

# GROUP FINANCIALS

Despite the challenging market, TGS' Return on Average Capital Employed (ROACE) was 10.1%, meaning that TGS is one of few international oil service companies delivering a return above its cost of capital in 2017.

# Consolidated Statement of Comprehensive Income

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

	Note	2017	2016
<b>Net revenues</b>	15,22	492,181	455,991
Cost of goods sold - proprietary and other		565	5,759
Amortization and impairment of the multi-client library	5,15	302,346	297,693
Personnel costs	7	54,293	51,670
Cost of stock options	7,8	243	751
Other operating expenses	19	27,805	35,039
Depreciation, amortization and impairment	4,5	9,499	12,046
<b>Total operating expenses</b>		394,752	402,956
<b>Operating profit</b>		97,429	53,035
Financial income	23	2,998	3,053
Financial expenses	23	(1,640)	(3,967)
Net exchange losses	23	848	553
<b>Net financial items</b>		2,207	(360)
<b>Profit before taxes</b>		99,636	52,675
Taxes	24	24,042	25,022
<b>Net income</b>		75,594	27,653
<b>Other comprehensive income:</b>			
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods</i>			
Exchange differences on translation of foreign operations		359	114
<b>Other comprehensive income, net of tax</b>		359	114
<b>Total comprehensive income for the period</b>		75,952	27,766
Net income attributable to the owners of the parent		75,594	28,220
Net income attributable to non-controlling interests		-	(567)
		75,594	27,653
Total comprehensive income attributable to the owners of the parent		75,952	28,333
Total comprehensive income attributable to non-controlling interests		-	(567)
		75,952	27,766
Earnings per share (USD)	9	0.74	0.28
Earnings per share, diluted (USD)	9	0.73	0.28

# Consolidated Balance Sheet

As of 31 December

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

	Note	2017	2016
<b>Assets</b>			
<b>Non-current assets</b>			
Goodwill	5,6	67,925	67,925
Multi-client library	5	799,015	812,399
Other intangible non-current assets	5,6	9,045	9,009
Deferred tax asset	24	4,390	9,565
Buildings	4	5,213	6,759
Machinery and equipment	4	14,452	16,263
Other non-current assets	14	496	10,500
<b>Total non-current assets</b>		<b>900,535</b>	<b>932,420</b>
<b>Current assets</b>			
Accounts receivable	16	157,423	201,231
Accrued revenues	16	97,285	119,112
Other receivables	16	18,939	33,073
Cash and cash equivalents	11	249,917	190,739
<b>Total current assets</b>		<b>523,564</b>	<b>544,155</b>
<b>Total assets</b>		<b>1,424,100</b>	<b>1,476,575</b>

# Consolidated Balance Sheet

As of 31 December

[All amounts in USD 1,000s unless noted otherwise]

	Note	2017	2016
<b>Equity and liabilities</b>			
<b>Equity</b>			
<b>Paid-in capital</b>			
Share capital	10	3,663	3,657
Treasury shares	10	(4)	(21)
Share premium	10	62,771	58,107
Other paid-in equity	10	39,722	36,964
<b>Total paid-in capital</b>		<b>106,152</b>	<b>98,707</b>
Other equity		1,093,957	1,070,426
<b>Equity attributable to owners of the parent</b>		<b>1,200,109</b>	<b>1,169,132</b>
Non-controlling interests	10	(7)	(7)
<b>Total equity</b>		<b>1,200,102</b>	<b>1,169,124</b>
<b>Liabilities</b>			
<b>Non-current liabilities</b>			
Long-term debt	14	2,500	
Other non-current liabilities	14	2,850	6,057
Deferred taxes	24	23,721	39,284
<b>Total non-current liabilities</b>		<b>29,071</b>	<b>45,341</b>
<b>Current liabilities</b>			
Accounts payable and debt to partners	17	101,385	116,534
Taxes payable, withheld payroll tax, social security	24	25,197	18,066
Other current liabilities	17	68,345	127,510
<b>Total current liabilities</b>		<b>194,925</b>	<b>262,110</b>
<b>Total liabilities</b>		<b>223,996</b>	<b>307,451</b>
<b>Total equity and liabilities</b>		<b>1,424,100</b>	<b>1,476,575</b>

Asker, 22 March 2018



Henry H. Hamilton III  
Chairman



Wenche Agerup  
Director



Nils Peter Dyvik  
Director



Tor Magne Lønnum  
Director



Kristian Johansen  
Chief Executive Officer



Mark S. Leonard  
Director



Elisabeth Grieg  
Director



Vicki Messer  
Director



Torstein Sanness  
Director

# Consolidated Statement of Changes in Equity

As of 31 December

[All amounts in USD 1,000s unless noted otherwise]

	Attributable to the owners of the parent							Non-controlling Interest	Total Equity
	Share Capital (par value at NOK 0.25)	Treasury Shares	Share Premium	Other Paid-in Capital*	Foreign Currency Translation Reserve	Retained Earnings	Total		
Balance 1 January 2017	3,657	(21)	58,107	36,964	(21,933)	1,092,359	1,169,132	(7)	1,169,124
Net income	-	-	-	-	-	75,594	75,594	-	75,594
Other comprehensive income	-	-	-	-	359	-	359	-	359
Total comprehensive income	-	-	-	-	359	75,594	75,953	-	75,952
Paid-in equity through exercise of stock options	6	14	4,664	-	-	8,456	13,141	-	13,141
Distribution of treasury shares	-	0.4	-	-	-	250	250	-	250
Deferred tax income related to stock options	-	-	-	-	-	26	26	-	26
Cost of equity-settled long-term incentive plans	-	-	-	2,758	-	-	2,758	-	2,758
Dividends	-	-	-	-	-	(61,146)	(61,146)	-	(61,146)
Balance 31 December 2017	3,663	(4)	62,771	39,722	(21,574)	1,115,538	1,200,114	(7)	1,200,102

	Attributable to the owners of the parent							Non-controlling Interest	Total Equity
	Share Capital (par value at NOK 0.25)	Treasury Shares	Share Premium	Other Paid-in Capital*	Foreign Currency Translation Reserve	Retained Earnings	Total		
Balance 1 January 2016	3,657	(26)	58,107	34,728	(22,047)	1,123,110	1,197,528	560	1,198,088
Net income	-	-	-	-	-	28,220	28,220	(567)	27,653
Other comprehensive income	-	-	-	-	114	-	114	-	114
Total comprehensive income	-	-	-	-	114	28,220	28,334	(567)	27,766
Paid-in equity through exercise of stock options	-	5	-	-	-	1,793	1,798	-	1,798
Distribution of treasury shares	-	0.4	-	-	-	156	156	-	156
Deferred tax income related to stock options	-	-	-	-	-	20	20	-	20
Cost of equity-settled long-term incentive plans	-	-	-	2,236	-	-	2,236	-	2,236
Dividends	-	-	-	-	-	(60,940)	(60,940)	-	(60,940)
Balance 31 December 2016	3,657	(21)	58,107	36,964	(21,933)	1,092,359	1,169,132	(7)	1,169,124

\* Other Paid-in Capital consists of costs related to stock options.

# Consolidated Statement of Cash Flow

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

	Note	2017	2016
<b>Cash flow from operating activities</b>			
Received payments from customers		579,854	424,428
Payments for salaries, pensions, social security tax		(56,567)	(49,549)
Payments of other operational costs		(49,559)	(48,532)
Paid taxes	24	(12,422)	(1,981)
<b>Net cash flow from operating activities <sup>1)</sup></b>		<b>461,306</b>	<b>324,366</b>
<b>Cash flow from investing activities</b>			
Investments in tangible and intangible assets		(9,919)	(8,128)
Investments in multi-client library		(337,964)	(233,297)
Investments through mergers and acquisitions		(7,776)	-
Interest received		2,958	1,429
<b>Net cash flow from investing activities</b>		<b>(352,701)</b>	<b>(239,996)</b>
<b>Cash flow from financing activities</b>			
Interest paid		(328)	(400)
Dividend payments	10	(62,767)	(59,458)
Proceeds from share issuances		13,141	1,798
<b>Net cash flow from financing activities</b>		<b>(49,954)</b>	<b>(58,060)</b>
Net change in cash and cash equivalents		58,651	26,310
Cash and cash equivalents at the beginning of the period	11	190,739	162,733
Net unrealized currency gains/(losses)		527	1,698
<b>Cash and cash equivalents at the end of the period</b>	<b>11</b>	<b>249,917</b>	<b>190,739</b>
<b>1) Reconciliation</b>			
Profit before taxes		99,636	52,675
Depreciation/amortization/impairment	4,5,6	311,846	309,739
Changes in accounts receivables and accrued revenues		65,634	(42,696)
Net unrealized currency gains/(losses)		(168)	(1,576)
Changes in other receivables		20,156	11,892
Changes in other balance sheet items		(23,376)	(3,687)
Paid taxes	24	(12,422)	(1,981)
<b>Net cash flow from operating activities</b>		<b>461,306</b>	<b>324,366</b>

# Notes to Consolidated Financial Statements

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

## 1. General Accounting Policies

### General Information

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

TGS-NOPEC Geophysical Company ASA and its subsidiaries (TGS or the Company) provide multi-client geoscience data to oil and gas exploration and production companies worldwide. In addition to extensive global geophysical and geological data libraries that include multi-client seismic data, magnetic and gravity data, digital well logs, production data and directional surveys, TGS also offers advanced processing and imaging services, interpretation products and data integration solutions.

The consolidated financial statements of TGS were authorized by the Board of Directors on 22 March 2018.

### Basis of Preparation

The consolidated financial statements of TGS have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) in effect as of 31 December 2017 and consist of the consolidated statement of comprehensive income, the consolidated balance sheet, the consolidated cash flow statement, the consolidated statement of changes in equity and notes to the consolidated financial statements.

The consolidated financial statements have been prepared on a historical cost basis, except financial investments available for sale and financial investments through profit and loss that have been measured at fair value. The financial statements of the subsidiaries have been prepared for the same reporting year as the Parent Company, using consistent accounting policies.

### Principles of Consolidation

#### *Companies Consolidated*

The consolidated financial statements comprise the financial statements of the Parent Company and its subsidiaries as at 31 December 2017. Control is achieved when TGS is exposed, or has rights, to variable returns from its involvement with

the investee and has the ability to affect those returns through its power over the investee.

Specifically, TGS controls an investee if and only if TGS has:

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

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

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

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

#### *Presentation Currency*

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

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

are translated at exchange rates prevailing at the dates of the transactions. Exchange rate differences arising from the translation to presentation currency are recognized in OCI.

#### **Foreign Currency**

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

#### **Significant Accounting Judgments, Estimates and Assumptions**

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

#### **Impairment Evaluation of Multi-client Data Library**

TGS performed impairment reviews and determined the value in use of the multi-client library during 2017. The Company estimated value in use based on discounted estimated future sales forecasts. The underlying estimates that form the basis for the sales forecast depend on variables such as the number of oil and gas exploration and production (E&P) companies operating in the area that would be interested in the data, the overall E&P spending, expectations regarding hydrocarbons in the sector, whether licenses to perform exploration in the sectors exist or will be given in the future, expected farm-ins to licenses, relinquishments, etc. Changes in these estimates may potentially affect the estimated amount of future materially. The future sales forecasts are evaluated regularly and impairments are recognized in the period they occur.

