, Norway. Each PGS share is entitled to one vote. Please note that Norwegian regulations stipulate that shares must be registered in the name of a specific owner in order for that person (or duly authorized agent) to be allowed to vote. Shareholders who wish to attend the Annual General Meeting are requested to pre-register via the Company's registrar. The registrar's contact information follows:

DNB Bank ASA
Registrar Services
PO Box 1600 Sentrum
NO-0021 Oslo, Norway

Phone: +4723268020
Email: kua@dnb.no

Holders of American Depositary Shares ("ADS") may vote according to the underlying shares by: (a) having the underlying shares transferred to an account with the Norwegian Central Securities Depository in the name of the holder, (b) attending the meeting as a shareholder by providing their name, address and evidence that they are the beneficial owner of the ADSs and coordinating with Deutsche Bank, depositary for the ADS, to have their ADSs blocked from voting, or (c) authorizing Deutsche Bank to vote the ADS on their behalf in accordance with specific guidelines.

### Contact Information for ADS Shareholders

The depositary bank for PGS' ADS shares is Deutsche Bank; the contact information is as follows:

Deutsche Bank Shareholder Services
American Stock Transfer & Trust Company
6201 15th Avenue Brooklyn, NY 11219, USA

E-mail: DB@amstock.com
Direct Dial: +1 718 921 8137

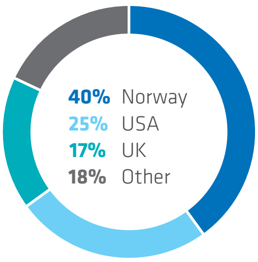
### Corporate Credit Rating

PGS corporate rating is 'B3' with a stable outlook by Moody's (updated March 13, 2018) and 'B-' with a stable outlook by Fitch (updated October26, 2018).

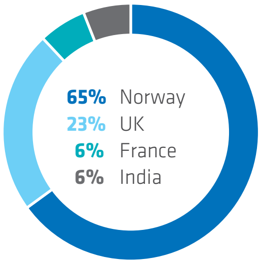
## 20 Largest PGS Shareholders*

| | December 31, 2018 | |
|---|---|---|
| | **Total shares** | **Ownership %** |
| DNB Asset Management AS | 33 272 271 | 9.8 |
| Coltrane Asset Management L.P. | 26 395 416 | 7.8 |
| Folkketrygdfondet | 24 777 255 | 7.3 |
| M&G Investment Management Ltd. | 19 232 706 | 5.7 |
| Ferd AS | 15 823 200 | 4.7 |
| Lancaster Investment Management LLP | 15 031 723 | 4.4 |
| Dimensional Fund Advisors LP | 13 078 862 | 3.9 |
| The Vanguard Group | 8 482 254 | 2.5 |
| KLP Forsikring | 8 174 928 | 2.4 |
| Legal & General Investment Management Ltd. | 7 744 888 | 2.3 |
| Albert Bridge Capital LLP | 6 538 397 | 1.9 |
| Hermes Investment Management Ltd. | 6 257 391 | 1.8 |
| Assenagon Asset Management SA | 5 443 909 | 1.6 |
| Edinburgh Partners Limited | 5 337 246 | 1.6 |
| BlackRock Institutional Trust Company | 4 767 338 | 1.4 |
| Carmignac Gestion | 4 720 608 | 1.4 |
| Third Avenue Management LLC | 4 547 310 | 1.3 |
| Storebrand Kapitalforvaltning | 4 325 535 | 1.3 |
| Shell Asset Management Company BV | 2 650 575 | 0.8 |
| Nuveen LLC | 2 458 073 | 0.7 |
| Other shareholders | 118 830 574 | 35.1 |
| Total | 338 579 996 | 100.0 |

*The data in the table above is provided by Nasdaq Advisory Services and is obtained through an analysis of beneficial ownership and fund manager information provided in replies to disclosure of ownership notices issued to all custodians in relation to the PGS share register provided by the Norwegian Central Securities Depository (VPS). Every reasonable effort has been made to verify the data, however neither PGS nor Nasdaq Advisory Services can guarantee the accuracy of the analysis, which is updated each quarter.

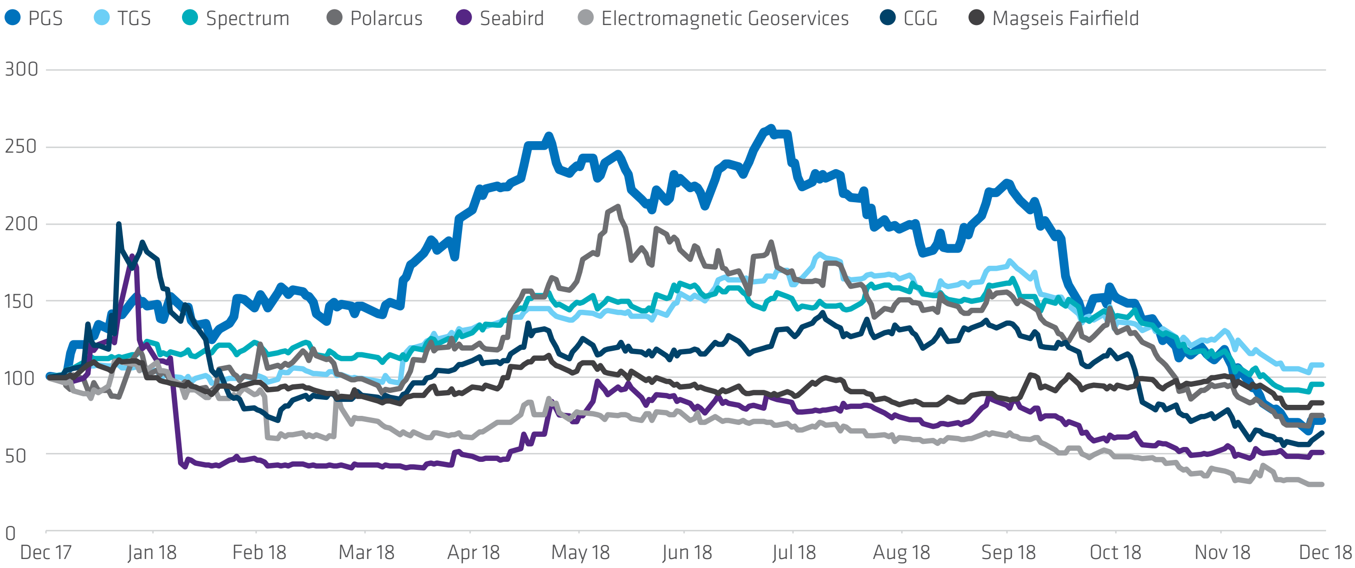



## Citizenship of Shareholders




## PGS Sell-side Analyst Location

## PGS Share Price Performance During 2018 Relative to Peers



# History of PGS

| | |
|---|---|
| 1991 | Geoteam and Precision Seismic merge to form Petroleum Geo-Services ("PGS"). Later the Company merged with Nopec. PGS' vision was to provide the most efficient acquisition of 3D marine seismic data. |
| 1992 | PGS was incorporated as a public limited liability company, Petroleum Geo-Services ASA, and listed on Oslo Stock Exchange. |
| 1993 | Initial public offering on NASDAQ in the United States. With the acquisition of Tensor Inc., specialists in 3D processing and depth imaging, PGS' expanded into the data processing field. |
| 1994 | Acquisition of ERC – a reservoir consultancy group. |
| 1995 | Ramform seismic vessel technology was introduced with delivery of the *Ramform Explorer*. From 1995 to 1999, PGS designed, built, and deployed six proprietary Ramform survey vessels and grew to become a worldwide leader in the development and industrialization of 3D marine seismic acquisition. |
| 1997 | PGS was listed on the New York Stock Exchange. PGS Production is conceived with the acquisition of Golar-Nor and the FPSOs *Petrojarl I* and *Petrojarl Foinaven* |
| 1998 | The production services business Atlantic Power was acquired. PGS added the *Ramform Banff* to the fleet of FPSO vessels. |
| 1999 | A fourth FPSO, the *Petrojarl Varg*, was bought from Saga Petroleum. |
| 2000 | PGS sold its subsidiary Spinnaker Exploration. |
| 2001 | The Company's data management business was sold to Landmark Graphics Corporation. *Ramform Victory* tows the world's first 16 streamer spread. |
| 2002 | PGS bought into in the Varg field in the North Sea from Norsk Hydro and Statoil and established the exploration and production company Pertra. PGS completes the world's 1st commercial Multi Azimuth ("MAZ") survey at Varg. |
| 2003 | PGS sold Atlantis to Sinochem. An inability to meet debt obligations made PGS file for Chapter 11 under the US Bankruptcy code in July. PGS emerged from Chapter 11 in November the same year. |
| 2005 | Pertra was sold to Talisman, and PGS became a dedicated oil services company. In December the same year a full refinancing of the Company was completed. |

| | |
|---|---|
| 2006 | PGS demerged its floating production by listing and distributing to shareholders the company Petrojarl ASA. PGS becomes a dedicated geophysical services company and announces a plan to build two Ramform S-class vessels. |
| 2007 | PGS introduced the GeoStreamer, the first ever dual sensor streamer. The Company sells *Ramform Victory* to the Japanese Ministry of Economy Trade and Industry ("METI"). PGS acquired Arrow Seismic, Multi Transient Electro Magnetics ("MTEM") and Applied Geophysical Services ("AGS"). The first dividend in PGS history was paid. |
| 2008 | PGS took delivery of the *Ramform Sovereign* and the vessel sets new industry record with deployment of 17 streamers. |
| 2009 | PGS took delivery of the *Ramform Sterling*. |
| 2010 | PGS emerged as a focused marine geophysical company, following sale of its Onshore seismic business. PGS was reorganized into global product lines within four business areas: Marine Contract, MultiClient, Operations, and Imaging & Engineering. *PGS Apollo* joined the fleet. |
| 2011 | PGS orders two new Ramform Titan-class vessels from Mitsubishi Heavy Industries Shipbuilding Co Ltd. in Japan, with options for additionally two vessels. |
| 2012 | PGS exercised options to build another two Ramform Titan-class vessels and launched Separated Wavefield Imaging ("SWIM"). |
| 2013 | PGS took delivery of the *Ramform Titan*, the first vessel in a series of four Ramform Titan-class ships. |
| 2014 | *Ramform Atlas*, the second Ramform Titan-class vessel was delivered in January. |
| 2015 | In an uncertain market environment PGS focused on cash flow and increased its liquidity reserve. |
| 2016 | *Ramform Tethys* was delivered, the third in a series of four Ramform Titan-class vessels, improving fleet capabilities further with excellent operational performance. |
| 2017 | Took delivery of *Ramform Hyperion*, the last in a series of four Ramform Titan-class vessels. Launched initiative to centralize, simplify and streamline the organization to reduce cost by more than $100 million. |
| 2018 | Delivers on plan to become cash flow positive, sells OptoSeis to GeoSpace as a part of the strategy to divest non-core assets. PGS is the preferred tenderer for vessel sale and long-term cooperation with JOGMEC in Japan, and a related service agreement of up to 10 years with annual renewals. |
| 2019 | To be continued... |

Visit www.pgs.com for further documentation and regulations

# Corporate Governance

PGS is committed to maintaining high standards of corporate governance. We believe that effective corporate governance is essential to our Company's success and establishes the framework by which we conduct ourselves in delivering services to our customers and creating value for our shareholders.

PGS is registered in Norway as a public limited liability company, and our corporate governance model is based on Norwegian corporate law, the Continuing Obligations of Stock Exchange Listed Companies issued by Oslo Stock Exchange, the Rules and Regulations of the Luxembourg Stock Exchange, and the Norwegian Code of Practice for Corporate Governance (the "NUES Recommendations"). To the extent practicable, PGS also adheres to requirements applicable to registrants of foreign securities in the United States, where our American Depositary Shares ("ADS") are publicly traded. We have also implemented corporate governance guidelines particularly suited to our Company and the industry in which we operate.

The Norwegian Public Limited Liability Companies Act section 5-6 (4) requires that the statement of Corporate Governance is brought up for the Annual General Meeting ("AGM"). Consequently, this report will be presented to the General Meeting on April 24, 2019.

Our corporate governance principles, which have been adopted by our Board of Directors, are summarized below. Our website provides full versions of our basic corporate governance documents and an overview of our governance structure. These items include the Company's Articles of Association, the Board of Directors' Rules of Procedure, and the charters for the Company's Audit Committee, Remuneration and Corporate Governance Committee, and Nomination Committee. The documents can be downloaded from our website: www.pgs.com.

In accordance with the Norwegian Accounting Act section 3-3b, PGS is required to give a statement of our corporate governance in the Board of Directors report. In the Board of Directors report we refer to this document.

### 1. Code of Conduct, Core Values and Corporate Responsibility

We have adopted a Code of Conduct that reflects our commitment to our shareholders, customers, and employees to carry out our business with the utmost integrity. Our Code of Conduct and Core Values are available in full on our website: www.pgs.com.

At the heart of our Core Values is also a principled approach to Corporate Responsibility. We have built our framework for Corporate Responsibility around four key areas: People, Environment, Conduct, and Stakeholders. For a further description, see our Corporate Responsibility Report, which is available at www.pgs.com.

### 2. Business

PGS is a focused marine geophysical company that provides a broad range of seismic and reservoir services, including acquisition, imaging, interpretation, and field evaluation. The Company's MultiClient data library is among the largest in the seismic industry. The Company operates on a worldwide basis with headquarters in Oslo, Norway.

Our business purpose, as presented in the Company's Articles of Association, is as follows:

"The business of the Company is to provide services to and participate and invest in energy related businesses."

Our business operations and the goals and strategies for our business areas are presented in greater detail on pages 16-18 of the Annual Report.

### 3. Equity and Dividends

The shareholders' equity as of December 31, 2018 was $ 721.8 million, corresponding to 30.3% of total assets.

The Board of Directors believes that the Company has an adequate capital structure. However, as a result of a weak market over recent years combined with substantial investments in fleet renewal, net interest bearing debt, currently at $1 112.8 million, is higher than what the Board sees as beneficial for stakeholders over time. During 2018, taking into account experience from the downcycle and with a view that the Company's markets will continue to be cyclical in the future, the Company has adopted a strategic target to over time reduce net interest bearing debt to a level not exceeding $500-600 million, assuming the current size and composition of business activities. As a result, the Company will give higher priority to profitability, cash flow generation and debt reduction than business growth until it reaches a lower debt level. The Board of Directors continually monitors the adequacy of the Company's capital structure – both equity and funding – in light of its objectives, strategy, and risk profile.

The Company has used above the alternative performance measure "net interest bearing debt". This term is defined in the Annual Report and based the accounting standards applicable in 2018, which excludes the effects of IFRS 16 which requires capitalization of leasing agreements and recognition of related liabilities in future years.

The Board of Directors has adopted a dividend policy whereby it is the intention to distribute 25 to 50 percent of annual net income as dividends over time. The Board of Directors has no general authorization to distribute dividends. Any year's dividend is decided by the AGM after a proposal from the Board of Directors.

The Company has not distributed dividends in recent years due to a weak market, operating losses and a need to maintain an adequate liquidity reserve. Going forward, the Company's capacity to pay dividend will be assessed by the Board of Directors in light of, among other things, the market outlook and the Company's equity and funding positions. Since the Company currently has a net interest bearing debt which is above the targeted level, priority will going forward be given to debt reduction before resuming dividend payments. In addition, the Company is restricted in its combined Revolving Credit and Term Loan B facility and indenture from proposing a dividend for 2018 and while these agreements remains in place they provide certain requirements to be fulfilled before the Company can propose a dividend payment.

The Board of Directors is authorized to buy back up to 10 percent of the Company's share capital (treasury shares). The current authorization expires on June 30, 2019. However, a new authorization will, in line with past practice, be proposed at the next AGM. Purchase of treasury shares are subject to restrictions in the Revolving Credit and Term Loan B facility identical to those applicable for distribution of dividends.

It has been an ongoing practice of PGS shareholders to grant authorizations to the Board of Directors permitting it to increase the Company's share capital or issue convertible loans for up to 10 percent of the Company's share capital for certain defined purposes. The current authorizations expire on June 30, 2019. New authorization in line with past practice will be proposed at the next AGM.

Separate General Meeting votes are held for (a) authorizations to increase the share capital for certain business purposes, (b) authorization to issue convertible loans and (c) authorization to acquire treasury shares. When a proposed resolution encompasses share capital increases and/or the issuance of convertible loans and/or acquisition of treasury shares for various purposes, the Company does not find it practical to hold separate votes on each element of proposals. This is a deviation from the NUES Recommendation (identified below) No. 3 where it is recommended that when the General Meeting is to consider mandates to the Board of Directors for the issue of shares for different purposes, each mandate should be considered separately by the meeting.

### 4. Equal Treatment of Shareholders and Transactions with Close Associates

PGS has a single share class and all shares carry the same rights. At our General Meetings, each share carries one vote. Our Board of Directors is committed to equal treatment of shareholders in all respects.

When applicable, transactions involving the Company's own shares are carried out through a stock exchange, or at prevailing stock-exchange prices if carried out in an alternative manner.

Transactions between the Company and shareholders, a shareholder's parent company, members of the Board of Directors, executive officers, or close associates of any such party (referred to as "Close Associates") shall be conducted at arm's length and at market terms. Material transactions with Close Associates will be subject to independent valuation by third parties. According to PGS' Code of Conduct, our employees shall not have any personal or financial interest that might conflict with those of PGS nor influence, or appear to influence judgments or actions in carrying out their responsibilities on behalf of the Company. According to the Board of Directors' Rules of Procedure, a member of our Board of Directors may not participate in discussions or decision-making as to issues in which the Director or any person closely associated with the Director has a material personal or financial interest. The Code of Conduct and Rules of Procedure are available on our website: www.pgs.com.

### 5. Shares and Negotiability

The Company's shares are freely transferable and there are no restrictions imposed by the Company on ownership of or voting for shares.

### 6. General Meetings

Through participation in General Meetings, our shareholders exercise ultimate authority over the Company and elect the members of its Board of Directors and the chairperson of the Board of Directors.

Pursuant to the Company's Articles of Association, the notice of an AGM is distributed at least four weeks in advance of the meeting to shareholders or their depository banks. A copy of the call notice with appendices will be posted on our website: www.pgs.com.

Notices convening Extraordinary General Meetings ("EGM") must be distributed at least three weeks ahead of the meeting. The Board of Directors is to call shareholders to an EGM upon a written demand by the Company's independent auditor or shareholders representing at least five percent of the share capital, or for other purposes.

Shareholders who wish to attend a General Meeting must notify the Company's registrar or PGS by the deadline stated in the meeting notice, which must be at least two working days before the General Meeting.

According to the Company's Articles of Association, documents to be considered at the General Meeting may be published on our website. The same applies to documents that, due to statutory requirements must be attached to, or included in the notice calling the General Meeting. If the documents are published in such a manner, the statutory requirements for distribution shall not apply. Nevertheless, shareholders are entitled to request that documents to be considered by the General Meeting are sent to them via regular mail.

To vote at General Meetings, in person or by proxy, a shareholder must be registered with the Norwegian Central Securities Depository ("VPS"). Holders of American Depositary Shares ("ADS") may vote according to the underlying shares by: (a) having the underlying shares transferred to an account with the Norwegian Central Securities Depository in the name of the holder, (b) attending the meeting as a shareholder by providing their name, address and evidence that they are the beneficial owner of the ADSs and coordinating with Deutsche Bank, depositary for the ADS, to have their ADSs blocked from voting, or (c) authorizing Deutsche Bank to vote the ADS on their behalf in accordance with specific guidelines.

An owner with shares registered through a custodian has voting rights equivalent to the number of shares covered by the custodial arrangement, provided that the owner of the shares, within two working days ahead of the General Meeting, provides PGS with his or her name and address together with written confirmation from the custodian to the effect that he or she is the beneficial owner of the shares held in custody.

Written and/or electronic voting in accordance with the Norwegian Public Limited Liability Companies Act, section 5-8b, shall be allowed for meetings where such method of voting is arranged by the Board of Directors.

Generally, all Directors attend the AGM together with the chairperson of the Nomination Committee and the auditor. In accordance with the Company's Articles of Association, the chairperson of the Board of Directors chairs General Meetings. This is a deviation from the NUES Recommendation No. 6 for making arrangements to ensure an independent chairperson for the General Meetings. The reason for this deviation is that the Company has found this more practical and that PGS wishes to ensure that General Meetings are chaired by a competent person having proper insight into PGS' overall operations.

## 7. Nomination Committee

According to our Articles of Association, the Company has a Nomination Committee comprised of three members to be elected by our shareholders at the AGM. The majority of Nomination Committee members shall qualify as independent parties, pursuant to the NUES Recommendations. The term of service shall be two years unless the General Meeting determines that the period shall be shorter.

The Nomination Committee's main responsibilities, which are set out in the Nomination Committee Mandate and Charter, are to propose nominees for election as members and chairperson of the Board of Directors and the Nomination Committee. Further, the Nomination Committee proposes remuneration to be paid to members of the Board of Directors and Nomination Committee. The remuneration is approved by the General Meeting. Annually, the Nomination Committee produces a written report containing its nominations and proposals, which is distributed in advance of each AGM.

Once a year, the Nomination Committee meets with each Director individually and discusses how the Board of Directors and its committees function and whether there is a need for changes to the Board of Directors. The Nomination Committee also keeps contact with shareholders and the Chief Executive Officer as part of its work.

The Nomination Committee comprises Harald Norvik (chairperson), C. Maury Devine, and Terje Valebjørg. Mr. Norvik was a first time electee at the AGM held May 10, 2017, whereas Mrs. Devine and Mr. Valebjørg at the same AGM were re-elected, all for a service period ending with the 2019 AGM.

Shareholders who wish to propose new Board members or new members of the Nomination Committee may do so by submitting a candidate's name to PGS' investor relations staff via the Company's website: www.pgs.com by following the link, "Nominate a Board Member." The deadline for submissions each year is January 31. Alternatively, candidates can be proposed by letter to PGS attn. General Counsel or via email to: ir@pgs.com. PGS does not employ any Nomination Committee members and none is a member of the Board of Directors.

In 2018, the Nomination Committee held seven meetings and conference calls. The Nomination Committee's report on its work and recommendations is set out in Appendix II to the Calling Notice to the 2019 AGM.

### 8. Board of Directors – Composition and Independence

According to the Company's Articles of Association, our Board of Directors shall have from three to thirteen Directors. The period of service for members of the Board of Directors shall be one year.

The Board of Directors has adopted its own Rules of Procedure that establish in more detail its roles and responsibilities, including:

- Directors' qualifications
- Requirement that a majority of the shareholder elected Directors in the Board, a majority of the shareholder elected Directors being members of the Remuneration and Corporate Governance Committee, and all shareholder elected Directors being members of the Audit Committee are considered to be independent Directors
- Annual review and determination of the independence of each Director.

The composition of the Board of Directors is a reflection of the Company's commitment to protect the common interests of all shareholders and the Company's need for expertise, capacity and diversity.

As of December 31, 2018, the Board of Directors comprised five shareholder elected and three employee elected Directors. Current Directors are presented on the Company's website: www.pgs.com and in this Annual Report.

All shareholder elected Directors are independent of the Company's management. All such Directors are also per December 31, 2018, independent of our major business relations and major shareholders (owning more than 10% of the shares in the Company ). The Director Morten Borge is the Chief Executive Officer in Ferd AS who as of 31 December 31, 2018 owned 4.67% of the shares in the Company. No shareholder elected Director may be an executive of PGS. Such Directors are not permitted to perform paid consultancy work for PGS. As of  December 31, 2018, seven Directors, directly or indirectly, own PGS shares.

Shareholders and other interested parties may communicate directly with our shareholder elected Directors by written correspondence addressed to Petroleum Geo-Services ASA, Board of Directors (shareholder elected members), Secretary of the Board of Directors or to the Company's General Counsel Lars Ragnar van der Bijl Mysen, PO Box 251, NO-0216 Oslo, Norway. Further, our website: www.pgs.com invites shareholders wishing to discuss corporate governance or corporate responsibility matters to contact Mr. Mysen by phone or arrange a meeting with him.

### 9. The work of the Board of Directors

In accordance with Norwegian corporate law, our Board of Directors has overall responsibility for management of the Company, while the Company's Chief Executive Officer ("CEO") is responsible for day-to-day management.

The Board of Directors provides oversight of the CEO's day-to-day management and company activities in general. The Board of Directors is also responsible for ensuring that appropriate management, guidelines, and control systems are in place and are followed.

The CEO, as agreed with the chairperson of the Board of Directors, annually submits a schedule of the meetings of the Board of Directors in the upcoming calendar year. The schedule is subject to Board approval. In 2018, the Board of Directors held eight meetings including conference calls. During 2018, all the current shareholder elected Directors participated in all prescheduled board meetings and conference calls.

Key elements of the Rules of Procedure cover the Board of Directors' responsibilities to determine the Company's financial targets, set strategy along with the CEO and executive committees, and approve business plans, budgets, and budgetary and risk frameworks. The Board of Directors reviews at least annually the objectives, strategy and risk profile for the Company. In its supervision of the Company's business activities, the Board of Directors will seek to ensure that satisfactory procedures are in place for monitoring and follow-up of Board-approved corporate principles and guidelines covering areas such as ethical conduct; adherence to laws, rules, and regulations; health, safety and environment; and corporate responsibility.

The Rules of Procedure also require an annual self-evaluation to determine whether the Board of Directors and its committees are functioning effectively. The annual self-evaluation is prepared and facilitated by the Remuneration and Corporate Governance Committee. An anonymous survey is carried out and the findings are discussed by the Board of Directors. The survey's findings are made available to the Nomination Committee. The Chairperson of the Nomination Committee also shares with the Board of Directors relevant information for improvement of Board processes that may come up in their annual interviews with individual Directors.

Each scheduled Board of Directors meeting includes a separate session at which issues may be discussed without the presence of the Company's management.

The tasks and duties of the CEO vis-à-vis the Company's Board of Directors are also outlined in the Rules of Procedure, along with the tasks and duties of the chairperson of the Board of Directors. The CEO participates in all board meetings other than closed sessions. The Board of Directors elects a vice chairperson to chair board meetings in the chairperson's absence. The full text of the Board of Directors' Rules of Procedure is available at www.pgs.com.

*Our governance structure is organized as described below*

Our Board of Directors is responsible for the supervision of our business activities. The Board has established an Audit Committee and a Remuneration and Corporate Governance Committee to assist in organizing and carrying out its responsibilities. The mandate and charter for the Audit Committee and the Remuneration and Corporate Governance Committee is available at www.pgs.com.

Board responsibilities include:

- The Board of Directors appoints the Company's CEO
- The Board of Directors, along with the CEO, is committed to operating PGS in an effective and ethical manner in order to create value for the Company's shareholders. Our Code of Conduct requires management to maintain an awareness of the risks involved in carrying out our business strategies. Personal interests must not override or conflict with the interests of PGS.

The responsibilities of the CEO include:

- Day-to-day management of company activities
- Organizing PGS' Executive Committees and the Disclosure Committee to further assist the CEO
- The CEO, under the guidance and supervision of the Board of Directors and the Audit Committee, is responsible for ensuring that the Company's financial statements in all material respects fairly present the Company's financial condition and the results of its operations. Timely disclosure of issues to the Board of Directors is also essential to the assessment of the Company's financial condition, business performance and risks.

*Board of Directors Committees*

As of December 31, 2018, our Audit Committee comprises Directors Anne Grethe Dalane (chairperson), Richard Herbert, Marianne Kah, Anette Valbø and Hege Renshus. All shareholder elected Director's being members of the committee are considered independent of the Company. The committee's functions are to assist the Board of Directors in its supervision of the integrity of PGS' financial statements; to monitor the independent auditor's qualifications, independence and performance; to monitor the performance of the internal audit function; and to promote and review compliance with laws and regulatory requirements.

As of December 31, 2018, the PGS' Remuneration and Corporate Governance Committee comprises Directors Walter Qvam (chairperson), Morten Borge, and Espen Grimstad. All shareholder elected Director's being members of this committee are considered independent of the Company's senior management. The function of the committee is to assist in matters relating to compensation, benefits, and perquisites of the CEO and other senior executives. Review and modification of the Company's guidelines for good corporate governance are also committee responsibilities.

## 10. Risk Management and Internal Control

The Board of Directors is responsible for ensuring that appropriate guidelines, monitoring, and internal control systems are in place. These are to include embedding risk management, designating risk ownership, and implementing risk responses and controls.

The Board of Directors has systems in place to assess that the CEO exercises appropriate and effective management. The Board of Directors' Audit Committee assesses the integrity of PGS' accounts. It also enquires about, on behalf of the Board of Directors, issues related to financial review and external audit of PGS' accounts. Further, the Board of Directors and the Audit Committee supervise and verify that effective internal control systems are in place, including systems for risk management and financial reporting.

The Board of Directors and the Audit Committee take steps to ensure that the Company's internal control functions are working as intended and that necessary measures are taken to reduce extraordinary risk exposure. Furthermore, the Board of Directors makes certain that there are satisfactory routines for follow-up of principles and guidelines adopted by the Board of Directors governing (i) ethical conduct; compliance with laws, rules and regulations; health, safety and working environment; and corporate responsibility, and (ii) how the Company integrates stakeholder considerations into the Company's value creation.

The Company's anti-corruption program includes a policy, a management statement, and procedures as to several ethical issues, periodic training, high risk area assessment and monitoring, compulsory contract wording, etc. The policy and procedures are available at www.pgs.com. The program is evaluated on a regular basis by the Audit Committee.

Management maintains and regularly reviews a risk matrix setting out the main risks for the Company. These risk factors and the Company's risk mitigating activities are subject to discussion in the Board of Directors at least once a year.

Management conducts day-to-day follow-up of financial management and reporting. Management has established a structured process to ensure that Internal Control over Financial Reporting is effective. The process includes identification and assessment of all material financial reporting risks, identifying and documenting relevant controls to address these risks, and monitoring that controls are implemented and performed. For controls that are not operationally effective at year-end, their potential financial exposure and impact on the consolidated financial statements are evaluated.

*Internal Audit Department*
PGS has an Internal Audit Department reporting directly to the Audit Committee on its audit planning and audit reports. The purpose of the Internal Audit Department is to perform independent, objective assurance and consulting activities that add value and improve the Company's initiatives in financial, operational and compliance areas.

The scope of work for the Internal Audit Department includes determining whether the Company's risk management, control, and governance processes, as designed and represented by management, are adequate and well-functioning. The department has established a process for monitoring that adequate internal control-related activities are integrated into significant PGS business operations worldwide and that focus is directed towards areas of perceived high risk. Any non-conformance is systematically followed up and corrective measures are implemented and their effects monitored.

## 11. Remuneration of the Board of Directors and Executive Management

Remuneration of shareholder elected Directors is not linked to performance but is based on an annual fee and is subject to annual approval by the General Meeting. Shareholder elected Directors shall not solicit or accept specific assignments for PGS beyond their role as Directors. Shareholder elected Directors neither hold any PGS share options, restricted stock units nor performance based restricted stock units.

For details on compensation to individual Directors, please see Note 29 to the consoliated financial statements of PGS.

Remuneration payable to the shareholder elected Directors will be proposed by the Nomination Committee according to its Mandate and Charter, and is submitted to the AGM for approval.

Executive remuneration is one of the primary tasks of the Remuneration and Corporate Governance Committee. The committee annually reviews the total compensation level, the mix between fixed and performance related compensation and the mix between short and long-term compensation. The Remuneration and Corporate Governance Committee has developed an annual schedule in order to ensure and facilitate a structured approach to the annual review of executive compensation. The committee normally also engages an external advisor for this work.

A specific peer group of comparable companies and an executive remuneration philosophy have been adopted. As per December 31, 2018, the peer group consisted of twenty companies primarily from Norway and Europe. All companies are of comparable size and have international operations in the oil & gas and oil service sectors. An external advisor collects and compiles relevant information on peer group companies. This information is used by the Remuneration and Corporate Governance Committee for benchmarking executive remuneration. The executive remuneration policy document includes certain targets and guidelines on how the Company's executives should compare to the peer group. These tools, amongst others, are used by the Remuneration and Corporate Governance Committee to decide on an appropriate remuneration structure and to set appropriate total remuneration.

Compensation for the CEO adheres to the same process as that used for other executives, but is also subject to approval by the Board of Directors.

PGS currently has a compensation structure for executive managers that include a base salary, benefits such as newspaper and mobile phone subscriptions, cash bonuses, pension plans, and performance stock-based long-term incentive programs. Features of these programs include an absolute ceiling on performance-related remuneration.

For further details on the compensation structure and total compensation to executive team members, see note 29 to the consolidated financial statement of PGS, and also the Board of Directors' Statement on Remuneration to the CEO and Executive Officers set forth as Appendix VII to the Calling Notice to the 2019 AGM.

## 12. Information and Communications

The Board of Directors is committed to reporting financial results and other relevant information based on openness and the requirement of equal treatment of all shareholders and securities market participants. The Company complies with relevant disclosure rules and regulations. Announcements are released through the Nasdaq OMX reporting channel and posted on the Oslo Stock Exchange's news service: www.newsweb.no. In addition, all announcements are available on the Company's website: www.pgs.com. The Company's policy of accessibility for shareholders is also presented on the Company's website.

The Company has an investor relations function to ensure that requests for information from shareholders, analysts and other interested parties are satisfied. The Company has an active investor communication program which includes senior management roadshows in connection with reporting of financial results, presentations at relevant investor conferences, and availability for one-on-one meetings. The Company hosts a capital markets day presentation once a year.

The Board of Directors and the Nomination Committee send a letter to the 30 largest shareholders once a year inviting them to join in a dialog on corporate governance and corporate responsibility matters. The letter is also posted on www.pgs.com and any shareholder may initiate communication with the Company on these matters. During 2018, one meeting was conducted with shareholders under this initiative.

### 13. Takeover Bids

The Board of Directors has established guiding principles for how it will act in the event of a takeover bid. The Board of Directors will ensure that all shareholders are treated equally and seek to prevent disruptions to, or interference with, Company operations to the extent possible. In the event of a takeover bid, the Board of Directors will, in accordance with its overall responsibilities and good corporate governance, act in the best interest of shareholders and ensure that they are given sufficient information in the matter. If a takeover bid is made, the Board of Directors will issue a statement containing a recommendation as to whether the shareholders should accept or reject the offer, including an independent valuation of the offer. The Company's Articles of Association do not contain any restrictions, limitations, or defense mechanisms against acquisition of its shares.

### 14. Auditor

The Audit Committee shall support the Board of Directors in the administration and exercise of its responsibility for supervision of the work of the independent auditor, who shall keep the Board of Directors informed of all aspects of its work for PGS. This duty includes submission of an annual plan for the audit of PGS. The auditor attends all Audit Committee meetings and, at least twice a year, meets with the Audit Committee without the presence of management. In-house policies govern the use of the auditor's services. Use of the auditor for services other than the audit of PGS requires pre-approval by the Audit Committee.

The independent auditor meets with the full Board of Directors at least once a year in connection with the preparation of the annual financial statements and, at least once a year, presents a review of PGS' financial reporting and internal control procedures for financial reporting. At least once a year, the independent auditor meets with the Board of Directors without the presence of any member of the executive management.

