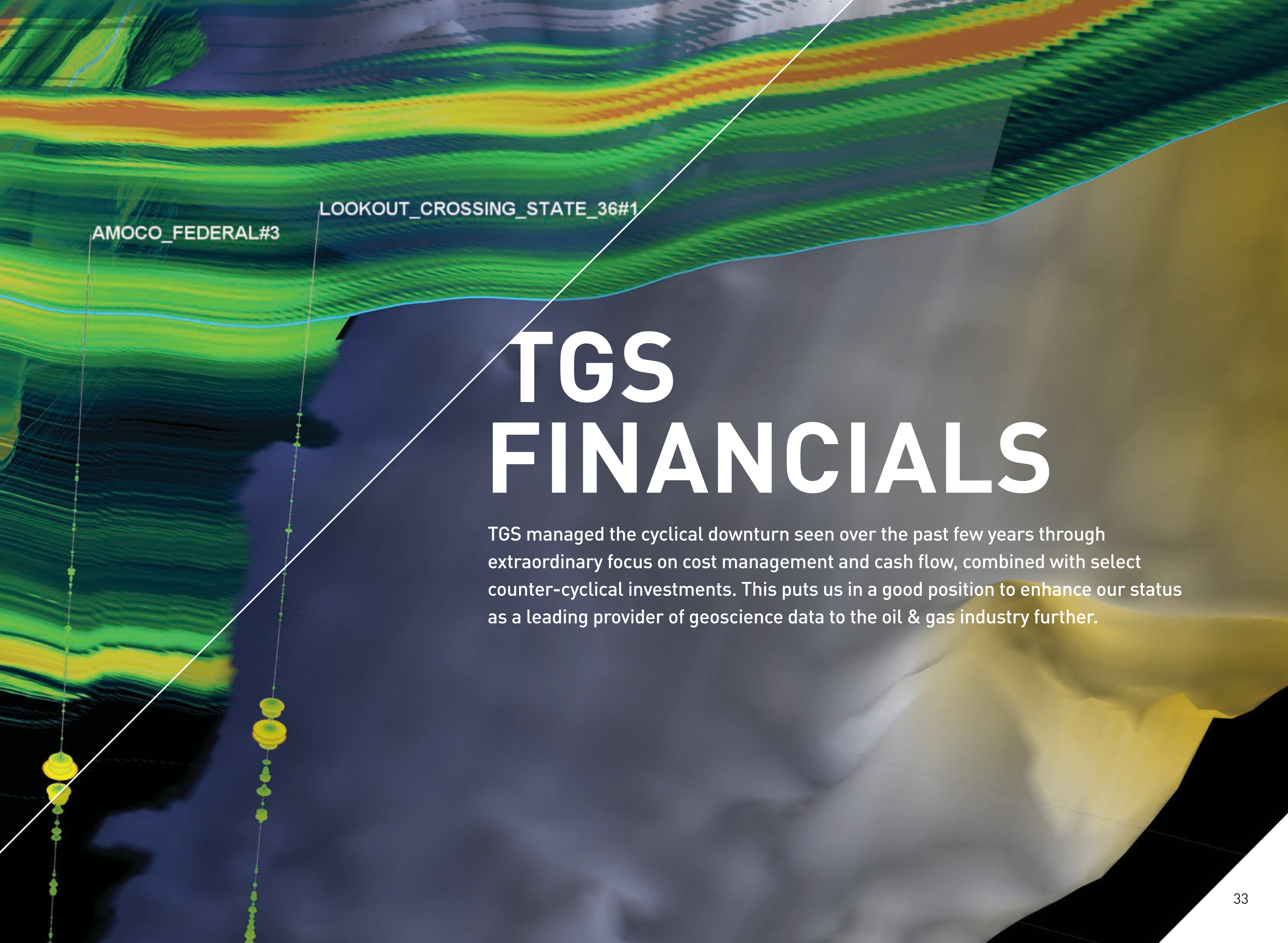

TGS FINANCIALS

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

Consolidated Statement of Comprehensive Income

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

	Note	2018	2017
Net revenues	4,17,24	614,239	492,181
Cost of goods sold - proprietary and other		584	565
Amortization and impairment of the multi-client library	7,17	270,776	302,346
Personnel costs	9	70,318	54,293
Cost of stock options	9,10	-	243
Other operating expenses		33,639	27,805
Depreciation, amortization and impairment	6,7	8,897	9,499
Total operating expenses		384,214	394,752
Operating profit		230,025	97,429
Financial income	25	6,980	2,998
Financial expenses	25	(991)	(1,640)
Net exchange gains (losses)	25	756	848
Net financial items		6,746	2,207
Profit before taxes		236,771	99,636
Taxes	26	57,971	24,042
Net income		178,800	75,594
Other comprehensive income:			
Other comprehensive income to be reclassified to profit or loss in subsequent periods			
Exchange differences on translation of foreign operations		(899)	359
Other comprehensive income, net of tax		(899)	359
Total comprehensive income for the period		177,901	75,952
Net income attributable to the owners of the parent		178,800	75,594
Net income attributable to non-controlling interests		-	(567)
		178,800	75,594
Total comprehensive income attributable to the owners of the parent		177,901	75,952
Total comprehensive income attributable to non-controlling interests		-	-
		177,901	75,952
Earnings per share (USD)	11	1.75	0.74
Earnings per share, diluted (USD)	11	1.73	0.73