A 10% reduction in the net present value of estimated future revenues for all multi-client projects as of 31 December 2017 would have resulted in further impairments of USD 0.3 million in 2017.

For details about the book value, amortization and impairment of the multi-client library, see Note 5.

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

#### **Impairment Evaluation of Goodwill**

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

For details about the goodwill and impairment, see Note 6.

#### **Deferred Tax Assets**

Uncertainties exist with respect to the interpretation of complex tax regulations, changes in tax laws, and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and expense already recorded.

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

For details about the deferred tax assets, see Note 24.

#### **Contingent Liabilities**

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

On 2 March 2017, Økokrim, the Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime, issued a corporate fine of NOK 85 million (approximately USD 11 million) against TGS based on alleged

violations of the Norwegian Tax Assessment Act arising from a transaction for the license of seismic data entered into in 2009 with Skeie Energy AS, later known as E&P Holding AS (Skeie). The Company rejected the fine, and a trial regarding the alleged violations commenced 22 January 2018. The trial is expected to conclude in April 2018, with a decision from the court later in 2018. If TGS is convicted, the fine will increase to NOK 90 million. TGS has also been notified by the Government of Norway that it will hold TGS responsible for repayment of the refunds received by Skeie, which, at the time of notification, amounted to approximately NOK 326 million with interest. Other civil claims have been asserted against TGS by various other parties in relation to the Skeie transaction, all of which are predicated on whether the parties making the claims are ultimately held responsible for unwarranted tax refunds and suffer damages that can be attributed to TGS.

Based upon the Company's assessment of the evidence in the case to date, the Company believes the claims by Økokrim lack merit and the trial will confirm that TGS acted diligently in connection with the transactions with Skeie and no wrongdoing by the Company occurred. The civil matters that have arisen in relation to the transactions that form the basis for the Økokrim charges, and the outcome of these matters, will depend in large part on the outcome of the Økokrim matter. Given the early stage of the trial process, it is impracticable to render an accurate assessment of the outcome. However, based upon the Company's rejection of the fine and its assessment of the case at this point, it does not consider it probable that an outflow of resources embodying economic benefits will be required in connection with the criminal or civil proceedings and, accordingly, no provisions have been made.

See Note 21 for a further description of the above criminal and civil matters.

#### ***Provision for Impairment Losses of Accounts Receivables and Other Financial Assets***

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

For details about the provision of impairment losses of accounts receivables, see Note 16.

#### ***Share-based Payments***

TGS measures the cost of stock options and other share-based payment plans granted to employees by reference to the fair value of the equity instruments at the date at which they are granted (equity-settled transactions) or at the end of each reporting period (cash-settled transactions). Estimating fair value requires an appropriate valuation model to value the share-based instruments. The values are dependent on the terms and conditions of the granted share-based

instruments. This also requires determining the appropriate assumptions in the valuation models including the expected life of the instruments, volatility and dividend yield.

For details about the share-based payments, see Note 8.

### **Summary of Significant Accounting Policies**

#### ***Revenue Recognition***

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

#### ***Work in Progress (WIP)***

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

#### ***Finished Data***

Revenue is recognized for sales of finished data at the time of the transaction; i.e. when the client has gained access to the data under a binding agreement. Sales of finished data are presented as late sales revenues.

#### ***Volume Sales Agreements***

In certain situations, TGS grants licenses to the customer for access to a specified number of blocks of multi-client library within an area. These licenses typically enable the customer to select and access the specific blocks over a period of time. Revenue recognition for volume sales agreements is based on a proportion of the total volume sales agreement revenue, measured as the customer gains access to the data.

#### ***Revenue Sharing Arrangements***

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

### *Proprietary Contracts*

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

### *Royalty Income*

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

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

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

### ***Multi-client Library***

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

### *Amortization of Seismic Data*

During the work in progress phase, amortization is based on total cost versus forecasted total revenues of the project. Amortization is recorded in line with how revenues are recognized for each project during this phase.

After a project is completed, a straight-line amortization is applied. The straight-line amortization is assigned over a remaining useful life, which for most marine projects is considered to be 4 years. For most onshore projects, the remaining useful life after completion of a project is considered to be 7 years.

### *Amortization Policy on Seismic Data Purchased from Third Parties*

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

### *Amortization Policy on Well Data Products*

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

### *Impairment Evaluation Multi-client Library*

When there are indicators that the net book value may not be recoverable, the library is tested for impairment either individually per project (seismic and interpretation reports) or at the cash generating unit level (well logs), as appropriate. Any impairment of the multi-client library is recognized immediately and presented as “Amortization and impairment of the multi-client library” in the statement of profit or loss.

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

For details about impairments of the multi-client library, see Note 5.

### ***Contingent rent agreements***

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

### ***Joint arrangements***

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

For certain multi-client library projects, TGS invests in the project with other parties and has cooperation agreements whereby revenues will be shared with other companies. These agreements are initiated and agreed as joint operations where both parties have rights to the assets and share in the liabilities. TGS recognizes its share of the investment in multi-client library, its share of revenues from the sale of the multi-client library, related amortization, and expenses. When TGS has a license to market and sell the seismic project, TGS enters into the license contracts with customers and invoices and collects payments from

the customer. The related account receivable is presented gross, while the portion due to the partner upon collection from the customer is presented as debt to partners. Similarly, when a partner holds the license and invoices and collects from the customer, TGS recognizes its share of related accounts receivables.

### ***Other Intangible Assets***

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

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

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

### ***Research and Development Costs***

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

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

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

### ***Business Combinations and Goodwill***

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

When TGS acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions at the acquisition date. This involves recognizing identifiable assets (including previously unrecognized intangible assets) and liabilities (including contingent liabilities but excluding future restructuring) of the purchased business at fair value. This includes the separation of embedded derivatives in host contracts by acquiree.

Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date. Subsequent changes to fair value of the contingent consideration, which is deemed to be an asset or liability, will be recognized in accordance with IAS 39 in the profit or loss. If the contingent consideration is classified as equity, it will not be remeasured. Subsequent settlement is accounted for within equity. In instances where the contingent consideration does not fall within the scope of IAS 39, it is measured in accordance with the appropriate IFRS.

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

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

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

values of the operation disposed of and the portion of the cash generating unit retained.

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

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

### ***Tangible Non-Current Assets***

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

### ***Impairment of Non-Financial Assets***

Disclosures relating to impairment of non-financial assets are also provided in the following notes:

- Significant Accounting Judgments, Estimates and Assumptions - Note 1
- Tangible Non-Current Assets - Note 4
- Impairment Testing of Goodwill - Note 6

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

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

the asset.

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

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

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

For further information about impairment testing of the multi-client library, see "Impairment Test Multi-Client Library" above and Note 5.

### ***Provisions and Contingencies***

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

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

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

For a description of contingent liabilities, see Note 21.

## **Income Taxes**

### **Current Income Tax**

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the countries where TGS operates and generates taxable income.

Current income tax relating to items recognized directly in equity is recognized in equity and not in the statement of profit or loss. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

### **Deferred Tax**

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

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

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

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

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

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

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

### **Share-based Payments**

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

The cost of equity-settled transactions (stock options, PSUs and the RSUs issued in 2015 to 2017) is measured by reference to the fair value at the date on which they are granted. The fair value is determined by an external value using an appropriate pricing model.

The cost of equity-settled transactions is recognized, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award (the vesting date). The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and TGS' best estimate of the number of equity instruments that will ultimately vest. The statement of profit or loss expense or credit for a period represents the movement in cumulative expense recognized at the beginning and end of that period. No expense is recognized for awards that do not ultimately vest. The dilutive effect of outstanding options is reflected as additional share dilution in the computation of diluted earnings per share (further details are given in Note 9).

In some tax jurisdictions, TGS receives a tax deduction in respect of remuneration in the form of stock options to employees. The tax deduction is not received until the stock options are exercised and is based on the intrinsic value of the award at the date of exercise. In accordance with IAS 12, the tax relief must be allocated between profit or loss and equity so that the amount of the tax deduction exceeding the cumulative cost of stock options expensed by the Company is recognized directly to equity.

The RSUs granted in 2014 were cash settled share-based payments. These RSUs vested and were paid out to the respective employees in 2017. The fair value of these RSUs were measured at the end of each reporting period and accrued over the period until the employees had earned an unconditional right to receive them. These fair values were expensed over the period until the vesting date with recognition of a corresponding liability. The ultimate cost of such a cash-settled transaction was the actual cash paid by TGS, which was the fair value at settlement date.

The fair values of the RSUs are recognized as personnel costs.

### ***Financial Investments and Other Financial Instruments***

TGS classifies financial investments in the following categories: financial assets at fair value through profit or loss, loans and receivables and available-for-sale financial assets. The classification depends on characteristics of the instruments and the purpose for which the investments were acquired. Management determines the classification at initial recognition. When financial assets or financial liabilities are recognized initially, they are measured at fair value plus, for all financial investments other than those at fair value through profit or loss, directly attributable transaction costs. The purchases and sales of financial assets or financial liabilities are recognized at the date of trade.

TGS does not have any hedge arrangements which qualify for hedge accounting.

#### ***Financial Assets at Fair Value Through Profit or Loss***

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value presented as finance costs (negative net changes in fair value) or finance income (positive net changes in fair value) in the statement of profit or loss.

#### ***Loans and Receivables***

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, loans and receivables are subsequently carried at amortized cost using the effective interest rate method (EIR), less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR.

The losses arising from impairment are recognized in the statement of profit or loss in finance costs for loans and in other operating expenses for receivables. This category generally applies to trade and other receivables. For more information on loans and receivables, refer to Note 14 and 16.

#### ***Available-for-Sale Financial Assets***

Available-for-sale financial assets are those non-derivative financial assets that are designated as available-for-sale or are not classified in any other category. After initial measurement, the available-for-sale financial assets held are measured at fair value with unrealized gains or losses being recognized as OCI in the available-for-sale reserve, until the investment is derecognized or considered impaired at which time the cumulative loss is recognized in the income statement in finance cost and removed from the available-for-sale reserve. The investment is determined to be impaired when a negative development is considered significant or prolonged.

The fair value of financial investments that are actively traded in organized financial markets is determined by reference to quoted market bid prices at the close of business on the balance sheet date. For investments where there is no active market, fair value is determined applying commonly used valuation techniques.

### ***Financial liabilities***

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs. The Group's financial liabilities include trade and other payables and loans and borrowings.

#### ***Loans and borrowings***

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortized cost using the effective interest rate (EIR) method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included as finance costs in the statement of profit or loss. This category generally applies to interest-bearing loans and borrowings.

#### ***Derecognition of Financial Assets and Liabilities***

A financial asset is derecognized when:

- The rights to receive cash flows from the asset have expired.
- TGS has transferred its rights to receive cash flows from the asset and either (a) has transferred substantially all the risks and rewards of the asset, or (b) has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

A financial liability is derecognized when the obligation under the liability is discharged, cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the income statement.