Remuneration paid to the auditor for mandatory and other audit services will be reported to the AGM for approval.

### 15. Compliance with Laws, Rules, Regulations and Recommendations

As part of PGS' Business Practice outlined on www.pgs.com, PGS is inter alia committed to comply with relevant laws, rules, and regulations, as well as the Continuing Obligations of Stock Exchange Listed Companies issued by Oslo Stock Exchange and the Rules and Regulations of the Luxembourg Stock Exchange. In addition, PGS complies with the current recommendations set forth in the NUES Recommendations, subject only to deviations identified and justified in this report. The NUES Recommendations are available at www.nues.no.

The Board of Directors further conducts periodic reviews of PGS' corporate governance policies and procedures, including the Board of Directors' Rules of Procedure. This process is conducted annually and managed by the Remuneration and Corporate Governance Committee. Any changes to policies or procedures are presented to the Board of Directors for approval.

Visit www.pgs.com for further documentation and regulations

# Board of Directors

The Board of Directors is responsible for the administration, development, and supervision of PGS business activities.

## Walter Qvam

Chairperson (Elected 2016)
Board Member since 2013
Shareholding: 25 000

**Mr. Qvam** was, until June 6, 2016, the President and CEO of Kongsberg Group ASA. He has previously held leading positions in various prominent Norwegian and international businesses in a variety of fields, including oil & gas and shipping, (DNV; Det Norske Veritas), IT (Capgemini), transportation (the Norwegian State Railway) and consultancy (Gemini Consulting). In addition to his role as Chairperson of PGS, Mr. Qvam is also the Chairperson of the Council of Stiftelsen Det Norske Veritas and the Chairperson of the Board of the research organization SINTEF as well as DigitalNorway AS. Mr. Qvam graduated Master of Science (M.Sc.) from the Norwegian University of Science and Technology (1979).

## Anne Grethe Dalane

Vice Chairperson (Elected 2018)
Board Member since 2013
Audit Committee Member
Shareholding: 10 000

**Ms. Dalane** is a Senior Executive at Yara International and previously held a number of senior positions at Norsk Hydro. She is currently Chief Financial Officer Crop Nutrition at Yara International. Her previous experience covers a range of fields including HR as well as oil and gas. She has been Region Director Latin America and Country Manager of Argentina. Ms. Dalane's background is in economics and she holds a business degree from the Norwegian School of Economics NHH.

## Morten Borge

Board Member since 2015
Remuneration and Corporate Governance Committee Member
Shareholding: 0

**Mr. Borge** is CEO of the family owned investment company Ferd. Earlier he was Investment Director and co-head responsible for the overall concept and execution of strategy in the same firm. He has previously been CFO in Interwell AS and held various positions within the audit company PwC. He currently serves as Board Member for Aibel AS, and Interwell AS. Morten Borge holds a Master of Science (M.Sc.) Finance from the Norwegian School of Management where he also qualified as a Certified Public Accountant.

## Richard Herbert

Board Member since 2017
Remuneration and Corporate Governance Committee Member
Shareholding: 0

**Mr. Herbert** is a petroleum geologist who has worked in the global upstream industry for more than 36 years. He is currently employed as an independent advisor. He started his career with Phillips Petroleum, then spent 19 years with BP working on international exploration and development projects with senior positions in Thailand, Mexico, USA, Colombia, and Angola as well as the UK North Sea. From 2003-2008 he worked for TNK-BP in Russia, first as Exploration Vice-President and subsequently as Executive Vice President of Technology. He then joined Talisman Energy in Calgary, Canada as Exploration Vice President before returning to BP in 2013 to join the upstream executive team as Chief Operating Officer, Exploration. Richard Herbert retired from BP at the end of 2016. He holds a BSc in Geology from the University of Bristol in the UK.

## Marianne Kah

Board Member since 2018
Audit Committee Member
Shareholding: 3 589

**Ms. Kah** was the Chief Economist of ConocoPhillips from 1992 to 2017, she was also a member of the company's Corporate Strategy Committee. Prior to this, she was a manager of Corporate Planning for Cabot Corporation, and held various positions in Conoco and U.S. Synthetic Fuel Corp, and was a policy analyst for the US General Accounting Office. She is currently a Senior Research Scholar and member of the advisory board at Columbia University Center on Global Energy Policy; a member of the US Advisory Board for Kayrros and the advisory board of the University of Texas Energy Institute; president-elect of the US Association for Energy Economics and head of its strategic planning group.

## Anette Valbø

Employee Elected Board Member since 2015
Audit Committee Member
Shareholding: 7 142

**Ms. Valbø** joined PGS in 2002. Her current position is Bid Manager, Operations & Technology. She has previously held varius Business Controller positions within Marine Contract and Operations business area. Prior to joining the Company, Ms. Valbø served in various positions within auditing and accounting in Frontline Ltd. and DNB. Ms. Valbø holds a bachelor degree in accounting and auditing from Molde University College, Norway.

## Espen Grimstad

Employee Elected Board Member since 2015
Remuneration and Corporate Governance Committee Member
Shareholding: 917

**Mr. Grimstad** is Senior Navigation Specialist in PGS and has worked for the Company since 2001. After 10 years offshore, working with navigation, he joined Operations Technical Support at PGS headquarters. Grimstad holds a Master of Science (M.Sc.) in Geomatics from the Norwegian University of Life Science at Ås and the University of Glasgow. He is also the employee representative of PGS Tekna.

## Hege Renshus

Employee Elected Board Member since 2017
Audit Committee Member
Shareholding: 1 918

**Ms. Renshus** is Senior Navigation Specialist in PGS. She joined PGS in 1995, initially working offshore as a seismic navigator and subsequently in the Oslo office, in various technical and management positions. Ms. Renshus holds an M.Sc. in Engineering from the Norwegian University of Science and Technology.

# Board of Directors' Report

PGS' financial results improved in 2018. A comprehensive streamlining of the organization, resulting in a significantly lower cost base, and a strong performance by the PGS organization in a continued challenging market were the main drivers.

Petroleum Geo-Services ("PGS" or "the Company") is a focused marine geophysical company providing a broad range of seismic and reservoir services, including acquisition, imaging, interpretation, and field evaluation. The Company's MultiClient data library is among the largest in the seismic industry, with modern 3D coverage in all significant offshore hydrocarbon provinces of the world. The Company operates on a worldwide basis with headquarters in Oslo, Norway.

PGS is, effective January 2019, organized in three primary business units: Sales & Imaging, New Ventures and Operations & Technology.

- **Sales & Imaging** markets and sells PGS' MultiClient library, contract acquisition services and imaging solutions to oil and gas companies.
- **New Ventures** initiates and acquires new MultiClient surveys, and manages the strategic positioning and portfolio development for new MultiClient investments.
- **Operations & Technology** manages vessel operations and marine seismic acquisition projects, as well as research and technology developments.

## 2018 Business Highlights

PGS allocated two thirds of its active 3D vessel capacity to MultiClient in 2018 to expand and further develop its portfolio of attractive MultiClient surveys. The Company invested $277.1 million in new surveys and expects to harvest from these investments in a strengthening market going forward.

Overall MultiClient Segment revenues grew by 22% in 2018, compared to 2017. MultiClient late sales were record high and ended at $371.9 million, an increase of 58% from 2017. The sales performance highlights the quality of PGS MultiClient data library.

2018 was the first year PGS operated in a centralized, simplified and streamlined structure, after a comprehensive reorganization in the fourth quarter 2017. The flexible fleet strategy whereby the Company adjusts capacity according to seasonal demand swings, implemented as a part of the reorganization, proved to work as intended.

The reorganization resulted in a cost reduction of approximately $100 million and PGS was able to achieve the primary financial target for the year of becoming cash flow positive after debt servicing*.

Capital expenditures were kept at a low level in 2018. The Company has an inventory of seismic in-sea equipment from cold-stacked vessels, which is used to re-supply equipment used by vessels in operation, securing low maintenance capital expenditures.

In November, PGS sold the fiber optic permanent monitoring solution, OptoSeis, as a part of the plan to divest non-core assets.

Later in the same month PGS announced it was the preferred tenderer for sale of the *Ramform Sterling* to JOGMEC in Japan and a related service agreement of up to 10 years with annual renewals. The agreement to sell the vessel at a price of approximately $100 million was signed early 2019. PGS will reintroduce the *Ramform Vanguard* from the summer of 2019 to maintain the same operated fleet size in 2019 as in 2018.

## Strategy

PGS will strengthen its position as a leading fully integrated marine seismic acquisition and imaging company. Following decisions by WesternGeco and CGG to exit the seismic vessel acquisition market, PGS is the only seismic company offering a full range of towed streamer acquisition and imaging services through both

*Is measured as Segment revenues less, gross cash costs, capital expenditures (as reported), taxes and interest paid and scheduled debt repayment.

contract and MultiClient business models. Being in full control of seismic vessels, imaging and technology positions PGS to deliver the best and most flexible solutions to clients under any business model. Further, being a fully integrated marine seismic company positions PGS to deliver on its strategic priorities in a way that distinguish it from competition.

The prolonged downturn in the industry, combined with capital expenditures relating to the Ramform Titan-class new build program, has led to a higher level of interest bearing debt than targeted. The Company will prioritize profitability, cash flow and debt reduction before growth and focus on delivering a competitive return on capital employed over the cycle. Debt reduction will be given priority to ensure PGS reaches a capital structure that will sustain future downturns.

PGS business strategy comprise the following key priorities:

- Through the downturn, PGS MultiClient business has demonstrated cyclical resilience with industry leading returns and a positive cash flow. PGS intends to continue to invest in, and profitably grow the MultiClient business. The Company is aiming at becoming the preferred MultiClient provider in the industry and targets a sales-to-cash investment ratio of at least 2.5 times.
- The 4D market troughed in 2016 and has grown significantly in subsequent years. For the repeat surveys over producing fields most clients focus on data quality. High capacity and productive vessels in combination with the proprietary GeoStreamer technology and integration with imaging positions PGS in front in the 4D market. PGS intends to build on its leadership and increase market share in the 4D market.
- Substantially reduced time spent at each stage of the seismic value chain, from survey planning to data delivery is becoming increasingly important. PGS aims to deliver the fastest turnaround time in the industry and being a fully integrated marine seismic company with both acquisition and imaging services PGS is ideally placed to do so. Clients will benefit from a shorter lead time to access seismic data while PGS will benefit from a more efficient and cost effective work process and a closer relationship to clients.
- In the wake of the GeoStreamer, the Company has developed dual-sensor imaging technologies and received acknowledgement for unique imaging capabilities. PGS will leverage the strong imaging technology, including dual sensor processing products, with a target to process all of the seismic data the Company acquires.
- PGS Ramform fleet is unique in the industry with the lowest average age, flexible solutions for all survey designs and high productivity. PGS will continue to capitalize on these assets in a cost effective manner by developing acquisition configurations that leverage productivity, the GeoStreamer technology platform and the Company's imaging capabilities.
- PGS differentiates on technology and the Company will invest in imaging and acquisition technologies where sustained differentiation is or could be achieved.

PGS will aggressively leverage digitalization to deliver on the business strategy, reduce costs and increase efficiency.

## Markets and Main Businesses

PGS is one of the largest participants in the global marine 3D seismic market, with a market share in 2018 of approximately 35%, measured by number of streamers operated.

The seismic industry started on a positive trend in 2018, building on the momentum from the fourth quarter 2017. The sentiment was supported by an improvement in the oil price through most of the year, however the oil price fell and had a volatile period towards the end of the year.

Both PGS and the industry experienced an increase in demand for, and sales of, MultiClient data. On the back of substantial investments in the MultiClient library, PGS had record high late sales, with a growth of 58% from 2017.

The higher oil price also impacted sales leads and active tenders for contract work, and towards the end of 2018 these indicators reached the highest levels for more than 3.5 years. Improved demand and more production seismic in the contract mix made pricing improve, compared to 2017. Despite the improvement, the contract market was still challenging and lossmaking in 2018.

Vessel utilization in the latter part of the year was more difficult than expected due to a seasonal reduction of activity levels and unforeseen project delays and cancellations.

### Technology

PGS invests considerable resources to develop and deliver solutions for customers focusing on efficiency and best-in-class imaging quality.

GeoStreamer, the first-ever dual-sensor streamer and a proprietary PGS technology, represented a game changer in streamer technology and the best proof of PGS' technology differentiation.

GeoStreamer affects the entire E&P life cycle, reducing exploration risk, improving the delineation of reservoir details, enabling accurate reservoir characterization and better production management. For example, the unique design of GeoStreamer has created several new paradigms for how seismic data is used by PGS' customers. Separated Wavefield Imaging ("SWIM") is a technology that significantly improves understanding of shallow geology and drilling hazards whilst simultaneously enabling improvements in survey efficiency - a concept previously viewed as contradictory. Complete Wavefield Imaging ("CWI") is an associated seismic workflow that uses seismic wavefield information previously inaccessible to geophysicists to improve the understanding of seismic velocities in rocks, especially those in the first kilometer below the seafloor where historically available methods have failed. This renewed confidence translates to a more accurate structural understanding of deep drilling targets, higher resolution at all depths, and reduced exploration and drilling risk. SWIM and CWI are examples of unique solutions made possible by GeoStreamer data.

### Financial Results

In 2018 PGS implemented the new revenue recognition standard, IFRS 15, as the Company's external financial reporting method. This change impacts the timing of revenue recognition for MultiClient prefunding revenues and related amortization. For internal management purposes PGS continues to use the revenue recognition principles applied in previous years, which are based on percentage of completion, and uses this for numbers disclosed as Segment Reporting. See note 2 in the annual financial statements for a description of the change in revenue recognition resulting from the implementation of IFRS 15.

The comments below relate to both the Company's primary financial statements with the adoption of IFRS 15 from January 1, 2018 ("As Reported") and segment financial information "Segment" unless otherwise stated.

In 2018, As Reported revenues amounted to $874.3 million. Following implementation of IFRS 15, As Reported revenues for MultiClient prefunding are not comparable to previous periods.

2018 Segment Revenues were $834.5 million, compared to $838.8 million in 2017, a decrease of $4.3 million, or 1%. The decrease is primarily driven by a change in vessel deployment from contract services towards MultiClient investment activity and a lower average prefunding level on new MultiClient surveys. This was offset by record high MultiClient late sales revenues of $371.9 million, up 58% compared to 2017.

Contract revenues ended at $149.5 million, compared to $241.3 million in 2017, a decrease of $91.8 million, or 38%, primarily as a result of less capacity allocated to contract work. This was partially offset by higher prices.

In 2018, As Reported MultiClient prefunding revenues were $322.2 million, predominantly driven by completion of surveys in Europe and North America. Following implementation of IFRS 15, MultiClient prefunding revenues are not comparable to previous periods.

Segment MultiClient prefunding revenues in 2018 were $282.4 million, compared to $299.4 million in 2017, a decrease of $17.0 million, or 6%. Segment MultiClient prefunding revenues for 2018 were highest in Europe and North America.

Segment MultiClient prefunding revenues as a percentage of capitalized cash investment (excluding capitalized interest) was 102%, inside the Company's targeted range of 80-120%, compared to 140% in 2017. The high prefunding level in 2017 was primarily driven by more sales from surveys in the processing phase. Cash investment in the MultiClient library ended at $277.1 million, compared to $213.4 million in 2017, an increase of $63.7 million, or 30%. The higher

MultiClient cash investment is mainly due to more 3D vessel capacity allocated to MultiClient following a strategic choice to increase investments, which is expected to benefit future sales.

MultiClient late sales in 2018 were record high with $371.9 million, compared to $235.0 million in 2017, an increase of $136.9 million, or 58%. Higher late sales revenues were primarily driven by an improving MultiClient market, in combination with a geographically diverse MultiClient data library attracting good licensing interest from a variety of clients. Late sales were distributed across regions and highest in Europe and South America.

Total Segment MultiClient revenues (prefunding and late sales combined) increased by $119.9 million or 22%, compared to 2017 and ended at $654.3 million.

The fleet allocation ratio, active 3D vessel time for marine contract versus MultiClient data acquisition, was approximately 34:66 in 2018, compared to 57:43 in 2017.

External imaging revenues ended at $25.8 million, compared to $51.0 million in 2017, a decrease of $25.2 million, or 49%. The reduction comes as a result of a challenging market for imaging services, overall reduced capacity and increased use of capacity for processing of MultiClient data, as the Company has changed its focus to more internal use of Imaging resources.

The Company closely monitors the development of the gross cash costs. Gross cash costs are the sum of reported net operating expenses (excluding depreciation, amortization, impairments, deferred steaming, net and other charges, net), the cash operating costs capitalized as investments in the MultiClient library, and capitalized development costs. In 2018 gross cash costs ended at $601.6 million, a decrease of $95.9 million, or 14%, compared to 2017, in line with the target set for the reorganization at year-end 2017.

Net operating expenses, which include cost of sales, expensed research and development costs, and selling, general and administrative costs, totaled $318.6 million in 2018, compared to $464.7 million in 2017, a decrease of $146.1 million, or 31%. The decrease is primarily due to a significant cost reduction from the reorganization, as well as more costs capitalized as MultiClient investment, partially offset by higher fuel cost, less deferred steaming cost and less capitalized development costs.

Full year 2018, gross research and development ("R&D") costs decreased by $9.7 million, or 33%, to $19.7 million. Capitalized development costs decreased by $2.9 million, or 25%, compared to 2017, resulting in overall R&D costs in 2018 to be 39% lower than in 2017. The Company's R&D costs are mainly incurred to support and develop core business activities of marine seismic acquisition and imaging.

In 2018, total MultiClient amortization, As Reported, was 52% of MultiClient revenues. The Company recognized accelerated amortization of $145.1 million on projects completed in 2018. Following implementation of IFRS 15, MultiClient amortization, As Reported, is not comparable to previous periods. See note 2 for further information.

Segment MultiClient Amortization for 2018 decreased by $4.3 million, or 1%, to $362.1 million, compared to 2017. Segment MultiClient amortization as a percentage of total Segment MultiClient revenues was 55% in 2018, compared to 69% for the full year 2017.

2018 gross depreciation was $203.4 million, a decrease of $22.6 million, or 10%, compared to 2017 as a result of a generally lower investment levels over recent years. Capitalized depreciation was $85.9 million in 2018, an increase of 14.3 million, or 20%, compared to 2017 since more capacity was allocated to MultiClient projects, partially offset by reduction in gross depreciation.

PGS did not record any impairments of property and equipment in 2018, compared to an impairment of $40.6 million for the full year 2017, which primarily related to reduced 3D vessel operations, including cold stacking of *Ramform Vanguard*.

The Company has recorded significant impairment charges in the period 2014 to 2017 as a consequence of a weak seismic market. The market for seismic services is still uncertain and further impairments may arise in future periods.

Operating profit As Reported in 2018 was $39.4 million. Following implementation of IFRS 15, As Reported MultiClient prefunding revenues and amortization are not comparable to previous periods.

Operating profit according to Segment Reporting, excluding impairment and other charges net, in

2018 was $36.3 million, compared to an operating loss of $147.1 million in 2017.

For the full year 2018, the share of results from associated companies amounted to a loss of $18.9 million, compared to $20.7 million in 2017. The loss was primarily related to exploration expense and impairments in the Azimuth Group, where PGS has an ownership of approximately 35%. PGS has a right, but no obligation to provide further funding of the Azimuth Group and has no guarantees outstanding.

Gross interest expense amounted to $69.1 million in 2018, compared to $64.4 million in 2017, an increase of $4.7 million, or 7%, primarily as a result higher interest rates on the Company's floating rate debt due to an increase of USD LIBOR, partially offset by reduced credit margin on the Revolving Credit Facility.

Other financial expense, net, of $6.4 million in 2018 is primarily related to fees on debt instruments, partially offset by interest income, compared to other financial expense, net, of $6.0 million in 2017.

Income tax expense, which consists of current and deferred tax expense, was $40.0 million in 2018, compared to $55.2 million in 2017. The 2018 current tax expense was $40.0 million, up from $12.3 million in 2017. Current tax expense relate primarily to foreign taxes, including withholding taxes, and increased in 2018 primarily due to increased profits in Brazil. There were no deferred tax expense for the full year 2018, since all the deferred tax assets in the balance sheet was expensed in 2017, compared to $42.9 million of deferred tax expense in 2017.

PGS is subject to taxation in many jurisdictions around the world with increasingly complex tax laws. PGS has identified issues in several jurisdictions that could eventually make the Company liable to pay taxes relating to prior years in excess of the liability recognized in financial statements. Reference is made to note 11 and 22 of this annual report for a description of significant tax contingencies.

Loss to equity holders of PGS ASA was $81.1 million in 2018, compared to a loss of $519.8 million in 2017.

## Cash Flow, Financial Position and Financing

Net cash provided by operating activities totaled $445.9 million in 2018, compared to $281.8 million in 2017. The increase is mainly driven by higher earnings as a result of more MultiClient sales.

Cash and cash equivalents totaled $74.5 million as of December 31, 2018, compared to $47.3 million as of December 31, 2017. The liquidity reserve, cash and cash equivalents and the undrawn part of the Revolving Credit Facility ("RCF"), was $159.5 million as of December 31, 2018, compared to $257.3 million as of December 31, 2017.

As of December 31, 2018, drawings of $265.0 million were outstanding on the RCF. The RCF matures in September 2020 and has a drawing limit of $350 million, reduced by $50 million from $400 million in September 2018.

Restricted cash of $43.2 million includes $38.3 million held in debt service reserve and retention accounts related to the export credit financing ("ECF") of *Ramform Titan*, *Ramform Atlas*, *Ramform Tethys* and *Ramform Hyperion*.

At December 31, 2018, the Company had approximately 50% of its debt at fixed interest rates. The Q4 2018 weighted average cash interest costs of gross debt reflects an interest rate of approximately 4.9%, including credit margins paid on the debt. PGS has a debt structure with no material scheduled maturities until the second half of 2020, except the ECF, which is repaid in separate semi-annual instalments. Total annual ECF instalments for 2019 will be approximately $47.2 million and each subsequent year until they taper off following maturity of one after one of the four facilities in the period 2025 to 2027.

The undrawn portion of the RCF constitutes a significant portion of the Company's liquidity reserve. The Company is in compliance with the Total Leverage Ratio ("TLR") covenant applicable to the RCF. At December 31, 2018 the TLR was 2.58:1, well below the maximum level of 3.50:1. The maximum TLR will be reduced by 0.25:1 each of the following three quarters to come down to 2.75:1 by end of Q3 2019 and will thereafter stay at 2.75:1 for the remaining life of the facility.

If the Company were to breach the TLR covenant, this would represent a default under the loan agreement. In such case the Company may be able to continue to access the RCF if it receives a waiver of the breach.

PGS interest-bearing debt includes the following components:

| (In USD million) | December 31, 2018 | 2017 |
|---|---|---|
| **Secured:** | | |
| Term Loan B | 381.0 | 385.0 |
| Revolving Credit Facility | 265.0 | 190.0 |
| Japanese Export Credit Financing | 369.3 | 416.5 |
| **Unsecured:** | | |
| Senior Notes, due 2018 | 0.0 | 26.0 |
| Senior Notes, due 2020 | 212.0 | 212.0 |
| **Total** | **1 227.3** | **1 229.5** |

Net interest-bearing debt (interest-bearing debt less cash and cash equivalents, restricted cash, and interest-bearing investments) was $1,112.8 million as of December 31, 2018, compared to $1,139.4 million as of December 31, 2017.

## Investments

In 2018, total MultiClient cash investment, excluding capitalized interest, amounted to $277.1 million, compared to $213.4 million in 2017, an increase of $63.7 million, or 30%. The increase is primarily due to more 3D vessel capacity allocated to MultiClient.

Capital expenditures, whether paid or not, totaled $42.5 million in 2018, compared to $154.5 million in 2017, a decrease of $112.0 million, or 72%. The decrease is primarily a result of the Company's new build program coming to an end in 2017 with the delivery of the fourth Ramform Titan-class vessel in March 2017.

### *Financial Market Risk*

The Company is exposed to market risks such as interest rate risk, currency exchange risk, credit risk, liquidity risk and commodity price risk, as discussed below. The Company's risk management policies are approved by the Board of Directors. The treasury function reports regularly to the Company management and any breach of limits set in the policy shall be reported to the Board of Directors.

### *Interest Rate Risk*

PGS has a mixture of fixed and floating interest rate debt combined with financial instruments, such as interest rate swaps, to manage the impact of interest rate fluctuations.

As of December 31, 2018, the debt structure of PGS included $743.1 million of floating interest rate debt, with interest rates based on up to six month LIBOR rates, plus a margin. $125.0 million of this floating interest debt is swapped into fixed interest by use of interest rate swaps. Fixed interest rate debt amounted to $484.1 million. Taking the interest rate swaps into account, $618.1 million of the Company's debt is exposed to floating interest rates while $609.1 million have fixed interest rates. For every (hypothetical) one percentage point increase in LIBOR, the annual net interest expense of the PGS' net debt, including finance leases, would increase (with some delay) by approximately $5.4 million.

### *Currency Exchange Risk*

PGS conducts business primarily in US dollars ("$" or "USD"), but also in several other currencies, including British pounds ("GBP"), Norwegian kroner ("NOK"), Brazilian real ("BRL"), euro ("EUR"), and occasionally currencies like Egyptian Pounds ("EGP"), Nigerian Naira ("NGN") and Japanese Yen ("JPY"). PGS is subject to foreign currency exchange rate risk on cash flows related to sales, expenses, financing, and investment transactions in currencies other than the US dollar.

PGS predominantly sells products and services in US dollars, and to a limited extent in other currencies. In addition to USD, a significant proportion of PGS' operating expenses are incurred in NOK and GBP. Less substantial amounts are incurred in various other currencies. Thus, regarding expenses and revenues in currencies other than US dollars, such expenses will typically exceed revenues.

A stronger US dollar reduces PGS' operating expenses as reported in US dollars. It is estimated that a 10% change of the US dollar against the two most significant non-USD currencies, NOK and GBP, would have an annual impact on gross cash cost of $12-15 million, and $5-7 million, respectively, before currency hedging.

PGS hedges parts of the foreign currency exposure related to operating income and expenses by entering into forward currency exchange contracts. While PGS enters into these contracts with the purpose of reducing the Company's exposure to exchange rate fluctuations, the contracts are not treated as hedges unless they are specifically designated as hedges of firm commitments or certain cash flows. Consequently, these forward currency exchange contracts are recorded at estimated fair value with gains and losses included as currency exchange gain (loss) in Other financial expense in the consolidated statements of profit and loss.

As of December 31, 2018, PGS had net open forward contracts to buy/sell GBP, NOK, BRL and JPY. The total nominal amount of these contracts was $177.0 million, compared to $101.7 million as of December 31, 2017. Of the total nominal amounts of forward exchange contracts, $102.8 million was accounted for as cash flow hedges, as of December 31, 2018, compared to $31.9 million as of December 31, 2017. Outstanding contracts at year-end 2018 had a net negative fair value of $4.1 million, compared to a net positive fair value of $1.1 million at year-end 2017.

A 10% depreciation of the US dollar against all the currencies in which PGS holds derivative contracts would decrease the fair value of these contracts by approximately $5.6 million. The effect on the consolidated statements of profit and loss would have been positive $5.0 million.

All interest-bearing debts are denominated in US dollars.

*Credit Risk*

PGS' accounts receivable are primarily from multinational, integrated oil companies and independent oil and natural gas companies, including companies that are owned in whole or in part by governments. PGS manages the exposure to credit risk through ongoing credit evaluations of customers. Due to the nature of PGS' customer base, a low level of losses on accounts receivable has been incurred over the years. Due to the current market circumstances, where requests for extended credit terms may be more frequent, PGS has implemented additional processes to monitor and follow up credit risk.

PGS has a structured approach to monitor the credit risk of the Company's banking partners, including derivatives counterparties and the institutions in which cash is held on deposit.

*Liquidity Risk*

As of December 31, 2018, PGS had cash and cash equivalents of $74.5 million and the total liquidity reserve, including cash and cash equivalents and the undrawn part of the RCF, was $159.5 million, compared to $47.3 million and $257.3 million respectively as of December 31, 2017. At December 31, 2018 the total leverage ratio was 2.58:1, well below the maximum level of 3.50:1.

The un-drawn portion of the RCF is a significant portion of PGS' liquidity reserve. According to the loan agreement the TLR has to be below 3.50:1 by December 31, 2018, with subsequent step downs, as described above.

PGS' actual TLR was substantially below the required level at December 31, 2018 and already below the level required after the step downs that will take effect in 2019 (2.75:1). Based on current plans and projections, the Company expects to be in compliance with the required TLR level going forward. Still there is a risk that PGS' TLR may increase in the future to be close to or exceed the agreed maximum TLR. If such risk becomes significant, PGS would seek to agree further amendments to ensure that the RCF is available for drawing or to implement other available measures to avoid a covenant breach. If PGS ultimately ends up breaching this covenant, the breach would represent an event of default under the loan agreement. In such case PGS may be able to continue to access the RCF if PGS receives a waiver of the breach or implements remedial actions acceptable to the lenders thereunder. Should a breach continue without a waiver or remediation by PGS, the RCF agent or a majority of the RCF lenders would be entitled to declare default and demand a repayment of drawings under the RCF, which in turn would represent an event of default in most of the Company's other loan agreements and debt instruments.

However, this scenario is in PGS' view unlikely since firstly the Company believes it has plans and available measures to avoid an event of default and secondly, even in an event of default, several viable alternatives to avoid acceleration would exist.

Based on available liquidity resources and the current structure and terms of the Company's debt, it is the Board's opinion that PGS has sufficient funding and liquidity to support the Company's operations and investment programs.

*Commodity Risk*

Operation of seismic vessels requires substantial fuel purchases, thus PGS is exposed to fuel price fluctuations. Based on the Company's fuel consumption in 2018, a 10% increase in fuel prices would increase the total annual fuel costs by approximately $6 million. The Company seeks to pass fuel price risk to customers on a majority of contract work.

## Operational and Other Risks

Demand for the Company's products and services depend on the level of spending by oil and gas companies on hydrocarbon-resource exploration, field development, and production. Spending levels are heavily influenced by oil and gas prices and the oil and gas companies' focus areas. In addition to the risk of less demand for PGS' services or for data from the MultiClient data library, the Company is subject to a large number of other risk factors including, but not limited to increased competition, the attractiveness of technology, changes in governmental regulations affecting the markets, technical downtime, licenses and permits, and operational hazards such as weather conditions.

Contracts for services are occasionally modified by mutual consent and in certain instances may be cancelled by customers on short notice without compensation. Consequently, the order book as of any particular date may not be indicative of actual operating results for any succeeding period.

## Shares, Share Capital and Dividend

As of December 31, 2018 PGS had 338 579 996 shares issued and outstanding, all of which are of the same class and carry equal voting and dividend rights. Each share has a par value of NOK 3.

PGS' ordinary shares are listed on the Oslo Stock Exchange (ticker: PGS) and denominated in Norwegian kroner. The PGS share continues to be traded as an American Depositary Share ("ADS") over the counter in the US (ticker: PGSVY). Quotes are denominated in US dollars and each ADS represents one share.

As of December 31, 2018, the Company held 1,739 treasury shares.

Due to the current market conditions, the Company's need to maintain an adequate liquidity reserve, the Company's strategic target of reducing debt and limitations in existing loan agreements, a dividend will not be proposed for 2018. The Company will prioritize debt reduction over the coming years.

## Health, Safety, Environment and Quality ("HSEQ")

Assessment and mitigation of risk, to people and assets, are at the heart of how PGS manages its business.

The PGS organization (core fleet vessels and PGS offices) had the following number of health and safety incidents in 2018:

| Incident | 2018 | 2017 |
|---|---|---|
| Fatalities | 0 | 0 |
| Lost time injuries | 1 | 1 |
| Restricted work day cases | 3 | 0 |
| Medical treatment cases | 2 | 3 |
| High potential incidents | 1 | 3 |

The Company's activity level (core fleet vessels and PGS offices) in 2018 was lower than that of 2017, with 5 250 840 man-hours in 2018, compared to 6 708 271 in 2017.

| Incident frequencies* | 2018 | 2017 |
|---|---|---|
| Lost Time Injury Frequency ("LTIF") | 0.19 | 0.15 |
| Total Recordable Case Frequency ("TRCF") | 1.14 | 0.60 |

The number of total recordable cases and lost time injuries in relation to man hours increased somewhat in 2018, but still remained at a very low level. PGS has a strong focus on HSEQ and to improve further the Company has multiple ongoing initiatives and a system to ensure that practices and experiences are shared fleet-wide.

To continue minimizing the number of incidents going forward, the Company will keep focus on long-term key areas, such as HSEQ leadership and behavior, risk management, planning of tasks and ongoing improvement of the HSEQ management system.

## Organization

PGS had an average of 1,258 and 1,715 regular active employees in the years ended December 31, 2018 and 2017, respectively.

As of December 31, 2018, PGS employees represented 53 nationalities; 31% of the office based employees are women (4% of offshore employees are women). Among staff working in Norway, 34% are women. The Board of Directors has three male and two female shareholder elected directors and one male and two female employee-elected directors.

At the headquarters in Oslo, 26% of management positions are held by women, and 9% of women working for the Norwegian organization of PGS work part-time. PGS consciously strives to improve the gender diversity of staff through reporting and actively encouraging development and promotion of women to management roles. The primary development processes are the Performance Management and Potential Assessment systems. Improving gender diversity has become increasingly challenging due to the weak seismic market, but it is a continued priority for the Company.

Being a global company, PGS has long-standing practices to ensure that offshore crews are culturally diverse, and that cultural sensitivity training is offered to employees.

The average monthly salary of all active regular employees as of December 2018 was $7 866 ($6 476 for female employees and $8 245 for male employees) based on 1 February, 2019 exchange rates.

PGS headquarter is located in Oslo, Norway. The Company also has offices and warehouses in other cities in Norway, and in 14 other countries: Angola, Australia, Brazil, China, Egypt, Ghana, Indonesia, Japan, Malaysia, Mexico, Nigeria, Singapore, United Kingdom and United States of America.

## Board of Directors and Corporate Governance

As of December 31, 2018, the Board of Directors has the following members: Walter Qvam (chairperson), Anne Grethe Dalane, Richard Herbert, Morten Borge, Marianne Kah, Anette Valbø, Hege Renshus and Espen Grimstad. The latter three are employee elected Board members.

The Board has established two sub-committees: an Audit Committee, comprising Anne Grethe Dalane (chairperson), Richard Herbert, Marianne Kah, Anette Valbø and Hege Renshus, and the Remuneration and Corporate Governance Committee, consisting of Walter Qvam (chairperson), Morten Borge, and Espen Grimstad. The committees act as preparatory bodies for the Board of Directors and assist the Directors in exercising their responsibilities.

PGS also has a Nomination Committee elected by the shareholders. As of December 31, 2018, this committee consists of Harald Norvik (chairperson), C. Maury Devine, and Terje Valebjørg.