Consolidated Balance Sheet

As of 31 December

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

	Note	2018	2017
Assets			
Non-current assets			
Goodwill	7,8	67,925	67,925
Multi-client library	7	870,495	799,015
Other intangible non-current assets	7,8	8,366	9,045
Deferred tax asset	26	884	4,390
Buildings	6	3,518	5,213
Machinery and equipment	6	19,308	14,452
Other non-current assets	16	180	496
Total non-current assets		970,675	900,536
Current assets			
Accounts receivable	18	215,046	157,423
Accrued revenues	18	133,810	97,285
Other receivables	18	31,353	18,939
Cash and cash equivalents	13	273,527	249,917
Total current assets		653,736	523,564
Total assets		1,624,412	1,424,100

Consolidated Balance Sheet

As of 31 December

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

	Note	2018	2017
Equity and liabilities			
Equity			
Paid-in capital			
Share capital	12	3,672	3,663
Treasury shares	12	(4)	(4)
Share premium	12	67,355	62,771
Other paid-in equity	12	45,248	39,722
Total paid-in capital		116,271	106,152
Other equity		1,135,435	1,093,957
Equity attributable to owners of the parent		1,251,706	1,200,109
Non-controlling interests	12	(7)	(7)
Total equity		1,251,699	1,200,102
Liabilities			
Non-current liabilities			
Long-term debt	16	2,500	2,500
Other non-current liabilities	16	2,514	2,850
Deferred taxes	26	29,261	23,721
Total non-current liabilities		34,275	29,071
Current liabilities			
Accounts payable and debt to partners	19	39,922	101,385
Taxes payable, withheld payroll tax, social security	26	27,062	25,197
Other current liabilities	19	271,454	68,345
Total current liabilities		338,436	194,927
Total liabilities		372,711	223,998
Total equity and liabilities		1,624,412	1,424,100

Asker, 21 March 2019

Henry H. Hamilton III
Chairman

Mark S. Leonard
Director

Wenche Agerup
Director

Elisabeth Grieg
Director

Nils Peter Dyvik
Director

Vicki Messer
Director

Tor Magne Lønnum
Director

Torstein Sanness
Director

Kristian Johansen
Chief Executive Officer

Consolidated Statement of Changes in Equity

As of 31 December

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

	Attributable to the owners of the parent								
	Share Capital (par value at NOK 0.25)	Treasury Shares	Share Premium	Other Paid-in Capital*	Foreign Currency Translation Reserve	Retained Earnings	Total	Non-controlling Interest	Total Equity
Balance 31 December 2017	3,663	(4)	62,771	39,722	(21,574)	1,115,539	1,200,114	(7)	1,200,102
Opening balance adjustment IFRS 15	-	-	-	-	-	(54,895)	(54,895)	-	(54,895)
Opening balance 1 January 2018	3,663	(4)	62,771	39,722	(21,574)	1,060,644	1,145,219	(7)	1,145,207
Net income	-	-	-	-	-	178,800	178,800	-	178,800
Other comprehensive income	-	-	-	-	(899)	-	(899)	-	(899)
Total comprehensive income	-	-	-	-	(899)	178,800	177,901	-	177,901
Paid-in equity through exercise of stock options	9	-	4,584	-	-	-	4,594	-	4,594
Distribution of treasury shares	-	0.4	-	-	-	377	377	-	377
Deferred tax income related to stock options	-	-	-	-	-	-	-	-	-
Cost of equity-settled long-term incentive plans	-	-	-	5,526	-	-	5,526	-	5,526
Dividends	-	-	-	-	-	(81,906)	(81,906)	-	(81,906)
Balance 31 December 2018	3,672	(4)	67,355	45,248	(22,473)	1,157,914	1,251,711	(7)	1,251,699

	Attributable to the owners of the parent								
	Share Capital (par value at NOK 0.25)	Treasury Shares	Share Premium	Other Paid-in Capital*	Foreign Currency Translation Reserve	Retained Earnings	Total	Non-controlling Interest	Total Equity
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