#### ***Impairment of Financial Assets***

TGS assesses, at each reporting date, whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective

evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset (an incurred "loss event") and that loss event has an impact on the estimated future cash flows of the financial asset or TGS of financial assets that can be reliably estimated. Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganization and when observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

### ***Pensions***

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

### ***Leases – TGS as lessee***

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

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

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

### ***Cash and Cash Equivalents***

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

### ***Accounts Receivable and Other Receivables***

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

### ***Treasury Shares***

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

recognized in the share premium reserve.

### ***Dividends***

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

### ***Cash Flow Statement***

The cash flow statement is compiled using the direct method.

### ***Changes in Accounting Policy and Disclosures***

TGS applied for the first time certain amendments to the standards, which are effective for annual periods beginning on or after 1 January 2017. The Group has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

The nature and the impact of each amendment is described below.

- **Amendments to IAS 7 Statement of Cash Flows: Disclosure Initiative:**

The amendments require entities to provide disclosure of changes in their liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes (such as foreign exchange gains or losses). The amendments did not have material impact on the Company's statement of cash flow.

- **Amendments to IAS 12 Income Taxes:**

Recognition of Deferred Tax Assets for Unrealized Losses The amendments clarify that an entity needs to consider whether tax law restricts the sources of taxable profits against which it may make deductions on the reversal of deductible temporary difference related to unrealized losses. Furthermore, the amendments provide guidance on how an entity should determine future taxable profits and explain the circumstances in which taxable profit may include the recovery of some assets for more than their carrying amount. The application has no effect on the Company's financial position and performance as the Company has no deductible temporary differences or assets that are in the scope of the amendments.

- **Annual Improvements Cycle - 2014-2016**

- **Amendments to IFRS 12 Disclosure of Interests in Other Entities: Clarification of the scope of disclosure requirements in IFRS 12**

The amendments clarify that the disclosure requirements in IFRS 12, other than those in paragraphs B10–B16, apply to an entity's interest in a subsidiary, a joint venture or an associate (or a portion of its interest in a joint venture or an associate) that is classified (or included in a disposal group that is classified) as held for sale. The amendments did not have any effect on the Company's financial position as of 31 December 2017.

### ***New Standards and Interpretations Issued, but not Yet Effective***

The standards and interpretations that are issued, but not yet effective, up to the date of the issuance of TGS' financial statements are disclosed below. TGS intends to adopt these standards, if applicable, when they become effective.

- **IFRS 9 Financial Instruments**

In July 2014 the IASB issued the final version of IFRS 9. IFRS 9 will replace IAS 39 Financial Instruments: Recognition and Measurement and previous versions of IFRS 9. The standard introduces new requirements for classification and measurement, impairment, and hedge accounting. IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with early application permitted. Retrospective application is required, but comparative information is not compulsory. The amendments are not expected to impact TGS' financial position or performance.

- **IFRS 15 Revenue from Contracts with Customers**

The IASB has issued a new revenue recognition standard, IFRS 15. The standard replaces existing IFRS revenue requirements. The core principle of IFRS 15 is that revenue is recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard applies to all revenue contracts and provides a model for the recognition and measurement of sales of some non-financial assets (e.g., disposals of property, plant and equipment). The Standard is effective for annual periods beginning on or after 1 January 2018.

The Company will implement IFRS 15 from 1 January 2018. For late sales committed after completion of the relevant projects and proprietary sales, there will be no material effects following the implementation of IFRS 15. Pre-funding revenues and late sales revenues from contracts committed prior to completion of multi-client projects are currently being recognized as the services are performed. Recognition of revenues of contracts committed prior to completion of multi-client projects have been subject to an in-depth analysis together with the other seismic companies. TGS is evaluating whether such contracts could be viewed as services contracts for which revenue should be recognized over time, i.e. continuing the current revenue recognition policy.

However, based on a current analysis of the contracts, there is a high risk that all multi-client pre-funding and late sale contracts committed prior to completion of projects are considered to be "right to use licenses", meaning that all revenues related to these contracts will be recognized at the point in time when the license is transferred to the customer, which would typically be upon completion of processing of the survey and granting of access to

the finished survey or delivery of the finished data, independent of services delivered to clients during the project phase.

If it is concluded that pre-funding revenues and late sales revenues from contracts committed prior to completion of a projects will be recognized when the "right of use" license is transferred to the client, the Company will apply the modified retrospective approach for the transition. Under this approach, the comparative periods will not be restated, and the cumulative effect of initially applying IFRS 15 will be recognized at the date of initial application, i.e. in the 2018 opening balance. As a consequence, multi-client pre-funding revenues and late sales revenues from contracts committed prior to completion of a project and amortization that are recognized in prior periods will also be recognized in the statement of profit for 2018 and future periods, without those prior periods being restated. In the financial statements for 2018 and subsequent periods, the effect of applying IFRS 15 in such period as compared to applying the current policy will be disclosed.

Under this approach, the consolidated shareholders' equity will be reduced by approximately USD 55 million as of 1 January 2018.

- **IFRS 16 Leases**

IFRS 16 Leases replaces existing IFRS leases requirements, IAS 17 Leases. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, i.e., the customer ('lessee') and the supplier ('lessor'). The new leases standard requires lessees to recognize assets and liabilities for most leases, which is a significant change from current requirements. For lessor, IFRS 16 substantially carries forward the accounting requirements in IAS 17. Accordingly, a lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently. TGS is currently assessing the impact of IFRS 16 which is effective from 1 January 2019 and is considering if current agreements are considered lease agreements and determining if any agreements are non-cancellable. Reference is also made to note 19 which describes the Company's operating leases during 2017.

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

## 2. Business Combinations

No significant business combinations, either individually or collectively, took place in 2017 or in 2016.

## 3. Segment Information

TGS' reporting structure, as reported to the executive management, is broken down into the geographic areas forming the operating segments, North and South America (NSA), Europe and Russia (EUR) and Africa, Middle-East and Asia/Pacific (AMEAP).

TGS' onshore seismic projects in North America are reported under the business segment NSA. This is due to the executive management structure and common economic characteristics like a similar core client base, common sales resources, and long-term rights to market and sell data in North America.

In addition to the operating segments, TGS has segments that do not individually meet the quantitative thresholds to produce reportable segments. The segments which are aggregated and form "Other segments/Corporate costs" include GPS Well Logs, GPS Interpretations, Global Services, Imaging, Data & Analytics, G&A and Corporate.

Management monitors the operating results of its business units separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on operating profit or loss and is measured consistently with operating profit or loss in the consolidated financial statements. However, group financing (including finance costs and finance income) and income taxes are managed on a group basis and are not allocated to the operating segments.

Transactions between operating segments are on an arm's-length basis in a manner similar to transactions with third parties. No inter-segment sales between the reportable segments have taken place during 2017 or 2016. Employee bonuses and cost related to share options are recognized within "Corporate costs".

2017	North & South America	Europe & Russia	Africa, Middle East & Asia/ Pacific	Other segments/Corporate costs	Consolidated
Net operating revenues	239,940	157,336	44,357	50,548	492,181
<b>Net external revenues</b>	<b>239,940</b>	<b>157,336</b>	<b>44,357</b>	<b>50,548</b>	<b>492,181</b>
Costs of goods sold-proprietary & other	71	445	30	19	565
Amortization and impairment of multi-client library	171,813	77,166	29,729	23,639	302,346
Operational costs	9,060	3,511	2,845	66,924	82,339
Depreciation, amortization and impairment	562	67	134	8,736	9,499
<b>Operating profit/(loss)</b>	<b>58,433</b>	<b>76,147</b>	<b>11,619</b>	<b>(48,770)</b>	<b>97,429</b>

Impairments of multi-client library totaled USD 7.5 million for 2017.

2016	North & South America	Europe & Russia	Africa, Middle East & Asia/ Pacific	Other segments/Corporate costs	Consolidated
Net operating revenues	267,007	109,168	25,939	53,878	455,991
<b>Net external revenues</b>	<b>267,007</b>	<b>109,168</b>	<b>25,939</b>	<b>53,878</b>	<b>455,991</b>
Costs of goods sold-proprietary & other	[10]	5,677	53	38	5,759
Amortization and impairment of multi-client library	171,754	60,658	39,844	25,438	297,693
Operational costs	12,531	3,506	6,020	65,402	87,458
Depreciation, amortization and impairment	643	158	154	11,091	12,046
<b>Operating profit/(loss)</b>	<b>82,090</b>	<b>39,170</b>	<b>(20,133)</b>	<b>(48,092)</b>	<b>53,035</b>

Impairments of multi-client library totaled USD 11.0 million for 2016.

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

	2017	2016
Operating profit for reportable segments	146,199	101,127
Operating profit for other segments/corporate costs	(48,770)	(48,092)
<b>Total segments</b>	<b>97,429</b>	<b>53,035</b>
Financial income	2,998	3,053
Financial expenses	(1,640)	(3,967)
Exchange gains/losses	848	553
<b>Profit/(loss) before taxes</b>	<b>99,636</b>	<b>52,675</b>

Total assets are not a part of the information regularly provided to executive management. TGS does not report a measure of liabilities for the reportable segments.

As the operating segments reported are broken down to geographic areas, there is no further breakdown of revenues to the customer's country of domicile.

Net revenues from one customer were above 10% of total revenues and amounted to USD 62.3 million in 2017, arising from sales in NSA and EUR. In 2016, net revenues from one customer exceeded 10% of total revenues and amounted to USD 52.9 million, arising from sales in all geographic areas (NSA, EUR and AMEAP).

Analysis of external revenues:

	2017	2016
2D seismic	85,028	182,260
3D seismic	363,469	230,662
Well logs and integrated products	43,685	43,070
<b>Total net revenues</b>	<b>492,181</b>	<b>455,991</b>
	2017	2016
Prefunding	115,809	105,198
Late sales	369,379	333,353
Proprietary	6,993	17,437
<b>Total net revenues</b>	<b>492,181</b>	<b>455,991</b>

## 4. Tangible Non-Current Assets

### 2017

Acquisition Cost and Depreciation:	Machinery and Equipment	Buildings <sup>2)</sup>	Total
Cost as of 1 January 2017	114,560	7,125	121,685
Additions	7,614	223	7,837
Disposals <sup>1)</sup>	(745)	(228)	(973)
Cost as of 31 December 2017	121,429	7,120	128,549
Accumulated depreciation as of 1 January 2017	98,297	366	98,663
Correction	(20)	46	26
Depreciation for the year	3,796	1,607	5,403
Accumulated amortization/depreciation on disposals	(422)	(112)	(534)
Capitalized to the multi-client library	5,326	-	5,326
Accumulated depreciation as of 31 December 2017	106,977	1,907	108,884
Net book value as of 31 December 2017	14,452	5,213	19,665
Useful life	2 to 7 years	3 to 12 years	

<sup>1)</sup> Losses on disposals during the year were recognized by USD 0.6 million <sup>2)</sup> Mainly leasehold improvements