PGS' corporate governance principles are adopted by the Board of Directors. The Board periodically reviews these principles. Statements of the corporate governance structure are described in more detail in the corporate governance section of this annual report. The Company's articles of association, in addition to full versions of the rules of procedures for the Board of Directors, the Audit Committee charter, the Remuneration and Corporate Governance Committee charter, the Nomination Committee charter, and PGS' Code of Conduct are available on the Company's website www.pgs.com (follow the links: "About us" – "Corporate Governance").

Since 2004, PGS has maintained a compliance hotline operated by an external service provider in order to facilitate reporting of any concerns regarding inappropriate business conduct. The Company encourages use of the hotline by anyone who has concerns relating to compliance with laws and regulations, breaches of the code of conduct, fair treatment, or any other matter. Concerns can also be raised directly with the General Counsel or any Board member.

Corporate responsibility reports were published in combination with annual reports for 2013, 2014 2015, 2016 and 2017, and will be done in combination with the 2018 annual report as well. The Company has signed up to UN Global Compact and going forward, progress of corporate responsibility activities will be reported in accordance with the 10 principles of UN Global Compact and published on the Company web site. In 2017, PGS also analyzed the UN Social Development Goals ("SDGs") in light of our strategic priorities identifying SDG Nos. 3 (Good Health and Well Being), 4 (Quality Education), 14 (Life Below Water) and 16 (Peace Justice and Strong Institutions). For 2018, the Company re-evaluated the materiality of each goal and priority area to us as a company and to PGS stakeholders which has led the Company to introduce an additional SDG being No. 8 (Decent Work and Economic Growth).

## Outlook

World GDP and demand for energy is expected to continue its growth going forward. Even though renewables are expected to be the fastest growing energy source, fossil fuels is, and will remain a significant source of global energy supplies for several decades. With the added challenge of natural decline of existing fields, significant investments will be required to meet future demand for oil and gas.

Integrated oil and gas companies have adjusted to a lower oil price environment and despite the oil price correction experienced in the fourth quarter 2018 they report solid results. At the current oil price level, oil companies will continue to report strong cash generation going forward.

PGS expects significant cash flow generation among customers and an increase in exploration and production spending, including offshore spending, to contribute to strengthen the recovery of the marine seismic market going forward.

The Board emphasizes that valuations in the financial statements and forward looking statements contained in this report are based on various assumptions made by management, depend on factors beyond its control, and are subject to risks and uncertainties. Accordingly, actual results may differ materially.

Pursuant to section 3-3a of the Norwegian Accounting Act, the Board confirms that the 2018 financial statements have been prepared based on the assumption of a going concern and that it believes that this assumption is appropriate.

### Allocation of Parent Company's result for 2018

The financial statements of the parent company, Petroleum Geo-Services ASA ("PGS ASA"), are prepared and presented in accordance with generally accepted accounting principles in Norway ("NGAAP"). PGS ASA reported a net loss of NOK 581.3 million for 2018, compared to a net loss of NOK 5 318.2 million in 2017. PGS ASA is a holding company with no material operating activities.

The Board proposes that the net loss for 2018 of NOK 581 300 000 is transferred from other equity. Total shareholders' equity in PGS ASA as of December 31, 2018 was NOK 4 486 700 000 corresponding to 32% of total assets.

Oslo, February 26, 2019
Board of Directors
Petroleum Geo-Services ASA

Walter Qvam
Chairperson

Anne Grethe Dalane
Vice Chairperson

Morten Borge

Richard Herbert

Marianne Kah

Hege Renshus

Anette Valbø

Espen Grimstad

Rune Olav Pedersen
Chief Executive Officer

# Responsibility Statement

Today, the Board of Directors and the Chief Executive Officer reviewed and approved the Board of Directors' report and the consolidated and separate annual financial statements for PGS ASA, for the year ending and as of December 31, 2018.

PGS ASA's consolidated financial statements have been prepared and presented in accordance with IFRSs and IFRICs as adopted by the EU and additional disclosure requirements in the Norwegian Accounting Act, and that should be used as of December 31, 2018. The separate financial statements for PGS ASA have been prepared in accordance with the Norwegian Accounting Act and Norwegian accounting standards as of December 31, 2018. The Board of Directors report for the group and the parent company is in accordance with the requirements of the Norwegian Accounting Act and Norwegian accounting standard 16, as of December 31, 2018.

To the best of our knowledge:

- The consolidated and separate annual financial statements for 2018 have been prepared in accordance with applicable accounting standards.
- The consolidated and separate annual financial statements give a true and fair view of the assets, liabilities, financial position, and result of operations as a whole as of December 31, 2018, for the group and the parent company.
- The Board of Directors' report for the group and the parent company include a true and fair review of:
    - The development and performance of the business and the position of the group and the parent company.
    - The principal risks and uncertainties the group and the parent company face.

Oslo, February 26, 2019
Board of Directors
Petroleum Geo-Services ASA

| | | | | |
|---|---|---|---|---|
| Walter Qvam<br>Chairperson | Anne Grethe Dalane<br>Vice Chairperson | Morten Borge | Richard Herbert | Marianne Kah |
| Hege Renshus | Anette Valbø | Espen Grimstad | Rune Olav Pedersen<br>Chief Executive Officer | |

# Alternative Performance Measures

As required by the European Securities and Markets Authority ("ESMA") guidelines, the Company has defined and explained the purpose of its Alternative Performance Measures ("APMs") in the paragraphs below.

### Segment EBITDA

Segment EBITDA, when used by the Company, means Segment EBIT excluding other charges, impairment and loss on sale of long-term assets and depreciation and amortization. Segment EBITDA may not be comparable to other similarly titled measures from other companies. The Company has included EBITDA as a supplemental disclosure because PGS believes that the measure provides useful information regarding the Company's ability to service debt and to fund capital expenditures and provides a helpful measure for comparing its operating performance with that of other companies.

### Segment EBIT, excluding impairments and other charges

PGS believes that Segment EBIT, excluding impairments and other charges, is a useful measure in that the measures provide an indication of the profitability of the Company's operating activities for the period without regard to significant events and/or decisions in the period that are expected to occur less frequently.

### MultiClient pre-funding level

The MultiClient pre-funding level is calculated by dividing the MultiClient pre-funding revenues, as per segment reporting, by the cash investment in MultiClient library, as reported in the Statements of Cash Flows. PGS believes that the MultiClient pre-funding percentage is a useful measure in that it provides some indication of the extent to which the Company's financial risk is reduced on new MultiClient investments.

### Net interest bearing debt

Net interest bearing debt is defined as the sum of long-term and short-term interest bearing debt, less cash and cash equivalents and restricted cash. PGS believes that Net Interest Bearing Debt ("NIBD") is a useful measure because it provides an indication of the hypothetical minimum necessary debt financing to which the Company is subject at balance sheet date.

### Liquidity reserve

Liquidity reserve is defined as the sum of cash and cash equivalents and the un-drawn part of the Revolving Credit Facility. Management believes that liquidity reserve is a useful measure because it provides an indication of the amount of funds readily available to the Company in the very short term at balance sheet date.

### Gross cash costs and net operating expenses

Gross cash costs are defined as the sum of reported net operating expenses (excluding depreciation, amortization, impairments, deferred steaming, net and other charges, net) and the cash operating costs capitalized as investments in the MultiClient library as well as capitalized development costs. PGS believes that the gross cash costs figure is a useful measure because it provides an indication of the level of cash costs incurred by the Company irrespective of the extent to which the fleet is working on MultiClient projects or the extent to which its R&D expenditures qualify for capitalization.

Net operating expenses are defined as gross cash costs (as per above) less capitalized investments in the MultiClient library and capitalized development costs. PGS believes this figure is a useful measure because it provides an indication of the level of net cash costs incurred by the Company in running current period commercial activities that are not devoted to investment.

### Order book

Order book is defined as the aggregate estimated value of future Segment revenues on signed customer contracts or letters of award. PGS believes that the Order book figure is a useful measure in that it provides an indication of the amount of customer backlog and committed activity in the coming periods.

### Capital expenditures, whether paid or not

Capital expenditures means investments in property and equipment irrespective of whether paid in the period, but excluding capitalized interest cost.

## APM Reconciliations

**Segment EBITDA is reconciled as follows:**

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Operating profit (loss) | 39.4 | (383.6) |
| Segment adjustment to revenues as reported | (39.8) | - |
| Other charges, net | 13.5 | 82.8 |
| Amortization and impairment of MultiClient library | 385.3 | 426.3 |
| Depreciation and amortization of long term assets (excl. MultiClient library) | 117.5 | 154.4 |
| Impairment and loss on sale of long-term assets (excl. MultiClient library) | - | 94.2 |
| **Segment EBITDA ex other charges, net** | **515.9** | **374.1** |

**Segment EBIT ex. impairment and other charges, net is reconciled as follows:**

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Operating profit (loss) | 39.4 | (383.6) |
| Segment adjustment to revenues reported | (39.8) | - |
| Other charges, net | 13.5 | 82.9 |
| Segment adjustment to amortization as reported | 0.6 | - |
| Impairment of MultiClient library | 22.6 | 59.4 |
| Impairment and loss on sale of long-term assets (excl. MultiClient library) | - | 94.2 |
| **Segment EBIT ex. impairment and other charges, net** | **36.3** | **(147.0)** |

**Net interest bearing debt is reconciled as follows:**

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Cash and cash equivalents | 74.5 | 47.3 |
| Restricted cash (current and long-term) | 43.2 | 43.2 |
| Short-term debt and current portion of long-term debt | (54.4) | (77.6) |
| Long-term debt | (1 164.7) | (1 135.8) |
| Adjustment for deferred loan costs (offset in long-term debt) | (11.4) | (16.5) |
| **Net interest bearing debt** | **(1 112.8)** | **(1 139.4)** |

**Total capital expenditures, whether paid or not is reconciled as follows:**

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Seismic equipment | 24.4 | 35.7 |
| Vessel upgrades/yard | 4.7 | 18.7 |
| Processing equipment | 10.4 | 6.6 |
| Newbuilds | - | 89.0 |
| Other | 3.0 | 4.5 |
| **Total capital expenditures, whether paid or not** | **42.5** | **154.5** |
| Adjustment to prior years capital expenditures | - | 5.3 |
| Change in working capital and capital leases | 5.5 | (10.9) |
| Investment in property and equipment | 48.0 | 148.9 |

**Cash cost, gross and Net operating expenses are reconciled as follows:**

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Cost of sales before investment in MultiClient library | (530.1) | (632.0) |
| Research and development costs before capitalized development costs | (19.7) | (29.4) |
| Sellling, general and administrative costs | (51.8) | (36.0) |
| **Cash costs, gross** | **(601.6)** | **(697.4)** |
| Steaming deferral, net | (3.0) | 7.5 |
| Cash investment in MultiClient library | 277.1 | 213.4 |
| Capitalized development costs | 8.9 | 11.8 |
| **Net operating expenses** | **(318.6)** | **(464.7)** |

# Financial Statements

## Petroleum Geo-Services Consolidated



## Petroleum Geo-Services ASA Parent Company



## Notes to the consolidated Financial Statements



## Notes to the Parent Company Financial Statements

Petroleum Geo-Services

# Consolidated Statements of Profit and Loss

| (In millions of US dollars) | Note | Year ended December 31, 2018 | 2017 |
|---|---|---|---|
| **Revenues** | 5 | **874.3** | **838.8** |
| Cost of sales | 6 | (256.0) | (411.0) |
| Research and development costs | | (10.8) | (17.6) |
| Selling, general and administrative costs | | (51.8) | (36.0) |
| Amortization and impairment of MultiClient library | 7 | (385.3) | (426.3) |
| Depreciation and amortization of long term assets (excl. MultiClient Library) | 7 | (117.5) | (154.4) |
| Impairment and loss on sale of long-term assets (excl. MultiClient Library) | 7 | - | (94.2) |
| Other charges, net | 8 | (13.5) | (82.8) |
| **Total operating expenses** | | **(834.9)** | **(1 222.4)** |
| **Operating profit (loss)** | | **39.4** | **(383.6)** |
| Share of results from associated companies | 18 | (18.9) | (20.7) |
| Interest expense | 9 | (62.0) | (57.8) |
| Other financial expense, net | 10 | (6.4) | (6.0) |
| **Income (loss) before income tax** | | **(47.9)** | **(468.2)** |
| Income tax | 11 | (40.0) | (55.2) |
| **Profit (loss) for the year** | | **(87.9)** | **(523.4)** |

| | | | |
|---|---|---|---|
| **Earnings (loss) per share, to ordinary equity holders of PGS ASA:** | 12 | | |
| - Basic | | ($0.26) | ($1.55) |
| - Diluted | | ($0.26) | ($1.55) |

Petroleum Geo-Services

# Consolidated Statements of Comprehensive Income

| (In millions of US dollars) | Note | Year ended December 31, 2018 | 2017 |
|---|---|---|---|
| **Profit (loss) for the year** | | **(87.9)** | **(523.4)** |
| | | | |
| **Other comprehensive income** | | | |
| Actuarial gains (losses) on defined benefit pension plans | 25 | 11.6 | 11.2 |
| Income tax effect on actuarial gains and losses | | - | (10.8) |
| Items that will not be reclassified to statements of profit and loss | | 11.6 | 0.4 |
| Cash flow hedges | | (4.4) | 2.6 |
| Other comprehensive income (loss) from associated companies | | (0.4) | 0.6 |
| Items that may be subsequently reclassified to statements of profit and loss | | (4.8) | 3.2 |
| **Other comprehensive income (loss), net of tax** | | **6.8** | **3.6** |
| **Total comprehensive income (loss) to equity holders of PGS ASA** | | **(81.1)** | **(519.8)** |

Petroleum Geo-Services

# Consolidated Statements of Changes in Shareholders' Equity

| | Attributable to equity holders of PGS ASA | | | | | |
|---|---|---|---|---|---|---|
| (In millions of US dollars) | Share capital | Treasury shares | Additional paid-in capital | Accumulated earnings | Other capital reserves | Shareholders' equity |
| **Balance as of January 1, 2017** | **133.7** | **(0.8)** | **816.3** | **418.2** | **(8.0)** | **1 359.4** |
| Profit (loss) for the period | - | - | - | (523.4) | - | (523.4) |
| Other comprehensive income (loss) | - | - | - | 0.4 | 3.2 | 3.6 |
| Share issue | 4.8 | - | 30.6 | - | - | 35.4 |
| Share based payments | - | 0.8 | 4.5 | (0.8) | - | 4.5 |
| **Balance as of December 31, 2017** | **138.5** | **-** | **851.4** | **(105.6)** | **(4.8)** | **879.5** |
| Effect of IFRS 15 adoption (see note 2) | | | | (75.3) | | (75.3) |
| **Balance as of January 1, 2018** | **138.5** | **-** | **851.4** | **(180.9)** | **(4.8)** | **804.2** |
| Profit (loss) for the period | - | - | - | (87.9) | - | (87.9) |
| Other comprehensive income (loss) | - | - | - | 11.6 | (4.8) | 6.8 |
| Share based payments | - | - | 3.0 | - | - | 3.0 |
| Share based payments, cash settled | - | - | (4.3) | - | - | (4.3) |
| **Balance as of December 31, 2018** | **138.5** | **-** | **850.1** | **(257.2)** | **(9.6)** | **721.8** |

Petroleum Geo-Services

# Consolidated Statements of Financial Position

| (In millions of US dollars) | Note | December 31, 2018 | 2017 |
|---|---|---|---|
| **ASSETS** | | | |
| ***Current assets*** | | | |
| Cash and cash equivalents | 21 | 74.5 | 47.3 |
| Restricted cash | 13 | 4.3 | 19.8 |
| Accounts receivable | 21,5 | 160.3 | 162.8 |
| Accrued revenues and other receivables | 14 | 61.1 | 133.2 |
| Other current assets | 15 | 64.8 | 84.6 |
| **Total current assets** | | **365.0** | **447.7** |
| ***Long-term assets*** | | | |
| Property and equipment | 16 | 1 062.2 | 1 297.6 |
| MultiClient library | 17 | 654.6 | 512.3 |
| Restricted cash | 13 | 38.9 | 23.5 |
| Other long-term assets | 18 | 66.6 | 78.5 |
| Other intangible assets | 19 | 106.7 | 123.2 |
| **Total long-term assets** | | **1 929.0** | **2 035.1** |
| **Asset held for sale** | **16** | **90.8** | **-** |
| **Total assets** | | **2 384.8** | **2 482.8** |
| **LIABILITIES AND SHAREHOLDERS' EQUITY** | | | |
| ***Current liabilities*** | | | |
| Short-term debt and current portion of long-term debt | 20, 21 | 54.4 | 77.6 |
| Accounts payable | 21 | 67.0 | 81.5 |
| Accrued expenses and other current liabilities | 23 | 110.6 | 173.0 |
| Deferred revenues | 5 | 160.6 | 13.8 |
| Income taxes payable | 11 | 32.5 | 21.4 |
| **Total current liabilities** | | **425.1** | **367.2** |
| ***Long-term liabilities*** | | | |
| Long-term debt | 20, 21 | 1 164.7 | 1 135.8 |
| Deferred tax liabilities | 11 | 0.8 | 0.8 |
| Other long-term liabilities | 24 | 72.4 | 99.5 |
| **Total long term liabilities** | | **1 237.9** | **1 236.1** |
| ***Shareholders' equity*** | | | |
| Share capital; par value NOK 3; issued and outstanding 338,579,996 shares | 26 | 138.5 | 138.5 |
| Additional paid-in capital | 26 | 850.1 | 851.4 |
| **Total paid-in capital** | | **988.6** | **989.9** |
| Accumulated earnings | | (257.2) | (105.6) |
| Other capital reserves | | (9.6) | (4.8) |
| **Total shareholders' equity** | | **721.8** | **879.5** |
| **Total liabilities and shareholders' equity** | | **2 384.8** | **2 482.8** |

Oslo, February 26, 2019
Board of Directors
Petroleum Geo-Services ASA

Walter Qvam
Chairperson

Anne Grethe Dalane
Vice Chairperson

Morten Borge

Richard Herbert

Marianne Kah

Hege Renshus

Anette Valbø

Espen Grimstad

Rune Olav Pedersen
Chief Executive Officer

Petroleum Geo-Services

# Consolidated Statements of Cash Flows

| (In millions of US dollars) | Note | Year ended December 31, 2018 | 2017 |
|---|---|---|---|
| ***Cash flows provided by operating activities:*** | | | |
| Profit (loss) for the year | | (87.9) | (523.4) |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | |
| Depreciation, amortization, impairment and loss on sale of long-term assets | 7 | 504.8 | 674.7 |
| Share of results from associated companies | 18 | 18.9 | 20.7 |
| Interest expense | 9 | 62.0 | 57.8 |
| Loss (gain) on sale and retirement of assets | | 2.4 | (2.9) |
| Change in deferred tax | | - | 42.9 |
| Income taxes paid | | (30.0) | (12.7) |
| Other items | | (1.2) | 14.9 |
| (Increase) decrease in accounts receivable, accrued revenues and other receivables | | 3.8 | (77.3) |
| Increase (decrease) in deferred revenues | | (12.5) | 5.5 |
| Increase (decrease) in accounts payable | | (8.4) | 18.7 |
| Change in other short-term items related to operating activities | | (3.1) | 37.9 |
| Change in other long-term items related to operating activities | | (2.9) | 25.0 |
| **Net cash provided by operating activities** | | **445.9** | **281.8** |
| ***Cash flows provided by (used in) investing activities:*** | | | |
| Investment in MultiClient library | 17 | (277.1) | (213.4) |
| Investment in property and equipment | 16 | (48.0) | (148.8) |
| Investment in other intangible assets | 19 | (19.9) | (17.0) |
| Investment in other current- and long-term assets | | (6.6) | (2.3) |
| Proceeds from sale of other current- and long-term assets | | 1.5 | 23.7 |
| (Increase) decrease in long-term restricted cash | | - | 57.7 |
| **Net cash provided by (used in) investing activities** | | **(350.1)** | **(300.1)** |
| ***Cash flows provided by (used in) financing activities:*** | | | |
| Proceeds, net of deferred loan cost, from issuance of long-term debt | 20 | - | 76.4 |
| Repayment of long-term debt | 20 | (80.2) | (51.8) |
| Net drawdown of Revolving Credit Facility | 20 | 75.0 | - |
| Proceeds from sale of treasury shares/share issue | 26 | - | 35.4 |
| Interest paid | | (63.4) | (56.3) |
| **Net cash provided by (used in) financing activities** | | **(68.6)** | **3.7** |
| Net increase (decrease) in cash and cash equivalents | | 27.2 | (14.4) |
| Cash and cash equivalents as of January 1 | | 47.3 | 61.7 |
| **Cash and cash equivalents as of December 31** | | **74.5** | **47.3** |

## Note 1 — General Information about the Company and Basis of Presentation

### General information

Petroleum Geo-Services ASA ("PGS ASA") is a public limited liability company established under the laws of the Kingdom of Norway in 1991. Unless stated otherwise, references herein to the "Company" and "PGS" refer to Petroleum Geo-Services ASA and its subsidiaries.

PGS is a technologically focused oilfield service company principally involved in providing geophysical services worldwide. PGS provides a broad range of seismic and reservoir services, including acquisition, imaging, interpretation and field evaluation. The Company's headquarters is at Oslo, Norway. The address is Lilleakerveien 4C, 0283 Oslo.

### Basis of presentation

The Company prepares its consolidated financial statements in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union ("EU"). IFRS as adopted by the EU differs in certain respects from IFRS as issued by the International Accounting Standards Board ("IASB"). References to IFRS hereafter should be construed as references to IFRS as adopted by the EU. The consolidated financial statements are prepared using the historical cost basis, except for certain financial assets and derivative financial instruments that have been measured at fair value. The consolidated financial statements are presented in millions of US Dollars ("$" or "dollars"), unless otherwise indicated.

The consolidated financial statements were authorized for issue by the Board of Directors on February 26, 2019.

## Note 2 — Summary of Significant Accounting Policies

### Consolidation

*Subsidiaries*

A subsidiary is an entity (including special purpose entities) that is controlled by the Company. Control is achieved where the Company is exposed, or has rights to, variable returns from its involvement with the entity, and has the ability to affect those returns through its power, directly or indirectly, over the entity.

The consolidated financial statements include the results of the Company and all of its subsidiaries from the date that control commences to the date that control ceases.

*Joint arrangements and investments in associated companies*

An associated company is an entity over which the Company has significant influence, being the power to participate in the financial and operating policy decisions of the entity, but which does not amount to control or joint control.

A joint arrangement is a contractual arrangement whereby the Company undertakes an economic activity that is subject to joint control and requires the parties' unanimous consent for strategic financial and operating policy decisions. A joint arrangement is classified as joint operation if the parties have rights to the assets, and obligations for the liabilities, relating to the arrangement. If the parties in the joint arrangement have rights to the net assets of the arrangement, it is classified as a joint venture.

The consolidated financial statements include the Company's share of the post-tax results, other comprehensive income and net assets (less any impairments), of its joint ventures and associates on an equity-accounted basis from the point at which joint control or significant influence respectively commences, to the date that it ceases. Where the Company's share of losses exceeds its interest in a joint venture or associate, the carrying amount is reduced to zero and recognition of further losses is discontinued, except to the extent that the Company has incurred legal or constructive obligations or made payments on behalf of the investment.

The Company accounts for its investment in a joint operation by recognizing its relative share of the investee's assets, liabilities, revenues and expenses. The Company periodically reviews its net investments to determine whether there is an indication of impairment. If such indication exists, the recoverable amount of the net investment is estimated in order to determine the extent of the impairment (if any).

The Company has cooperation agreements to invest in certain MultiClient data projects with other parties, which are classified as joint operations. The Company recognizes its relative share of the investment in MultiClient data and its share of revenue, amortization and costs. When the Company performs services related to acquisition, processing or marketing to the joint operation the share attributable to its partners is recognized as part of MultiClient pre-funding revenue.

### Cash and cash equivalents and restricted cash

Cash and cash equivalents include demand deposits and all highly liquid financial instruments purchased with original maturities of three months or less. Cash and cash equivalents that are restricted from the Company's use are presented separately in the consolidated statements of financial position and are classified as current or long-term depending on the nature of the restrictions.

### Foreign currency translation and transactions

The financial statements of subsidiaries and associates whose functional currency is not US dollar are translated using the current exchange rate. Assets and liabilities are translated at the foreign exchange rate in effect at the period end; share par value and paid-in capital are translated at historical exchange rates; and revenues and expenses are translated at the average rate of exchange in effect during the period. Translation adjustments are recorded as a separate component in the consolidated statements of other comprehensive income.

Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation of realized and unrealized monetary assets and liabilities denominated in foreign currencies are recognized in the consolidated statements of profit and loss as other financial expense, except when recognized in the consolidated statements of other comprehensive income as qualifying cash flow hedges.

### Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less accumulated amortization and accumulated impairment. The cost of internally generated intangible assets, other than those specified below, is expensed as incurred.

### Revenue from contracts with customers

Revenue from contracts with customers arise primarily from (i) performance of proprietary/exclusive seismic services in accordance with customer specifications and (ii) granting of licenses to the Company's MultiClient data library. Revenue is recognized at the amount that the Company expects to be entitled to and expects to collect under the contract. If a contract has multiple performance obligations, consideration is allocated among the performance obligations based on their estimated relative fair values.

Amounts received from customers in advance of the Company satisfying its performance obligations are recorded as deferred revenue. In the event most of the consideration under the contract is received more than 12 months in advance of satisfying the related performance obligation, a financing factor is accrued and included in the value of the revenue recognized upon satisfying the performance obligation.

In the rare event the Company has satisfied a performance obligation and is otherwise entitled to compensation under the contract but there is a significant uncertainty as to ultimately collecting the compensation, revenue recognition is delayed until such uncertainty no longer exists.

Where the Company have satisfied its performance obligations and has a right to consideration, an accrued revenue is recognized.

The principles applied for each of the main types of contracts with customers are described in more detail below.

*MultiClient late sales licenses* – The Company grants a license to a customer, which entitles the customer to have "right to use" a specifically defined portion of the MultiClient data library as it exists at that point in time. The Company's performance obligation is considered to be satisfied at the "point in time" when the customer has received the underlying data or has the right to access the licensed portion of the data.

*MultiClient Pre-funding licenses* – The Company typically obtains funding from a limited number of customers before a seismic survey project is completed. In return for the pre-funding, the customer typically gains the ability to direct or influence the project specifications and to access data as it is being acquired. The Company recognizes pre-funding revenue as "right to use" licenses and the revenue is to be recognized at the point in time when the "right to use" license is transferred to the customer. This "point in time" depends on the specific contract, but is typically upon completion of processing of the survey and granting of access to the finished data or delivery of the finished data.

The "point in time" of satisfying the performance obligation is generally the same for both MultiClient Late Sale licenses and MultiClient Pre-funding licenses. Accordingly, revenue is generally recognized at this same "point in time" for each of these two types of licenses in accordance with IFRS 15.

See below for information on the impact of change in accounting policy related to MultiClient prefunding licenses.

*Proprietary sales/Marine contract sales/Imaging revenues*

The Company performs seismic services under contract in accordance with customer specifications. Such service contracts are considered to contain one performance obligation. This performance obligation is considered to be satisfied over time because the Company performs the service at the customer specification, the resultant data is owned by the customer and the Company has no alternative right to otherwise use or benefit from the resultant data. The Company recognizes proprietary/contract revenue over time as the services are performed and the Company is entitled to the compensation under the contract. Depending on nature of the contract progress is measured either based on square kilometers or time progressed. Progress for imaging services are measured based on a model taking into account both working hours and processing.

*Other services*

Customer contracts for other services are similar in nature and terms to the proprietary contract sales. Revenue is recognized over time as the Company satisfies the performance obligation and is entitled to the compensation under the contract.

**MultiClient library**

The MultiClient library consists of seismic data surveys which are licensed to customers on a non-exclusive basis. Costs directly incurred in acquiring, imaging and otherwise completing seismic surveys are capitalized to the MultiClient library. Costs incurred while relocating or "steaming" a vessel or crew from one location to another and borrowing costs incurred during the acquisition and imaging phases of the survey are also capitalized to the MultiClient library.

A project remains in surveys-in-progress until imaging is complete which may be some months or up to more than a year after data acquisition ends, at which point it is transferred to completed surveys.

The Company records the costs incurred on the MultiClient library in a manner consistent with its capital investment and operating decision analysis, which generally results in each component of the MultiClient library being recorded and evaluated separately. The cost of projects within the same political regime, with similar geological traits and that are marketed collectively are recorded and evaluated as a group by year of completion.

*Straight-line amortization* – Upon completion of a survey, straight-line amortization commences over its estimated useful life which is generally over a period of 4 years from the date it is transferred to completed surveys.

*Accelerated amortization* – Following the adoption of the straight-line amortization policy for completed surveys, recognition of impairment of library may be necessary in the event that sales on a completed survey are realized disproportionately sooner within that survey's 4-year useful life.

Further, when a project is completed and after pre-funding revenue is recognized, recognition of impairment may be necessary in the event the present value of expected Late Sales is lower than the value of the project.

This accelerated amortization is included in "Amortization and impairment of MultiClient library" in the consolidated statements of profit and loss and specified in note 7.

I*mpairment of MultiClient library* – The Company updates its sales forecast for each survey at each year-end and when an impairment indicator is deemed to exist. In the event the net book value of survey exceeds its net present value of estimated future cash flows an impairment is recorded in the amount of the excess. This impairment is included in "Amortization and impairment of MultiClient library" in the condensed consolidated statements of profit and loss and specified in note 7.

**Research and development costs**

Research costs are expensed as incurred. An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognized if all of the following have been demonstrated: technical and commercial feasibility of completing the intangible asset so that it will be available for use or sale; the intention to complete the intangible asset and use or sell it; the ability to use or sell the intangible asset; how the intangible asset will generate probable future economic benefits; the availability of adequate technical, financial and other resources to complete the development to use or sell the intangible asset; and the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date on which the intangible asset first satisfies the recognition criteria above. All other development costs are expensed as incurred.

Subsequent to initial recognition, internally generated intangible assets are reported at cost less accumulated amortization and accumulated impairment, on the same basis as intangible assets acquired separately. Capitalized development costs are amortized on a straight-line basis over the estimated useful life of the asset.

**Patents, licenses and technology**

Patents, licenses and technology are stated at cost less accumulated amortization and accumulated impairment. Amortization is calculated on a straight-line basis over the estimated period of benefit, ranging from one to fifteen years.

**Property and equipment**

Property and equipment are stated at cost, excluding the costs of the day-to-day servicing, less accumulated depreciation and impairment. Depreciation is calculated on a straight-line basis over the useful life of the assets based on cost less estimated residual values. The estimated useful lives for property and equipment are as follows:

| Years | |
|---|---|
| Seismic vessels | 25 - 30 |
| Seismic and operations equipment, incl. computers | 3 - 15 |
| Buildings and related leasehold improvements | 1 - 10 |
| Fixture, furniture, fittings and office computers | 3 - 5 |
| Major overhauls | 3 - 7.5 |

Subsequent expenditures and major inspections/overhauls are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of replaced asset components are derecognized. All other repairs and maintenance are charged to the consolidated statements of profit and loss during the period in which they are incurred.

The assets' residual values, useful lives and method of depreciation are reviewed, and adjusted if appropriate, at least at each year-end.

Assets under construction are carried at cost, less accumulated impairment. Cost includes borrowing costs incurred during construction in accordance with the Company's accounting policy as stated below. Depreciation commences when the asset is ready for its intended use.

A component of property and equipment is derecognized upon disposal or when no future economic benefit is expected from its use or disposal. Gains and losses arising on de-recognition of assets (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statements of profit and loss in the year derecognized.

Significant spare parts are capitalized along with the assets to which they relate. Other spare parts, consumables and bunker inventory are classified as other current assets and stated at cost, less any obsolescence.

### Steaming costs

Steaming costs relate to relocating or "steaming" a vessel and its crew from one location to another. Steaming costs are deferred to the extent the probable future economic inflows from the projects to which the vessel will steam are sufficient to recover the cost of the steam. In the event the vessel steam at a significantly lower speed than normal, the number of days allocated to steaming are reduced. The recoverable steaming cost associated with MultiClient surveys is capitalized as a part of the MultiClient library (see above). The recoverable steaming costs, representing a contract asset, associated with exclusive contract surveys is deferred and charged to the consolidated statements of profit and loss during the periods of data acquisition.

### Impairment of property, equipment and intangibles

The carrying amount of intangible assets and property, plant and equipment are reviewed at each balance sheet date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated.

Intangible assets not yet available for use are assessed for impairment annually, or whenever there is an indication that the asset may be impaired.

The recoverable amount of an asset is the greater of its fair value less costs to sell and its value in use. In assessing value in use, estimated future cash flows are discounted to present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, recoverable amount is determined for the cash-generating unit ("CGU") to which the asset belongs.

An impairment charge is recognized whenever the carrying amount of an asset or its CGU exceeds its recoverable amount. Impairment charges recognized in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to that CGU, and then to reduce the carrying amount of the other assets in the unit on a pro-rata basis.

An impairment charge in respect of goodwill is not subject to reversal. For other assets, an impairment charge is reversed if the circumstances that gave rise to the impairment no longer exist, but only to the extent that the increased carrying amount does not exceed the carrying amount that would have existed had no impairment had been recognized.

### Income taxes

Income tax expense is comprised of current and deferred tax. Income tax is recognized in the consolidated statement of profit and loss, except to the extent that it relates to items taken directly to the consolidated statements of other comprehensive income.

Current tax is the tax expected to be paid to or recovered from taxation authorities in respect of taxable income for the year, using tax rates enacted or substantially enacted during the period.

Deferred tax assets and liabilities are measured using the liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes, and the amounts used for taxation purposes. The amount of deferred tax provided is based on tax rates that are expected to apply in the year of realization or settlement, using tax rates and laws that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is not recognized on temporary differences arising from the initial recognition of goodwill, or relating to investments in subsidiaries to the extent that the temporary difference can be controlled by the Company and will probably not reverse in the foreseeable future.

Deferred tax assets are recognized only when, on the basis of all available evidence, it can be regarded as probable that there will be sufficient taxable profits in the foreseeable future against which the asset can be utilized.

Deferred tax assets and deferred tax liabilities are offset when a legally enforceable right exists to set off current tax assets against current tax liabilities, and the deferred taxes are related to the same taxable entity and the same taxation authority. Deferred tax assets and liabilities are classified as long-term in the consolidated statement of financial position.

Accounting for uncertain tax positions is described in note 3.

### Employee benefits

*Pension obligations*

The Company's pension arrangements comprise defined benefit plans and defined contribution plans. The plans are funded through payments to insurance companies or trustee-administered funds.

A defined benefit plan is a pension plan which defines an amount of pension benefit that an employee will receive on retirement, dependent on factors such as age, years of service and compensation. The liability recognized for defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period, reduced by the fair value of plan assets. The calculation of the obligation is performed annually by a qualified actuary, using the projected unit credit method and key actuarial assumptions at the reporting date.

The amount charged to the consolidated statement of profit and loss comprises the cost of benefits accruing to employees over the year, plus net interest expense or income, calculated by applying the liability discount rate to the net pension liability.