### 2016

Acquisition Cost and Depreciation:	Machinery and Equipment	Buildings <sup>2)</sup>	Total
Cost as of 1 January 2016	140,653	12,947	153,600
Additions	7,723	11	7,734
Disposals <sup>1)</sup>	(33,816)	(5,833)	(39,649)
Cost as of 31 December 2016	114,560	7,125	121,685
Accumulated depreciation as of 1 January 2016	118,897	4,520	123,417
Depreciation for the year	7,371	1,617	8,988
Accumulated amortization/depreciation on disposals	(33,296)	(5,771)	(39,067)
Capitalized to the multi-client library	5,325	-	5,325
Accumulated depreciation as of 31 December 2016	98,297	366	98,663
Net book value as of 31 December 2016	16,263	6,759	23,022
Useful life	2 to 7 years	3 to 12 years	

<sup>1)</sup> No gains or losses were recognized during the year <sup>2)</sup> Mainly leasehold improvements

## 5. Intangible Assets

### 2017

Acquisition Cost and Depreciation:	Goodwill	Multi-client Library	Other Intangible Assets <sup>2)</sup>	Total
Cost as of 1 January 2017	118,538	4,152,060	88,264	4,358,862
Acquisition of assets from third-parties	-	9,522	-	9,522
Additions <sup>1)</sup>	-	279,440	4,164	283,604
Cost as of 31 December 2017	118,538	4,441,022	92,388	4,651,949
Accumulated depreciation and impairment as of 1 January 2017	50,615	3,339,661	79,255	3,469,531
Amortization for the year	-	294,819	-	294,819
Impairment for the year	-	7,527	-	7,527
Accumulated amortization on disposals <sup>1)</sup>	-	-	(8)	(8)
Capitalized to the multi-client library	-	-	-	-
Accumulated depreciation and impairment as of 31 December 2017	50,615	3,642,007	79,247	3,771,869
Net book value as of 31 December 2017	67,925	799,015	13,141	880,080
Useful life		4 to 7 years	3 to 7 years	

<sup>1)</sup> Internally developed additions to the multi-client library represents USD 33.7 million <sup>2)</sup> Other intangible assets are internally developed software

### 2016

Acquisition Cost and Depreciation:	Goodwill	Multi-client Library	Other Intangible Assets <sup>2)</sup>	Total
Cost as of 1 January 2016	118,252	3,880,884	84,986	4,084,122
Acquisition of assets from third-parties	286	166	-	452
Additions <sup>1)</sup>	-	271,010	3,278	274,288
Cost as of 31 December 2016	118,538	4,152,060	88,264	4,358,862
Accumulated depreciation and impairment as of 1 January 2016	50,606	3,041,968	75,726	3,168,300
Amortization for the year	-	286,692	3,058	289,750
Impairment for the year	9	11,001	-	11,010
Capitalized to the multi-client library	-	-	471	471
Accumulated depreciation and impairment as of 31 December 2016	50,615	3,339,661	79,255	3,469,531
Net book value as of 31 December 2016	67,925	812,399	9,009	889,331
Useful life		4 to 7 years	3 to 7 years	

<sup>1)</sup> Internally developed additions to the multi-client library represents USD 70.8 million <sup>2)</sup> Other intangible assets are internally developed software

## 6. Impairment Testing of Goodwill and Other Intangible Assets

The table below shows goodwill by cash generating unit.

Specification of goodwill:	Imaging	GPS Well Logs	GPS Interpretation	Arcis	Other	Total
NBV as of 1 January 2017	27,928	12,791	7,558	18,581	1,067	67,925
Additions	-	-	-	-	-	-
Impairment	-	-	-	-	-	-
NBV as of 31 December 2017	27,928	12,791	7,558	18,581	1,067	67,925

In accordance with IFRS, TGS tests goodwill annually for impairment, or more frequently if there are indications that goodwill might be impaired. The test is performed at year-end.

Goodwill acquired through business combinations has been allocated to individual cash generating units (CGU) as referred to in the table above. GPS Well Logs, GPS Interpretations and Imaging form operating segments which are included in "Other segments/Corporate costs", while Arcis is part of "North & South America" in Note 3.

Goodwill for all the CGUs has been tested for impairment. Based on the impairment testing performed, no impairments have been recognized during 2017 (2016: USD 0 million).

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

### GPS Well Logs

The Geological Products & Services (GPS) Well Logs CGU offers the industry's largest collection of digital well logs. The well data library includes US production data, directional surveys and a custom well file database. The CGU does also offer data integration services.

The value in use of GPS Well Logs has been determined based on revenue and cash flow projections from financial estimates prepared by management of the business unit. The approved budget has been used for 2018. The value in use

calculations has not assumed any growth in 2019. For the subsequent three years, an expected growth rate of 2% has been used, which is lower than the actual historical growth and reflects the uncertainty in today's market.

A terminal value in 2022 of the business unit was determined by discounting the projected cash flow in 2022 assuming a nominal growth of 2% limited to twenty years. The applied growth is lower than the historical growth and reflects the current market uncertainty. The terminal value and the cash flows in the five year projection period were discounted using a 11% (pre-tax) discount rate.

The impairment calculations are most sensitive to the changes in the forecasted growth rates, which are mainly influenced by future E&P spending and demand for TGS' products. In addition, the impairment calculations are sensitive to the discount rate.

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

### Imaging

The Imaging CGU processes both 2D and 3D seismic data, with relevant products and services. In addition, research and development professionals are continually developing new technology and workflows for seismic imaging, as well as enhancing existing ones.

The value in use of the division has been determined based on revenue and cash flow projections from financial estimates prepared by management of the business unit. The approved budget has been used for 2018. The value in use calculations have assumed 5% growth in 2019 and in 2020. For the subsequent two years, an expected growth rate of 2% has been used, which is lower than the historical growth and reflects the current market uncertainty.

A terminal value in 2022 of the business unit was determined by discounting the projected cash flow in 2022 assuming a nominal growth of 2%. The terminal value and the cash flows in the five years projection period were discounted using a 11% (pre-tax) discount rate.

The impairment calculations are sensitive to the changes in the forecasted growth rates, which are mainly influenced by future E&P spending and demand for TGS' products. In addition, the impairment calculations are sensitive to the discount rate.

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

### GPS Interpretation

The Geological Products & Services (GPS) Interpretations CGU offers interpretive studies and services to help energy companies find hydrocarbons.

The recoverable amount of GPS Interpretations has been determined based on additional sales of the multi-client library deriving from the interpretation work carried out by GPS Interpretations. The additional sales are estimated to be slightly higher than USD 2 million annually for the next five years.

A terminal value in 2022 of the business unit was determined by discounting the projected cash flow in 2022 assuming a nominal growth of 2%. The terminal value and the cash flows in the five years projection period were discounted using a 11% (pre-tax) discount rate.

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

### Arcis

The Arcis CGU comprises a land seismic business in Canada.

The value in use of Arcis has been determined based on revenue and cash flow projections from financial estimates prepared by management of the business unit. The approved budget has been used for 2018. The value in use calculations has assumed a growth rate of 2% for the subsequent four years, which is viewed as conservative based on current market expectations.

A terminal value in 2022 of the business unit was determined by discounting the projected cash flow in 2022 assuming a nominal growth of 2%. The terminal value and the cash flows in the five years projection period were discounted using a 12% (pre-tax) discount rate.

The impairment calculations are sensitive to the changes in the forecasted growth rates which are mainly influenced by future E&P spending and demand for TGS' products. In addition, the impairment calculations are sensitive to the discount rate.

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

## 7. Personnel costs / Number of Employees / Remuneration to Executive Management, Board of Directors and Auditors

	2017	2016
Payroll	73,000	67,133
Social security costs	5,552	5,286
Pension costs	3,281	3,184
Other employee related costs	5,948	6,452
Salaries capitalized to developed software	(1,384)	(1,366)
Salaries capitalized to multi-client library	(32,104)	(29,019)
Personnel costs	54,293	51,670
Cost of stock options (see Note 8)	243	751
Personnel costs and cost of stock options	54,536	52,421

The number of employees per 31 December 2017 was 597 versus 614 as of 31 December 2016. As of 31 December, USD 0.2 million in loans to employees were outstanding (31 December 2016: USD 0 million).

In 2017, TGS provided a Short-Term Incentive bonus plan that was funded by allocating 13.25% of operating profit among all full-time employees. A similar plan is in place for 2018, with an allocation of 12.75% of operating profit. Employees are eligible to participate in the bonus plan following a six months trial period. The bonus is payable quarterly and the amount paid is directly proportional to the actual operating profit of TGS. An individual employee's relative share of the bonus is based on level of responsibility, individual contribution, performance versus previous year goals and benchmark data. All bonuses earned in 2017 have been paid or accrued as of 31 December 2017. More information on the Short-Term Incentive is provided in the company's Declaration on Executive Remuneration.

The following table provides the stock, stock options, and warrants held by executive management:

Executive Management	No. of Shares Held 31/12/2017	No. of Options Held 31/12/2017	No. of Options Granted in 2017	No. of Options Exercised in 2017	PSUs awarded in 2017	Total balance of free-standing warrants related to PSUs/RSUs	WAEP <sup>1)</sup> (in NOK)
Kristian Johansen (CEO)	20,200	12,000	-	39,500	68,000	156,000	176.96
Sven B Larsen (CFO)	3,600	-	-	-	32,000	84,000	-
John Adamick (SVP Data & Analytics)	38,500	-	-	42,000	26,000	64,000	176.96
Knut Agersborg (VP Global Services)	4,700	-	-	42,000	23,000	58,000	176.96
Will Ashby (VP HR & Communication)	1,414	-	-	6,500	23,000	47,800	174.40
Katja Akentieva (SVP Onshore & GPS)	2,500	-	-	10,100	26,000	64,000	181.90
Zhiming Li (SVP Data Processing and Research & Development)	108,494	20,000	-	22,000	26,000	64,000	174.40
Tana Pool (VP General Counsel & Corporate Secretary)	1,575	-	-	-	23,000	58,000	-
Fredrik Amundsen (SVP Europe & Asia Pacific)	2,250	10,100	-	-	26,000	54,500	-
Tanya Herwanger (VP Africa & Middle East)	-	-	-	-	23,000	32,800	-

<sup>1)</sup> WAEP: Weighted average exercise prices on options exercised

The tables below show total expensed compensation to executive management:

### Executive Management 2017

Executive Management	Salary	Bonuses	Other Benefits	Payments from long-term incentive plans	Total Remunerations
Kristian Johansen	528	972	68	26	1,594
Sven B Larsen	366	272	18	-	656
John A. Adamick	242	257	25	70	594
Knut Agersborg	177	109	20	66	372
Katja Akantieva	298	203	22	14	537
Zhiming Li	342	288	22	41	693
Tana Pool	305	172	22	2	502
Will Ashby	243	100	16	60	419
Fredrik Amundsen	208	220	15	-	443
Tanya Herwanger (Executive from January 2017)	178	71	16	-	265

### Executive Management 2016

Executive Management	Salary	Bonuses	Other Benefits <sup>1)</sup>	Payments from long-term incentive plans	Total Remunerations
Kristian Johansen (CEO from 11 March 2016)	477	93	66	-	635
Sven B Larsen	328	25	18	-	372
John A. Adamick	247	25	6	30	310
Knut Agersborg	174	10	19	-	203
Katja Akentieva	288	20	18	-	326
Zhiming Li	336	28	24	30	418
Tana Pool	291	16	29	-	336
Will Ashby (Executive from April 2016)	218	20	14	-	252
Fredrik Amundsen (Executive from April 2016)	177	36	16	-	228
Stein Ove Isaksen (Executive until April 2016)	247	-	18	-	265
Robert Hobbs (CEO until 11 March 2016)	174	-	636	53	863
Genie Erneta (Resigned in June 2016)	134	-	192	15	341

<sup>1)</sup> Termination benefits are included in "Other Benefits" for Robert Hobbs and Genie Erneta

TGS awards its executives Long Term Incentives with performance metrics measured over a three year period. In 2017, a limited number of performance share units (PSUs) were issued to the executive management under the 2017 Long Term Incentive plan. The plan and status versus performance metrics is further described in the Declaration on Executive Remuneration. Each of the PSUs represent the right to receive the maximum of one share, and the 2017 plan is equity-settled. The 2017 plan also provides for the issuance of RSUs to non-executive key employees, as further described in the Declaration on Executive Remuneration.