Past service costs are recognized immediately in the consolidated statement of profit and loss, unless they relate to plan changes which are conditional on the employees remaining in service for a specified period of time (the vesting period). In this case, past service costs are recognized on a straight line basis over the vesting period.

Actuarial gains and losses due to current period changes in assumptions applied are recognized immediately in other comprehensive income.

For defined contribution plans, the Company pays contributions to privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Company has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expense when due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

*Bonus plans*

The Company recognizes a provision for bonus where contractually obliged or where there is a past practice that has created a constructive obligation.

*Share-based payments*

Restricted Stock Unit Plans are measured at the grant date using the current market value reduced by expected dividends paid before the vesting date, which is then further discounted.

Performance Restricted Stock Unit Plans are measured at the grant date using a Monte Carlo simulation with relative total shareholder return. The model simulates the future stock prices based on historical values over the length of the lifetime for the PRSU. The Relative TSR is calculated against a group of peer companies, where every company is ranked based on the simulations. If the rank is in the 25th percentile, 0% of the performance is met, if the rank is in the 75th percentile, 100% of the performance is met. There is a linear relationship between the percentiles. The awards are adjusted for expected future dividends. Social security tax on the PRSU is based on the intrinsic value as of the end of the reporting period.

### Provision for onerous contracts

A provision is made for legally binding obligations (contracts) whereby the unavoidable costs of fulfilling the contracts exceed the economic benefits expected to be received. All costs (including depreciation of assigned assets) directly related to contract fulfillment are included in the calculation.

### Interest bearing debt and borrowings

Interest bearing loans are recognized initially at fair value less transaction costs. Subsequent to initial recognition, interest bearing loans are measured at amortized cost using the effective interest method. Gains and losses are recognized in the consolidated statements of profit and loss when the liabilities are derecognized as well as through the amortization process.

### Financial instruments

Financial assets and financial liabilities are recognized when the Company becomes party to the contractual obligations of the relevant instrument.

The Company classifies its financial instruments in the following categories: at fair value through profit and loss, at fair value through other comprehensive income or at amortized cost. The Company determines the classification of financial instruments at initial recognition.

### Classification and measurement

*Financial instruments at fair value through profit and loss*

This category comprises financial assets and liabilities held for trading, including all derivative instruments. Financial instruments in this category are initially recorded at fair value, and transaction costs are expensed in the consolidated statement of profit and loss. Realized and unrealized gains and losses arising from changes in the fair value are included in the consolidated statements of profit and loss in the period in which they arise.

*Financial instruments at fair value through other comprehensive income*

On initial recognition, an election can be made to classify investments in equity instruments at fair value through other comprehensive income. Financial instruments in this category are initially recognized at fair value plus transaction costs. Subsequently, they are measured at fair value, with gains and losses arising from changes in fair value recognized in other comprehensive income.

*Financial instruments at amortized cost*

Financial assets and liabilities in this category are initially recognized at fair value, and subsequently carried at amortized cost, using the effective interest method less any allowance for impairment. This category includes accounts receivable, accounts payable and loans and other borrowings.

*Impairment of financial assets*

At each reporting date, the Company measures the loss allowance for the financial asset at an amount equal to the lifetime expected credit losses. For accounts receivables and contract assets, the Company uses a simplified approach in calculating expected credit losses. The Company recognizes a loss allowance using factors including aging of accounts, historical experience, customer concentration, customer creditworthiness and current industry and economic trends. An impairment loss, amounting to any difference between the carrying amount of the loss allowance and the expected credit losses at the reporting date, is recognized in the consolidated statement of profit and loss.

### Derivative financial instruments and hedging

The Company uses derivative financial instruments to reduce its exposure related to fluctuations in foreign currency rates and interest rates. Derivative instruments are recognized in the consolidated statements of financial position at their fair values. Realized and unrealized gains and losses attributable to derivative instruments that do not qualify for hedge accounting are recognized as other financial items, net, as they arise.

*Fair value hedges*

Fair value hedges are used to hedge currency risk on equipment purchases denominated in currencies other than USD. The change in fair value of the hedging instrument is recognized in the consolidated statements of profit and loss, together with any change in fair value of the hedged item that are attributable to the hedged risk.

When an unrecognized firm commitment is designated as a hedged item, the subsequent cumulative change in fair value of the firm commitment attributable to the hedged risk is recognized as an asset or liability with a corresponding gain or loss recognized in the consolidated statements of profit and loss.

*Cash flow hedges*

Cash flow hedging is used to hedge interest rate risk. Gains or losses on the hedging instrument are recognized in the consolidated statement of other comprehensive income, to the extent that the hedge is determined to be effective. All other gains or losses are recognized immediately in the consolidated statement of profit and loss.

For cash flow hedges of recognized assets or liabilities, accumulated gains or losses are transferred from other comprehensive income to the consolidated statement of profit and loss in the same period in which the hedged transaction affects the consolidated statement of profit and loss.

Hedge accounting is discontinued when a hedging instrument is derecognized due to expiry, termination or disposal. If the forecasted transaction continues to be expected to occur, the related gains or losses are retained in other comprehensive income until the transaction takes place. Any subsequent change in value is recorded directly to the consolidated statement of profit and loss.

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of host contracts and the host contracts are not carried at fair value through the consolidated statements of profit and loss.

### Earnings per share

Basic earnings per share is calculated by dividing the profit attributable to equity holders of the Company by the weighted average number of ordinary shares outstanding during the year, excluding ordinary shares purchased by the Company and held as treasury shares. Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. For diluted earnings per share, dilutive potential ordinary shares are determined independently for each period presented. When the number of ordinary shares outstanding changes (e.g. share split) the weighted average number of ordinary shares outstanding during all periods presented is adjusted retrospectively. The dilutive effect of outstanding Restricted Stock Units and Performance Restricted Stock Units is reflected as additional share dilution in the computation of earnings per share.

### Assets held for sale

Non-current assets are classified as held for sale if it is highly probable that they will be recovered primarily through sale rather than through continuing use. The sale is highly likely if, at the reporting date, management has committed to detailed sales plans, is actively looking for a buyer and has set a reasonable selling price and the sale is highly likely to occur within a year.

Such assets are measured at the lower of their carrying amount and fair value less costs to sell. Once classified as held for sale, the non-current assets will no longer be depreciated.

### New and amended standards and interpretations adopted by the Company

*IFRS 9 Financial Statements*

Effective January 1, 2018, the new financial instruments standard, IFRS 9, replaced existing IFRS requirements for financial instruments.

The Company has completed a detailed assessment of its financial assets and liabilities as at 1 January 2018. The new classification of financial instruments under IFRS 9 is as follows:

Accounts and other receivables: these items previously classified as loans and receivables are classified and continue to be measured at amortized cost.

Accounts payable and accrued expenses: these items continue to be classified and measured at amortized cost.

Secured and unsecured debt: debt instruments continue to be classified and measured at amortized cost.

Derivative assets and liabilities: derivative instruments continue to be classified and measured at fair value through profit and loss.

The company have restated the classification of comparable figures for the year ended December 2018. The standard did not have any material effect on the classification and valuation of financial assets or liabilities.

*IFRS 15 Revenue from Contracts with Customers*
Effective January 1, 2018, the new revenue recognition standard, IFRS 15, replaced existing revenue requirements.

The core principle of IFRS 15 is that revenue is recognized to depict the transfer of control of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to the entitled in exchange for these goods or services.

Implementation of IFRS 15 does not impact the recognition of revenues for proprietary contracts and MultiClient late sales. The principal area impacted on adoption of IFRS 15 is the recognition of revenue for MultiClient pre-funding agreements.

Under the previous revenue recognition policy for MultiClient pre-funding agreements, the acquisition and processing of MultiClient data is considered a service to the pre-funders, and therefore revenue was recognized as the service is performed over time during the acquisition and processing of MultiClient data. Under IFRS 15 MultiClient pre-funding agreements are considered "right to use" licenses and the revenue is to be recognized at the point in time when the "right to use" license is transferred to the customer. Refer to Revenues section above for further information.

The Company has applied the modified retrospective approach in transitioning to the new principle. Under this approach, the cumulative effect of initially applying IFRS 15 is recognized at the date of initial application, i.e. the 2018 opening balance, and the comparative periods are not restated. As a consequence, previously recognized revenue from MultiClient pre-funding agreements for which final data had not yet been delivered as of December 31, 2017 was reversed effective January 1, 2018, along with the related MultiClient amortization expense, and will be recognized in the 2018 and future periods statement of profit and loss, without prior periods being restated.

The transition adjustments to the 2018 opening balance are as follows:

| Adjusted opening balance following IFRS 15 | **As Reported 31-12-17** | **Adjustment IFRS 15** | **Opening Balance 01-01-18** |
|---|---|---|---|
| Accounts receivable | 162.8 | - | 162.8 |
| Accrued revenues and other receivables | 133.2 | (70.9) | 62.3 |
| Other | 151.7 | - | 151.7 |
| **Total current assets** | **447.7** | **(70.9)** | **376.8** |
| | | | |
| MultiClient library – completed surveys | 388.9 | - | 388.9 |
| MultiClient library – surveys in progress | 123.4 | 155.7 | 279.1 |
| Other | 1 522.8 | - | 1 522.8 |
| **Total long term assets** | **2 035.1** | **155.7** | **2 190.8** |
| | | | |
| **Total assets** | **2 482.8** | **84.8** | **2 567.6** |
| | | | |
| Accumulated earnings | (18.5) | (75.3) | (93.8) |
| Other equity | 898.0 | - | 898.0 |
| **Total shareholders' equity** | **879.5** | **(75.3)** | **804.2** |
| | | | |
| Accrued expenses, other current liabilities and deferred revenues | 186.8 | 160.1 | 346.9 |
| Other | 180.4 | | 180.4 |
| **Total current liabilities** | **367.2** | **160.1** | **527.3** |
| | | | |
| **Total long term liabilities** | **1 236.1** | **-** | **1 236.1** |
| | | | |
| **Total liabilities and shareholders' equity** | **2 482.8** | **84.8** | **2 567.6** |

The opening balance has been adjusted with $70.9 million in decrease in accrued revenues and a $160.1 increase in deferred revenues, in total $231.0 million. For the year ended December 31, 2018 $197.6 million of this adjustment has been recognized as pre-funding revenues. The remainder $33.4 is expected to be recognized in the first half of 2019.

The adjustment to the MultiClient library of $155.7 million will be partly recognized as accelerated amortization at completion and the remainder recognized as straight line amortization during the Late Sale phase over the lifetime of the project.

If IFRS revenues for 2018 were presented in accordance with the principles applied for 2017, the statement of profit and loss would be as follows;

| (In millions of US dollars) | Previous IFRS 2018 | Adjustment IFRS 15 | As Reported 2018 |
|---|---|---|---|
| **Revenues** | **834.5** | **39.8** | **874.3** |
| Cost of sales | (256.0) | - | (256.0) |
| Research and development costs | (10.8) | - | (10.8) |
| Selling, general and administrative costs | (51.8) | - | (51.8) |
| Amortization and impairment of MultiClient library | (387.4) | 2.1 | (385.3) |
| Depreciation and amortization of long term assets (excl. MultiClient Library) | (117.5) | - | (117.5) |
| Impairment and loss on sale of long-term assets (excl. MultiClient Library) | - | - | - |
| Other charges, net | (13.5) | - | (13.5) |
| **Total operating expenses** | **(837.0)** | **2.1** | **(834.9)** |
| **Operating profit (loss)** | **(2.5)** | **41.9** | **39.4** |
| Share of results from associated companies | (18.9) | - | (18.9) |
| Interest expense | (62.0) | - | (62.0) |
| Other financial expense, net | (6.4) | - | (6.4) |
| **Income (loss) before income tax** | **(89.8)** | **41.9** | **(47.9)** |
| Income tax | (40.0) | - | (40.0) |
| **Profit (loss) for the year** | **(129.8)** | **41.9** | **(87.9)** |

As the Company has valued its deferred tax asset at nil there are no material changes to the tax expense. The difference in amortization and impairment compared to Segment Reporting relates to impairment.

If the Company had not implemented IFRS 15 the closing balance would have looked as follows;

| Closing balance, excluding IFRS 15 | As Reported 31-12-18 | Adjustment IFRS 15 | Pre IFRS 15 31-12-18 |
|---|---|---|---|
| Accounts receivable | 160.3 | - | 160.3 |
| Accrued revenues and other receivables | 61.1 | 45.5 | 106.6 |
| Other | 143.6 | - | 143.6 |
| **Total current assets** | **365.0** | **45.5** | **410.5** |
| | | | |
| MultiClient library | 654.6 | (157.8) | 496.8 |
| Other | 1 274.4 | - | 1 274.4 |
| **Total long term assets** | **1 929.0** | **(157.8)** | **1 771.2** |
| | | | |
| **Asset held for sale** | **90.8** | **-** | **90.8** |
| | | | |
| **Total assets** | **2 384.8** | **(112.3)** | **2 272.5** |
| | | | |
| Accumulated earnings | (257.2) | 33.4 | (223.8) |
| Other equity | 979.0 | - | 979.0 |
| **Total shareholders' equity** | **721.8** | **33.4** | **755.2** |
| | | | |
| Deferred revenues | 160.6 | (145.7) | 14.9 |
| Other | 264.5 | - | 264.5 |
| **Total current liabilities** | **425.1** | **(145.7)** | **279.4** |
| | | | |
| **Total long term liabilities** | **1 237.9** | **-** | **1 237.9** |
| | | | |
| **Total liabilities and shareholders' equity** | **2 384.8** | **(112.3)** | **2 272.5** |

**Standards issued but not yet effective (which the Company has not early adopted)**
Standards and interpretations that are issued up to the date of issuance of the consolidated financial statements, but not yet effective, are disclosed below. The Group's intention is to adopt the relevant new and amended standards and interpretations when they become effective, subject to EU approval before the consolidated financial statements are issued.

*IFRIC 23 Uncertainty over Income Tax Treatment*
The interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12. Including:

- Whether an entity considers uncertain tax treatments separately
- The assumptions made about examination of tax treatments by taxation authorities
- How to determine taxable profit (tax loss), tax bases, unused tax credits and tax rates
- How an entity considers change in facts and circumstances

Since PGS operates in a complex multinational tax environment, applying the interpretation may affect its consolidated financial statements.

*IFRS 16 Leases*
The new standard provides a single lessee accounting model, specifying how leases are recognized, measured, presented and disclosed.
The Company will implement IFRS 16 from January 1, 2019. The expected impact of adopting IFRS 16 is disclosed below.

The Company has elected to apply the modified retrospective transition method. Under this method, the comparative information will not be restated, but the cumulative impact of applying IFRS 16 will be recognized within the opening balance of retained earnings at the date of initial application, January 1, 2019.

Under IFRS 16, the Company will capitalize the right of use of all vessels, properties and other assets that are currently held under operating leases. The lease term will correspond to the term of the lease contract, unless the Company is reasonably certain that it will exercise contractual extension or termination options. A corresponding lease liability will be recognized in the statement of financial position, representing the obligation to make lease payments. Operating lease expenses currently recognized within cost of sales will be replaced by depreciation of the right of use asset and interest costs arising from the effect of discounting. The Company will apply the interest rate implicit in the lease, or alternatively its incremental borrowing rate if this cannot be readily determined.

The Company has elected to use the following practical expedients on initial application, as proposed by IFRS 16:

- Use of a single discount rate to a portfolio of leases with similar characteristics;
- The use of hindsight when determining the length of the lease term;
- Lease contracts with a duration of less than 12 months will continue to be expensed to the income statement;
- Lease contracts for underlying assets of a low value will continue to be expensed to the income statement;
- Initial direct costs will be excluded from the measurement of the right of use asset.

On transition, the right-of-use asset has been measured at an amount equal to the lease liability, adjusted by the amount of lease incentives embedded into the value of the asset, asset impairment, accrued costs of restoration and any liabilities relating to onerous leases.

As of January 1, 2019 the Company will recognize lease liabilities of $238 million and right-of-use assets of $202 million, together with a reduction in accrued expenses of $27 million and a decrease to equity of $9 million.

The impact on the January 1, 2019 Opening Balance is expected to be as follows:

| Adjusted opening balance following IFRS 16 | **Closing Balance 31-12-18** | **Adjustment IFRS 16** | **Opening Balance 01-01-19** |
|---|---|---|---|
| **Total current assets** | **365.0** | **-** | **365.0** |
| | | | |
| Property and equipment | 1 062.2 | 202.0 | 1 264.2 |
| Other | 866.8 | - | 866.8 |
| **Total long term assets** | **1 929.0** | **202.0** | **2 131.0** |
| | | | |
| **Asset held for sale** | **90.8** | **-** | **90.8** |
| | | | |
| **Total assets** | **2 384.8** | **202.0** | **2 586.8** |
| | | | |
| Accumulated earnings | (257.2) | (9.5) | (266.7) |
| Other equity | 979.0 | - | 979.0 |
| **Total shareholders' equity** | **721.8** | **(9.5)** | **712.3** |
| | | | |
| Accrued expenses, other current liabilities | 110.6 | (5.4) | 105.2 |
| Short-term debt and current portion of long-term debt | 54.4 | 44.0 | 98.4 |
| Other | 260.1 | - | 260.1 |
| **Total current liabilities** | **425.1** | **38.6** | **463.7** |
| | | | |
| Long-term debt | 1 164.7 | 194.5 | 1 359.2 |
| Other | 73.2 | (21.6) | 51.6 |
| **Total long term liabilities** | **1 237.9** | **172.9** | **1 410.8** |
| | | | |
| **Total liabilities and shareholders' equity** | **2 384.8** | **202.0** | **2 586.8** |

The aggregate lease liability recognized at January 1, 2019 and the Company's operating lease commitment at December 31, 2018 can be reconciled as follows:

| (In millions of US dollars) | |
|---|---|
| **Future minimum payments at 31 December 2018** | **293.6** |
| Commitments exempt due to expiry within 12 months | (11.9) |
| Commitments exempt due to low value | (0.1) |
| Effect of increase in lease term due to extension options | 0.6 |
| Effect of discounting | (43.7) |
| **Total** | **238.5** |

Impact on MultiClient library capitalization and consolidated statement of profit and loss.

A substantial amount of lease costs are directly incurred in acquiring seismic surveys, and as such are eligible for capitalization to the MultiClient library.

In the year of transition, the Company anticipates a reduction in gross cash costs of approximately $50 million, partially offset by a reduction in MultiClient library capitalization of approximately $20 million, depending on vessel utilization. Lease costs previously recognized within gross cash costs will be replaced by depreciation of $40 million and interest expense of $15 million.

Other amendments issued are not yet effective, are not applicable for the group and/or will not have a significant impact on the financial statements.

## Note 3 — Critical Accounting Judgments, Estimates and Assumptions

The preparation of financial statements in accordance with IFRS requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities. In many circumstances, the ultimate outcome related to the estimates, assumptions and judgments may not be known for several years after the preparation of the financial statements. Actual amounts may differ materially from these estimates due to changes in general economic conditions, changes in laws and regulations, changes in future operating plans and the inherent imprecision associated with estimates.

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

### Impairment of seismic vessel and equipment, MultiClient library and other intangible assets

*Discount rate*

The Company applied a pre-tax discount rate of 11% in determining discounted cash flows in connection with the impairment evaluations of seismic vessels and equipment, intangible assets and the MultiClient library. The rates reflect the estimated weighted average cost of capital for Company activities.

*Forecast sales of MultiClient library*

At least annually, management forecasts future sales for each MultiClient library survey for purposes of determining the amount of impairment, and for those surveys still in work-in-progress, the amortization rate to be applied against pre-funding revenues. In forecasting sales, management considers past experience, market developments as described above, general prospects for hydrocarbons in the area, political risk, likelihood and timing of exploration licensing rounds, existence of competitor data sets and general economic conditions. Because of the inherent difficulty in forecasting sales and future developments, it is possible that the amount of impairment could vary significantly between periods and the amortization rate applied to surveys in progress may also vary between periods. In addition, future revenues from a survey may not be sufficient to cover the existing carrying value. To the extent the future actual revenues achieved prove to be less than forecasted, future periods will reflect lower profitability with and/or impairment of MultiClient library surveys.

*Sensitivity of forecasted sales on MultiClient impairment evaluation*

A 10% reduction in the sales forecast for all surveys with a net book value as of December 31, 2018 would have resulted in an additional impairment of approximately $10 million. A 20% reduction in the sales forecast for all surveys with a net book value as of December 31, 2018 would have resulted in an additional impairment of approximately $31 million.

*Impairment of seismic vessels and equipment*

Seismic vessels and equipment are regularly reviewed for impairment, whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. Future cash flows expected to be generated from the use and eventual disposal of the assets are estimated to determine the amount of impairment, if any.

Estimating future cash flows requires management to make judgments regarding long-term forecasts of future revenues and costs related to the assets subject to review. These forecasts are subject to uncertainty as they require assumptions about demand for our products and services, future market conditions and technological developments. Significant and unanticipated changes in these assumptions could result in impairments in a future period.

In estimating future cash flows of the seismic fleet, management has assumed that revenue levels for the fleet will improve in 2019, compared to 2018, however will still be adversely impacted by a weak market. Thereafter, management has forecast improved margins that generate operating profit ("EBIT") margins similar to average historic margins. Had EBIT margins that are 3 percentage points lower than average historic EBIT margins been assumed for the long term, then additional impairment of the fleet would approximate $60 million as of December 31, 2018. Had EBIT margins that are 5 percentage points lower than average historic EBIT margins been assumed for the long term, then additional impairment of the fleet would approximate $140 million as of December 31, 2018. See note 7 and 16 for recognized impairments.

### Depreciation of seismic vessels and equipment

Depreciation is based on management estimates of the future economic benefits and expected useful lives of seismic vessels and equipment. These estimates may change due to changes in market conditions including competition, technological development, use of the assets and strategic considerations.

### Deferred tax assets

Deferred tax assets are recognized for unused tax losses to the extent it is probable that future taxable profit will be available against which the losses can be utilized. Significant management judgment is required to estimate the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profit in the nearer term (generally 2 to 3 years forward). In recent years, the Company has experienced tax losses in most of the jurisdictions in which it operates and combined with a nearer-term outlook of continued tax losses has resulted in a write-down of the remaining deferred tax assets in 2017, primarily in Norway (see note 11).

As of December 31, 2018, aggregate unrecorded deferred tax assets of the Company amount to $348.5 million.

### Provision for contingencies, claims and tax litigations

The Company records accruals for contingencies, claims and other uncertain liabilities, including tax contingencies, when it is more likely than not that a liability has been incurred and the amount can be reasonably estimated. These accruals are adjusted periodically as assessments change or new or additional information becomes available. In estimating the likelihood of an unfavorable outcome, management evaluates the specific facts and circumstances in light of the related laws and regulations; advice from external counsel; and the outcome of similar cases, if any. Because of the inherent uncertainty in estimating the future outcome of such matters, it is possible that some of these matters will ultimately result in the Company incurring a material liability. See note 11 and 22 for further descriptions.

## Note 4 — Segment Reporting

Following the Company's reorganization effective from January 1, 2018, PGS has now only one operating segment. Because the previous segments, Marine Contract and MultiClient, satisfied the aggregation criteria under IFRS 8 operating segments, this change in segments does not result in a change to the segment reporting for previous periods.

Following the implementation of the new accounting standard for revenues, IFRS 15, MultiClient pre-funding revenues are no longer recognized under the previously applied percentage of completion method. Instead, all such revenues are recognized at delivery of the final processed data, which is typically significantly later than the acquisition of the seismic data.

Management has, for the purpose of its internal reporting, continued to report according to the principle applied in 2017 and earlier years, where MultiClient pre-funding revenue is recognized on a percentage of completion basis, and the related amortization of each MultiClient project during the prefunding phase is based upon the project's ratio of aggregate capitalized survey cost to forecasted sales.

The table below sets out a summary of the Group's segment numbers for the year ended December 31, 2018 and 2017 respectively.

| | Year ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | **2018** | **2017** | **2018** | **2017** | **2018** | **2017** |
| | Segment Reporting | | Adjustments | | As Reported | |
| Total revenues | 834.5 | 838.8 | 39.8 | - | 874.3 | 838.8 |
| | | | | | | |
| Cost of sales | (256.0) | (411.0) | - | - | (256.0) | (411.0) |
| Research and development costs | (10.8) | (17.6) | - | - | (10.8) | (17.6) |
| Selling, general and administrative costs | (51.8) | (36.0) | - | - | (51.8) | (36.0) |
| Amortization of MultiClient library | (362.1) | (366.8) | (0.6) | - | (362.7) | (366.8) |
| Depreciation and amortization (excl. MultiClient library) | (117.5) | (154.4) | - | - | (117.5) | (154.4) |
| **Operating profit/ EBIT ex impairment and other charges,net** | **36.3** | **(147.0)** | **39.2** | **-** | **75.5** | **(147.0)** |

As IFRS 15 was implemented January 1, 2018 there are no differences between Segment and As Reported income statement figures for the year ended December 31, 2017.

Segment Reporting applies a percentage of completion revenue recognition principle for MultiClient pre-funding agreements and recognizes MultiClient library amortization in the same periods as the revenues. This differs from IFRS reporting which recognizes revenue from MultiClient pre-funding agreements and related amortization at the "point in time" when the customer receives access to, or delivery of, the finished data. See note 2 for further description of the principles applied.

For the year ended December 31, 2018 MultiClient pre-funding revenues, As Reported, were higher than Segment pre-funding revenues. This difference is only related to timing of revenue recognition.

Because the Company provides services worldwide to the oil and gas industry, a substantial portion of the property and equipment is mobile, and their respective locations at the end of each period (as listed in the tables below together with the MultiClient library) are not necessarily indicative of the earnings generated by the related property and equipment during the period. Property and equipment and other non-current assets are classified based upon location of ownership. The geographic classification of statements of profit and loss items is based upon location of performance or, in the case of MultiClient seismic data sales, the geographic area covered by the data being licensed.

| | Year ended December 31, | | | |
|---|---|---|---|---|
| | **2018** | **2017** | **2018** | **2017** |
| Geographical markets | Segment Reporting | | As Reported | |
| Americas (excluding Brazil and Canada) | 28.5 | 51.7 | 65.0 | 51.7 |
| Brazil | 139.6 | 88.7 | 113.7 | 88.7 |
| Canada | 80.7 | 89.4 | 69.3 | 89.4 |
| UK | 72.7 | 66.7 | 49.9 | 66.7 |
| Norway | 200.2 | 177.0 | 275.0 | 177.0 |
| Asia/Pacific | 67.8 | 131.7 | 98.2 | 131.7 |
| Africa (excluding Angola) | 115.2 | 105.5 | 82.7 | 105.5 |
| Angola | 90.6 | 36.5 | 90.3 | 36.5 |
| Middle East/Other | 39.2 | 91.6 | 30.2 | 91.6 |
| **Total revenues from contracts with customers** | **834.5** | **838.8** | **874.3** | **838.8** |

| Total non-current assets (a) | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | 2018 | 2017 |
| Americas (excluding Brazil) | 173.6 | 176.2 |
| Brazil | 92.8 | 24.9 |
| UK | 63.0 | 54.4 |
| Norway | 1 304.0 | 1 472.1 |
| Asia/Pacific | 115.7 | 65.9 |
| Africa | 75.4 | 69.4 |
| Middle East/Other | 56.5 | 140.1 |
| **Total** | **1 881.0** | **2 003.0** |

(a) Consists of Property and equipment, MultiClient library, Investments in associated companies (note 18) and Other intangible assets.

## Note 5 — Revenue from Contracts with Customers

The company earns revenue from the following categories of customer contracts:

| | Year ended December 31, | |
|---|---|---|
| Type of goods or service | 2018 | 2017 |
| Contract seismic | 149.5 | 241.3 |
| MultiClient pre-funding | 322.2 | 299.4 |
| MultiClient late sales | 371.9 | 235.0 |
| Imaging | 25.8 | 51.0 |
| Other | 4.9 | 12.1 |
| **Total revenues from contracts with customers** | **874.3** | **838.8** |

| | | |
|---|---|---|
| Timing of revenue recognition* | | |
| Licenses transferred at a point in time | 649.3 | 496.2 |
| Services transferred over time | 225.0 | 342.6 |
| **Total revenues from contracts with customers** | **874.3** | **838.8** |

*Refer to section on performance obligations below

Set out below is the reconciliation of the revenue form contracts with customers with the amounts disclosed in the segment information (note 4)

| | Year ended December 31, | |
|---|---|---|
| | 2018 | 2017 |
| **Revenue as reported in Segment disclosure** | **834.5** | **838.8** |
| Segment MultiClient revenue for projects not yet delivered | (157.8) | - |
| MultiClient revenue from previous years, projects delivered | 197.6 | - |
| **Revenues, As Reported** | **874.3** | **838.8** |

The difference is related to timing of recognition of MultiClient pre-funding revenues. Refer to note 2 for further information.

In 2018, aggregate revenues from the two largest customers accounted for 8.3% and 8.2% of the Company's consolidated revenues compared to 12.8% and 9.1% in 2017, respectively. Numbers are not directly comparable due to implementation of IFRS 15.

### Revenue from Joint Operations

The Company has cooperation agreements to invest in certain MultiClient data projects with other parties. These agreements are classified as joint operations where the parties have rights to the assets and liability of the investment. The Company generally holds an interest between 30-50%. PGS recognizes its relative share of the revenue. For the year ended December 31, 2018, $140.1 million of the net revenue recognized relates to projects with Joint Operations.

### Contract balances

Balances related to customer contracts consists of the following;

| | Year ended December 31, | |
|---|---|---|
| | 2018 | 2017 |
| Accounts receivable | 160.3 | 162.8 |
| Accrued revenues | 58.1 | 131.5 |
| **Total assets from contracts with customers** | **218.4** | **294.3** |
| | | |
| Deferred revenues | 160.6 | 13.8 |
| **Total liabilities from contracts with customers** | **160.6** | **13.8** |

Trade receivables are non-interest bearing and are generally on terms of 30 to 90 days.

Contract assets are initially recognized for revenue earned, but not yet invoiced. This is generally related to Contract and Imaging projects where the condition to invoice is not yet satisfied. As well as Late Sales to be invoiced the following month.

Contract liabilities consist of revenue billed, not yet recognized. A substantial share of the balance is related to MultiClient pre-funding projects where revenue is generally recognized at completion of final data. The Company currently expect all deferred revenues to be recognized during 2019.

The significant increase of deferred revenues and decrease of accrued revenues from 2017 is mainly due to the MultiClient pre-funding contracts following the implementation of IFRS 15; refer to note 2 for further information.

**Performance obligations**

*Contract seismic and imaging*

The performance obligation is satisfied over-time and payment is generally due monthly or upon defined project milestones.

*MultiClient Pre-funding*

The performance obligation is satisfied at a point-in-time, usually by delivery of final data, and payment is generally due upon defined project milestones. The customer is usually entitled to other deliverables such as preliminary data, but these are deemed not to be distinct within the context of the contract.

Revenue the company receives from Joint Operation partners for acquisition or processing preformed is classified as MultiClient pre-funding. The ownership of data is, in most cases, joint and the partner assumes ownership, rights and obligations as the data is produced, the revenue is therefore considered as transferred over time. This amounts to $47.9 million and $50.3 million for the years ended December 31, 2018 and 2017, respectively.

*MultiClient Late Sales*

The performance obligation is satisfied at a point-in-time upon signing of contract and delivery of data. Payment is generally due 30-60 days after the performance obligation is satisfied. Certain contracts may contain uplift payments dependent on a condition such as the customer subsequently being awarded acreage that is covered by the MultiClient data license granted to the customer. These are considered contingent consideration and is recognized when the Company has an enforceable right to receive the additional payment.

The transaction price, for contracts entered into as of December 31, allocated to the remaining performance obligations (unsatisfied or partly unsatisfied) as follows:

| | **Year ended December 31,** |
|---|---|
| Remaining performance obligations | **2018** |
| Within one year | 257.7 |
| More than one year | - |
| **Total** | **257.7** |

Comparable numbers are not presented as the revenue reporting for the year ended December 31, 2017 is not based on performance obligations. Refer to note 2.

All ongoing MultiClient projects as of December 31, 2018 with pre-funders are expected to be completed during 2019. Timing of performance obligations are uncertain as MultiClient projects are, among other, subject to allocation of internal imaging capacity.

## Note 6 – Cost of Sales

| (In millions of US dollars) | Year ended December 31, 2018 | 2017 |
|---|---|---|
| Vessel cost, direct project cost & technology | (393.7) | (427.0) |
| New Ventures & Imaging | (132.4) | (193.9) |
| Other | (4.0) | (11.0) |
| **Total cost of sales, gross** | **(530.1)** | **(631.9)** |
| Steaming deferral, net | (3.0) | 7.5 |
| Less amount capitalized to MultiClient library | 277.1 | 213.4 |
| **Total cost of sales, net** | **(256.0)** | **(411.0)** |

## Note 7 – Depreciation, Amortization and Impairments of Long-Term Assets

Amortization and impairment of the MultiClient library consist of the following:

| (In millions of US dollars) | Year ended December 31, 2018 | 2017 |
|---|---|---|
| Amortization of MultiClient library (note 17) | (212.3) | (366.4) |
| Accelerated amortization of MultiClient library (note 17) | (150.4) | (0.4) |
| Impairment of MultiClient library (note 17) | (22.6) | (59.4) |
| **Amortization and impairment of MultiClient library** | **(385.3)** | **(426.2)** |

Amortization for the years ended December 31, 2018 and 2017 are not comparable. Refer to note 2 for information on changes following implementation of IFRS 15.

Impairment relates mainly to surveys where initially expected sales have not materialized or are no longer probable. Approximately 50% relates to Asia Pacific and remainder Europe and America.

Amortization and depreciation of long-term assets (excluding MultiClient library) consist of the following:

| (In millions of US dollars) | Year ended December 31, 2018 | 2017 |
|---|---|---|
| Gross depreciation and amortization | (203.4) | (226.0) |
| Depreciation capitalized and deferred, net | 85.9 | 71.6 |
| **Depreciation and amortization of long term assets (excl. MultiClient Library)** | **(117.5)** | **(154.4)** |

Impairments and reversal of impairments of long-term assets (excluding MultiClient library) consist of the following:

| (In millions of US dollars) | Year ended December 31, 2018 | 2017 |
|---|---|---|
| Impairment of property and equipment (note 16) | - | (40.6) |
| Impairment other intangible assets (note 19) | - | (53.6) |
| **Impairment and loss on sale of long-term assets (excl. MultiClient Library)** | **-** | **(94.2)** |

## Note 8 – Other charges, net

Other charges, net consist of the following:

| (In millions of US dollars) | Year ended December 31, 2018 | 2017 |
|---|---|---|
| Severance cost | (2.4) | (34.5) |
| Onerous lease contracts | (1.7) | (21.8) |
| Onerous contracts with customers | 6.9 | (2.4) |
| Loss on ISS settlement | - | (14.4) |
| Write down supply/spare parts | (8.2) | - |
| Other | (8.1) | (9.7) |
| **Total** | **(13.5)** | **(82.8)** |

## Note 9 – Interest Expense

Interest expense consists of the following:

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | 2018 | 2017 |
| Interest cost, gross | (62.0) | (64.4) |
| Interest capitalized to the MultiClient library (note 16) | 7.1 | 4.8 |
| Interest capitalized to construction in progress (note 16) | - | 1.8 |
| **Total** | **(62.0)** | **(57.8)** |

The average interest rate used to determine the amount of interest cost eligible for capitalization was 4.9% and 4.5% for the years ended December 31, 2018 and 2017, respectively.

## Note 10 – Other Financial Expense, Net

Other financial expense, net, consists of the following:

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | 2018 | 2017 |
| Interest income | 2.3 | 1.4 |
| Currency exchange loss | (3.0) | (7.3) |
| Fees, including commitment fee RCF | (5.0) | (6.5) |
| Other | (0.7) | 6.4 |
| **Total** | **(6.4)** | **(6.0)** |

## Note 11 – Income Taxes

Income tax consists of the following:

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | 2018 | 2017 |
| Current taxes (a) | (40.0) | (12.3) |
| Deferred taxes | - | (42.9) |
| **Total income tax expense** | **(40.0)** | **(55.2)** |

The increase in current taxes from the year ended December 31, 2018 relates mainly to income tax on operations in Brazil.

The income tax differs from the amounts computed when applying the Norwegian statutory tax rate to income (loss) before income tax as a result of the following:

| | December 31, | |
|---|---|---|
| | Year ended December 31, | |
| (In millions of US dollars) | 2018 | 2017 |
| Income (loss) before income tax | (47.9) | (468.2) |
| Norwegian statutory rate | 23% | 24% |
| Provision for income taxes at statutory rate | 11.0 | 112.4 |
| ***Increase (reduction) in income taxes from:*** | | |
| Effect of tax rates other than statutory tax rate in Norway | (11.7) | (4.5) |
| IFRS 15 Revenue and amortization reconized in previous years (c) | 20.2 | - |
| Tax exempt income within tonnage tax regimes net of vessel impairments (a) | 4.2 | 11.0 |
| Losses from equity investments | (4.3) | (2.4) |
| Foreign taxes not creditable in home country | (10.9) | (8.7) |
| Change in tax rate | (14.2) | (2.6) |
| Currency effects (b) | (17.0) | (10.6) |
| Changes in unrecognized deferred tax assets | (24.5) | (177.2) |
| Prior period adjustments (a) | 5.9 | 26.2 |
| Other permanent items | 1.2 | 1.1 |
| **Income tax** | **(40.0)** | **(55.3)** |

Notes to selected items in the preceding table:

(a) The Company's vessel operations related to the Ramform Titan class vessels are held within the Norwegian Tonnage Tax regime under which operating profit is tax exempt. With effect from 2016, the Company chose to transfer vessel operations related to all other vessels from the Norwegian Tonnage Tax regime to the general Norwegian tax regime, under which operating profit is taxable. The impact is included in the above table as part of prior period adjustments for the year ended December 31, 2017.

(b) Currency effects primarily relate to translating tax positions in local currency to US dollar functional currency.

(c) Following implementation of IFRS 15, the Company reversed revenue and amortization towards the opening balance. Refer to note 2 for further information. Revenue and amortization previously recognized has been taken out as a permanent difference. This did not have any impact on the Balance Sheet or tax expense, as all deferred tax is currently unrecognized.

The tax effects of the Company's temporary differences are as follows:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| ***Deferred tax assets*** | | |
| MultiClient library | - | (3.6) |
| Derivatives | (0.8) | - |
| Employee benefits | (7.7) | (12.7) |
| Tax loss carry-forwards | (289.3) | (298.7) |
| Tax credits | (2.9) | (11.0) |
| Unrealized exchange loss | - | (10.8) |
| Current accruals/liabilities | (1.1) | - |
| Property and equipment | (42.2) | (3.9) |
| Other | (13.9) | (34.3) |
| **Deferred tax assets, gross** | **(357.9)** | **(375.0)** |
| | | |
| ***Deferred tax liabilities*** | | |
| Property and equipment | 0.1 | - |
| Intangible assets | 10.1 | 16.6 |
| Current accruals/liabilities | - | 28.4 |
| Deferred taxable gain/revenue | - | 8.4 |
| **Deferred tax liabilities, gross** | **10.2** | **53.4** |
| | | |
| Deferred tax assets, net | (347.7) | (321.6) |
| Deferred tax assets not recognized in the consolidated statements of financial position | 348.5 | 322.4 |
| **Net recognized deferred tax assets and liabilities** | **0.8** | **0.8** |

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Deferred tax assets | - | - |
| Deferred tax liabilities | 0.8 | 0.8 |
| **Income tax liabilities, gross** | **0.8** | **0.8** |

The Company has incurred several years of consecutive tax losses in the Norwegian tax jurisdiction, including for 2018 and the outlook for 2019 remains uncertain. Although the Company believes it will eventually attain a satisfactory level of profitability, sufficient convincing evidence of such as required by International Accounting Standard 12 is not present. The remaining deferred tax asset was expensed in 2017.

Deferred tax assets specified by jurisdiction, both recognized and unrecognized, and tax losses including expiration periods as of December 31, 2018 are as follows:

| (In millions of US dollars) | **Tax losses** | **Expiry dates** | **Recognized deferred tax assets** | **Unrecognized deferred tax assets** |
|---|---|---|---|---|
| Brazil | 1 052.0 | None | - | 231.5 |
| UK | 144.0 | None | - | 27.3 |
| Other | 140.0 | Various | - | 30.5 |
| | **1 336.0** | | **-** | **289.3** |

It is the Company's current view that unremitted earnings from international operations in subsidiaries are expected to be reinvested indefinitely, and as a result, no withholding tax have been provided for unremitted earnings.

With its multi-national operations, the Company is subject to taxation in many jurisdictions around the world with increasingly complex tax laws. The Company has matters in several jurisdictions that could eventually make it liable for material amounts of taxes relating to prior years.

Total provision for uncertain tax positions are recognized as follows:

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Other long-term liabilities (see "Other" note 24) | 0.2 | 2.0 |
| **Total provision for uncertain tax positions** | **0.2** | **2.0** |

*Tax Contingencies*

The Company estimates the likelihood of unfavorable outcomes for tax contingencies amounting to approximately $25 million as reasonably possible (20-50%) and approximately $75 million as remote (less than 20%) which are not provided for.

## Note 12 – Earnings Per Share Information

Specification of average number of shares:

| | Year ended December 31, | |
|---|---|---|
| | **2018** | **2017** |
| Weighted average basic shares outstanding (a) | 338 575 238 | 337 860 603 |
| Dilutive potential shares | 2 432 040 | 2 374 029 |
| **Weighted average diluted shares outstanding** | **341 007 278** | **340 234 632** |

(a) Weighted average basic shares outstanding for each year is reduced by the average number of treasury shares owned by the Company during the year (see note 26)

## Note 13 – Restricted Cash

Restricted cash consists of the following:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| ***Current:*** | | |
| Restricted cash debt service (note 20) | - | 15.3 |
| Restricted payroll withholding taxes | 4.2 | 4.5 |
| Other | 0.1 | - |
| Total restricted cash, current | 4.3 | 19.8 |
| ***Long-term:*** | | |
| Restricted cash debt service | 38.9 | 23.0 |
| Other | - | 0.5 |
| **Total** | **43.2** | **43.3** |

## Note 14 – Accrued Revenues and Other Receivables

Accrued revenues and other receivables consist of the following:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Accrued revenues (a) | 58.1 | 131.5 |
| Other receivables | 3.0 | 1.7 |
| **Total** | **61.1** | **133.2** |

(a) Refer to note 2 for changes following IFRS 15

## Note 15 – Other Current Assets

Other current assets consist of the following:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Consumables, supplies and fuel inventory | 32.8 | 40.5 |
| Deferred steaming and project costs | 9.5 | 14.9 |
| Prepaid operating expenses | 10.2 | 12.0 |
| Withholding taxes and taxes receivable | 7.7 | 8.8 |
| Prepaid reinsurance | 2.9 | 3.0 |
| Unrealized gain on firm commitment subject to hedge accounting | 0.9 | 1.7 |
| Other | 0.8 | 3.7 |
| **Total** | **64.8** | **84.6** |

## Note 16 – Property and Equipment

The changes in property and equipment are as follows:

| (In millions of US dollars) | Construction of vessels in progress | Seismic vessels and equipment | Buildings, fixtures and furniture* | Total |
|---|---|---|---|---|
| **Cost as of January 1, 2017** | **151.4** | **2 881.7** | **99.1** | **3 132.2** |
| Capital expenditures/recoveries | 88.8 | 65.3 | 0.4 | 154.5 |
| Capitalized interest | 1.8 | - | - | 1.8 |
| Asset transfers | (242.0) | 242.0 | - | - |
| Reclassification | - | 4.5 | - | 4.5 |
| Asset retirements | - | (202.6) | (28.6) | (231.2) |
| **Cost as of December 31, 2017** | **-** | **2 990.9** | **70.9** | **3 061.8** |
| Capital expenditures/recoveries | - | 42.4 | 0.1 | 42.5 |
| Asset transfers to held for sale | - | (172.1) | - | (172.1) |
| Capitalized interest | - | - | - | - |
| Asset retirements | - | (120.3) | (3.1) | (123.4) |
| Reclassification/Other | - | (5.9) | 5.5 | (0.4) |
| **Cost as of December 31, 2018** | **-** | **2 735.0** | **73.4** | **2 808.4** |
| | | | | |
| **Accumulated depreciation as of January 1, 2017** | **-** | **1 546.9** | **60.3** | **1 607.2** |
| **Impairments as of January 1, 2017** | **-** | **133.3** | **-** | **133.3** |
| Depreciation | - | 200.3 | 8.6 | 208.9 |
| Impairments | - | 39.2 | 1.4 | 40.6 |
| Asset retirements | - | (197.3) | (28.6) | (225.9) |
| **Depreciation as of December 31, 2017** | **-** | **1 549.9** | **40.3** | **1 590.2** |
| **Impairments as of December 31, 2017** | **-** | **172.5** | **1.4** | **173.9** |
| Depreciation | - | 176.9 | 7.6 | 184.5 |
| Asset transfers to held for sale | - | (81.3) | - | (81.3) |
| Asset retirements- accumulated depreciation | - | (78.7) | - | (78.7) |
| Asset retirements- accumulated impairment | - | (39.3) | (3.2) | (42.5) |
| **Depreciation as of December 31, 2018** | **-** | **1 566.9** | **46.1** | **1 613.0** |
| **Impairments as of December 31, 2018** | **-** | **133.1** | **-** | **133.1** |
| | | | | |
| **Balance as of December 31, 2017** | **-** | **1 268.5** | **29.2** | **1 297.6** |
| **Balance as of December 31, 2018** | **-** | **1 035.0** | **27.1** | **1 062.2** |

*Building, fixtures and fittings include, as of December 31, 2018, USD 4.7 million in leases classified as financial.

### Impairments

Management regularly evaluates its fleet plan and capital expenditure levels in light of market conditions. In 2018 and 2017 management performed such evaluations and made decisions which, for 2017, resulted in impairments of certain vessels in the fleet described below. Refer to note 3 for information in estimates.

*2018 impairments*

PGS did not record impairments related to fixed assets for the year ended December 31, 2018.

*2017 impairments*

PGS recorded aggregate impairment charges of $40.6 million in 2017 primarily related to a reduced baseline for 3D vessel capacity to be operated going forward. The impairment primarily reflects a write-down to an average estimated recoverable value of $9.0 million for each of the three Ramform V-class vessels that are cold stacked.

A summary of vessel impairments and losses is as follows:

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | 2018 | 2017 |
| V-Class vessels | - | (36.5) |
| Atlantic Explorer | - | (2.7) |
| **Total impairment and loss on disposal of vessels** | **-** | **(39.2)** |

### Asset held for sale

In November 2018, the Company committed to a plan to sell the seismic vessel, *Ramform Sterling*. The transaction was finalized in 2019. The vessel is measured at carrying value of $90.8 million, which is lower than the fair value less costs to sell. The sale of *Ramform Sterling* is not expected to generate any material gain in the consolidated statements of profit and loss.

### New build program – Ramform Titan-class vessels

*Ramform Hyperion* was delivered in March 2017 from Mitsubishi Heavy Industries Shipbuilding Co. Ltd. in Japan. With delivery of *Ramform Hyperion*, the Titan-class vessels new-build program is completed.

## Note 17 – MultiClient Library

The changes in the MultiClient library are as follows:

| (In millions of US dollars) | 2018 | 2017 |
|---|---|---|
| **Balance as of December 31, 2017** | **512.3** | |
| Effect from implementation of IFRS 15 (see note 2) | 155.7 | |
| **Balance as of January 1** | **668.0** | **647.2** |
| Capitalized cash costs | 277.1 | 213.4 |
| Capitalized interest | 7.1 | 4.8 |
| Capitalized depreciation | 87.7 | 67.9 |
| Amortization expense | (212.3) | (366.4) |
| Accelerated amortization | (150.4) | (0.4) |
| Impairments (see note 7) | (22.6) | (59.4) |
| Other | - | 5.2 |
| **Balance as of December 31,** | **654.6** | **512.3** |

The net carrying value of the MultiClient library, by the year of survey completion is as follows:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | 2018 | 2017 |
| Completed surveys: | | |
| Completed during 2013 | - | 7.6 |
| Completed during 2014 | 10.7 | 35.5 |
| Completed during 2015 | 29.7 | 69.3 |
| Completed during 2016 | 110.1 | 185.7 |
| Completed during 2017 | 66.3 | 90.8 |
| Completed during 2018 | 116.4 | - |
| **Completed surveys** | **333.2** | **388.9** |
| **Surveys in progress** | **321.4** | **123.4** |
| **MultiClient library** | **654.6** | **512.3** |

## Note 18 – Other Long-Term Assets

Other long-term assets consist of the following:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | 2018 | 2017 |
| Investments in associated companies (a) | 57.7 | 70.5 |
| Other receivables | 8.9 | 8.0 |
| **Total** | **66.6** | **78.5** |

(a) Specification of investments in and loans to associated companies as follows:

| | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|
| (In millions of US dollars) | Net book value | Ownership | Net book value | Ownership |
| Azimuth Ltd. | - | 35% | - | 35% |
| Azimuth II Ltd. | 40.5 | 35% | 47.5 | 32% |
| Azimuth III Ltd. | 17.0 | 44% | 22.8 | 44% |
| Other | 0.2 | - | 0.2 | - |
| **Total** | **57.7** | | **70.5** | |

PGS share of income (loss) from associated companies is calculated as follows:

| | Year ended December 31, 2018 | | | Year ended December 31, 2017 | | |
|---|---|---|---|---|---|---|
| (In millions of US dollars) | Profit (loss) for the year | Adjustments (a) | Share of income (loss) | Profit (loss) for the year | Adjustments (a) | Share of income (loss) |
| Azimuth Ltd. | 5.8 | (5.8) | - | (2.6) | 2.6 | - |
| Azimuth II Ltd. | (20.1) | 1.9 | (18.2) | (8.5) | (5.1) | (13.6) |
| Azimuth III Ltd. | (9.4) | 8.7 | (0.7) | (4.7) | (2.4) | (7.1) |
| Other | - | - | | - | - | - |
| **Total** | | | **(18.9)** | | | **(20.7)** |

(a) Adjustments relate to accounting for exploration costs in Azimuth; losses on dilution of ownership and recoverable investment value; and loss limitation entries to reflect investment balance at no less than nil.

Exploration costs, hereof seismic data and services purchased by Azimuth (including data and services purchased from PGS) is capitalized in the Azimuth financial statements and subject to impairment testing. In its equity method accounting for the investment in Azimuth, PGS charges to expense exploration costs, including seismic data and services purchased by Azimuth from PGS, which does not relate to specific licensed acreage.

In 2017 the Company incurred a $6.4 million loss on dilution of its investment in Azimuth II by not fully participating in Azimuth II share capital increases. The Company also recognized a loss in its investment in Azimuth III by $7.0 million based upon an assessment of recoverable value.

As of December 31, 2018 and 2017, PGS' share of cumulative losses (as adjusted for PGS accounting principles) in Azimuth Limited exceeded PGS investment in that associate. Because PGS has no further obligation to fund its share of losses for Azimuth Limited, PGS' share of cumulative losses recognized from this associate are limited to its investment. For the year ended December 31, 2018 there was a reversal of previously unrecognized losses amounting to $5.9 million and for the year ended December 31, 2017 unrecognized losses amounted to $2.6 million. Cumulative unrecognized losses amount to $3.3 million and $9.0 million as December 31, 2018 and 2017, respectively.

The Company owns 35% of Azimuth Limited, 35% of Azimuth II Limited and 44% of Azimuth III Limited, which together are the holding companies of the Azimuth Group. The remaining shares are held by a majority shareholder and minority shareholder comprised of employees of Azimuth. The investments are therefore accounted for as associated companies. The Azimuth Group consists of several operating entities which invest in Exploration and Production ("E&P") companies and exploration assets.

The Company has contributed $6.6 million and nil to the Azimuth Group in 2018 and 2017, respectively. During 2018 and 2017 the Azimuth Group purchased data and services from the Company for nil and $0.7 million, respectively.

The Company has during 2018 granted a loan to Azimuth in the amount of $4.0 million. The receivable is non-interest bearing and convertible to shares at a given conversion price.

The Company has entered into a cooperation agreement whereby the Company provides certain services to the Azimuth Group. The Azimuth Group has the right to buy, for cash and at fair value, up to 50% of any future equity settlement that the Company may receive as payment for its library or services. The Company has a right, but no obligation to provide further funding of Azimuth Group and has no guarantees outstanding.

The following table illustrates the summarized financial information (100% basis) as of December 31:

| | **Azimuth Limited** | | **Azimuth II Limited** | | **Azimuth III Limited** | |
|---|---|---|---|---|---|---|
| (In millions of US dollars) | **2018 (preliminary)** | **2017(a)** | **2018 (preliminary)** | **2017(a)** | **2018 (preliminary)** | **2017 (a)** |
| Current assets | 0.6 | 7.1 | 20.0 | 24.7 | 3.7 | 3.8 |
| Non-current assets | 6.8 | 7.3 | 127.3 | 152.6 | 30.1 | 40.1 |
| Current liabilities | 0.3 | 9.0 | 16.7 | 2.0 | 50.1 | 50.0 |
| Non-current liabilities | 4.2 | 20.3 | - | - | - | - |
| Equity | 2.9 | (14.9) | 130.6 | 175.3 | (16.3) | (6.1) |
| | | | | | | |
| Revenue | - | - | - | - | 1.0 | - |
| Operating expenses | 0.6 | 1.7 | 12.7 | 1.3 | 11.2 | 12.1 |
| Financial (income) expenses | (18.4) | 8.3 | 42.3 | 25.1 | - | (0.5) |
| Income (loss) before tax | 17.8 | (10.0) | (55.0) | (26.4) | (10.2) | (11.6) |
| Income tax | - | - | - | - | - | - |
| Profit (loss) for the year | 17.8 | (10.0) | (55.0) | (26.4) | (10.2) | (11.6) |
| Other comprehensive income | - | - | (1.2) | 0.2 | - | - |
| Total comprehensive income | 17.8 | (10.0) | (56.2) | (26.2) | (10.2) | (11.6) |

(a) The preliminary 2017 financial statements numbers for the Azimuth companies included in the 2017 Annual Report have been updated to reflect final numbers.

The changes for the year in Investments in Associated Companies are as follows:

| | **December 31,** | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Balance at January 1 | 70.5 | 89.6 |
| Investments | 6.6 | - |
| Share of results from associated companies | (18.9) | (20.7) |
| Other comprehensive income (loss) from associated companies | (0.4) | 0.5 |
| Other changes | (0.1) | 1.1 |
| **Balance at December 31** | **57.7** | **70.5** |

## Note 19 – Other Intangible Assets

The changes in other intangible assets are summarized as follows:

| (In millions of US dollars) | Patents, licenses, technology and other (b) | Intangible assets in development | Total |
|---|---|---|---|
| **Cost as of January 1, 2017** | **320.7** | **54.7** | **375.5** |
| Additions to costs | 23.5 | 11.8 | 35.3 |
| Asset retirements | (5.6) | - | (5.6) |
| Asset transfers | 28.9 | (28.9) | - |
| Impairment | - | (0.4) | (0.4) |
| **Cost as of December 31, 2017** | **367.5** | **37.2** | **404.8** |
| Additions to costs | 0.6 | 9.8 | 10.4 |
| Reclassification | - | 0.5 | 0.5 |
| Asset retirements | (2.4) | - | (2.4) |
| Asset transfers | 14.7 | (14.7) | - |
| Asset sale | (29.6) | - | (29.6) |
| Abandoned equity investment | - | (2.0) | (2.0) |
| **Cost as of December 31, 2018** | **350.8** | **30.8** | **381.7** |
| | | | |
| **Amortization as of January 1, 2017 (a)** | **216.9** | **-** | **216.9** |
| Amortization expense | 17.2 | - | 17.2 |
| Impairment | 53.1 | - | 53.1 |
| Asset retirements | (5.6) | - | (5.6) |
| **Amortization as of December 31, 2017 (a)** | **281.6** | **-** | **281.6** |
| Amortization expense | 17.8 | - | 17.8 |
| Impairment | - | - | - |
| Asset retirements | (2.4) | - | (2.4) |
| Asset sale | (22.0) | - | (22.0) |
| **Amortization as of December 31, 2018 (a)** | **275.0** | **-** | **275.0** |
| | | | |
| **Balance as of December 31, 2017** | **85.9** | **37.2** | **123.2** |
| **Balance as of December 31, 2018** | **75.8** | **30.8** | **106.7** |
| Estimated useful life | 1 to 15 years | | |

(a) The accumulated impairment charge on intangibles other than goodwill was $ 164.8 and $184.8 million as of December 31, 2018 and 2017.
(b) Includes net book value of approximately $5 million relating to towed EM technology.

### 2017 Impairments

As a result of a continued weak seismic market and as a consequence of the reorganization the Company evaluated its intangible assets for possible impairment.

The Company recognized a $33 million impairment of capitalized development costs on its EM technology, writing down the assets to an aggregate recoverable value of $10 million as of December 31, 2017. The impairment primarily reflects management's suspension of the Company's EM activities until the activity is able to generate sufficient cash to cover operating costs.

The Company recognized a $20.0 million impairment on its OptoSeis technology assets due to reduced estimated future cash flow.

### 2018 Impairments

The company recognized a $2.0 loss from abandoning an equity interest. This loss is included in Other Charges.

### 2018 Sale of OptoSeis business

In November 2018 the Company entered into an agreement to sell its fiber optic permanent reservoir monitoring solution, OptoSeis, to Geospace Technologies. Terms of the transaction include an initial cash payment as closing of $1.8 million and contigent cash payment of up to an additional $23.2 million over a five-and-half year earn-out period. The contingent cash payments will be derived from revenues generated during the earn-out period from products and services utilizing the OptoSeis fiber optic technology. The earn-out have been valued at an assumed fair value and the sale did not give any material gain or loss in the statement of profit or loss.

## Note 20 – Debt and Guarantees

Long-term debt:

| (In millions of US dollars) | December 31, 2018 | 2017 |
|---|---|---|
| ***Secured:*** | | |
| Term loan B, Libor (minimum 75 bp) + 250 Basis points, due 2021 | 381.0 | 385.0 |
| Export credit financing, due through 2025 | 140.6 | 161.4 |
| Export credit financing, due through 2027 | 228.7 | 255.1 |
| Revolving credit facility, due 2020 (a) | 265.0 | 190.0 |
| ***Unsecured:*** | | |
| Senior notes, Coupon 7.375%, due 2018 | - | 26.0 |
| Senior notes, Coupon 7.375%, due 2020 | 212.0 | 212.0 |
| Total | 1 227.3 | 1 229.5 |
| Less current portion (b) | (51.2) | (77.2) |
| Less deferred loan costs, net of debt premiums | (11.4) | (16.5) |
| **Total long-term debt** | **1 164.7** | **1 135.8** |

Undrawn facilities consists of:

| (In millions of US dollars) | December 31, 2018 | 2017 |
|---|---|---|
| ***Secured:*** | | |
| Revolving credit facility, due 2020 (a) | 85.0 | 210.0 |
| ***Unsecured:*** | | |
| Bank facility (NOK 50 mill) | 5.8 | 6.1 |
| Performance bond | 12.3 | 11.3 |
| **Total** | **103.1** | **227.4** |

(a) The latest amendment of the Senior secured credit facility which govern the Term Loan and the Revolving Credit Facility took effect on December 23, 2016, when the maturity date of the Revolving Credit Facility was extended with two years to 2020. This amendment reduced the Revolving Credit Facility from $500.0 million to $400.0 million and a further reduction to $350.0 million in 2018. The original maturity date in September 2018 was extended to September 2020.

(b) Does not include financial lease obligations.

Reconciliation of debt arising from financing activities:

| | | | Non-cash changes | | | |
|---|---|---|---|---|---|---|
| (In millions of US dollars) | January 1, 2018 | Cash flows (a) | Foreign exchange movement | Change in fair value | Other | December 31, 2018 |
| Debt to financial institutions | 991.5 | 23.8 | - | - | - | 1 015.3 |
| Bond debt | 238.0 | (26.0) | - | - | - | 212.0 |
| **Total liabilities from financing activities** | **1 229.5** | **(2.2)** | **-** | **-** | **-** | **1 227.3** |

| | | | Non-cash changes | | | |
|---|---|---|---|---|---|---|
| (In millions of US dollars) | January 1, 2017 | Cash flows | Foreign exchange movement | Change in fair value | Other (b) | December 31, 2017 |
| Debt to financial institutions | 953.4 | 24.6 | - | - | 13.5 | 991.5 |
| Bond debt | 238.0 | - | - | - | - | 238.0 |
| **Total liabilities from financing activities** | **1 191.4** | **24.6** | **-** | **-** | **13.5** | **1 229.5** |

(a) Cash flows in this table do not include $3.0 million out flows relating to financial lease obligations.

(b) Other consists mainly of $12.6 million in proceeds from issuance of long-term debt classified as restricted cash.

### Credit Facility

The Senior Secured Credit Facility (the "Credit Facility") as amended originated in 2007 and is currently comprised of a $400.0 million term loan B (the "Term Loan") and a $350.0 million Revolving Credit Facility (the "Revolving Credit Facility") with Petroleum Geo-Services ASA and PGS Finance, Inc., as co-borrowers. At December 31, 2018, the Company had $381.0 million (2017 - $385.0 million) outstanding under the Term Loan and $265.0 million (2017 - $190.0 million) outstanding under the Revolving Credit Facility. Revolving loans may be made at any time prior to the final maturity of the Revolving Facility. Borrowings under the Credit Facility are secured by pledges of shares of material subsidiaries and are guaranteed by the same material subsidiaries.

In November 2016 the maturity date on the Revolving Credit Facility was extended to September 18, 2020 and the facility was reduced from $500 to $400 million with a further reduction to $350 million effective September 18, 2018. Pursuant to the terms of the Revolving Credit Facility, our total leverage ratio could not exceed certain levels. As part of the extension made in November 2016 the stepdown of the Total Leverage Ratio ("TLR") covenant, with which the Company must comply in order to draw on the RCF, was amended to a flatter profile. At December 31, 2018 the TLR was 2.58:1, well below the maximum level of 3.50:1. The maximum TLR will be reduced by 0.25:1 each of the following three quarters to come down to 2.75:1 by end of Q3 2019 and will thereafter stay at 2.75:1 for the remaining life of the facility. Borrowings under the Revolving Credit Facility have an interest rate equal to an adjusted LIBOR rate plus a margin in the interval from 3.25% to 6.25% dependent on the reported total leverage ratio at the end of the previous quarter through September 17, 2019 and from 3.75% to 6.75% dependent on the reported total leverage ratio from and after September 18, 2019, with additional utilization fees dependent on the amount drawn (less than $150 million: 0.25%; between $150 million and $300 million: 0.50%; over $300 million: 0.80%), and a commitment fee on undrawn amounts of 50% of the applicable margin.

The Term Loan as amended, matures in 2021; carries a floating interest rate of LIBOR (but minimum 0.75%) + 2.50%; and is amortized by $4 million per year. The Term Loan has no financial maintenance covenants.

The Credit Facility contains financial covenants and negative covenants that restrict the Company in various ways.

The facility provides that:

i) for the Revolving Credit Facility part the total leverage ratio may not exceed the threshold agreed in the November 2016 extension and amendment (maintenance covenant). The Credit Facility combined (Revolving Credit Facility and Term Loan) has an incurrence test prohibiting the Company from incurring more senior indebtedness, with certain exceptions, if the total leverage ratio is above 3.00:1.0. The Credit Facility loan agreement permits us to borrow an additional sum of specific secured debt limited to: $1,850 million less the sum of (A) any Revolving Credit Facility commitments outstanding, (B) Term Loans outstanding and (C) Permitted vessel financing indebtedness outstanding, provided that the total leverage ratio does not exceed 2.75:1. Such potential additional borrowing is not committed, but would be secured by the same collateral that secures the Term Loan and borrowings under the existing Revolving Credit Facility. As long as the Company does not exceed a total leverage ratio of 3.00:1, the Company can incur further senior unsecured debt. Drawing of the committed Revolving Credit Facility and Permitted vessel financing indebtedness (see "—Export Credit Financing" below) is exempted from the incurrence test.

The Revolving Credit Facility also contains a minimum consolidated liquidity covenant as long as the maximum total leverage ratio covenant exceeds 2.75:1. If maximum total leverage ratio covenant exceeds 2.75:1, consolidated unrestricted cash and cash equivalents and the unused and available revolving commitments shall not be less than the amount equal to the greater of (a) $75 million and (b) 5% of the consolidated net interest-bearing indebtedness. Dividends may not be declared or paid before April 1, 2017 and can only be declared or paid only if our total leverage ratio is below 2.75:1 for the two most recent fiscal quarters and the total leverage ratio requirement is reset to 2.75:1 for the remaining term of the Credit Agreement.

(ii) the Credit Facility generally requires the Company to apply 50% of excess cash flow to repay outstanding Term Loan borrowings for financial years when the total leverage ratio exceeds 2.5:1 or the senior secured leverage ratio exceeds 2:1. Excess cash flow for any period is defined as net cash flow provided by operating activities less capital expenditures (excluding capital expenditure financed by certain borrowings), MultiClient investments and scheduled debt services (excluding certain debt incurred to finance capital expenditures) during that period, and on the Company's option minus income taxes to be paid in the next period and capital expenditure committed in the period but to be paid in future periods. The Company may make optional prepayments to reduce the outstanding principal balance at no penalty.

In addition, the Credit Facility and Notes Indenture (described below) restrict or could restrict our ability, among other things, to sell assets without the sales proceeds being reinvested in the business or used to repay debt; incur additional indebtedness or issue preferred shares; prepay interest and principal on our other indebtedness (including restrictions when our total leverage ratio exceeds 3.0 to 1.0); pay dividends and distributions or re-purchase our capital stock; create liens on assets; make investments, loans, guarantees or advances; make acquisitions; engage in mergers or consolidations; enter into sale and leaseback transactions; engage in transactions with affiliates; amend material agreements governing our indebtedness; change our business; enter into agreements that restrict dividends from subsidiaries; and enter into speculative financial derivative agreements.

The Revolving Credit Facility has a $60 million sub-limit for issuance of letters of credit. Under the Revolving Credit Facility, the Company may borrow USD, or any other currency freely available in the London banking market to which the lenders have given prior consent, for working capital and for general corporate purposes. At December 31, 2018, the Company had zero outstanding standby letters of credit under the Revolving Facility.

### Old Notes

The Old Notes were issued in two separate transactions. On November 15, 2011, the Company issued $300.0 million aggregate principal amount of 7.375% Senior Notes due 2018 (the "Original Notes") in an offering that was not subject to the registration requirements of the U.S. Securities Act. The Company issued an additional $150 million aggregate principal amount of 7.375% Senior Notes due 2018 in a transaction on December 27, 2012 (the "Additional Notes"). Both the Original Notes and the Additional Notes are admitted to listing on the Official List of the Luxembourg Stock Exchange and to trading on the Euro MTF market of the Luxembourg Stock Exchange.

At December 31, 2017, the Company had $26.0 million outstanding under the Old Note. The Old Notes matured and were repaid in December 2018.

### The New Notes

On December 23, 2016, the Company issued $212.0 million in aggregate principal amount of 7.375% Senior Notes due 2020 (the "New Notes") as part of the Exchange Offer in an offering that was not subject to the registration requirements of the U.S. Securities Act. The New Notes were admitted to listing on the Official List of the Luxembourg Stock Exchange and to trading on the Euro MTF market of the Luxembourg Stock Exchange.

The New Notes are governed by the New Notes Indenture. The New Notes are the Company's senior obligations and rank equally in right of payment with all existing and future senior indebtedness of the Company and senior in right of payment to all existing and future indebtedness of the Company that is subordinated in right of payment to the New Notes. The New Notes are guaranteed, jointly and severally, on a senior basis by the subsidiaries of the Company that provide a guarantee in respect of obligations under the Credit Facility. Each guarantee ranks equally in right of payment with all existing and future senior indebtedness of such guarantor and senior in right of payment to all existing and future indebtedness of such guarantor that is subordinated in right of payment to its guarantee. The New Notes Indenture contains a number of covenants that, among other things, restrict, subject to certain exceptions, the Company's ability to incur or guarantee additional indebtedness; pay dividends, repurchase shares and make distributions of certain other payments; make certain investments; create certain liens; merge or consolidate with other entities; enter into certain transactions with affiliates; sell, lease or transfer certain assets, including shares of any restricted subsidiary of the Company; and guarantee certain types of other indebtedness of the Company and its restricted subsidiaries without also guaranteeing the New Notes.

The New Notes will mature on December 15, 2020. Interest is payable in cash semi-annually on each June 15 and December 15. The Company may redeem all or a portion of the Old Notes at 103.688% of their principal amount plus accrued and unpaid interest, if any, from December 15, 2017, with the specified premium declining to 101.844% on December 15, 2018 and to par on December 15, 2019. At December 31, 2018, the Company had $212.0 million outstanding under the New Note.

### Export credit financing

The Export credit financing arrangement is comprised of four loan agreements each with Japan Bank for International Cooperation ("JBIC") and Sumitomo Mitsui Banking Corporation ("SMBC") and with an aggregate value at inception of $544.2 million. The loans are incurred by the subsidiary, PGS Titans AS, for the financing of the four Ramform Titan class vessels. PGS ASA guarantees the obligations under two internal 12-year bareboat charter agreements between PGS Falcon AS and PGS Titans AS for the two vessels, the *Ramform Titan* and the *Ramform Atlas*, and guarantees the loans financing for the *Ramform Tethys* and the *Ramform Hyperion*. The loans are senior facilities secured by first priority mortgages over the vessels and fittings on board (but excluding "in sea" equipment such as streamers), pledge of the borrower's right under a debt service reserve account and assignment of insurance rights in the vessels. The loans will be repaid over 12 years in semiannual equal installments and each will have two tranches whereby JBIC and SMBC each receive 50%. The JBIC tranche bears a fixed interest and is repaid from the 7th to 12th year after draw down, while the SMBC tranche bears a floating interest based on 6 months Libor plus a margin and is repaid from 1st to 6th year after draw down. SMBC has received credit insurance from Nippon Export and Investment Insurance ("NEXI") and the insurance premium is paid by PGS Titans AS.