The maximum amount payable to the CEO in case of termination of employment without cause or for good reason is one times the amount of his highest annual base salary in effect during the three years that immediately precede the date of termination spread over an ensuing one year period and conditional upon his continued compliance with restrictive covenants.

The maximum amount payable to the CFO in case of termination for any reason other than redundancy, gross misconduct or statutory retirement is one times the amount of his highest annual base salary in effect during the three years that immediately precede the date of termination spread over an ensuing one year period and conditional upon his continued compliance with restrictive covenants.

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

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

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

### Board of Directors 2017

	Director's Fee <sup>1)</sup>	Value of Shares Received <sup>2)</sup>	Total Remunerations
Hank Hamilton (Chairman of the Board)	200	-	200
Mark Leonard	36	29	64
Vicki Messer	36	29	64
Tor Magne Lønnum	36	29	64
Wenche Agerup	36	29	64
Elisabeth Grieg	36	29	64
Torstein Sanness	36	29	64
Nils Petter Dyvik (Director from May 2017)	18	29	47
Elisabeth Harstad (Director until May 2017)	73	-	73

### Board of Directors 2016

	Director's Fee <sup>1)</sup>	Value of Shares Received <sup>2)</sup>	Total Remunerations
Hank Hamilton (Chairman of the Board)	210	-	210
Elisabeth Harstad	62	-	62
Mark Leonard	35	21	56
Vicki Messer	35	21	56
Tor Magne Lønnum	35	21	56
Wenche Agerup	35	21	56
Elisabeth Grieg	35	21	56
Torstein Sanness (Director from May 2016)	18	21	38

<sup>1)</sup> The tables include Director's fees paid during the year. Directors receive fees on a bi-annual basis as decided by the AGM. Deviations in individual fees are related to the timing of the bi-annual payments.

<sup>2)</sup> In May 2017, each of the Directors, other than the Chairman received 1,650 restricted shares in TGS. One of the Directors was not permitted by her employer to own shares in other companies and received cash in lieu of restricted shares in an amount equal to the amount for which the other Directors would be able to sell their restricted shares for at the closing share price on the first day that a sale was permitted.

	No. of Restricted Shares Received during 2017	No. of Shares Held 31/12/2017
Hank Hamilton (Chairman of the Board )	-	1,352,400
Mark Leonard (Director)	1,650	20,500
Vicki Messer (Director)	1,650	11,400
Tor Magne Lønnum (Director)	1,650	8,200
Wenche Agerup (Director)	1,650	4,950
Elisabeth Grieg (Director)	1,650	4,295
Torstein Sanness (Director)	1,650	3,300
Nils Petter Dyvik (Director)	1,650	1,650

Compensation to the members of the Nomination Committee <sup>11</sup>	2017	2016
Tor Himberg-Larsen (Chairman)	23	25
Christina Stray	13	14
Herman Kleeven	14	11

<sup>11</sup> The table shows compensation paid during the year.

Auditor's fee	2017	2016
Statutory audit	419	444
Other attestation services	0	0
Tax advisory services	41	20
Other services outside the audit scope	0	0
<b>Total fees</b>	<b>460</b>	<b>464</b>

All amounts are exclusive of VAT.

## 8. Long Term Incentive Plans

From 2014 to 2017, TGS issued performance-based incentive awards, using metrics as described below and in the Declaration on Executive Remuneration. The incentive awards issued in 2014 were settled in cash, and the awards issued in 2015 to 2017 are settled in equity. Prior to 2014 TGS generally issued stock options as long-term incentives or, on occasion, stock appreciation rights. All stock options under the 2012 stock option plan expired in 2017, and only the 2013 stock option plan remains in effect at 31 December 2017.

When stock options are exercised, TGS issues new shares or transfers treasury shares. Options granted under the 2012 plan were secured by treasury shares. Options granted under the 2013 plan are secured by free-standing warrants.

In 2014 a limited amount of restricted share units (RSUs) were issued to key employees other than the executive management. The 2014 RSU plan was a cash-settled plan measured at the end of each reporting period and was paid out in 2017 when vested three years after grant.

From 2015 to 2017, a limited number of performance share units (PSUs) have been issued to executives, while a limited amount of restricted share units (RSUs) have been issued to key employees other than the executive management. Each of the PSUs and RSUs represent the right to receive the maximum of one share, and the awards are equity settled. The PSUs and the RSUs will vest three years after grant.

At any time prior to date where the actual shares are delivered to the holder, the Board of Directors may determine that the 2015 RSU and PSU holders are eligible for an additional discretionary cash bonus. In the 2016 and 2017 plans, a cash bonus equivalent to dividends paid on TGS' common shares is accrued and paid at settlement.

The actual number of shares to be received by holders of the 2017 PSUs are dependent on three performance metrics which are measured for the period 1 January 2017 through 31 December 2019 (2015 plan: 1 January 2016 through 31 December 2018);

- Relative return on average capital employed
- Absolute return on average capital employed
- Health, social and environmental metric

The performance metrics are described in more detail in TGS' Declaration on Executive Remuneration. If all the performance metrics are fully earned, the payout percentage will be at 100% which is equal to a total of 296,000 PSUs (2016 plan: 273,000 PSUs remain outstanding at 31 December 2017). The fair value of the PSUs granted in 2017 is measured based on the market value of the shares at the end of each reporting period including the net present value of expected dividends during the vesting period. The fair value reflects the expected result of the performance metrics.

The holders of the RSUs are eligible to receive one share per RSU on the vesting date, and the fair value of the RSUs granted in 2017 is measured based on the market value of the shares at the end of each reporting period, including the net present value of expected dividends during the vesting period. A total of 141,000 RSUs remain outstanding under the 2017 plan. (2016 plan: 143,000 RSUs)

The expense recognized for employee services during the year is shown in the following table:

	2017	2016
Expense arising from equity-settled share-based payment plans	2,988	1,975
Expense arising from cash-settled share-based payment plans	254	902

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

The strike price of the outstanding stock options is equal to the market price of a share of common stock at market close the day prior to grant. The contractual life of an option is five years and there are no cash settlement alternatives.

The fair value of stock options granted is estimated at the date of the grant using the Black & Scholes model, taking into account the vesting pattern of each option. Fair values of the stock options have been determined by a level 3-technique from the fair value hierarchy, see also note 13.

The following table illustrates the number (No.) and weighted average prices (WAEP) of, and movements in, stock options, RSUs and PSUs during the year:

	2017		2016	
	No.	WAEP (NOK)	No.	WAEP (NOK)
Outstanding at 1 January	1,352,801	114.71	1,455,024	132.08
Granted during the year	437,000	0.25	416,000	0.25
Adjusted quantity due to performance criteria	(157,925)		(182,550)	
Forfeited during the year	(23,230)	170.49	(205,473)	108.30
Exercised during the year	(703,841)	154.79	(130,200)	113.80
Expired during the year	-		-	
Outstanding at 31 December	904,805	46.80	1,352,801	114.71
Exercisable at 31 December	232,300		644,250	

The weighted average remaining contractual life for the long-term incentive plans outstanding on 31 December 2017 is 1.59 years (2016: 1.32 years).

The weighted average fair value at 31 December 2017 of the PSUs and RSUs granted during 2017 was NOK 168.36. The weighted average fair value of the PSUs and RSUs granted during 2016 was NOK 139.25.

The strike price for outstanding options at the end of the year was NOK 181.90 (2016: NOK 174.40 - NOK 181.90):

The following table lists the input to the Black & Scholes model used for calculation of the share options granted in 2013:

	2013
<i>Expected volatility</i>	
For options vested after 3 year	0.41
For options vested after 4 year	0.48
<i>Expected risk-free interest rate</i>	
For options vested after 3 year	1.75%
For options vested after 4 year	1.90%
Expected life of options beyond vesting period (years)	1.00
Expected annual turnover of employees	1.00%
Dividend yield	0.00%
Model used	Black & Scholes

The expected life of the options is based on historical data and management's assessment. This is not necessarily indicative of exercise patterns that may occur. The expected volatility reflects the assumptions that the historical volatility is indicative of future trends, which may also deviate from the actual outcome

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

The fair values of the PSUs and the RSUs are measured at every reporting date, and per 31 December 2017, the liabilities arising from the plans amounted to USD 0.4 million (2016: USD 1.8 million).

### Outstanding Stock Options as of 31 December 2017:

No. of Options	Exercise dates	Holders	Price/ conditions	Granted
232,300	See below <sup>1)</sup>	Key employees	NOK 181.90 Warrants expiring on 4 June 2018	8 August 2013
<b>232,300</b>				

### Outstanding PSUs and RSUs as of 31 December 2017:

No. of PSUs/RSUs	Exercise dates	Holders	Price/ conditions	Granted
105,080	See below <sup>2)</sup>	Key employees	Fair market value (FMV) of a share reduced for expected dividends	5 August 2015
100,000	See below <sup>3)</sup>	Executive management	Fair market value (FMV) of a share reduced for expected dividends, adjusted for performance criteria	5 August 2015
143,000	See below <sup>4)</sup>	Key employees	Fair market value (FMV) of a share including expected dividends	5 August 2016
273,000	See below <sup>5)</sup>	Executive management	Fair market value (FMV) of a share including expected dividends, adjusted for performance criteria	5 August 2016
141,000	See below <sup>6)</sup>	Key employees	Fair market value (FMV) of a share including expected dividends	4 August 2017
296,000	See below <sup>7)</sup>	Executive management	Fair market value (FMV) of a share including expected dividends, adjusted for performance criteria	4 August 2017
<b>1,058,080</b>				

<sup>1)</sup>The holders may request shares in exchange for the stock options as follows: Up to 50% beginning 8 August 2016 and 100% beginning 8 August 2017 less previously exercised.

<sup>2)</sup>The holders will receive one share per unit on 5 August 2018.

<sup>3)</sup>The holders will receive maximum one share per unit on 5 August 2018.

<sup>4)</sup>The holders will receive one share per unit on 5 August 2019.

<sup>5)</sup>The holders will receive maximum one share per unit on 5 August 2019.

<sup>6)</sup>The holders will receive one share per unit on 4 August 2020.

<sup>7)</sup>The holders will receive maximum one share per unit on 4 August 2020.