### Letters of credit and guarantees

The Company has $35.0 million uncommitted bid and performance bond facilities ($20 million in 2017) intended for operational use. Drawings under these facilities totaled $22.7 million and $8.7 million as of December 31, 2018 and 2017, respectively.

The Company had aggregate outstanding letters of credit and similar guarantees (incl. the $22.7 million and $8.7 million above), not reflected in the accompanying consolidated statements of financial position, of $30.9 million and $42.8 million as of December 31, 2018 and 2017, respectively.

PGS ASA has guaranteed the payment obligation under the lease of PGS Apollo (see note 22).

## Note 21 — Financial Instruments

### Valuation of financial instruments carried at fair value

The Company classifies financial instruments carried at fair value in the consolidated statement of financial position using the Fair Value Hierarchy.

*Level 1:* quoted prices (unadjusted) in active markets for identical assets and liabilities.
*Level 2:* assets and liabilities whose values are based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly.
*Level 3:* techniques for which all inputs which have a significant effect on the recorded fair value that is not based on observable market data.

*Carrying amount and fair values of financial assets and liabilities*

The carrying amounts, estimated fair values of debt and derivatives instruments including how fair value is determined are summarized as follows:

| | | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|---|
| (In millions of US dollars) | Hierarchy Level | Carrying amounts | Fair values | Carrying amounts | Fair values |
| **FINANCIAL ASSETS** | | | | | |
| ***At fair value through profit and loss*** | | | | | |
| Foreign exchange contracts | 2 | 0.2 | 0.2 | 0.6 | 0.6 |
| ***Derivatives designated as hedging instruments*** | | | | | |
| Foreign exchange contracts | 2 | - | - | 1.4 | 1.4 |
| Interest rate swaps | 2 | 0.7 | 0.7 | 0.6 | 0.6 |
| **Total** | | **0.9** | **0.9** | **2.6** | **2.6** |
| | | | | | |
| **FINANCIAL LIABILITIES** | | | | | |
| ***Financial liabilities at amortized cost*** | | | | | |
| Debt with fixed interest rate | 2 | (484.2) | (478.7) | (510.1) | (485.7) |
| Debt with variable interest rate | 2 | (743.1) | (708.9) | (719.4) | (664.6) |
| Finance leases | 2 | (3.3) | (3.3) | - | - |
| ***At fair value through profit and loss*** | | | | | |
| Foreign exchange contracts | 2 | (3.0) | (3.0) | (0.9) | (0.9) |
| ***Derivatives designated as hedging instruments*** | | | | | |
| Foreign exchange contracts | 2 | (1.3) | (1.3) | - | - |
| **Total** | | **(1 234.9)** | **(1 195.2)** | **(1 230.4)** | **(1 151.2)** |

The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable, accrued revenues and other receivables, other current assets, accounts payable and accrued expenses classified at amortized cost approximate their respective fair values because of the short maturities of those instruments.

The fair values of the long-term debt instruments, forward exchange contracts and interest rate swaps are estimated using quotes obtained from dealers in such financial instruments or latest quoted prices or indexes at Reuters or Bloomberg. Where market prices are not observed or quotes from dealers are not obtained, an indirect method is used by use of implied credit spread from debt instrument with similar risk characteristics.

### Financial risk management policies

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders such as dividends and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The management of the capital structure involves active monitoring and adjustments in light of changes in economic conditions and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure the Company may refinance its debt, buy or issue new shares or debt instruments, sell assets or return capital to shareholders.

The Company monitors debt on the basis of the leverage ratio and other covenants in credit agreements. The Total Leverage Ratio ("TLR") is calculated as total indebtedness divided by adjusted EBITDA less non pre-funded MultiClient library investments. At December 31, 2018, the total indebtedness was $1,309.8 million and adjusted EBITDA less non pre-funded MultiClient library was $508.4 million. At December 31, 2018 and 2017, the TLR was 2.58 and 3. 63, respectively. Based on the total indebtedness at December 31, 2018 there was an EBITDA headroom of $134 million up to the maximum maintenance covenant leverage ratio.

In addition, the Company monitors leverage based on net debt. Net debt is calculated as total debt (including short-term and long-term debt as reported in the consolidated statement of financial position) less cash and cash equivalents, including restricted cash. During 2018, taking into account experience from the downcycle and with a view that the Company's markets will continue to be cyclical in the future, the Company has adopted a strategic target to over time reduce Net Interest Bearing Debt to a level, excluding lease obligations, not exceeding $5-600 million, assuming the current size and composition of business activities. As a result, the Company will give higher priority to profitability, cash flow generation and debt reduction than business growth until it reaches a lower debt level.

The Company is exposed to market risks such as interest rate risk, foreign exchange rate risk, credit risk and liquidity risk. The Company's risk management policies are approved by the Board of Directors. The treasury function reports regularly to the Company management and any breach of limits set in the policy shall be reported to the Board of Directors.

### Interest rate risk management

The Company is subject to interest rate risk on debt, including finance leases. The risk is managed by using a combination of fixed -and variable rate debt, together with interest rate swaps, where appropriate, to fix or lower the borrowing costs.

| | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|
| | **Notional amounts** | **Weighted average interest rate** | **Notional amounts** | **Weighted average interest rate** |
| Debt at fixed interest rate | 484.2 | 4.91% | 510.1 | 5.03% |
| Debt at variable interest rate based on US dollar plus a margin | 618.1 | 5.33% | 594.4 | 5.09% |
| Variable interest rate debt with interest fixed | 125.0 | 1.62% | 125.0 | 1.62% |

After giving effect to the Company's interest rate swaps, for every one-percentage point hypothetical increase in LIBOR, our annual net interest expense on our variable rate debt, inclusive non-restricted cash holdings, would have increased by $5.4 million and $5.5 million approximately measured from December 31, 2018 and 2017, respectively.

### Foreign currency risk management

The Company is exposed to currency fluctuation due to the effects of a predominantly USD based revenue stream, while the Company's operating expenses and capital expenditures are mainly denominated in USD, GBP, NOK and EUR. The Company maintains a foreign currency risk management strategy that uses foreign currency exchange contracts to reduce volatility in the income statement and protect against fluctuations in cash flow caused by volatility in currency exchange rates. The Company had open forward contracts to buy and sell GBP, NOK and GBP, NOK, BRL at December 31, 2018 and 2017, respectively. The table shows exposures and foreign exchange contracts in currencies that the Company hedges on a regular basis.

| | December 31, 2018 | | | | December 31, 2017 | | | |
|---|---|---|---|---|---|---|---|---|
| (in millions, local currency) | **NOK** | **GBP** | **BRL** | **JPY** | **NOK** | **GBP** | **BRL** | **JPY** |
| Restricted cash | 36.6 | - | - | - | 37.1 | - | - | - |
| Current assets | 22.3 | 1.5 | 98.5 | 808.9 | 5.6 | 1.3 | 26.0 | 622.1 |
| Current liabilities | (173.8) | (2.2) | (48.9) | (44.6) | (190.9) | (4.6) | (8.8) | (45.3) |
| Pension liabilities | (35.2) | (22.7) | - | - | (34.2) | (34.0) | - | - |
| Other long term liabilities | (78.1) | (2.4) | - | - | (54.0) | (2.3) | - | - |
| **Net statements of financial position exposure** | **(228.2)** | **(25.8)** | **49.6** | **764.3** | **(236.4)** | **(39.6)** | **17.2** | **576.8** |
| Hedged committed operational cash flow and capital expenditure: | | | | | | | | |
| Next year | - | - | - | 8 851.2 | (201.9) | - | - | - |
| 1-2 years | - | - | - | 2 621.3 | (70.2) | - | - | - |
| 2-3 years | - | - | - | - | - | - | - | - |
| **Net forward commitments** | **-** | **-** | **-** | **11 472.5** | **(272.1)** | **-** | **-** | **-** |
| Forward exchange contracts | 266.3 | 24.0 | (45.0) | (11 472.5) | 457.1 | 34.7 | - | - |
| **Net exposure** | **38.1** | **(1.8)** | **4.6** | **764.3** | **(51.4)** | **(4.9)** | **17.2** | **576.8** |

| | Average rate | | Year end spot | |
|---|---|---|---|---|
| | **2018** | **2017** | **2018** | **2017** |
| USD / NOK | 8.122 | 8.287 | 8.689 | 8.223 |
| GBP / USD | 1.338 | 1.288 | 1.127 | 1.350 |
| USD / BRL | 3.604 | 3.312 | 3.875 | 3.197 |
| USD / JPY | 110.38 | 112.35 | 110.05 | 112.59 |

### Credit risk management

Credit risk is the risk that counterparties to financial instruments do not perform according to the terms of the contract. The approximate maximum credit exposure related to financial assets is as follows:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Cash and cash equivalents | 74.5 | 47.3 |
| Restricted cash (note 13) | 43.2 | 43.3 |
| Accounts receivable | 160.3 | 162.8 |
| Accrued revenues and other receivables (note 14) | 61.1 | 133.2 |
| **Total** | **339.1** | **386.6** |

*Cash and cash equivalents*

The Company continually monitors the counterparty credit risk of banking partners, including derivatives counterparties and the institutions in which cash is held on deposit.

*Accounts receivables and contract assets*

Trade receivables are primarily with multinational integrated oil companies and independent oil and natural gas companies, including companies owned in whole or in part by governments. As of December 31, 2018, approximately 35% of the balance relates to 5 customers.

The aging of trade receivables is as follows:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Current | 141.7 | 145.2 |
| Up to one month past due | 2.7 | 6.5 |
| Between one and two months past due | 4.0 | 0.9 |
| More than three months past due | 17.0 | 16.9 |
| Allowance for doubtful accounts | (5.1) | (6.7) |
| **Total** | **160.3** | **162.8** |

The Company provides for expected credit losses through a loss allowance, which is based on the lifetime expected credit losses at the reporting date. The Company assesses expected credit losses using factors including aging of accounts, historical experience, customer concentration, customer creditworthiness and current industry and economic trends. The provision for expected credit losses is related to receivables more than three months past due.

For accrued revenues the Company have assessed that collectability prior to recognizing the revenue and assess for credit risk on the same basis as trade receivables. There are no allowance related to accrued revenues as of December 31, 2018 and 2017.

The Company is also exposed to credit risk relating to off-balance items such as agreements to provide future services to customers and counterparties on derivatives and where cash is held on deposit. The Company manages its exposure to such risks through continuously monitoring of counterparties.

### Exposure to liquidity risk

The Company tries to minimize liquidity risk through ensuring access to a diversified set of funding sources, and management of maturity profile on debt and derivatives. The Company is exposed to liquidity risk related to the following:

| December 31, 2018 | | | Contractual cash flows | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| (In millions of US dollars) | Carrying amount | Notional value | Total | 0-1 years | 1-2 years | 2-3 years | 3-4 years | 4-5 years | Thereafter |
| ***Non-derivative financial liabilities*** | | | | | | | | | |
| Trade payables | (67.0) | - | (67.0) | (67.0) | | | | | |
| Debt with fixed interest rates | (484.2) | - | (559.7) | (29.1) | (256.5) | (31.8) | (48.2) | (52.6) | (141.5) |
| Debt with variable interest rates | (743.1) | - | (820.3) | (85.5) | (328.1) | (400.8) | (5.9) | - | - |
| **Total** | **(1 294.3)** | **-** | **(1 447.0)** | **(181.6)** | **(584.6)** | **(432.6)** | **(54.1)** | **(52.6)** | **(141.5)** |
| ***Derivative financial assets/liabilities*** | | | | | | | | | |
| Interest rate swaps hedge accounted | 0.7 | 125.0 | 0.7 | 0.7 | - | - | - | - | - |
| Forward exchange contracts used for hedging | (3.0) | 102.8 | (3.0) | (2.3) | (0.7) | - | - | - | - |
| Other foreign exchange contracts | (1.1) | 74.2 | (1.1) | (1.1) | - | - | - | - | - |
| **Total** | **(3.4)** | **302.0** | **(3.4)** | **(2.7)** | **(0.7)** | **-** | **-** | **-** | **-** |

| December 31, 2017 | | | Contractual cash flows | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| (In millions of US dollars) | Carrying amount | Notional value | Total | 0-1 years | 1-2 years | 2-3 years | 3-4 years | 4-5 years | Thereafter |
| ***Non-derivative financial liabilities*** | | | | | | | | | |
| Trade payables | (81.5) | - | (81.5) | (81.5) | - | - | - | - | - |
| Debt with fixed interest rates | (510.2) | - | (611.5) | (51.8) | (29.0) | (256.5) | (31.8) | (48.2) | (194.2) |
| Debt with variable interest rates | (719.3) | - | (818.8) | (83.5) | (79.1) | (249.7) | (400.6) | (5.9) | - |
| **Total** | **(1 311.0)** | **-** | **(1 511.8)** | **(216.8)** | **(108.1)** | **(506.2)** | **(432.4)** | **(54.1)** | **(194.2)** |
| ***Derivative financial assets/liabilities*** | | | | | | | | | |
| Interest rate swaps hedge accounted | 0.6 | 125.0 | 0.7 | 0.3 | 0.4 | - | - | - | - |
| Forward exchange contracts used for hedging | 1.4 | 31.9 | 1.4 | 1.1 | 0.3 | - | - | - | - |
| Other foreign exchange contracts | (0.3) | 69.8 | (0.3) | (0.3) | - | - | - | - | - |
| **Total** | **1.7** | **226.7** | **1.8** | **1.1** | **0.7** | **-** | **-** | **-** | **-** |

In addition, the Company has operating lease commitments, see note 22.

As of December 31, 2018, the Company had cash and cash equivalents of $74.5 million and a total liquidity reserve, including available unutilized drawings of the Revolving Credit Facility, of $159.5 million, compared to $47.3 million and $257.3 million respectively at year-end 2017. The Company has a structured approach to monitoring of credit risk against financial counterparties and has no reason to doubt their ability to meet their funding commitments if and when called upon to do so.

The Company does not have any material scheduled debt maturities until second half of 2020, except scheduled installments on the export credit debt. The export credit debt is paid back in separate semi-annual installments and scheduled principal payments in aggregate approximately $47 million for 2019 and each year forward to it taper off following the maturity of one after one of the four facilities in the period 2025 to 2027.

The un-drawn portion of the Revolving Credit Facility ("RCF") constitutes a significant portion of the Company's liquidity reserve. In the current market it is likely that the Company will continue to use the RCF during the coming year. In 2016 the maximum TLR with which the Company must comply in order to draw on the RCF, was amended. The maximum for Q4 2018 was 3.50, which will step down during 2019 to 3.25 for Q1 2019, 3.00 for Q2 2019 and to 2.75 for Q3 and all quarters thereafter until the RCF matures.

While PGS' actual TLR was substantially below this level at December 31, 2018, there is a risk, due to the weak market, that PGS' TLR may increase in the future to be close to or exceed the agreed maximum TLR. If and when such risk becomes significant, PGS would seek to agree further amendments to ensure that the RCF is available for drawing or to implement other available measures to avoid a covenant breach. If PGS ultimately ends up breaching this covenant, the breach would represent an event of default under the loan agreement. In such case PGS may be able to continue to access the RCF if PGS receives a waiver of the breach or implements remedial actions acceptable to the lenders thereunder. Should a breach continue without a waiver or remediation by PGS, the RCF agent or a majority of the RCF lenders would be entitled to declare default and demand a repayment of drawings under the RCF, which in turn would represent an event of default in most of the Company's other loan agreements and debt instruments. However, this scenario is in the Company's view highly unlikely since firstly it believes that it has plans and available measures to avoid an event of default and secondly, even in an event of default, several viable alternatives to avoid acceleration would exist.

Based on the year-end cash balance, available liquidity resources, and the current structure and terms of the Company's debt, it is the Board's opinion that PGS has sufficient funding and liquidity to support its operations and investment programs.

### Interest rate hedge accounting

In December 2016, the Company entered into interest rate swaps, with a total notional amount of $125 million, to fix the interest rate on part of its floating rate debt. The fair value of the interest rate swaps were recorded in other comprehensive income as the effective portion of the designated and qualifying hedging instrument. The profit and loss impact of the cash flow hedges are estimated to be in the same year as the effect of the cash flows.

The Company has not excluded any components of the derivative instruments' gain or loss from the assessment of hedge effectiveness with respect to the qualifying interest rate swaps. The interest rate swaps had a positive fair value $0.7 million, and fair value of $0.6 million recorded in other comprehensive income at December 31, 2018 and 2017, respectively.

### Foreign exchange rate hedge accounting

The majority of revenues are in USD. The company entered into derivatives accounted for under fair value hedge relationships to hedge the currency risk. As of year-end, this is mainly related to sale of the vessel *Ramform Sterling*. A summary of fair value hedging relationships follows:

| | December 31, 2018 | | | December 31, 2017 | | |
|---|---|---|---|---|---|---|
| (In millions of US dollars) | Notional value | Fair value | Change in fair value | Notional value | Fair value | Change in fair value |
| Foreign currency derivatives designated as fair value hedging instruments | - | - | - | - | - | 0.2 |
| Firm commitments to purchase equipment (note 16) | - | - | - | - | - | (0.1) |
| Foreign currency derivatives designated as cash flow hedging instruments | 102.8 | (3.0) | 1.0 | 31.9 | 1.4 | 0.3 |
| Foreign currency derivatives not designated as hedges | 74.2 | (1.1) | (3.6) | 69.8 | 0.3 | 0.9 |

The difference between the change in the value of the derivatives and the change in the fair value of the firm commitment is primarily caused by the fact that only the spot element of the derivative is designated to hedge the object and that in previous years derivatives at the hedge designation date were already carried at fair value.

### Sensitivity analysis

The following analysis illustrates the sensitivity of changes in relevant foreign exchange rates and interest rates, after the impact of hedge accounting. All other variables remain constant. The sensitivity analysis is based on the Company's financial assets and liabilities held as of December 31.

The interest rate analysis assumes a change in interest rates of 100 basis points.

The foreign exchange rate analysis assumes a 10% change in NOK, GBP, BRL and JPY exchange rates.

| (In millions of US dollars) | 10% depreciation of USD | | | | Interest rates increase |
|---|---|---|---|---|---|
| **December 31, 2018** | NOK | GBP | BRL | JPY | 100 basis points |
| Gross effect | 3.1 | 3.1 | (1.2) | (10.6) | (5.6) |
| Impact on profit before tax: gain/(loss) | 3.1 | 3.1 | (1.2) | - | (6.2) |
| Impact on other comprehensive income | - | - | - | (10.6) | 0.6 |
| **December 31, 2017** | | | | | |
| Gross effect | 5.6 | 4.7 | - | - | (5.9) |
| Impact on profit before tax: gain/(loss) | 2.2 | 4.7 | - | - | 1.8 |
| Impact on other comprehensive income | 3.0 | - | - | - | (4.1) |

## Note 22 – Leases, Contingent Liabilities and Provisions

### Commitments under operating leases

The Company has operating lease commitments expiring at various dates through 2027. Future minimum payments related to non-cancellable operating leases were as follows:

| | Vessels | | Buildings | | Other | | Total | |
|---|---|---|---|---|---|---|---|---|
| (In millions of US dollars) | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 |
| 2018 | - | 61.0 | - | 16.4 | - | 6.8 | - | 84.2 |
| 2019 | 49.0 | 55.4 | 17.0 | 11.7 | 1.7 | 0.6 | 67.7 | 67.7 |
| 2020 | 38.8 | 40.9 | 16.0 | 10.5 | 0.1 | 0.2 | 54.9 | 51.6 |
| 2021 | 31.5 | 33.1 | 13.3 | 8.0 | 0.1 | 0.2 | 44.9 | 41.3 |
| 2022 | 31.6 | 33.1 | 10.6 | 7.4 | - | 0.2 | 42.2 | 40.7 |
| 2023 | 28.1 | 27.9 | 9.1 | 7.4 | - | 0.2 | 37.2 | 35.5 |
| thereafter | 30.0 | 30.1 | 16.7 | 16.1 | - | - | 46.7 | 46.2 |
| **Total** | **209.0** | **281.5** | **82.7** | **77.5** | **1.9** | **8.2** | **293.6** | **367.1** |

Rental expenses for the year ended December 31, 2018, excluding short term leases of support vessels, was $99.9 million.

#### *Seismic support vessels*

The Company leases four seismic support vessels under time-charter agreements which expire in 2024-2025. The lessor holds options to purchase each vessel from the 3rd party owner at certain times during each lease and at the end of the lease term. At the end of each lease, the 3rd party owner may also require the lessor to purchase the vessel for a pre-determined amount. Should the lessor not purchase the vessel, the 3rd party owner may require PGS to purchase the vessel for a price of $5.5 million which is estimated to be less than fair value.

### *Time-charter agreements*
The Company leases two 3D vessels, *Sanco Swift* and *Sanco Sword*, under operating lease time charter agreements which expire in 2023 and 2020, respectively. The *Sanco Swift* agreement has two 2-year renewal options, and the *Sanco Sword* agreement has three 2-year renewal options. *Sanco Sword* is currently stacked and part of the lease commitment is included in Onerous Leases, refer to note 24.

### *Sale and leaseback*
In 2015, the Company entered into a sale and operating bareboat leaseback for the 3D vessel *PGS Apollo*. The remaining leaseback period is 7 years with an option to extend for a 5-year period. PGS has the option, but no obligation, to acquire the vessel after end of year 5 (in 2020) and year 8 (in 2023).

### Commitments under finance leases

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Present value of minimum lease payments fall due as follows: | | |
| Not later than one year | 3.2 | - |
| Future finance charges | 0.1 | - |
| **Total** | **3.3** | **-** |

### Contingent liabilities
### *Brazil service tax claim on charter*
The Company has ongoing tax disputes related to charter of vessels into Brazil. The assessments, which seek to levy 15% withholding tax and 10% CIDE (service) tax and other direct taxes, amount to $41.3 million in total. Because the Company considers it more likely than not that the contingency will be resolved in its favor, no provision has been made for any portion of the exposure.

### *Petrojarl*
Following the demerger of Petrojarl (today part of Teekay) in 2006, the Company retained a joint secondary liability for certain obligations of Petrojarl. Petrojarl agreed to indemnify the Company from liabilities related to its operations. The Company remains with a joint secondary liability with Petrojarl under their FPSO service agreement with the customer for the Petrojarl Banff FPSO. The guarantee is not capped. If the claim is made and Petrojarl does not honor its obligation to indemnify PGS, it could adversely affect the Company's business, results of operation or financial condition

## Note 23 – Accrued Expenses

Accrued expenses consist of the following:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Accrued Severance pay a) | 3.9 | 31.1 |
| Accrued revenue share | 12.3 | 32.1 |
| Accrued employee benefits | 20.9 | 20.4 |
| Accrued vessel operating expenses | 20.3 | 16.7 |
| Accrued sales tax and VAT | 13.9 | 14.7 |
| Customer advances | 0.4 | - |
| Onerous contracts | 4.0 | 10.6 |
| Accrued project costs | 3.9 | 10.5 |
| Accrued commissions | 7.0 | 8.3 |
| Accrued office lease expenses | 5.5 | 6.4 |
| Accrued interest expenses | 4.4 | 3.7 |
| Received, not invoiced, property and equipment | 0.6 | 1.3 |
| Unrealized loss on hedging | 3.6 | 0.9 |
| Other | 9.9 | 16.3 |
| **Total** | **110.6** | **173.0** |

a) Accrued Severance pay is estimated based on severance packages granted as part of the restructuring.

## Note 24 – Other Long-Term Liabilities

Other long-term liabilities consist of the following:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Pension liability (note 25) | 32.9 | 50.0 |
| Onerous lease contracts* | 19.3 | 25.1 |
| Lease incentives* | 16.6 | 14.4 |
| Other | 3.6 | 10.0 |
| **Total** | **72.4** | **99.5** |

*Refer to note 2 for information on IFRS 16 and lease incentitives and onerous leases

## Note 25 – Pension Obligations

### Defined benefits plans

*Plan characteristics*

The Company operates a defined benefit pension plan in the UK. The defined benefit plan was closed to new entrants in 2006 and to all future accrual in 2015. The plan is administered through a pension trust which is legally separate from the Company. It is the Company's general practice to fund defined benefit plans in accordance with applicable statutory requirements.

In addition, as described in note 29, the CEO and two executive officers have an early retirement plan allowing for termination of employment without cause when the CEO or the executive officers reach the age of 62. Full early retirement benefits are defined as 60% of the last base salary beginning in the year of retirement. The CEO is eligible for 85% of full benefits if he retires at the age of 62 and full benefits if he retires at the age of 65. The two executive officers are eligible for full benefits if they retire at the age of 62. The early retirement benefits ceases when the CEO and executive officers reach the age of 67.

*Actuarial valuations and assumptions*

The actuarial valuations are performed by independent actuaries in Norway and UK.

*Risks*

Actuarial valuations as applied in the consolidated financial statements are based upon financial and demographic assumptions which may be impacted by future events. Such future events include, but are not limited to, longer than expected longevity of participants, lower than expected return on investments and higher than expected inflation. Changes to assumptions may increase the liabilities or reduce the value of assets of the plan.

*Financial impact*

A summary of changes in the plans' aggregate projected benefit obligations and fair values of assets are summarized as follows:

| (In millions of US dollars) | 2018 | 2017 |
|---|---|---|
| **Projected benefit obligations (PBO) as of January 1, (a)** | **202.0** | **186.5** |
| Service cost | 0.2 | 0.4 |
| Interest cost | 5.2 | 5.2 |
| Employee contributions | - | - |
| Social security tax | 0.1 | 0.1 |
| Actuarial loss (gain), arising from changes in demographic assumptions | - | - |
| Actuarial loss (gain), arising from changes in financial assumptions | (15.4) | (2.2) |
| Actuarial loss (gain) due to scheme experience | (1.7) | 0.2 |
| Plan settlements | - | - |
| Benefits paid | (9.4) | (6.3) |
| Exchange rate effects | (10.4) | 18.3 |
| **Projected benefit obligations (PBO) as of December 31, (a)** | **170.6** | **202.0** |

(a) $ 4 million and $4.1million arise from unfunded plans as of December 31, 2018 and 2017, respectively.

Change in fair value of pension plan assets:

| (In millions of US dollars) | 2018 | 2017 |
|---|---|---|
| **Fair value of plan assets as of January 1,** | **152.0** | **128.5** |
| Expected return on plan assets | 4.0 | 3.6 |
| Employer contributions | 4.5 | 4.2 |
| Employee contributions | - | - |
| Actuarial gain (loss) arising from return on plan assets | (5.4) | 8.5 |
| Plan settlements | - | - |
| Benefits paid | (8.9) | (6.1) |
| Exchange rate effects | (8.4) | 13.3 |
| **Fair value of plan assets as of December 31,** | **137.8** | **152.0** |

The aggregate funded status of the plans and amounts recognized in the Company's consolidated statements of financial position are summarized as follows:

| | **December 31,** | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Projected benefit obligation (PBO) | 170.6 | 202.0 |
| Fair value of plan assets | 137.8 | 152.0 |
| **Net pension liability** | **32.9** | **50.0** |

Net amount recognized as accrued pension liability is presented as other long-term liabilities (see note 24).

Net periodic pension cost for the Company's defined benefit pension plans are summarized as follows:

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Service cost | 0.2 | 0.4 |
| Interest cost | 5.2 | 5.1 |
| Expected return on plan assets/net interest cost | (4.0) | (3.5) |
| Plan settlements | - | - |
| Social security tax | 0.1 | 0.1 |
| **Net periodic pension cost** | **1.5** | **2.0** |

Net periodic actuarial gains and losses arising from the Company's defined benefit plans and recorded in other comprehensive income is as follows:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Actuarial gain (loss), arising from changes in demographic assumptions | - | - |
| Actuarial gain (loss), arising from changes in financial assumptions | 15.2 | 2.4 |
| Actuarial gain (loss) due to scheme experience | 1.7 | (0.2) |
| Actuarial gain (loss) arising from return on plan assets | (5.4) | 9.1 |
| **Net actuarial gain (loss) recognized in other comprehensive income** | **11.5** | **11.2** |

### *Significant acturial assumptions:*

| | 2018 | | 2017 | |
|---|---|---|---|---|
| | Norway | UK | Norway | UK |
| Discount rate | 2.60% | 3.02% | 2.30% | 2.68% |
| Return on plan assets | - | 3.02% | - | 2.68% |
| Compensation increase | 2.75% | - | 2.50% | - |

The discount rate assumptions used for calculating pensions reflect the rates at which the obligations could be effectively settled. Observable long-term rates on corporate bonds are used for the Norwegian and UK plans.

### *Plan asset allocation*

The Company's pension plan asset allocations, by asset category, are presented by major plan group as follows:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Fair value plan assets | 137.8 | 152.0 |
| | | |
| ***Plan assets at fair value with quoted prices in active markets for identical assets*** | | |
| Equity/diversified growth funds | 32% | 47% |
| Bonds | 56% | 40% |
| Real estate | 9% | 11% |
| Other | 3% | 2% |
| **Total** | **100%** | **100%** |

Management of plan assets must comply with applicable laws and regulations in Norway and the UK where the Company provides defined benefits plans. Within constraints imposed by laws and regulations, and given the assumed pension obligations and future contribution rates, the majority of assets are managed actively to obtain a long-term rate of return that at least reflects the chosen investment risk.

### *Sensitivity*

The following table show the sensitivity to the principal assumptions of the present value of the defined benefit obligation. The sensitivities shown below are approximate and each sensitivity considers one change in isolation.

| (In millions of US dollars) | Change in assumptions | Change in liabilities |
|---|---|---|
| Discount rate | Decrease of 1.0% p.a. | 28.1% |
| Inflation rate | Increase of 1.0% p.a. | 25.7% |

The Company expects to contribute approximately $4.4 million to its defined benefit pension plans in 2019.

### Defined contribution plans

Substantially all employees not eligible for coverage under the defined benefit plans in Norway and the UK are eligible to participate in pension plans in accordance with local industrial, tax and social regulations. All of these plans are considered defined contribution plans. For some of the plans, subject to statutory limitations, employees may make voluntary contributions in addition to the Company's contributions. Plan contributions made by the Company aggregated $6.1 million and $6.8 million for 2018 and 2017, respectively. Plan contributions made by employees aggregated $5.3 million and $5.9 million for 2018 and 2017, respectively.

## Note 26 — Shareholder Information

At the Annual General Meeting ("AGM") held on April 25, 2018, authority was given for the Board of Directors to acquire treasury shares at a maximum face value of in total NOK 101 573 998. Under no circumstances can the Company acquire shares leading to an aggregate number of treasury shares exceeding 10 percent of the total number of shares. The shares may be used to meet obligations arising from employee incentive schemes; as part of consideration payable for acquisitions made by the Company; as part of consideration for any mergers, demergers or acquisitions; by way of cancellation of the shares in part or full; to raise funds for specific investments; for the purpose of repaying loans (including convertible loans); or to strengthen the Company's capital base. The Board is free to choose the method of disposal considered expedient for such purposes. Further, the Board of Directors is authorized to increase the Company's share capital by a total amount of NOK 101 573 998 through one or more subscriptions. The authorization shall be utilized in connection with potential acquisitions of companies or businesses within the oil and energy sector, including the oil service sector, settlement of obligations (including convertible loans), funding of material investments, debt repurchases or to raise funds to strengthen the Company's capital base. The authorization includes the right to increase the Company's share capital in return for non-cash contributions and the right to assume special obligations on behalf of the Company. The Board was also authorized to issue convertible bonds at a total amount of NOK 3 500 000 000. The share capital of the Company may be increased by a total amount of NOK 101 573 998 as a result of the convertible loans being converted into equity. The right to issue convertible bonds and the right to increase the share capital is jointly capped at 10% of the share capital of the Company. These authorizations are valid until June 30, 2019.

As of December 31, 2017 and 2018, Petroleum Geo-Services ASA had a share capital of NOK 1 015 739 988 on 338 579 996 shares of par value NOK 3 each, all fully paid. On January 12, 2017, the share capital was increased through a public placement with gross proceeds of NOK 303.8 million.

All shares have equal voting rights and equal rights to dividends. Any distribution of the Company's equity is dependent on the approval of the shareholders, and the ability to make distributions is limited by certain debt covenants and Norwegian Corporate Law. The ordinary shares are listed on the Oslo Stock Exchange.

The Board of Directors will not propose any dividend to the AGM in 2019 for the year ended December 31, 2018.

The Company's holding of treasury shares reconciles as follows:

| | Treasury shares | % of total shares outstanding |
|---|---|---|
| **Balance as of January 1, 2017** | **689 904** | **0.21%** |
| Used to fulfill employee benefit programs in 2017 (note 28) | (682 016) | |
| **Balance as of December 31, 2017** | **7 888** | **0.00%** |
| Used to fulfill employee benefit programs in 2018 (note 28) | (6 149) | |
| **Balance as of December 31, 2018** | **1 739** | **0.00%** |

The 20 largest shareholders (a) in Petroleum Geo-Services ASA were as follows:

| | December 31, 2018 | |
|---|---|---|
| | **Total shares** | **Ownership percent** |
| DNB Asset Management AS | 33 272 271 | 9.83 |
| Coltrane Asset Management, L.P. | 26 395 416 | 7.80 |
| Folketrygdfondet | 24 777 255 | 7.32 |
| M & G Investment Management Ltd. | 19 232 706 | 5.68 |
| Ferd AS | 15 823 200 | 4.67 |
| Lancaster Investment Management LLP | 15 031 723 | 4.44 |
| Dimensional Fund Advisors, L.P. | 13 078 862 | 3.86 |
| The Vanguard Group, Inc. | 8 482 254 | 2.51 |
| KLP Forsikring | 8 174 928 | 2.41 |
| Legal & General Investment Management Ltd. | 7 744 888 | 2.29 |
| Albert Bridge Capital LLP | 6 538 397 | 1.93 |
| Hermes Investment Management Ltd. | 6 257 391 | 1.85 |
| Assenagon Asset Management S.A. | 5 443 909 | 1.61 |
| Edinburgh Partners Limited | 5 337 246 | 1.58 |
| BlackRock Institutional Trust Company, N.A. | 4 767 338 | 1.41 |
| Carmignac Gestion | 4 720 608 | 1.39 |
| Third Avenue Management LLC | 4 547 310 | 1.34 |
| Storebrand Kapitalforvaltning AS | 4 325 535 | 1.28 |
| Shell Asset Management Company B.V. | 2 650 575 | 0.78 |
| Nuveen LLC | 2 458 073 | 0.73 |
| Other | 119 520 111 | 35.30 |
| **Total** | **338 579 996** | **100.00** |

(a) The data in this table is provided by Nasdaq Advisory Services and is obtained through an analysis of beneficial ownership and fund manager information provided in replies to disclosure of ownership notices issued to all custodians in relation to the PGS share register provided by the Norwegian Central Securities Depository (VPS). Every reasonable effort has been made to verify the data, however neither PGS nor Nasdaq Advisory Services can guarantee the accuracy of the analysis.