All stock options, PSUs and RSUs become immediately exercisable should a change of control occur as defined in the plan documents. The Company, at its sole discretion, may permit terminated employees to exercise vested options and/or exchange warrants if an active exercise period is in progress at the time employment is terminated or, provided the employment was not terminated for cause, during the first exercise period that begins after the termination date. The Board has allowed for extended periods for exercise in special circumstances.

## 9. Earnings per Share

Basic earnings per share amounts are calculated by dividing net profit for the year attributable to ordinary equity holders of TGS by the weighted average number of ordinary shares outstanding (net of treasury shares) during the year.

Diluted earnings per share amounts are calculated by dividing the net profit attributable to ordinary equity holders of TGS by the weighted average number of ordinary shares outstanding during the year plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares (stock options, RSUs and PSUs) into ordinary shares.

The following reflects the income and share data used in the basic and diluted earnings per share computations:

	2017	2016
Net profit attributable to ordinary equity holders of the Parent	75,594	28,220
Weighted average number of ordinary shares (excluding treasury shares) for basic earnings per share	101,979	101,556
Effect of dilution: Share options, RSUs and PSUs	1,026	398
Weighted average number of ordinary shares (excluding treasury shares) adjusted for effect of dilution	103,005	101,954
Basic earnings per share	0.74	0.28
Diluted earnings per share	0.73	0.28

On 22 February 2018, a total of 73,600 stock options were exercised. There have been no other transactions involving ordinary shares or potential ordinary shares between the reporting date and the date of authorization of these financial statements.

## 10. Equity and Shareholders Authorizations

### Ordinary Shares Issued and Fully Paid

	Number of shares	USD
1 January 2016	102,135,990	3,657
31 December 2016	102,135,990	3,657
Issued 20 February 2017 for cash on exercise of stock options	33,050	1
Issued 20 November 2017 for cash on exercise of stock options	176,850	5
31 December 2017	102,345,890	3,663

## Treasury Shares

TGS, from time to time, buys back shares under authorizations given by the shareholders. The shares may be held in treasury, used as payment in M&A transactions, used in relation to exercise of employees' stock options, or eventually cancelled. As of 31 December 2017, TGS held 116,180 treasury shares, 0.1% of the total shares issued (2016: 533,500 shares, 0.5%).

The following table shows the movement of treasury shareholdings:

	Number of shares	USD
1 January 2016	673,600	26
Treasury shares used to cover option exercises and distributed to Board members (Note 7 and 8)	(140,100)	(5)
31 December 2016	533,500	21
16 February 2017, treasury shares transferred to cover exercise of stock options	(285,875)	(11)
10 May 2017, treasury shares distributed to Board members	(11,550)	(0.4)
24 May 2017, treasury shares transferred to cover exercise of stock options	(14,520)	(0.5)
31 May 2017, treasury shares transferred to cover exercise of stock options	(105,375)	(3)
31 December 2017	116,180	4

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

By resolution of the Annual General Meeting held 9 May 2017, the Board is authorized to, on behalf of the Company, increase share capital of the Company by up to NOK 2,554,226 through one or more issuances of new shares or bonus issues. The subscription price and other subscription terms will be determined by the Board. The capital increase may be paid in cash, by set-off or by other contributions in kind. The authorization includes the right to incur special obligations on behalf of the Company, cf. Section 10-2 of the Norwegian Public Limited Liability Companies Act. The shareholders' pre-emptive rights pursuant to Sections 10-4, cf. Section 10-5 of the Norwegian Public Limited Liability Companies Act, to subscribe for any new shares may be deviated from by the Board. The authorization shall encompass share capital increases in connection with mergers, cf. section 13-5 of the Norwegian Public Limited Liability Companies Act. The authorization is valid until the Annual General Meeting in 2018, but no later than until 30 June 2018.

By resolution of the Annual General Meeting held 9 May 2017, the Board is also granted the authorization to issue loans for a total amount of up to NOK 2,250,000,000 with the right to require shares to be issued (convertible loans). The share capital may be increased by up to NOK 2,554,226, provided that the combined number of shares that are issued pursuant to this authorization

and the authorization to increase the share capital shall not exceed 10% of the Company's current share capital. The subscription price and other subscription terms will be determined by the Board. The shareholders' pre-emptive rights pursuant to section 11-4 of the Norwegian Public Limited Companies Act cf. sections 10-4 and 10-5, may be deviated from by the Board. The authorization is valid until the annual general meeting in 2018, but no later than 30 June 2018.

During 2017, the Company increased the share capital by NOK 52,475 of which NOK 44,212.50 came from share capital increases between 9 May 2017 and 31 December 2017. The Company did not issue any convertible loans between 9 May 2017 and 31 December 2017.

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

By resolution of the Annual General Meeting held 9 May 2017, the Board is authorized to acquire, on behalf of the Company, the Company's own shares up to 10% of the nominal value of Company's share capital, which pursuant to the current nominal value is up to NOK 2,554,226. The limitations shall be adjusted in the event of share consolidation, share splits, and similar transactions. The lowest price to be paid per share shall be NOK 0.25 and the highest price to be paid per share shall be the price as quoted on the stock exchange at the time of acquisition plus 5%. The lowest price is equal to the current nominal value and shall be adjusted in the event of share consolidation, share splits, and similar transactions. Acquisition and sale of the Company's own shares can take place in the manner which the Board of

Directors considers to be in the Company's best interest. The authorization can be used one or several times. This authorization shall be valid until the Annual General Meeting in 2018, however no longer than until 30 June 2018.

The Company did not acquire any shares for treasury between 9 May 2017 and 31 December 2017.

### Shareholders' Authorization to the Board to Distribute Dividends

The Annual General Meeting held 9 May 2017 authorized the Board of Directors to distribute quarterly dividends on the basis of the 2016 financial statements. The Board shall, when using the authorization, pass its decision in accordance with the Company's approved dividend policy. The authorization shall be valid until the Company's annual general meeting in 2018, but no later than 30 June 2018.

The authorization has been used for the following quarterly dividends:

- On 9 May 2017, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.15 per share (NOK 1.30) to the shareholders.
- On 2 August 2017, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.15 per share (NOK 1.19) to the shareholders
- On 25 October 2017, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.15 per share (NOK 1.20) to the shareholders
- On 7 February 2018, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.20 per share (NOK 1.57) to the shareholders

### The 20 Largest Shareholders as of 31 December 2017 as Registered with VPS:

	Name	Country		Shares	%
1	FOLKETRYGDFONDET	NORWAY		10,703,770	10.5%
2	THE BANK OF NEW YORK MELLON SA/NV	BELGIUM	NOM	8,992,358	8.8%
3	RBC INVESTOR SERVICES TRUST	GREAT BRITAIN	NOM	4,222,992	4.1%
4	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	3,864,493	3.8%
5	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	3,001,276	2.9%
6	SANTANDER SECURITIES SERVICES, S.A	SPAIN	NOM	2,890,593	2.8%
7	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	2,268,028	2.2%
8	CLEARSTREAM BANKING S.A.	LUXEMBOURG	NOM	1,853,040	1.8%
9	PARETO AKSJE NORGE	NORWAY		1,784,486	1.7%
10	INVESCO FUNDS	BELGIUM		1,642,506	1.6%
11	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	1,630,515	1.6%
12	RBC INVESTOR SERVICES BANK S.A.	LUXEMBOURG	NOM	1,462,189	1.4%
13	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	1,448,955	1.4%
14	SWEDBANK ROBUR SMABOLAGSFOND	GREAT BRITAIN		1,418,871	1.4%
15	THE NORTHERN TRUST COMP, LONDON BR	GREAT BRITAIN	NOM	1,413,117	1.4%
16	HSBC TRINKAUS & BURKHARDT AG	GERMANY	NOM	1,376,215	1.3%
17	JPMORGAN CHASE BANK, N.A., LONDON	GREAT BRITAIN	NOM	1,352,898	1.3%
18	HAMILTON, HENRY HAYWOOD	U.S.A.		1,352,400	1.3%
19	VERDIPAPIRFONDET DNB NORGE (IV)	NORWAY		1,264,291	1.2%
20	THE NORTHERN TRUST COMP, LONDON BR	GREAT BRITAIN	NOM	1,092,447	1.1%
<b>20 largest shareholders</b>				<b>55,035,440</b>	<b>53.8%</b>
<b>Total number of shares, par value of NOK 0.25</b>				<b>102,229,710</b>	<b>100.0%</b>

Norwegian shareholders held 27,140,207 [26.6%] of TGS' outstanding shares (excluding treasury shares) as of 31 December 2017. Shares held in treasury as of 31 December 2017 were 116,180.

## 11. Cash and Cash Equivalents

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

Cash and cash equivalent	2017	2016
Bank deposits	249,487	190,416
Restricted cash deposits	430	323
Total cash bank deposits	249,917	190,739

The bank deposits are mainly denominated in USD and NOK. Restricted cash deposits are for employee tax withholdings.

## 12. Related Parties

### Terms and Conditions of Transactions with Related Parties

No material transactions took place during 2017 or 2016 with related parties. See Note 7 for further information of the remuneration to the Board of Directors and to the executive management.

See Note 20 for further information about the subsidiaries. Internal transactions are eliminated in the consolidated financial statements and do not represent transactions with related parties.

## 13. Financial Risk Management Objectives and Policies

TGS has various financial assets such as accounts receivables, cash and financial investments available for sale, which arise directly from its operations. These are mainly held in USD, which is the functional currency to most of TGS' entities. TGS' principal financial liabilities comprise of trade payables and other current liabilities. TGS does not hold any currency or interest rate swaps.

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

The Board of Directors reviews and agrees policies for managing each of these risks which are summarized below.

### Currency Risk

Major portions of TGS' revenues and costs are in US dollars. Due to this, TGS' operational exposure to exchange rate fluctuation is low. However, as the Parent Company pays taxes in Norwegian kroner to Norwegian Tax Authorities and dividends to shareholders in Norwegian kroner, fluctuations between the NOK and the USD impact currency exchange gains or losses on the tax expense and financial items of the consolidated accounts. For deferred tax liabilities calculated in NOK, a change of 10% on the NOK/USD currency exchange rate could have an impact on net income of approximately USD 1.7 million (2016: USD 0.4 million) with a corresponding effect to profit or loss.

### Liquidity Risk

Liquidity risk arises from a lack of correlation between cash flow from operations and financial commitments. Per the balance sheet date, TGS held current assets of USD 523.6 million, of which cash and cash equivalents represent USD 249.9 million and other current assets represent USD 273.7 million. In comparison current liabilities amounted to USD 194.9 million. TGS had USD 75.0 million in undrawn credit facilities. As of 31 December 2017, TGS considers the liquidity risk to be low.

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

2017	0-6 months	6-12 months	> 1 year	Total
Accounts payable and debt to partners	101,385	-	-	101,385
Other non-current liabilities	-	-	2,850	2,850
Long-term debt	-	-	2,500	2,500
<b>Total</b>	<b>101,385</b>	<b>-</b>	<b>5,350</b>	<b>106,735</b>
2016	0-6 months	6-12 months	> 1 year	Total
Accounts payable and debt to partners	116,118	416	-	116,534
Other non-current liabilities	-	-	6,057	6,057
Long-term debt	-	-	-	-
<b>Total</b>	<b>116,118</b>	<b>416</b>	<b>6,057</b>	<b>122,591</b>

### Credit Risk

All placements of excess cash are either bank deposits or in financial instruments that at minimum carry an "investment grade" rating. TGS' clients are oil and gas companies. TGS is exposed to credit risk through sales and uses best efforts to manage this risk. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in the table below and the carrying value of the accounts receivables and other short-term receivables

disclosed in note 16. TGS evaluates the concentration of risk with respect to trade receivables as low due to the company's credit rating policies and as the clients are mainly large oil and gas companies considered to be financially sound.

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

As of 31 December 2017, none of the outstanding accounts receivables were secured by ORRIs (2016: USD 0 million).

For details of the accounts receivables including aging, please see note 16.

For details on other financial assets, please see note 14 .

### Capital Management

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

1. Protect and preserve investment principal
2. Provide liquidity
3. Return a market rate of return or better

As of 31 December 2017, total equity represented 84% of total assets (2016: 79%).

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

Since 2016, TGS has paid quarterly dividends. The Annual General Meeting held 9 May 2017 renewed the Board of Directors' authorization to distribute quarterly dividends.

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

On 7 February 2018, the Board of Directors resolved to pay a quarterly dividend of USD 0.20 (NOK 1.57) per share. The dividend was paid to the shareholders on 1 March 2018.

### Fair Value of Financial Instruments

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

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

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

### Fair Value Hierarchy

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

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

Other non-current assets comprise account receivables with extended payment terms and loans. Any revenue share associated with these receivables is presented as "Other non-current liabilities". Fair values of the two loans to E&P Holding AS and Skeie Energy AS (see note 14) and the receivables with extended payment terms have been determined by using a level 3-technique. The fair values are considered to be equal to net book values as the discount rate applied is consistent with the current interest rate. The fair value of the long-term debt has been determined by using a level 2-technique.

Financial Instruments by Category

2017	Note	Carrying Amount	Fair Value	Cash and Cash Equivalents	Loans and Receivables	Assets/Liabilities at Fair Value Through the Profit and Loss	Interest Bearing Loans	Other Financial Liabilities
<b>Financial Assets</b>								
Other non-current assets	14	496	496	-	496	-	-	-
<b>Total</b>		<b>496</b>	<b>496</b>	<b>-</b>	<b>496</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Financial Liabilities</b>								
Other non-current liabilities	14	2,850	2,850	-	-	-	-	2,850
Long-term debt	14	2,500	2,500	-	-	-	2,500	-
<b>Total</b>		<b>5,350</b>	<b>5,350</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,500</b>	<b>2,850</b>

Financial Instruments by Category

2016	Note	Carrying Amount	Fair Value	Cash and Cash Equivalents	Loans and Receivables	Assets/Liabilities at Fair Value Through the Profit and Loss	Interest Bearing Loans	Other Financial Liabilities
<b>Financial Assets</b>								
Other non-current assets	14	10,500	10,500	-	10,500	-	-	-
<b>Total</b>		<b>10,500</b>	<b>10,500</b>	<b>-</b>	<b>10,500</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Financial Liabilities</b>								
Other non-current liabilities	14	6,057	6,057	-	-	-	-	6,057
Long-term debt	14	-	-	-	-	-	-	-
<b>Total</b>		<b>6,057</b>	<b>6,057</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,057</b>

## 14. Other Non-current Assets and Liabilities

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

None of the non-current receivables are due as of 31 December 2017.

Other non-current liabilities of USD 0.8 million are due in 2019 and USD 0.6 million are due in 2020. USD 1.5 million are due during the years 2021-2025.

TGS has interest bearing loans to E&P Holding AS and Skeie Energy AS. The two loans with a total value of gross USD 42.1 million (net to TGS of USD 29.4 million) are recognized at USD 0 million as of 31 December 2017 (2016: USD 0 million), net of provision for impairment. One of the loans was written off as uncollectible during 2016, see table below.

### Other Non-current Assets

	2017	2016
Other non-current receivables	496	10,500
Interest bearing loans	21,100	42,128
- Provision for impairment of interest bearing loans	(21,100)	(21,100)
Interest bearing loans written off during the year as uncollectible	-	(21,028)
<b>Total other non-current assets</b>	<b>496</b>	<b>10,500</b>

### Non-current Liabilities

As of 31 December 2017, TGS has recognized other non-current liabilities of USD 2.9 million which primarily represent non-current restructuring liabilities.

### Long-term Debt

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

## 15. Joint Operations

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

TGS has not established any material legal entities together with other companies with the purpose of acquiring a seismic project.

The table below provides TGS' share of revenues, amortization, impairment and net book value of the multi-client library at year-end for projects considered as joint operations:

	2017	2016
Gross revenues (projects invoiced by TGS)	275,817	222,177
Revenue share (projects invoiced by TGS)	(112,727)	(99,628)
Net revenues (projects invoiced by TGS)	163,090	122,549
Net revenues (projects invoiced by partner)	40,177	15,886
Net revenues joint operations	203,267	138,435
Amortization	117,593	68,053
Impairment	4,829	529
Net book value of multi-client library (joint operations) as of 31 December (recognized by TGS)	261,077	215,899

## 16. Accounts Receivables and Other Current Receivables

Accounts receivables are stated in the balance sheet at net realizable value.

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

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

For certain multi-client library projects, TGS has cooperation agreements whereby revenues are shared with other companies and/or governments. In such situations accounts receivables are presented gross for projects where TGS issues the licence agreement and is responsible for invoicing, while the related partner share is presented within "Accounts payable and debt to partners". See note 22 for a breakdown of gross revenues and revenue share and note 15 for gross revenues and revenue share from projects considered as joint operations.

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

	2017	2016
Accounts receivables	158,844	204,912
- Provision for impairment of accounts receivables	(1,421)	(3,681)
Accounts receivables - net	157,423	201,231
Accrued revenues	97,285	119,112
Other current receivables	18,939	33,073
<b>Total</b>	<b>273,647</b>	<b>353,416</b>

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

	Total	Not due	< 30 days	30 - 60 days	60 - 90 days	Over 90 days
2017	256,129	227,705	15,226	6,483	2,379	4,336
	Total	Not due	< 30 days	30 - 60 days	60 - 90 days	Over 90 days
2016	324,024	259,200	31,438	12,634	6,113	14,639

Provisions for accounts receivables are based on an individual assessment. Receivables with impairment provisions are all within the aging group "Over 90 days".

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

	2017	2016
As of 1 January	3,681	7,649
Provision for receivables impairment	94	2,546
Receivables written off during the year as uncollectible	(374)	(6,514)
Amount collected	(1,980)	-
<b>As of 31 December</b>	<b>1,421</b>	<b>3,681</b>

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

For a description of credit risk, see Note 13.

## 17. Accounts Payables and Other Current Liabilities

	2017	2016
Accounts payable and debt to partners	101,385	116,534
Other current liabilities	68,345	127,510
<b>Total accounts payable and other payables</b>	<b>169,730</b>	<b>244,044</b>

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

Other current liabilities consist of accrued expenses and deferred revenues.

## 18. Bank Overdraft Facility and Guarantees

### 3 Year Term Secured Revolving Credit Facility:

In January 2016, TGS entered into an amended and restated revolving credit facility of USD 75.0 million. The terms for Eurodollar borrowings range from Libor +1.75% to Libor +2.25%, depending on TGS' Leverage Ratio, multiplied by the Statutory Reserve Rate, as such terms are defined in the revolving credit facility. For unused commitments, TGS will pay a facility fee between 0.20% and 0.30% per annum, depending on the company's Leverage Ratio. TGS has the right to prepay Eurodollars borrowings with a 3 day notice. With respect to USD 10 million of the USD 75 million commitment, TGS must maintain a cash deposit of USD 10 million to access this portion of the commitment. As of 31 December 2017 TGS had not drawn on the facility.

The facility is secured by a lien on the assets of the material wholly owned subsidiaries of the Parent Company (TGS-NOPEC Geophysical Company, A2D Technologies Inc. and Volant Solutions Inc.) and is guaranteed by the Parent Company and certain other wholly owned subsidiaries.

### Guarantees

As of 31 December 2017, one bank guarantee have been issued on behalf of TGS of a total of USD 0.2 million related to a seismic program (2016: USD 0.9 million).

Under section 479A of the UK Companies Act 2006; five of TGS' subsidiaries, TGS Geophysical Company (UK) Limited (Registration number: 05731700), TGS Geophysical Investments Limited (Registration number: 09281097), Aceca Limited (Registration number: 03672833), TGS-NOPEC Geophysical Company Limited (Registration number: 02896729) and Magsurvey Limited (Registration number: 04568744) have availed exemption for audit of their statutory financial statements pursuant to guarantees issued by TGS to indemnify the subsidiaries of any losses towards third parties that may arise in the financial year ended 31 December 2017 in these subsidiaries. TGS can make an annual election to support such guarantees for each financial year.

## 19. Commitments and Contingencies

### Operating Leases

As of the end of 2017, TGS had entered into commitments for two 3D vessels, one 2D vessel and two land crews. All of these commitments will expire in 2018, and the amount committed, included contractual lease agreements, totaled USD 37 million (2016: USD 25 million).

In addition, TGS has entered into commercial leases on certain office premises and for office equipment and hardware. The leases for premises expire between 1-10 years and have renewal options. There are no restrictions placed upon TGS by entering these leases.

Operating leases of USD 7.1 million were recognized as expenses in 2017 (2016: USD 10.0 million).

Future minimum payments for operating leases (excluding vessels) as of 31 December are as follows:

	2017	2016
Within one year	16,972	16,491
After one year but not more than five years	42,292	47,133
More than five years	6,757	18,637
	<b>66,021</b>	<b>82,261</b>

### Contingent rent agreements

As of 31 December 2017, the deferred part of contingent rent agreements which is contingent on future sales, totaled USD 12.6 million (2016: USD 25.4 million).

## 20. Subsidiaries

As of 31 December 2017, TGS consists of:

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

## 21. Contingent Liabilities

### Økokrim Charges and Related Civil Matters

On 6 May 2014, TGS was notified that Økokrim, the Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime, charged TGS for violations of the Norwegian Tax Assessment Act and the Norwegian Securities Trading Act related to a transaction entered into in May 2009 with Skeie Energy AS, later known as E&P Holding AS (Skeie). The charge claims that TGS contributed to unwarranted tax refunds received by Skeie under the Norwegian Petroleum Tax Act through licenses of seismic data to Skeie, which included licenses to existing TGS multi-client data primarily in the North Sea and the Barents Sea and prefunding of a large 3D survey in the Hoop area of the Barents Sea. The surveys licensed by Skeie have since been licensed to multiple customers and are located in a very prospective area. Skeie paid for the licenses partially in cash, with the remaining amount of USD 42.1 million (net to TGS of USD 29.4 million) payable at the end of 2010. Due to Skeie's failed attempt to raise new capital, the loan was not repaid at the maturity date, and the loan was restructured into two loans from Skeie and an affiliated company during 2011. TGS has actively pursued collection of the loans, but despite these efforts, the loans were not repaid and the Company has written off as uncollectible one of the loans and has taken a reserve for the full amount of the other loan.