Shares owned or controlled by members of the Board of Directors, Chief Executive Officer and Other Executive Officers were as follows:

| | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|
| | Total shares | Ownership percent | Total shares | Ownership percent |
| ***Board of Directors*** | | | | |
| Walter Qvam, Chairperson | 25 000 | (a) | 25 000 | (a) |
| Anne Grethe Dalane | 10 000 | (a) | - | (a) |
| Morten Borge | - | --- | - | --- |
| Richard Herbert | 3 500 | (a) | - | (a) |
| Marianne Kah | 3 589 | (a) | NA | (a) |
| Hege Renshus | 1 918 | (a) | 1 918 | (a) |
| Anette Valbø | 7 142 | (a) | 7 142 | (a) |
| Espen Vollan Grimstad | 917 | (a) | 917 | (a) |
| | | | | |
| ***Chief Executive Officer and Other Executive Officers*** | | | | |
| Rune Olav Pedersen, President and Chief Executive Officer | 90 617 | (a) | 90 617 | (a) |
| Gottfred Langseth, Executive Vice President and Chief Financial Officer | 190 106 | (a) | 190 106 | (a) |
| Per Arild Reksnes, Executive Vice President Operations & Technology | 59 263 | (a) | 59 263 | (a) |
| Sverre Strandenes, Executive Vice President Sales & Services | 64 583 | (a) | 64 583 | (a) |

(a) Less than 1% of the Company's shares as of December 31, 2018 and 2017.

## Note 27 – Related Party Transactions

The following transactions were carried out with related parties:

| | Year ended December 31, | |
|---|---|---|
| (In millions of US dollars) | 2018 | 2017 |
| ***Sale of goods and services*** | | |
| Associates – MultiClient data | - | 0.7 |
| Associates – Other services | 0.4 | - |

The Company did not have any significant outstanding balances with related parties as of December 31, 2018 and 2017.

All transactions with related parties are priced on an arm's length basis.

Chief Executive Officer ("CEO"), other Executive Officers and Directors of the Company are also on the Board of certain customers and suppliers. As of December 31, 2018 and 2017, the Company did not have any significant outstanding balances with any of these companies.

## Note 28 – Share Based Payment Programs

Options, RSU's and PRSU's granted under the Company's employee share based programs are as follows:

| Grant Year | Options, RSU's and PRSU's granted | Additional options granted year | Additional options granted | Description |
|---|---|---|---|---|
| 2013 | 768 425 | 2014 / 2016 | 10 500 / 2 000 | Restricted Stock Plan (RSU) |
| 2014 | 739 500 | 2015 / 2017 | 2 000 / 17 500 | Restricted Stock Plan (RSU) |
| 2015 | 657 100 | - | - | Restricted Stock Plan (RSU) |
| 2015 | 776 100 | - | - | Performance Based Restricted Stock Plan (PRSU) |
| 2016 | 647 150 | 2018 | 26 200 | Restricted Stock Plan (RSU) |
| 2016 | 762 150 | - | - | Performance Based Restricted Stock Plan (PRSU) |
| 2017 | 456 320 | - | - | Restricted Stock Plan (RSU) |
| 2017 | 839 480 | - | - | Performance Based Restricted Stock Plan (PRSU) |
| 2018 | 1 746 450 | | | Performance Based Restricted Stock Plan (PRSU) |

*The programs*

The Restricted Stock Unit programs ("RSU") awarded under long term incentive plans ("LTI Plans") approved by the AGM in 2015, 2016 and 2017, requires the participant's continued employment with the company (or a subsidiary) and is settled three years after grant. Upon settlement, the participant will receive at no charge a number of shares in the Company which equals the number of RSUs awarded.

In 2015, 2016 and 2017 the company also granted Performance based Restricted Stock Units ("PRSU") as approved by the respective years' AGM. In 2018, the company only awarded PRSUs. Settlement of the PRSUs granted from the 2015 and 2016 LTI Plans and subsequent transfer of shares to the eligible employee will take place three years after the grant subject to the Company achieving a satisfactory Total Shareholder Return compared to the companies in STOXX TMI Oil Equipment, Services & Distribution index adjusted for dividends. For PRSUs granted under the 2017 LTI Plan, 75% of the PRSUs will settle subject to the TSR goal as outlined for the 2015 and 2016 LTI Plans above, and the remaining 25% of the PRSUs will settle subject to a goal on free cash flow after capex in the three full financial years prior to settlement date. For PRSUs granted under the 2018 LTI Plan, 50% of the PRSUs will settle subject to the TSR goal as outlined above and 25% subject to an EBIT goal. The remaining 25% is subject to net leverage ratio.

*Effect on financial statements*

For the years ended December 31, 2018 and 2017, the Company recognized compensation cost with a corresponding increase in shareholders' equity of $3.0 million and $4.5 million, respectively. Total net unrecognized compensation cost as of December 31, 2018 was $6.8 million (RSU's and PRSU's), which is expected to be recognized over a period of 3 years.

During 2018, the company settled PRSU and RSU's by cash. Equity was correspondingly decreased with $4.3 million.

The tables below detail the Company's outstanding options and share awards (RSU and PRSU) for the years presented.

**Year ended December 31, 2018**

| Grant date | RSU share awards outstanding December 31, 2017 | RSU's granted in 2018 | RSU's forfeited in 2018 | RSU's exercised in 2018 | RSU share awards outstanding December 31, 2018 | Weighted-average remaining contractual term |
|---|---|---|---|---|---|---|
| 2013 | 2 000 | - | - | - | 2 000 | 0.78 years |
| 2014 | 19 500 | - | (10 000) | (2 000) | 7 500 | 1.47 years |
| 2015 | 563 850 | - | (13 800) | (550 050) | - | - |
| 2016 | 584 025 | 26 200 | (53 850) | - | 556 375 | 0.54 years |
| 2017 | 421 380 | - | (46 000) | - | 375 380 | 1.47 years |
| 2018 | - | - | - | - | - | - |
| **Total** | **1 590 755** | **26 200** | **(123 650)** | **(552 050)** | **941 255** | **0.92 years** |

| Grant date | PRSU share awards outstanding December 31, 2017 | PRSU's granted in 2018 | PRSU's forfeited in 2018 | PRSU's exercised in 2018 | PRSU's expired in 2018 | PRSU share awards outstanding December 31, 2018 | Weighted-average remaining contractual term |
|---|---|---|---|---|---|---|---|
| 2015 | 678 850 | - | (9 800) | (334 525) | (334 525) | - | - |
| 2016 | 699 025 | - | (57 850) | - | - | 641 175 | 0.44 years |
| 2017 | 787 070 | - | (79 000) | - | - | 708 070 | 1.47 years |
| 2018 | - | 1 746 450 | (58 750) | - | - | 1 687 700 | 2.47 years |
| **Total** | **2 164 945** | **1 746 450** | **(205 400)** | **(334 525)** | **(334 525)** | **3 036 945** | **1.80 years** |

**Year ended December 31, 2017**

| Grant date | RSU share awards outstanding December 31, 2016 | RSU's granted in 2017 | RSU's forfeited in 2017 | RSU's exercised in 2017 | RSU share awards outstanding December 31, 2017 | Weighted-average remaining contractual term |
|---|---|---|---|---|---|---|
| 2013 | 9 500 | - | - | (7 500) | 2 000 | - |
| 2014 | 674 350 | 17 500 | (5 600) | (666 750) | 19 500 | 0.03 years |
| 2015 | 623 050 | - | (59 200) | - | 563 850 | 0.42 years |
| 2016 | 644 650 | - | (60 625) | - | 584 025 | 1.44 years |
| 2017 | - | 456 320 | (34 940) | - | 421 380 | 2.47 years |
| **Total** | **1 951 550** | **473 820** | **(160 365)** | **(674 250)** | **1 590 755** | **1.34 years** |

| Grant date | PRSU share awards outstanding December 31, 2016 | PRSU's granted in 2017 | PRSU's forfeited in 2017 | PRSU's exercised in 2017 | PRSU share awards outstanding December 31, 2017 | Weighted-average remaining contractual term |
|---|---|---|---|---|---|---|
| 2015 | 738 050 | - | (59 200) | - | 678 850 | 0.42 years |
| 2016 | 759 650 | - | (60 625) | - | 699 025 | 1.44 years |
| | - | 839 480 | (52 410) | - | 787 070 | 2.47 years |
| **Total** | **1 497 700** | **839 480** | **(172 235)** | **-** | **2 164 945** | **2.15 years** |

The table below details the Company's assumptions used to calculate estimated fair value at grant date:

| Grant date | Options, RSU's and PRSU's outstanding December 31, 2017 | Average exercise price | Weighted average share price at grant date | Risk free rate | Dividend yield | Volatility factor | Weighted average life | Estimated fair value at grant date (average NOK/USD per share option/ RSU/PRSU) |
|---|---|---|---|---|---|---|---|---|
| 2013 (a) | 2 000 | NOK 0 | NOK 83.85 | N/A | - | N/A | N/A | NOK 73.03/$12.63 |
| 2014 (a) | 7 500 | NOK 0 | NOK 63.89 | N/A | - | N/A | N/A | NOK 54.76/$9.14 |
| 2015 (a) | - | NOK 0 | NOK 49.35 | N/A | - | N/A | N/A | NOK 43.90/$5.61 |
| 2015 (b) | - | NOK 0 | NOK 49.37 | N/A | - | N/A | N/A | NOK 31.73/$4.05 |
| 2016 (a) | 556 375 | NOK 0 | NOK 24.55 | N/A | - | N/A | N/A | NOK 24.54/$2.99 |
| 2016 (b) | 641 175 | NOK 0 | NOK 24.56 | N/A | - | N/A | N/A | NOK 18.99/$2.32 |
| 2017 (a) | 375 380 | NOK 0 | NOK 14.59 | N/A | - | N/A | N/A | NOK 14.59/$1.71 |
| 2017 (b) | 708 070 | NOK 0 | NOK 14.59 | N/A | - | N/A | N/A | NOK 10.17/$1.19 |
| 2018 (b) | 1 687 700 | NOK 0 | NOK 40.70 | N/A | - | N/A | N/A | NOK 31.29/$3.88 |
| **Total** | **3 978 200** | | | | | | | |

(a) Restricted Stock Units ("RSU")
(b) Performance based Restricted Stock Units ("PRSU")

The estimated fair value of the RSU and PRSU's granted are lower than the weighted average share price at the same date as the fair value calculations include adjustment for expected dividends up to vesting. In addition, the fair value of the PRSU's is reduced due to the performance conditions in the program.

## Note 29 – Salaries and Other Personnel Costs, Number of Employees, and Remuneration to the Board of Directors, Executive Officers and Auditors

Salary and social expenses that are included in cost of sales, research and development costs and selling, general and administrative costs consist of:

| | December 31, | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Salaries and bonuses | 142.3 | 207.0 |
| Social security | 14.7 | 14.9 |
| Pension | 8.9 | 9.8 |
| Other benefits | 26.4 | 26.9 |
| **Total** | **192.3** | **258.6** |

The Company had an average of 1 258 and 1 715 employees during the years ended December 31, 2018 and 2017, respectively.

### Chief Executive Officer ("CEO") and Other Executive Officers

In 2018, the Company paid compensation to its President and CEO and other executive officers as follows:

| | Total compensation paid in 2018 (a) | | | | |
|---|---|---|---|---|---|
| **Name** | **Fixed salary** | **Bonus** | **Other benefits (b)** | **Total paid salary and compensation (in dollars)** | **Pension benefits (c)** |
| ***Rune Olav Pedersen*** | | | | | |
| President and Chief Executive Officer | 503 755 | - | 177 218 | 680 973 | 147 168 |
| ***Gottfred Langseth*** | | | | | |
| Executive Vice President and Chief Financial Officer | 460 610 | - | 184 711 | 645 321 | 100 382 |
| ***Per Arild Reksnes*** | | | | | |
| Executive Vice President, Operations & Technology | 432 924 | - | 176 551 | 609 475 | 61 450 |
| ***Sverre Strandenes*** | | | | | |
| Executive Vice President, Sales & Services (d) | 431 613 | - | 182 868 | 614 481 | 131 469 |

(a) Amounts in NOK have been translated to US Dollars using average exchange rate for 2018 of NOK/USD 8.1338.
(b) Includes items such as RSU's, car allowance, telephone, internet and other minor benefits.
(c) Contribution to defined contribution plans (Norway) and earned benefits for members of the defined benefit plan.
(d) Sverre Strandenes retired as of December 31, 2018. Sverre was succeeded by Berit Osnes, EVP New Ventures and Nathan Oliver, EVP Sales & Imaging.

RSUs and PRSU's held by the CEO and executive officers as of December 31, 2018 were as follows:

| Name | RSUs as of December 31, 2017 | RSUs granted 2018 | RSUs forfeited 2018 | RSUs exercised 2018 | RSUs expired 2018 | RSUs as of December 31, 2018 | Weighted average remaining contractual term |
|---|---|---|---|---|---|---|---|
| Rune Olav Pedersen | 45 000 | - | - | (18 000) | - | 27 000 | 0.78 |
| Gottfred Langseth | 45 000 | - | - | (18 000) | - | 27 000 | 0.78 |
| Per Arild Reksnes | 45 000 | - | - | (18 000) | - | 27 000 | 0.78 |
| Sverre Strandenes | 45 000 | - | - | (18 000) | - | 27 000 | 0.78 |

| Name | PRSUs as of December 31, 2017 | PRSUs granted 2018 | PRSUs forfeited 2018 | PRSUs exercised 2018 | PRSUs expired 2018 | PRSUs as of December 31, 2018 | Weighted average remaining contractual term |
|---|---|---|---|---|---|---|---|
| Rune Olav Pedersen | 90 000 | 126 000 | - | (13 500) | (13 500) | 189 000 | 1.97 |
| Gottfred Langseth | 90 000 | 60 000 | - | (13 500) | (13 500) | 123 000 | 1.72 |
| Per Arild Reksnes | 90 000 | 60 000 | - | (13 500) | (13 500) | 123 000 | 1.72 |
| Sverre Strandenes | 90 000 | 60 000 | - | (13 500) | (13 500) | 123 000 | 1.72 |

In 2017, the Company paid compensation to its President and CEO and other executive officers as follows:

| | Total compensation paid in 2017 (a) | | | | |
|---|---|---|---|---|---|
| **Name** | **Fixed salary** | **Bonus** | **Other benefits (b)** | **Total paid salary and compensation (in dollars)** | **Pension benefits (c)** |
| ***Jon Erik Reinhardsen*** | | | | | |
| President and Chief Executive Officer, until August 31 (d) | 543 742 | - | 91 233 | 634 975 | 326 379 |
| ***Rune Olav Pedersen*** | | | | | |
| President and Chief Executive Officer, from September 1 (d) | 165 232 | - | 51 708 | 216 940 | 80 037 |
| ***Rune Olav Pedersen*** | | | | | |
| Executive Vice President, General Counsel, until August 31 (d) | 287 375 | - | 33 704 | 321 079 | 38 510 |
| ***Gottfred Langseth*** | | | | | |
| Executive Vice President and Chief Financial Officer | 440 228 | - | 71 197 | 511 425 | 143 716 |
| ***Guillaume Cambois*** | | | | | |
| Executive Vice President, Imaging & Engineering (e) | 228 314 | - | 675 032 | 903 346 | 78 586 |
| ***Magne Reiersgard*** | | | | | |
| Executive Vice President, Operations | 476 464 | - | 132 205 | 608 669 | 43 106 |
| ***Per Arild Reksnes*** | | | | | |
| Executive Vice President, Marine Contract | 414 468 | - | 64 063 | 478 531 | 96 445 |
| ***Sverre Strandenes*** | | | | | |
| Executive Vice President, MultiClient | 412 223 | - | 70 398 | 482 621 | 195 303 |

(a) Amounts in NOK have been translated to US Dollars using average exchange rate for 2017 of NOK/USD 8.271.
(b) Includes items such as severance pay, RSU's, car allowance, telephone, internet and other minor benefits.
(c) Contribution to defined contribution plans (Norway) and earned benefits for members of the defined benefit plan.
(d) Rune Olav Pedersen succeded Jon Erik Reinhardsen as President and Chief Executive Officer with effect from September 1, 2017.
(e) Guillaume Cambois left the Company in November 2017.

Share options RSU's and PRSU's held by the CEO and executive officers as of December 31, 2017 were as follows:

| Name | RSUs as of December 31, 2016 | RSUs granted 2017 | RSUs forfeited 2017 | RSUs exercised 2017 | RSUs expired 2017 | RSUs as of December 31, 2017 | Weighted average remaining contractual term |
|---|---|---|---|---|---|---|---|
| Jon Erik Reinhardsen | 88 000 | - | - | (36 000) | - | 52 000 | |
| Rune Olav Pedersen | 70 600 | 9 000 | - | (34 600) | - | 45 000 | |
| Gottfred Langseth | 57 600 | 9 000 | - | (21 600) | - | 45 000 | |
| Guillaume Cambois | 57 600 | 9 000 | - | (21 600) | - | 45 000 | |
| Magne Reiersgard | 57 600 | 9 000 | - | (21 600) | - | 45 000 | |
| Per Arild Reksnes | 57 600 | 9 000 | - | (21 600) | - | 45 000 | |
| Sverre Strandenes | 57 600 | 9 000 | - | (21 600) | - | 45 000 | |

| Name | PRSUs as of December 31, 2016 | PRSUs granted 2017 | PRSUs forfeited 2017 | PRSUs exercised 2017 | PRSUs expired 2017 | PRSUs as of December 31, 2017 | Weighted average remaining contractual term |
|---|---|---|---|---|---|---|---|
| Jon Erik Reinhardsen | 158 000 | - | - | - | - | 158 000 | |
| Rune Olav Pedersen | 54 000 | 36 000 | - | - | - | 90 000 | |
| Gottfred Langseth | 54 000 | 36 000 | - | - | - | 90 000 | |
| Guillaume Cambois | 54 000 | 36 000 | - | - | - | 90 000 | |
| Magne Reiersgard | 54 000 | 36 000 | - | - | - | 90 000 | |
| Per Arild Reksnes | 54 000 | 36 000 | - | - | - | 90 000 | |
| Sverre Strandenes | 54 000 | 36 000 | - | - | - | 90 000 | |

See note 26 for shares held by the Company's CEO and other executive officers and note 28 for further information on the share based payments programs.

Rune Olav Pedersen, President and CEO of the Company, had an annual fixed salary of NOK 4 100 000 in 2018. The CEO has a mutual 6-months period of notice. The CEO is, both during and after the employment, obliged to refrain from taking employment with companies that are in direct or indirect competition with PGS. This prohibition applies for a period of two years from the termination date unless the Company sets a shorter period of time.

Other executive officers have similar provisions in their employment terms, with periods of notice of twelve months or less.

Further information on compensation of the CEO and other executive officers are provided in the statement on remuneration below.

### Board of Directors

None of our Directors has any contract with the Company providing benefits upon termination of service.

The table below provides information about our Directors and compensation for 2018:

| Name | Position | Director since | Term expire | Compensation (In dollars) (b) |
|---|---|---|---|---|
| Walter Qvam | Chairperson | 2013 | 2019 | 117 986 |
| Anne Grethe Dalane | Vice Chairperson | 2013 | 2019 | 85 806 |
| Morten Borge | Director | 2015 | 2019 | 78 556 |
| Marianne Kah | Director | 2018 | 2019 | 65 150 |
| Richard Herbert | Director | 2017 | 2019 | 89 326 |
| Hege Renshus | Director (Empl.rep) | 2017 | 2019 | - |
| Anette Valbø | Director (Empl.rep) | 2015 | 2019 | - |
| Espen Vollan Grimstad | Director (Empl.rep) | 2015 | 2019 | - |
| Daniel J. Piette (a) | Vice Chairperson | 2007 | 2018 | 41 444 |
| Holly Van Deursen (a) | Director | 2006 | 2018 | 39 735 |
| Carol Bell (a) | Director | 2009 | 2018 | 32 347 |
| | | | **Total** | **550 350** |

(a) Daniel J. Piette, Holly Van Deursen and Carol Bell left the Board of Directors in 2018.
(b) None of the members or deputy members of the board received compensation from any other Group companies, except for the employee representatives. Their remuneration as employees is not included above.

The table below provides information about our Directors and compensation for 2017:

| Name | Position | Director since | Term expire | Compensation (In dollars) (b) |
|---|---|---|---|---|
| Walter Qvam | Chairperson | 2013 | 2018 | 112 250 |
| Daniel J. Piette | Vice Chairperson | 2007 | 2018 | 113 750 |
| Holly Van Deursen | Director | 2006 | 2018 | 113 000 |
| Carol Bell | Director | 2009 | 2018 | 96 750 |
| Anne Grethe Dalane | Director | 2013 | 2018 | 87 500 |
| Morten Borge | Director | 2015 | 2018 | 74 000 |
| Richard Herbert | Director | 2017 | 2018 | 63 694 |
| Berit Osnes (a) | Director (Empl.rep) | 2015 | 2017 | - |
| Hege Renshus | Director (Empl.rep) | 2017 | 2019 | - |
| Anette Valbø | Director (Empl.rep) | 2015 | 2019 | - |
| Espen Vollan Grimstad | Director (Empl.rep) | 2015 | 2019 | - |
| | | | **Total** | **660 944** |

(a) Berit Osnes left the Board of Directors in 2017.
(b) None of the members or deputy members of the board received compensation from any other Group companies, except for the employee representatives. Their remuneration as employees is not included above.

See note 25 for shares held by the Company's Board of Directors.

### Board of Directors' statement on remuneration to the CEO and the Executive Officers

*Introduction*

In accordance with §6-16a of the Norwegian Public Limited Companies Act, the Board of Directors of Petroleum Geo-Services ASA ("PGS" or "the Company") has prepared a statement related to the determination of salary and other benefits for our CEO and other executive officers. The below advisory principles for our CEO and other executive officers salary and other benefits, for the coming fiscal year will be presented to the shareholders for their advisory vote at the 2019 AGM. The below binding principles on award of Performance based Restricted Stock Units ("PRSUs") to the CEO and executive officers will be presented to the AGM for approval and is binding for the Board of Directors.

PGS is an international company operating in the global geophysical industry. Our operations are conducted world-wide and our employment base is and needs to be largely international. The total compensation package for our CEO and other executive officers shall therefore be competitive both within the Norwegian labor market and internationally. Both the level of total compensation and the structure of the compensation package for our CEO and other executive officers shall be such that it may attract and retain highly qualified international leaders. This will require the use of several different instruments and measures also meant to provide incentives for enhanced performance and to ensure common goals and interest between the shareholders and management.

*Advisory principles*

The current remuneration package for our CEO and other executive officers includes fixed elements and variable elements. The fixed elements consist of a base salary and other benefits. Other benefits include car allowance, newspaper subscription, mobile phone, internet and similar benefits. The fixed elements also include a defined contribution pension scheme.

The CEO and one executive officer have an early retirement plan allowing for termination of employment without cause when the CEO or the executive officer reach the age of 62. Full early retirement benefits are defined as 60% of the last base salary beginning in the year of retirement. The CEO is eligible for 85% of full benefits if he retires at the age of 62 and full benefits if he retires at the age of 65. The executive officer is eligible for full benefits if he retire at the age of 62. The early retirement benefits cease when the CEO and executive officer reach the age of 67.

The variable elements today consist of a performance bonus scheme and participation in performance based restricted stock unit programs.

Participation in the performance bonus scheme and the target levels and the maximum levels of the annual performance bonus scheme are determined annually. Normally payment under the performance bonus scheme is based partly on achievements of agreed financial key performance indicators ("KPIs") for the group and partly on achievements of agreed operational, financial and organizational KPIs included in a personal performance contract. For the CEO, any performance bonus pay-out is capped to 150% of his annual base salary. For the executive officers, any performance bonus pay-out is capped to 100% of their annual base salary.

*Binding principles*

The Annual General Meetings in 2013, 2014, 2015, 2016, 2017 and 2018 authorized a performance based restricted stock unit program in order to ensure continued long term incentives which were linked to the development of the Company's share price. The Board of Directors will propose to the 2019 AGM a Long Term Incentive Plan ("LTI Plan") that for all eligible employees will consist of 100% Performance based Restricted Stock Units. Settlement of the PRSUs and subsequent transfer of shares to the eligible employee will take place three years later subject to; (i) Total Shareholder Return ("TSR") achievements compared to a comparator group that as of March 15, 2019 comprise 23 relevant companies (the "LTI Plan Comparator Group") adjusted for dividends for the said period, and (ii) the Company's Return On Capital Employed ("ROCE") compared to a goal for the said period. Settlement of the PRSUs and subsequent transfer to the eligible employee of shares in the Company will take place three years after the grant subject principally to continued employment by the Company. Further details of the LTI Plan is set out in Appendix VII to the 2019 AGM Calling Notice.

The Board of Directors will propose for approval by the Annual General Meeting a pool of PRSUs which will be granted to eligible employees in 2019. The full LTI Plan including all goals, terms and conditions will be presented to the Annual General Meeting on 24 April 2019 for approval. The Board of Directors will not distribute any other share based incentives than the LTI Plan to the CEO or any executive officer during 2019. The proposal for the LTI Plan is to approve a pool of 2,400,000 PRSUs. No participant in the LTI Plan (including the CEO) may receive more than 7% of the total pool.

*Application*

A specific peer group of comparable companies and an executive remuneration philosophy have been adopted. As per December 31, 2018, the peer group consisted of twenty companies primarily from Norway and Europe. All companies are of comparable size and have international operations in the oil & gas and oil service sector. An external advisor collects and combines relevant information related to the peer group companies. This is used by the Remuneration and Corporate Governance Committee and the Board of Directors for benchmarking of executive remuneration. The executive remuneration philosophy document includes certain guidelines on how the Company's CEO and executive officers should compare to the peer group. These tools amongst others are used by the Remuneration and Corporate Governance Committee and the Board of Directors to decide on an appropriate remuneration structure and to set appropriate total remuneration for the CEO and executive officers.

This statement deals primarily with the remuneration of our CEO and other executive officers. However, the above described remuneration policy is to a large extent applicable to a broad group of key employees within the Company. Enhanced performance by the management groups is not achieved by our CEO and other executive officers alone but rather is dependent on a large number of managers and key employees throughout the Company. Therefore, a large number of managers and key employees are normally included in performance based remuneration schemes, which contain all or some of the above mentioned elements. In addition, all other employees may traditionally receive up to a maximum of one month salary in annual bonus.

Remuneration of the CEO and other executive officers are evaluated regularly by the Remuneration and Corporate Governance Committee and the Board of Directors. The Remuneration and Corporate Governance Committee annually reviews the total compensation level, the mix between fixed and performance related compensation and the mix between short and long term compensation. The Remuneration and Corporate Governance Committee has developed an annual schedule in order to ensure and facilitate a structured approach to the annual review of executive compensation. The committee normally engages an external advisor for this work.

Since the Annual General Meeting in April 2018 the Board of Directors have followed the guidelines then approved by the Annual General Meeting with respect to remuneration of the CEO and the other executive officers.

### Remuneration of auditor

Fees for audit and other services provided by the Company's auditor EY, are as follows (exclusive VAT and including out of pocket expenses):

| | **Year ended December 31,** | |
|---|---|---|
| (In millions of US dollars) | **2018** | **2017** |
| Audit fees | 1.6 | 1.6 |
| Tax and other services | 0.5 | 0.3 |
| **Total** | **2.1** | **1.9** |

## Note 30 – Subsidiaries

The ownership percentage in subsidiaries as of December 31, 2018, was as follows:

| Company | Jurisdiction | Shareholding and voting rights |
|---|---|---|
| PGS Australia Pty. Ltd. | Australia | 100% |
| Seahouse Insurance Ltd. | Bermuda | 100% |
| PGS Investigacào Petrolifera Limitada | Brazil | 100% |
| PGS Suporte Logistico e Servicos Ltda. | Brazil | 100% |
| PGS Overseas Operation (Cyprus) Limited | Cyprus | 89.9% |
| PGS Data Processing Middle East SAE | Egypt | 100% |
| PGS Egypt for Petroleum Services | Egypt | 100% |
| PGS Ghana Limited | Ghana | 90% |
| PT Nusantara | Indonesia | 94% |
| PGS Marine Services (Isle of Man) Ltd. | Isle of Man | 100% |
| PGS Japan K.K. | Japan | 100% |
| PGS Asia Pacific Labuan Ltd. | Malaysia | 100% |
| Petroleum Geo-Services Exploration (M) Sdn. Bhd. | Malaysia | 100% |
| PGS Data Processing & Technology Sdn. Bhd. | Malaysia | 100% |
| P.G.S Imaging S.A. de C.V | Mexico | 100% |
| PGS Geophysical Nigeria Ltd. | Nigeria | 100% |
| PGS AS | Norway | 100% |
| Multiklient Invest AS | Norway | 100% |
| PGS Falcon AS | Norway | 100% |
| PGS Geophysical AS | Norway | 100% |
| PGS Titans AS | Norway | 100% |
| Natuna Ventures Pte. Ltd. | Singapore | 100% |
| Petroleum Geo-Services Asia Pacific Pte. Ltd. | Singapore | 100% |
| PGS Technology (Sweden) AB | Sweden | 100% |
| PGS Geophysical (UK) Ltd. | United Kingdom | 100% |
| PGS Geophysical Services (UK) Ltd. | United Kingdom | 100% |
| Arrow Seismic Invest IV Ltd. | United Kingdom | 100% |
| Arrow Seismic Invest VI Ltd. | United Kingdom | 100% |
| Panoceanic Energy Limited | United Kingdom | 100% |
| Petroleum Geo-Services (UK) Ltd. | United Kingdom | 100% |
| PGS EM Limited | United Kingdom | 100% |
| PGS Exploration (UK) Ltd. | United Kingdom | 100% |
| PGS Geophysical (Angola) Ltd. | United Kingdom | 100% |
| PGS Pension Trustee Ltd. | United Kingdom | 100% |
| PGS Reservoir Ltd. | United Kingdom | 100% |
| PGS Seismic Services Ltd | United Kingdom | 100% |
| Seismic Exploration (Canada) Ltd. | United Kingdom | 100% |
| Petroleum Geo-Services, Inc. | United States | 100% |
| PGS Americas, Inc. | United States | 100% |
| PGS Imaging, Inc. | United States | 100% |
| PGS Finance, Inc. | United States | 100% |
| PGS Ocean Bottom Seismic, Inc. | United States | 100% |
| Overseas CO., C.A. | Venezuela | 100% |
| Venezuela Overseas Co., C.A. | Venezuela | 100% |
| PGS Finance, Inc. | United States | 100% |
| PGS Ocean Bottom Seismic, Inc. | United States | 100% |
| Overseas CO., C.A. | Venezuela | 100% |
| Venezuela Overseas Co., C.A. | Venezuela | 100% |

Subsidiaries with minority interests are not considered significant and as such, are not disclosed in the consolidated statements of financial position and the consolidated statement of changes in shareholders' equity.

# Financial Statements — Parent Company

Petroleum Geo-Services ASA (Parent Company)

# Statements of Profit and Loss

| (In millions of NOK) | Note | Year ended December 31, 2018 | 2017 |
|---|---|---|---|
| **Revenue** | 2 | **0.2** | **63.6** |
| Cost of sales | | (0.5) | (2.4) |
| Selling, general, administrative and other costs | 2, 14 | (57.9) | (78.7) |
| **Total operating expenses** | | **(58.4)** | **(81.1)** |
| **Operating loss** | | **(58.2)** | **(17.5)** |
| Interest expense, net | 2, 3 | (309.7) | (215.3) |
| Gain (loss) on sales or liquidation of subsidiaries | | 0.7 | (207.5) |
| Impairment, net of reversal of impairment on shares in subsidiaries/Intercompany receivables | 1, 6 | (1 401.2) | (4 521.5) |
| Dividends/group contributions received from subsidiaries | 2 | 1 521.0 | 12.5 |
| Other financial items, net | 2, 4 | (348.5) | 95.6 |
| **Income (loss) before income taxes** | | **(595.9)** | **(4 853.7)** |
| Income tax | 5 | 14.6 | (464.5) |
| **Net income (loss)** | | **(581.3)** | **(5 318.2)** |

Petroleum Geo-Services ASA (Parent Company)

# Statements of Financial Position

| (In millions of NOK) | Note | December 31, 2018 | 2017 |
|---|---|---|---|
| **ASSETS** | | | |
| ***Long-term assets:*** | | | |
| Shares in subsidiaries | 1, 6 | 8 270.3 | 12 472.7 |
| Intercompany receivables | 1, 2, 6 | 5 434.8 | 4 795.7 |
| Other long-term assets | | - | 7.9 |
| **Total long-term assets** | | **13 705.1** | **17 276.3** |
| ***Current assets:*** | | | |
| Short-term intercompany receivables | 2 | 66.7 | 55.1 |
| Other current assets | | 9.7 | 16.2 |
| Restricted cash | 7 | 1.0 | 2.2 |
| Cash and cash equivalents | | 59.3 | 65.5 |
| **Total current assets** | | **136.7** | **139.0** |
| **Total assets** | | **13 841.8** | **17 415.3** |
| | | | |
| **LIABILITIES AND SHAREHOLDERS' EQUITY** | | | |
| ***Shareholders' equity:*** | | | |
| Common stock; par value NOK 3; issued and outstanding 338,579,996 shares | 8 | 1 015.7 | 1 015.7 |
| Additional paid-in capital | 8 | 5 227.6 | 5 235.9 |
| Total paid in capital | | 6 243.3 | 6 251.6 |
| Other equity | 8 | (1 756.6) | (1 138.2) |
| **Total shareholders' equity** | | **4 486.7** | **5 113.4** |
| ***Long-term liabilities:*** | | | |
| Long-term debt | 9, 10 | 7 375.1 | 6 368.2 |
| Intercompany debt | 1, 2 | 1 831.1 | 5 592.8 |
| Other long-term liabilities | 11 | 30.3 | 24.9 |
| **Total long-term liabilities** | | **9 236.5** | **11 985.9** |
| ***Current liabilities:*** | | | |
| Short-term intercompany debt | 2 | 0.5 | - |
| Accrued expenses and other short-term liabilities | 13 | 118.1 | 316.0 |
| **Total current liabilities** | | **118.6** | **316.0** |
| **Total liabilities and shareholders' equity** | | **13 841.8** | **17 415.3** |

Oslo, February 26, 2019
Board of Directors
Petroleum Geo-Services ASA

Walter Qvam
Chairperson

Anne Grethe Dalane
Vice Chairperson

Morten Borge

Richard Herbert

Marianne Kah

Hege Renshus

Anette Valbø

Espen Grimstad

Rune Olav Pedersen
Chief Executive Officer

Petroleum Geo-Services ASA (Parent Company)

# Statements of Cash Flows

| (In millions of NOK) | Notes | Year ended December 31, 2018 | 2017 |
|---|---|---|---|
| ***Cash flows provided by (used in) operating activities:*** | | | |
| Net income (loss) | | (581.3) | (5 318.2) |
| Adjustments to reconcile net income to net cash used in operating activities: | | | |
| Changes in deferred tax assets | 5 | - | 461.3 |
| Impairment, net of reversal of impairment of shares/intercompany receivables | 6 | 1 401.9 | 4 314.0 |
| Dividends/group contributions | 2 | (1 521.0) | (12.5) |
| Foreign exchange (gain) loss, unrealized | 4 | 176.9 | (63.6) |
| Changes in current assets and current liabilities | | 370.6 | 435.5 |
| Other items | | 23.0 | 32.8 |
| **Net cash provided by (used in) operating activities** | | **(129.9)** | **(150.7)** |
| ***Cash flows provided by (used in) investing activities:*** | | | |
| Investment in subsidiaries and changes intercompany receivables, net | 6 | 156.5 | 142.5 |
| Change in restricted cash | | 1.2 | 28.9 |
| **Net cash provided by (used in) investing activities** | | **157.7** | **171.4** |
| ***Cash flows provided by (used in) financing activities:*** | | | |
| Deferred loan costs from debt refinancing and amendments | 9 | - | (3.3) |
| Net drawdown of Revolving Credit Facility | 9 | 616.5 | 14.0 |
| Proceeds from sale of treasury shares/share issue | 8 | - | 301.3 |
| Repayment of long-term debt | 9 | (255.6) | (33.0) |
| Interest paid | | (393.6) | (365.2) |
| **Net cash provided by (used in) financing activities** | | **(32.7)** | **(86.2)** |
| **Net increase (decrease) in cash and cash equivalents** | | **(4.9)** | **(65.5)** |
| Effect of exchange rate changes on cash and cash equivalents | | (1.3) | (7.0) |
| Cash and cash equivalents at beginning of year | | 65.5 | 138.0 |
| **Cash and cash equivalents at end of year** | | **59.3** | **65.5** |

## Note 1 — Summary of Significant Accounting Policies

Petroleum Geo-Services Group ("the Company") prepares its consolidated financial statements in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union, while Petroleum Geo-Services ASA ("PGS ASA") prepares its financial statements in accordance with the Norwegian Accounting Act and accounting principles generally accepted in Norway ("N GAAP").