On 2 March 2017, Økokrim issued a corporate fine of NOK 85 million (approximately USD 11 million) against TGS based on the alleged violations of the Norwegian Tax Assessment Act. Økokrim dismissed the charges against TGS for market manipulation in violation of the Securities Trading Act due to insufficient evidence. The Company rejected the fine, and a trial regarding the alleged violations commenced 22 January 2018. The trial is expected to conclude in April 2018. If TGS is convicted, the fine would increase to NOK 90 million.

Based upon the Company's assessment of the evidence in the case to date, the Company believes the claims by Økokrim lack merit and the trial will confirm that TGS acted diligently in connection with the transactions with Skeie and no wrongdoing by the Company occurred. Given the early stage of the trial process, it is impracticable to render an accurate assessment of the outcome. However, based upon the Company's rejection of the fine and its assessment of the case at this point, it does not consider it probable that an outflow of resources embodying economic benefits will be required in connection with criminal charges and, accordingly, no provisions have been made.

TGS has also been notified of various claims or potential claims, asserting liability on TGS' part in relation to the 2009 transaction with Skeie. The claims are generally predicated on whether the parties making the claims are ultimately held

responsible for all or any part of the unwarranted tax refunds and suffer damages that can be attributed to TGS. The following summarizes the claims and potential claims:

- Skeie and two affiliated parties have notified TGS of potential claims of joint responsibility for losses arising from the tax refunds received by Skeie.
- In May 2016, the Norwegian Government notified TGS of a claim of compensation in connection with the Government's alleged losses arising from tax benefits received by Skeie under the Petroleum Tax Act for the purchase of seismic data from TGS. The Government alleges TGS aided and abetted Skeie in obtaining unwarranted tax refunds, and claims the amount of the unwarranted tax refunds plus interest, which totaled approximately NOK 326 million at the time of the notice. TGS has granted the Government a three-year extension of the statute of limitations for legal actions relating to the claim. Similar claims were made by the Government against other parties involved with Skeie.
- In October 2016, Skeie Technology, one of the Skeie affiliates and a guarantor of certain of Skeie's obligations, filed a writ of summons against TGS and certain other parties, seeking a declaratory judgment of joint liability for losses that, through its parent company guarantee, may be suffered by Skeie Technology as a result of the acquisition of seismic data by Skeie from TGS in 2009. The court in this case has stayed the proceedings pending the resolution of the Økokrim matter. No specific damages have been asserted in the writ. Skeie Technology was successful in a court proceeding during 2017 by the Norwegian Government that sought to enforce the parent company guaranty for repayment of the tax refunds. The ruling has been appealed by the Government.
- On 26 March 2017, TGS received notice from DNB that it will hold TGS responsible for any amounts payable by DNB to the Norwegian Government. DNB received notice from the Norwegian Government in December 2016, claiming liability for repayment of the tax refunds under a provision in the Tax Payment Act due to DNB's status as a pledgee of the tax refunds. In April 2017, the parties entered into a mutual standstill agreement to stop the tolling of the statute of limitations for three years. In November 2017, TGS received notification that, notwithstanding the standstill, DNB had filed a claim against TGS and various other parties for responsibility for any amounts that DNB may owe in relation to this matter. This claim initially arose out of the claims against Skeie Technology by the Norwegian Government in connection with Skeie Technology's parental guarantee, but the DNB claim has now been severed as a separate case. TGS has requested a stay in the proceedings of this case.

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

## 22. Gross and Net Revenues

TGS shares certain multi-client revenue with other companies (joint operations – see note 15) and the governments in certain countries. Operating revenue is presented net of portion shared. The table below provides the breakdown of gross revenue for 2016 and 2017.

	2017	2016
Gross revenues from sales	605,928	571,642
Revenue sharing	(113,747)	(115,651)
<b>Net revenues</b>	<b>492,181</b>	<b>455,991</b>

Revenue sharing does also include amounts not considered to be classified as joint operations as reported in Note 15.

## 23. Financial Items

	2017	2016
Interest income	2,958	3,029
Exchange gains	2,664	3,677
Other financial income	-	25
<b>Total financial income</b>	<b>5,622</b>	<b>6,731</b>
Interest expense	(328)	(992)
Exchange loss	(1,815)	(3,124)
Other financial expenses	(1,271)	(2,974)
<b>Total financial expenses</b>	<b>(3,414)</b>	<b>(7,090)</b>
<b>Net financial items</b>	<b>2,207</b>	<b>(360)</b>

## 24. Tax Expense and Deferred Tax

	2017	2016
<b>Profit before taxes</b>		
Norway	52,207	35,560
Outside Norway	47,428	17,115
<b>Total profit before taxes</b>	<b>99,636</b>	<b>52,675</b>
<b>Current taxes</b>		
Norway	22,103	-
Outside Norway	11,588	14,344
<b>Total current taxes</b>	<b>33,691</b>	<b>14,344</b>
<b>Changes in deferred taxes</b>		
Norway	2,755	14,548
Outside Norway	(12,404)	(3,871)
<b>Total changes in deferred taxes</b>	<b>(9,649)</b>	<b>10,678</b>

**Income tax expense reported in the income statement** **24,042** **25,022**

	2017	2016
<b>Tax expense related to other comprehensive income</b>		
Tax expense - other comprehensive income	-	-

	2017	2016
Profit before taxes:	99,636	52,675
Expected income taxes according to corporate income tax rate in Norway	23,896	13,169
Tax rates outside Norway different from 25%/27%	6,527	3,674
Adjustment in respect of current income tax of previous year	(4,360)	1,201
Deferred tax asset related to stock options	217	(136)
Change in deferred tax asset not recognized	93	(163)
Non-taxable income	(1,720)	(2,177)
Withholding taxes expensed	316	2,922
Effect of change in tax rates	(11,742)	-
Non-deductible expenses	1,496	3,164
Currency effects	9,321	3,369
<b>Income tax expense</b>	<b>24,042</b>	<b>25,022</b>
<b>Effective tax rate in %</b>	<b>24%</b>	<b>48%</b>

## Comments on Selected Line Items in the Preceding Table

### *Tax Rates Different from the Norwegian Tax Rate*

The tax rates for subsidiaries outside Norway are on average higher than the Norwegian 24% (2016: 25%) tax rate. The most significant effects relate to the US subsidiaries, which had a tax rate of 35% in 2017.

### *Deferred Tax Asset Related to Stock Options*

In some tax jurisdictions, TGS receives a tax deduction in respect of remuneration in the form of stock options. TGS recognizes an expense for employee services in accordance with IFRS 2 which is based on the fair value of the award at the date of the grant. The tax deduction is not received until the stock options are exercised and is based on the intrinsic value of the award at the date of exercise. In accordance with IAS 12, the tax relief must be allocated between profit or loss and equity so that the amount of the tax deduction exceeding the cumulative cost of stock options expensed by TGS is recognized directly to equity.

### *Deferred Tax Asset Not Recognized*

Deferred tax assets are not recognized for carry forward of unused tax losses when TGS cannot demonstrate that it is probable that taxable profit will be available against which the deductible temporary differences can be utilized.

TGS has unused tax losses and deductible temporary differences of USD 28.6 million (2016: 22.0 million) where no deferred tax assets were recognized in the balance sheet, all outside Norway.

### *Effect of change in tax rates*

The effect of change in tax rates does mainly relate to deferred tax liability positions in the US measured at 21% compared to the previous US corporate income tax rate at 35%.

### *Non-deductible expenses*

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

### *Currency Effects*

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

## Tax Effect of Temporary Differences and Tax Loss Carry-forwards as of 31 December

	2017	2016
<i>Differences that give rise to a deferred asset or a deferred tax liability:</i>		
Multi-client library/well logs	16,309	36,140
Fixed assets	(15,358)	(27,068)
Revenues on seismic projects in the work in progress phase	(28,278)	(73,009)
Goodwill and intangibles	(3,243)	(3,433)
Accruals	8,942	10,248
Interest deductions carried forward	-	1,025
Accounts receivable	(2,441)	(1,961)
Tax losses carried forward	2,074	25,884
Deferred revenue	507	603
Stock options	70	295
Withholding taxes carried forward	1,890	1,354
Other	197	204
<b>Total net deferred tax liability</b>	<b>(19,331)</b>	<b>(29,718)</b>
Of which:		
<b>Deferred tax asset</b>	<b>4,390</b>	<b>9,565</b>
<b>Deferred tax liability</b>	<b>23,721</b>	<b>39,284</b>
<i>Change in net deferred tax liability</i>	<i>2017</i>	<i>2016</i>
As of 1 January	29,718	19,856
Recognized in profit or loss	(9,649)	10,678
Withholding taxes recognized as deferred tax assets	(536)	(17)
Currency effects	(202)	(799)
<b>As of 31 December</b>	<b>19,331</b>	<b>29,718</b>

## Comments on Selected Line Items in the Preceding Table

### *Recognition of Deferred Tax Assets on Tax Losses Carried Forward*

Deferred tax assets are capitalized to the extent it is probable that TGS will have taxable profits and the carry forward tax losses can be utilized. Deferred tax losses on carry forward tax losses are recognized for United Kingdom (USD 2.3 million).

### *Withholding Taxes Carried Forward - Recognized as Deferred Tax Assets*

Withholding taxes carried forward and recognized as deferred tax assets relate to Norway. The full amount carried forward of USD 1.9 million has to be utilized no later than 2020.

### *Temporary Differences Group's subsidiaries*

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

### **Draft Taxation Ruling in Australia**

On 20 December 2017, the Australian Tax Office (ATO) released for public comment a draft taxation ruling (2017/D11 Income tax: capital allowances: expenditure incurred by a service provider in collecting and processing multi-client seismic data).

The preliminary contention of the Commissioner in the draft ruling is that costs associated with the collection of multi-client data are not immediately deductible for income tax purposes but rather are depreciable over, generally, 15 years. The draft ruling is proposed to apply for any seismic data the taxpayer started to hold after 14 May 2013. TGS has an opposing view of the application of the law, and has, in line with industry practice, deducted such costs in the year they have occurred. The Company is of the opinion that there is a good basis to support its tax treatment of the costs that are dealt with in the draft ruling for prior income years.

TGS has submitted its comments to the ATO and expressed that the draft ruling has incorrectly characterized the activities of companies like TGS, and that the application of the income tax act is incorrect.

Even if the draft ruling is finalized in its current form, TGS is of the opinion that the factual differences between the operations of TGS and the specific fact pattern in the draft ruling and the possibility that this difference in fact patterns may result in a different technical position to that outlined in draft ruling, do not make it probable that there will be an outflow of resources embodying economic benefits that will be required to settle an obligation. Accordingly, no provisions have been made.

## 25. Events After the Balance Sheet Date

On 7 February 2018, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.20 per shares (NOK 1.57) to the shareholders. The dividend payments USD 18.5 million were made on 1 March 2018.

Following an employee stock option exercise on 22 February 2018, a total of 73,600 new shares in the Company were registered resulting in an equity increase of USD 1.7 million.

To the best of the management's and the directors' knowledge, there are no other significant subsequent events not described in this Annual Report have occurred since 31 December 2017 that would impact the financial statements as presented for 2017.