PGS ASA applies the same accounting policies as described in note 2 in the notes to the consolidated financial statements where relevant, except that unrealized foreign exchange gain (loss) on long-term intercompany loans is recognized in the statements of profit and loss. The financial statements are presented in Norwegian kroner ("NOK") as this is the reporting currency. The functional currency is US dollars ("USD").

Shares in subsidiaries (see note 6) are presented at cost less impairment. Impairment is recognized based upon the carrying value of the individual shares and net intercompany receivables in the subsidiaries less the estimated recoverable amount (based on discounted estimated future cash flows). If and when estimated recoverable amounts increase, impairment charges are reversed. There is no fixed plan for repayment of long-term intercompany receivables.

The statement of cash flows is set up using the indirect method.

## Note 2 — Intercompany Transactions

PGS ASA has significant intercompany transactions with its subsidiaries. Transactions with subsidiaries are mainly related to business support functions and financing activities. Due to organizational changes, PGS ASA transferred the majority of the employees to PGS Geophysical AS at the beginning of 2018 and therefore no management fee charge out in 2018. Guarantee fee income is 51.2 in 2018. Dividends/group contributions from subsidiaries were NOK 1 521.0 and NOK 12.5 million in 2018 and 2017, respectively. In addition, PGS Geophysical AS allocated costs to PGS ASA amounting to NOK 23.5 and NOK 12.8 million in 2018 and 2017, respectively. Intercompany transactions in the statements of profit and loss consist of:

| **Subsidiaries** | **Year ended December 31, 2018** | | |
|---|---|---|---|
| (In millions of NOK) | **Revenues** | **Net interests** | **Net Receivables/ Liabilities** |
| Multiklient Invest AS | - | 39.2 | 291.2 |
| Natuna Ventures Pte. Ltd. | - | - | 101.6 |
| Petroleum Geo-Services, Inc. | - | 37.0 | 594.3 |
| Petroleum Geo-Services (UK) Ltd. | - | (47.8) | (451.9) |
| PGS Americas, Inc | - | 12.2 | 230.1 |
| Petroleum Geo-Services Asia Pacific Pte. Ltd. | - | (52.9) | (124.4) |
| PGS Australia PTY Ltd | - | - | 616.4 |
| PGS Data Processing S.A. de C.V. | - | - | 33.5 |
| PGS Data Processing Middle East SAE (Egypt) | - | (4.4) | (156.8) |
| PGS Egypt for Petroleum Services | - | (4.0) | (100.3) |
| PGS EM Ltd. | - | 47.5 | 839.6 |
| PGS Exploration (M) SDN BHD | - | - | 12.6 |
| PGS Geophysical Nigeria Limited | - | - | 75.2 |
| PGS Exploration (UK) Ltd | - | (7.1) | (75.9) |
| PGS Falcon AS | - | 35.1 | 1 183.9 |
| PGS Geophysical AS | - | 43.6 | 1 588.0 |
| PGS Ghana Limited | - | - | 46.0 |
| PGS Imaging, Inc | - | 9.4 | 166.6 |
| PGS Investigacào Petrolifera Ltda. | - | - | 90.1 |
| PGS Japan K.K. | - | (1.9) | (36.8) |
| PGS Geophysical (UK) Ltd. | - | - | (14.7) |
| PGS Marine Services (Isle of Man) Ltd. | - | 1.2 | 26.6 |
| PGS Onshore do Brazil Participacões Ltda. | - | - | 45.2 |
| PGS Reservoir Ltd | - | - | (44.0) |
| PGS Seismic Sevices Ltd. | - | 0.9 | 15.5 |
| PGS Suporte Logistico e Servicos Ltda. | - | - | 40.2 |
| PGS Titans AS | - | 15.0 | 178.7 |
| PT Petroprima Geo-Servis Nusantara | - | - | 413.5 |
| Seahouse Insurance Ltd. | - | (11.1) | (96.6) |
| Seismic Exploration (Canada) Ltd. | - | (1.0) | (79.6) |
| Other | - | 0.6 | (15.9) |
| Sum transactions intercompany | - | 111.5 | 5 391.9 |
| Accumulated impairment | | | (1 721.9) |
| **Net transactions intercompany** | | | **3 669.9** |

| Subsidiaries | Year ended December 31, 2017 | | |
|---|---|---|---|
| (In millions of NOK) | Revenues | Net interests | Net Receivables/ Liabilities |
| Arrow Seismic Invest VI Ltd. | - | - | 52.0 |
| Multiklient Invest AS | 19.4 | 75.2 | 1 283.2 |
| Natuna Ventures Pte. Ltd. | - | - | 95.4 |
| Petroleum Geo-Services, Inc. | - | 20.1 | 570.7 |
| Petroleum Geo-Services (UK) Ltd. | - | (52.3) | (749.4) |
| PGS Americas, Inc | 0.2 | 3.7 | 152.0 |
| Petroleum Geo-Services Asia Pacific Pte. Ltd. | 2.4 | (64.0) | (3 827.1) |
| PGS Australia PTY Ltd | 0.9 | - | 590.6 |
| PGS Data Processing S.A. de C.V. | 0.7 | - | 108.8 |
| PGS Data Processing Middle East SAE (Egypt) | 0.3 | (4.8) | (116.0) |
| PGS Egypt for Petroleum Services | 1.8 | (0.5) | (84.7) |
| PGS EM Ltd. | - | 30.5 | 746.7 |
| PGS Exploration (M) SDN BHD | 3.7 | - | 119.9 |
| PGS Geophysical Nigeria Limited | 0.2 | - | 78.1 |
| PGS Exploration (UK) Ltd | 11.0 | 15.7 | (300.3) |
| PGS Falcon AS | - | 57.0 | 178.2 |
| PGS Geophysical Netherlands BV | - | 7.4 | 127.4 |
| PGS Geophysical AS | 11.8 | 59.8 | 1 467.1 |
| PGS Ghana Limited | - | 4.5 | 81.6 |
| PGS Imaging, Inc | 2.5 | 6.9 | 76.2 |
| PGS Investigacào Petrolifera Ltda. | 6.6 | - | 168.8 |
| PGS Japan K.K. | - | (1.2) | (28.1) |
| PGS Geophysical (UK) Ltd. | - | (1.7) | (38.7) |
| PGS Geophysical Services (UK) Ltd. | - | (1.1) | (27.6) |
| PGS Geophysical (Angola) Ltd. | - | 0.2 | 16.7 |
| PGS Onshore do Brazil Participacões Ltda. | - | - | 42.8 |
| PGS Reservoir Ltd | 0.4 | (1.4) | (27.5) |
| PGS Seismic (UK) Ltd. | - | 0.5 | 13.8 |
| PGS Shipping AS | - | 17.4 | 28.0 |
| PGS Suporte Logistico e Servicos Ltda. | 0.3 | - | 37.3 |
| PGS Titans AS | - | 17.4 | 307.8 |
| PT Petroprima Geo-Servis Nusantara | 0.5 | - | 123.1 |
| Seahouse Insurance Ltd. | 0.9 | (7.5) | (188.1) |
| Seismic Exploration (Canada) Ltd. | - | (3.0) | (73.1) |
| Other | 0.1 | (0.2) | (30.4) |
| Sum transactions intercompany | 63.6 | 178.8 | 975.2 |
| Accumulated impairment | | | (1 717.2) |
| **Net transactions intercompany** | | | **(742.0)** |

## Note 3 – Interest Expense, Net

Interest expense, net, consists of:

| | Year ended December 31, | |
|---|---|---|
| (In millions of NOK) | 2018 | 2017 |
| Interest income, external | 4.2 | 7.5 |
| Interest income, intercompany | 252.7 | 354.2 |
| Interest expense, external | (425.3) | (401.6) |
| Interest expense, intercompany | (141.3) | (175.4) |
| **Total** | **(309.7)** | **(215.3)** |

## Note 4 – Other Financial Items, Net

Other financial items, net, consist of:

| (In millions of NOK) | Year ended December 31, 2018 | 2017 |
|---|---|---|
| Foreign currency (loss) gain, realized and unrealized | (360.4) | 80.1 |
| Guarantee fee | 51.2 | - |
| Other | (39.3) | 15.5 |
| **Total** | **(348.5)** | **95.6** |

## Note 5 – Income Taxes

The income tax expense differs from the amounts computed when applying the Norwegian statutory tax rate to income before income taxes as a result of the following:

| (In millions of NOK) | Year ended December 31, 2018 | 2017 |
|---|---|---|
| Income before income taxes | (595.9) | (4 853.7) |
| Norwegian statutory tax rate | 23% | 24% |
| Provision for income taxes at the statutory rate | 137.0 | 1 164.9 |
| (Increase) reduction in income taxes from: | | |
| Change in Norwegian statutory tax rate (a) | (44.8) | (39.2) |
| Foreign taxes | 11.2 | (2.4) |
| Impairment (reversal) of shares in subsidiaries | (292.6) | (1 120.9) |
| Impairment of intercompany receivables | (26.4) | 9.5 |
| Other permanent items | 333.6 | (35.3) |
| Correction previous year | (7.6) | (19.4) |
| Other changes in temporary differences | - | (10.5) |
| Changes in unrecognized deferred tax assets | (95.8) | (411.2) |
| **Income tax (expense) benefit** | **14.6** | **(464.5)** |

(a) The Norwegian corporate income tax rate was reduced from 23% to 22% effective from January 1, 2019. As a result, a reduction in deferred tax asset of 44.8 million was recognized in 2018. Effective January 1, 2018 the Norwegian corporate income tax rate was reduced from 24% to 23% which reduced the deferred tax asset with 39.2 million in 2017.

| (In millions of NOK) | Year ended December 31, 2018 | 2017 |
|---|---|---|
| Temporary differences relate to: | | |
| Pension liabilities (b) | 5.2 | 5.5 |
| Intercompany receivables | 58.4 | 57.8 |
| Unrealized exchange gain (loss) | - | - |
| Other | 2.6 | 6.0 |
| Tax losses carried forward | 919.7 | 820.7 |
| Deferred tax assets, net | 985.9 | 890.0 |
| Deferred tax assets not recognized in the statement of financial position | (985.9) | (890.0) |
| **Net recognized Deferred tax assets** | **-** | **-** |

(b) Change in deferred tax for actuarial gains/losses on pensions are recognized directly to shareholder's equity (see note 8 and 12).

## Note 6 – Shares in Subsidiaries and Intercompany Receivables

Shares in subsidiaries are recognized in PGS ASA balance sheet at cost less any impairment.

| | Registered office | Shareholding (a) | Book value as of 12/31/2018 (in millions of NOK) (b) | Equity as of 12/31/2018 (in millions of NOK) (b) | Impairments 2018 (in millions of NOK) | Net income 2018 (in millions of NOK) (b) |
|---|---|---|---|---|---|---|
| PGS Geophysical AS | Oslo | 100% | 5 175.7 | 2 917.2 | 21.3 | (986.1) |
| Petroleum Geo-Services Asia Pacific Pte. Ltd. | Singapore | 100% | 137.2 | 137.2 | (81.1) | 6.3 |
| PGS Titans AS | Oslo | 100% | 1 390.0 | 1 763.2 | - | 72.1 |
| Petroleum Geo-Services (UK) Ltd. | London | 100% | 1 017.8 | 1 017.8 | (159.7) | 46.8 |
| PGS Falcon AS | Oslo | 100% | 228.6 | 228.5 | (1 116.3) | (1 116.3) |
| Multiklient Invest AS | Oslo | 100% | 10.0 | 1 895.3 | - | 1 280.7 |
| Seahouse Insurance Ltd. | Bermuda | 100% | 27.6 | 94.2 | - | 26.9 |
| PGS Japan K.K. | Japan | 100% | 0.6 | 36.8 | - | 3.8 |
| PGS Geophysical Nigeria Ltd. | Nigeria | 100% | - | (26.4) | - | 28.5 |
| PGS EM Ltd. | Scotland | 100% | - | (838.5) | - | (47.0) |
| Petroleum Geo-Services, Inc. | Houston | 100% | - | (411.6) | - | (66.5) |
| PGS Australia Pty Ltd | Perth | 100% | - | (379.6) | - | (62.9) |
| PGS Venezuela de C.A. | Venezuela | 100% | - | - | - | - |
| PGS Investigacào Petrolifera Ltda. | Brazil | 99% | 282.5 | 282.5 | 63.4 | 417.3 |
| PGS Suporte Logistico e Servicios Ltda. (c) | Brazil | 1% | 0.4 | 32.0 | 0.4 | 86.1 |
| PGS Onshore do Brazil Participacões Ltda. (c) | Brazil | 0% | - | (52.8) | - | 0.7 |
| PT Petroprima Geo-Servis Nusantara | Indonesia | 93% | - | (13.9) | - | 19.2 |
| PGS Imaging S.A. de C.V. | Mexico | 100% | - | (33.5) | - | (3.0) |
| PGS Data Processing Middle East SAE (Egypt) | Egypt | 99% | - | 112.3 | - | (9.8) |
| **Total** | | | **8 270.3** | | **(1 272.1)** | |

(a) Voting rights are equivalent to shareholding for all companies.
(b) The numbers are preliminary and statutory audit has not been completed.
(c) The remaining shareholding is held by Geophysical AS.

In 2018, in addition to the NOK 1 272.1 million impairment of shares in subsidiaries, PGS ASA recognized net impairment charges on intercompany receivables totaling NOK 129.1 million, compared to net reversal of impairment charges of NOK 149.1 million in 2017.

As of December 31, 2018, PGS ASA has accumulated impairment charges related to shares in subsidiaries and intercompany receivables totaling NOK 16.1 billion and NOK 1.7 billion, respectively.

For additional information on impairment of shares in subsidiaries and intercompany receivables, see note 1.

## Note 7 – Restricted Cash

Restricted cash consists of:

| | December 31, | |
|---|---|---|
| (In millions of NOK) | **2018** | **2017** |
| Payroll withholding taxes | 1.0 | 2.2 |
| **Total** | **1.0** | **2.2** |

## Note 8 – Shareholders' Equity

Changes in shareholders' equity for the years ended December 31, 2018 and 2017 are as follows:

| (In millions of NOK) | Common stock | Paid-in capital<br>Own shares, par value | Additional paid-in capital | Other equity | Shareholders' equity |
|---|---|---|---|---|---|
| **Balance as of January 1, 2017** | **975.2** | **(2.1)** | **4 937.9** | **4 161.4** | **10 072.5** |
| Share issue | 40.50 | - | 260.7 | - | 301.2 |
| Employee benefit plans | - | 2.1 | 8.9 | (2.1) | 8.9 |
| Employee share options recharged to subsidiaries | - | - | 28.4 | - | 28.4 |
| Interest rate swaps (net of tax) | - | - | - | 22.3 | 22.3 |
| Actuarial gains and losses charged to equity (net of tax) | - | - | - | (1.6) | (1.6) |
| Net income | - | - | - | (5 318.2) | (5 318.2) |
| **Balance as of December 31, 2017** | **1 015.7** | **(0.0)** | **5 235.9** | **(1 138.1)** | **5 113.5** |
| Employee benefit plans | - | - | (31.6) | - | (31.6) |
| Employee share options recharged to subsidiaries | - | - | 23.3 | - | 23.3 |
| Interest rate swaps (net of tax) | - | - | - | (36.9) | (36.9) |
| Actuarial gains and losses charged to equity (net of tax) | - | - | - | (0.3) | (0.3) |
| Net income | - | - | - | (581.3) | (581.3) |
| **Balance as of December 31, 2018** | **1 015.7** | **(0.0)** | **5 227.6** | **(1 756.6)** | **4 486.7** |

As of December 31, 2016 the share capital was NOK 975 239 988 divided into 325 079 996 shares of par value NOK 3 each, all fully paid. On January 16, 2017, the share capital was increased through a public placement with gross proceeds of NOK 303.8 million, net of transaction costs of NOK 2.6 million. As a result, the share capital as of December 31, 2017 was NOK 1 015 739 988 on 338 579 996 shares of par value NOK 3 each, fully paid.

All shares have equal voting rights and are entitled to dividends. Distribution of PGS ASA's equity is dependent upon the approval of the shareholders, and the ability to make distributions is limited by certain debt covenants and Norwegian Corporate Law (see note 9 and note 19 to the consolidated financial statements). A listing of PGS ASA's largest shareholders is provided in note 25 to the consolidated financial statements.

## Note 9 – Debt and Guarantees

### Long-term debt

Long-term debt consists of the following:

| (In millions of NOK) | December 31,<br>2018 | 2017 |
|---|---|---|
| ***Secured:*** | | |
| Term loan B, Libor (minimum 75 bp) + 250 Basis points, due 2021 | 3 310.7 | 3 166.0 |
| Revolving credit facility, due 2020 | 2 302.6 | 1 562.4 |
| ***Unsecured:*** | | |
| Senior notes, Coupon 7.375%, due 2018 | - | 213.8 |
| Senior notes, Coupon 7.375%, due 2020 | 1 842.2 | 1 743.4 |
| **Total** | **7 455.5** | **6 685.6** |
| Less current portion | (34.8) | (246.7) |
| Less deferred loan costs, net of debt premiums | (45.7) | (92.1) |
| **Total long-term debt** | **7 375.1** | **6 346.8** |

Undrawn facilities consist of the following:

| (In millions of NOK) | December 31,<br>2018 | 2017 |
|---|---|---|
| ***Secured:*** | | |
| Revolving credit facility, due 2020 | 738.6 | 1 726.9 |
| ***Unsecured:*** | | |
| Bank facility (NOK 50 mill) | 50.0 | 50.0 |
| Performance bond | 106.9 | 92.7 |
| **Total** | **895.5** | **1 869.6** |

### Credit Facility
At December 31, 2017, the Company had $ 265.0 million outstanding under the Term Loan and $ 190.0 million outstanding under the Revolving Facility. For additional information see note 20 in the Group Financial Statements.

### Old Notes
The Old Notes will matured on December 15, 2018. For additional information see note 20 in the Consolidated Financial Statements.

### The New Note
The New Notes will mature on December 15, 2020. Interest is payable in cash semi-annually on each June 15 and December 15. The Company may redeem all or a portion of the Old Notes at 103.688% of their principal amount plus accrued and unpaid interest, if any, from December 15, 2017, with the specified premium declining to 101.844% on December 15, 2018 and to par on December 15, 2019. At December 31, 2017, the Company had $212.0 million outstanding under the New Note. For additional information see note 20 in the Consolidated Financial Statements.

## Note 10 – Financial Instruments

### Fair values of financial instruments
The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable, accrued revenues and other receivables, other current assets, accounts payable and accrued expenses approximate their respective fair values because of the short maturities of those instruments. PGS ASA disclose the hierarchy of how fair value is determined for financial instruments recorded at fair value in the financial statements as follows:

Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities.

Level 2: assets and liabilities whose values are based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly.

Level 3: techniques for which all inputs which have a significant effect on the recorded fair value that is not based on observable market data.

The fair values of the long-term debt instruments, forward exchange contracts and interest rate swaps are estimated using quotes obtained from dealers in such financial instruments or latest quoted prices or indexes at Reuters or Bloomberg. Where market prices are not observed or quotes from dealers are not obtained, an indirect method is used by use of implied credit spread from debt instrument with similar risk characteristics. The carrying amounts, estimated fair values of debt and derivatives instruments including how fair value is determined are summarized as follows:

| | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|
| (In millions of NOK) | Carrying amount | Fair value | Carrying amount | Fair value |
| FINANCIAL ASSETS | | | | |
| **At fair value through profit and loss** | **-** | **-** | **135.9** | **135.9** |
| Foreign exchange contracts | 1.7 | 1.7 | 4.8 | 4.8 |
| **Derivatives designated as hedging instruments** | | | | |
| Foreign exchange contracts | - | - | 11.8 | 11.8 |
| Interest rate swaps | 6.1 | 6.1 | 5.3 | 5.3 |
| **Total** | **7.8** | **7.8** | **21.9** | **21.9** |
| | | | | |
| FINANCIAL LIABILITIES | | | | |
| **Financial liabilities at amortised cost** | | | | |
| Debt with fixed interest rate | (1 842.2) | (1 795.3) | (1 957.2) | (1 756.7) |
| Debt with variable interest rate | (5 613.0) | (5 835.0) | (4 728.5) | (4 277.3) |
| **At fair value through profit and loss** | | | | |
| Foreign exchange contracts | (26.1) | (26.1) | (7.4) | (7.4) |
| **Derivatives designated as hedging instruments** | | | | |
| Foreign exchange contracts | (11.3) | (11.3) | - | - |
| **Total** | **(7 492.6)** | **(7 667.7)** | **(6 693.1)** | **(6 041.4)** |

### Interest rate exposure
PGS ASA is subject to interest rate risk on debt, including finance leases. The risk is managed by using a combination of fixed -and variable rate debt, together with interest rate swaps, where appropriate, to fix or lower the borrowing costs.

| | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|
| (In millions of NOK) | Notional amounts | Weighted average interest rate | Notional amounts | Weighted average interest rate |
| Debt at fixed interest rate | (1 842.2) | 7.38% | (1 957.2) | 7.38% |
| Debt at variable interest rate based on US dollar plus a margin | (4 527.0) | 5.30% | (3 700.6) | 4.91% |
| Variable interest rate debt with interest fixed | (1 086.0) | 1.62% | (1 027.9) | 1.62% |

### Liquidity risk exposure

The Company is responsible for founding of its subsidiaries and liquidity risk is not materially different from the consolidated group. For liquidity risk exposure refer to the consolidated financial statements

## Note 11 – Other Long-Term Liabilities

Other long-term liabilities consist of:

| | December 31, | |
|---|---|---|
| (In millions of NOK) | **2018** | **2017** |
| Unrealized loss hedge contracts (note 10) | 6.1 | - |
| Pension liability (note 12) | 23.4 | 24.1 |
| Other long-term liabilities | 0.8 | 0.8 |
| **Total** | **30.3** | **24.9** |

## Note 12 – Pension Obligations

PGS ASA is required to maintain a pension plan in accordance with the Norwegian Pension Benefit Act. The pension plans of PGS ASA comply with the requirements set forth in the Norwegian Pension Benefit Act.

### Defined benefit plan

In 2014 the defined benefit pension plan for the Norwegian employees was terminated and the participants were transferred to the defined contribution plan. The assets and liabilities relating to the defined benefit pension plan were de-recognized.

As described in note 28 to the consolidated financial statements there is an early retirement plan for the CEO and three executive officers allowing for termination of employment without cause when they reach the age of 62 and providing certain defined benefits from the date of retirement and until reaching the age of 67. Three employees in PGS ASA are in this plan. The plan is accounted for as a defined benefit obligation and is not funded.

The components of net periodic pension cost for PGS ASA's defined benefit pension plans are summarized as follows:

| | December 31, | |
|---|---|---|
| (In millions of NOK) | **2018** | **2017** |
| Service cost | 1.3 | 2.4 |
| Interest cost | 0.5 | 0.5 |
| Payroll tax | 0.2 | 0.4 |
| **Net periodic pension cost** | **2.0** | **3.3** |

The aggregate funded status of the plan and amounts recognized in other long-term liabilities (see note 11) is as follows:

| | December 31, | |
|---|---|---|
| (In millions of NOK) | **2018** | **2017** |
| Projected benefit obligations | 20.5 | 21.0 |
| Accrued payroll tax | 2.9 | 3.0 |
| **Net pension liability** | **23.4** | **24.0** |

The accumulated actuarial gains recognized in other equity are as follows:

| | December 31, | |
|---|---|---|
| (In millions of NOK) | **2018** | **2017** |
| Accumulated actuarial gains | 12.8 | 13.5 |
| Deferred tax | - | - |
| **Accumulated actuarial gains recognized in other equity** | **12.8** | **13.5** |

Assumptions used to determine benefit obligations:

| | December 31, | |
|---|---|---|
| (In millions of NOK) | **2018** | **2017** |
| Discount rate | 2.60% | 2.30% |
| Compensation increase | 2.75% | 2.50% |

### Defined contribution plan

The defined contribution plan was established in 2005, and ASA's contributions to this plan for the years ended December 31, 2018 and 2017 was NOK 0.3 million and NOK 1.3 million, respectively.

## Note 13 – Accrued Expenses and Other Short-term Liabilities

Accrued expenses and other short-term liabilities consist of the following:

| | December 31, | |
|---|---|---|
| (In millions of NOK) | **2018** | **2017** |
| Accrued unrealized loss on hedging (note 10) | 31.0 | 7.4 |
| Current portion of long-term debt | 34.8 | 246.7 |
| Foreign taxes | 12.2 | 27.3 |
| Account payables | 9.7 | 8.1 |
| Accrued employee benefits | 5.1 | 6.1 |
| Accrued interest expense | 23.7 | 17.1 |
| Other | 1.6 | 3.3 |
| **Total** | **118.1** | **316.0** |

## Note 14 – Salaries and Other Personnel Costs, Number of Employees, and Remuneration to the Board of Directors, Executive Officers and Auditors

Salary and social expenses that are included in cost of sales and selling and general and administrative costs consist of:

| | December 31, | |
|---|---|---|
| (In millions of NOK) | **2018** | **2017** |
| Salaries and bonus | 17.3 | 44.5 |
| Social security | 3.0 | 5.8 |
| Pension | 2.9 | 6.3 |
| Other benefits | 0.6 | 4.6 |
| **Total** | **23.8** | **61.2** |

As of December 31, 2018, PGS ASA had 2 employees. Man-years for the years 2018 and 2017 were 2 and 23.4, respectively.

### Compensation to Board of Directors, CEO and Other Executive Officers

For a full listing of Board of Directors, CEO and Other Executive Officers and their compensation, see note 29 to the consolidated financial statements.

PGS ASA has not provided loans or guarantees to the Board of Directors, CEO or Other Executive Officers as of December 31, 2018.

### Sharebased incentive programs

The Restricted Stock Unit programs (""RSU"") (granted in each of 2012 to 2016) requires the participant's continued employment with the Company (or a subsidiary) and is settled three years after grant. Upon settlement, the participant will receive at no charge a number of shares in the Company which equals the number of RSUs awarded. In 2015 and 2016, the Company also granted Performance based Restricted Stock Unit programs (""PRSU""). Settlement of the PRSUs and subsequent transfer of shares to the eligible employee will take place three years later subject to achieving a satisfactory Total Shareholder Return compared to the companies in STOXX TMI Oil Equipment, Services & Distribution index adjusted for dividends and further employment by the Company.

See note 28 to the consolidated financial statements for further information on the share option programs, RSU's and PRSU's.

For the years ended December 31, 2018 and 2017, PGS ASA recorded compensation costs of NOK 2.9 million and NOK 8.9 million, respectively, recognized in additional paid-in capital. During 2018, the company settled PRSU and RSU's by cash. Equity was correspondingly decreased with 34.5 million. Total net unrecognized compensation cost as of December 31, 2018 was NOK 55.9 million related to PRSU's and RSU's, which is expected to be recognized over a period of 3 years.

### Remuneration of auditor

Fees for audit and other services provided by PGS ASA's auditor EY who was elected in May 2014, are as follows (exclusive VAT and inclusive out of pocket expenses):

| | December 31, | |
|---|---|---|
| (In millions of NOK) | **2018** | **2017** |
| Audit fees | 2.2 | 1.8 |
| Fees for tax services (a) | 0.2 | 0.1 |
| All other fees | 2.5 | 1.5 |
| **Total** | **4.9** | **3.4** |

(a) Include fees for tax filing services and other tax assistance.

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Dronning Eufemias gate 6, NO-0191 Oslo
Postboks 1156 Sentrum, NO-0107 Oslo

Foretaksregisteret: NO 976 389 387 MVA
Tlf: +47 24 00 24 00

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**INDEPENDENT AUDITOR'S REPORT**

To the Annual Shareholders' Meeting of Petroleum Geo-Services ASA

## Report on the audit of the financial statements

### Opinion

We have audited the financial statements of Petroleum Geo-Services ASA comprising the financial statements of the parent company and the Group. The financial statements of the parent company comprise the statements of financial position as at 31 December 2018, the statements of profit and loss and cash flows for the year then ended and notes to the financial statements, including a summary of significant accounting policies.

The consolidated financial statements comprise the consolidated statements of financial position as at 31 December 2018, the consolidated statements of profit and loss, comprehensive income, cash flows and changes in shareholders' equity 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 financial statements present fairly, in all material respects, the financial position of the parent company as at 31 December 2018, and of 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 consolidated financial statements present fairly, in all material respects the financial position of the Group as at 31 December 2018 and of 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 in accordance with the ethical requirements that are relevant to our audit of the financial statements in Norway, and we have fulfilled our ethical responsibilities as required by law and regulations. We have also complied with our other ethical obligations 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 for 2018. 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. For each matter below, our description of how our audit addressed the matter is provided in that context.

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

### Revenue recognition from sale of MultiClient pre-funding licenses

The Group adopted IFRS 15 – Revenue from Contracts with Customers from 1 January 2018 using the modified retrospective approach. Management assessed its different customer contracts and determined the performance obligations and the transaction price relating to the services provided. This evaluation concluded that revenue recognition from MultiClient pre-funding licenses was impacted, while other revenue contracts are recognized in the same manner as prior to the adoption of IFRS 15. For MultiClient pre-funding contracts, the performance obligation was considered to be a "right to use" license, and revenue is recognized when the customer is granted access to the finished data or when delivery of the finished data has occurred. Multiclient pre-funding revenues were a key audit matter due to the cumulative effect at the date of initial application of IFRS 15 ($75.3 million) and the significant change in the timing of revenue recognition.

We obtained an understanding of the IFRS 15 adoption process and evaluated the accounting principles applied by management. We tested a sample of contracts from sale of MultiClient pre-funding licenses by agreeing the amounts in the analysis to the prior year's audited consolidated financial statements to assess the cumulative effect. For a sample for revenue recognized in 2018, we obtained evidence that the performance obligation had been satisfied.

We refer to notes 2 and 5 of the consolidated financial statements.

### Impairment evaluation of MultiClient library

MultiClient library accounts for $654.6 million or approximately 27 % of total assets of the Group as of 31 December 2018. The Group performed impairment testing to determine value in use and recorded an impairment loss of $22.6 million in 2018.

The Group uses forecasts of future sales when determining value in use. These forecasts are based on budgets and assumptions, thus requiring considerable insight and judgment by management about future market conditions and spending on exploration and production by oil companies, including licensing activities and farm-ins. Impairment evaluation of MultiClient library is a key audit matter due to the significant management judgment involved and the continued uncertain market conditions.

We evaluated management's assessment of impairment indicators for the MultiClient library. Our audit procedures included inquiries of management, including senior sales personnel and test of controls. Our audit procedures also included analyses and evaluation of historical accuracy of prior year's forecast. We further evaluated the assumptions used in the sales forecasting process based on the current market situation, expectations about oil prices, licensing rounds and exploration activities. Furthermore, we considered the valuation methodology and the discount rate applied in the value in use model. We also tested the mathematical accuracy of the value in use calculations and performed sensitivity analysis of key assumptions. We used a valuation specialist to assist us in evaluating the calculation and components of the applied discount rate. We also assessed the Group's disclosures regarding those assumptions and the recorded impairment losses of MultiClient library.

We refer to notes 3 and 7 of the consolidated financial statements.

### Impairment evaluation of vessels and seismic equipment

Vessels and related equipment account for $1,035 million or approximately 43 % of total assets of the Group as of 31 December 2018. The Group performed impairment tests to determine the recoverable amounts and concluded that no impairment should be recognized in 2018.

Management has identified certain impairment indicators such as continued operating losses and low spending on seismic activities by customers. The Group therefore assessed the recoverable amount by determining value in use for each vessel. Estimating the value in use requires management judgment when estimating future revenues, operating expenses, growth rates, useful lives and capital expenditures and determining the discount rate. Furthermore, management compared the transaction price in recent vessel sales to the value in use calculations where relevant. Management's impairment evaluation is a key audit matter due to the multiple variables and the significant management judgement involved in estimating future cash flows in the continued uncertain market conditions.

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Our procedures included assessing the assumptions and methods used by management in the impairment evaluation. We tested the key assumptions and underlying data by comparing them to external market information and historical data, transaction prices in recent vessel sales and by analyzing sensitivities. We also assessed the historical accuracy of management's estimates and tested the mathematical accuracy of the impairment model. We involved a valuation specialist to assist us in evaluating the calculation and components of the applied discount rate. We also assessed the disclosures regarding the assumptions applied by management and verified the arithmetical accuracy of the sensitivity analysis disclosed in Note 3.

We refer to notes 3 and 16 of the consolidated financial statements.

## Other information

Other information consists of the information included in the Company's annual report other than the financial statements and our auditor's report thereon. The Board of Directors and Chief Executive Officer (management) are responsible for the other information. Our opinion on the financial statements does not cover the other information, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the 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 management for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway for the financial statements of the parent company and International Financial Reporting Standards as adopted by the EU for the financial statements of the Group, 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 ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

## 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 ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with law, regulations and generally accepted auditing principles 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, 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 internal control



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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the 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 and on the statements on corporate governance and corporate social responsibility

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 proposal for the allocation of the result 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 ensure that the Company's accounting information is properly recorded and documented as required by law and bookkeeping standards and practices accepted in Norway.

Oslo, 26 February 2019
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Petter Larsen
State Authorised Public Accountant (Norway)



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