* 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	2018	2017
Cash flow from operating activities			
Received payments from customers		551,368	579,854
Payments for salaries, pensions, social security tax		(70,828)	(56,567)
Payments of other operational costs		(55,099)	(49,559)
Paid taxes	26	(35,419)	(12,422)
Net cash flow from operating activities [1)]		390,022	461,306
Cash flow from investing activities			
Investments in tangible and intangible assets		(16,369)	(9,919)
Investments in multi-client library		(273,062)	(337,964)
Investments through mergers and acquisitions [2)]		(6,501)	(7,776)
Interest received		6,980	2,958
Net cash flow from investing activities		(288,952)	(352,701)
Cash flow from financing activities			
Interest paid		(991)	(328)
Dividend payments	12	(81,440)	(62,767)
Proceeds from share issuances		4,971	13,141
Net cash flow from financing activities		(77,460)	(49,954)
Net change in cash and cash equivalents		23,610	58,651
Cash and cash equivalents at the beginning of the period	13	249,917	190,739
Net unrealized currency gains/(losses)		0	527
Cash and cash equivalents at the end of the period	13	273,527	249,917
1) Reconciliation			
Profit before taxes		236,771	99,636
Depreciation/amortization/impairment	6,7,8	279,672	311,846
Changes in accounts receivables and accrued revenues		(94,148)	65,634
Net unrealized currency gains/(losses)		(899)	(168)
Changes in other receivables		6,135	20,156
Changes in other balance sheet items		(2,090)	(23,376)
Paid taxes	26	(35,419)	(12,422)
Net cash flow from operating activities		390,022	461,306

Notes to Consolidated Financial Statements

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

1. General Accounting Policies

General Information

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

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

The consolidated financial statements of TGS were authorized by the Board of Directors on 21 March 2019.

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 2018 and consist of the consolidated statement of comprehensive income, the consolidated balance sheet, the consolidated cash flow statement, the consolidated statement of changes in equity and notes to the consolidated financial statements.

The consolidated financial statements have been prepared on a historical cost basis. The financial statements of the subsidiaries have been prepared for the same reporting year as the Parent Company, using consistent accounting policies.

Summary of Significant Accounting Policies

Principles of Consolidation

Companies Consolidated

The consolidated financial statements comprise the financial statements of the Parent Company and its subsidiaries as at 31 December 2018. Control is achieved when TGS is exposed, or has rights, to variable returns from its involvement with the investee and can affect those returns through its power over the investee.

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

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

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

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the Parent Company and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of TGS are eliminated in full 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 resulting gain or loss is recognized in profit or loss. Any retained investment is accounted for in accordance with the applicable IFRS.

Presentation Currency

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

For presentation in consolidated accounts, 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.

Revenue from Contracts with Customers

The IASB has issued a new revenue recognition standard, IFRS 15, which TGS implemented with effect from 1 January 2018. The standard replaces previous 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.

Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customers at an amount which reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. The Group has generally concluded that it is the principal in its revenue arrangements, because it typically controls the goods or services before transferring them to the customer.

Unfinished data

Multi-client pre-funding contracts and contracts for late sales of unfinished data (i.e. contracts entered into after commencement of a survey, but prior to data being ready for delivery) are considered to be "right to use licenses" under IFRS 15, meaning that all revenues related to these contracts 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. Consequently, the implementation of IFRS 15 impacts the timing of revenue recognition and amortization on such contracts compared to previous accounting principles that provided for recognition of revenue for these contracts to be recognized over time as the acquisition and processing services were delivered. Thus, revenues will typically be recognized later under IFRS 15 compared to the previous accounting principles.

Finished Data

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

For late sales of finished data, there are no material effects following the implementation of IFRS 15.

Volume Sales Agreements

In certain situations, TGS grants licenses to the customer for access to a specified number of blocks of the 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 follows the same principles as revenue recognition for finished data. The Company recognizes revenue when data is delivered to the customers.

Revenue Sharing Arrangements

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

Proprietary Contracts

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

Royalty Income

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

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

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

Multi-client Library

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

Amortization of Seismic Data

Prior to implementing IFRS 15, the Company recognized revenue and amortization (expense) over time, in line with the project's progress. During the work in progress phase, amortization was based on total cost versus forecasted total revenues of the project, i.e. amortization was recorded in line with how revenues were recognized for each project during this phase.

Under IFRS 15, no amortization is recognized until the point in time when the license is transferred to the customer, which would typically be upon completion of processing of the survey and granting of access to the finished survey or delivery of the finished data. At this point in time a customary impairment test is done (as described below) to determine if the net book value of the survey is equal or lower than the recoverable value. If this is not the case, an impairment is recognized immediately.

After a project is completed, a straight-line amortization is applied. The straight-line amortization is assigned over the remaining useful life, which for most marine projects is 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 of the data is recognized. The straight-line amortization is based on the cost of the seismic data recognized on the date of the purchase.

Amortization Policy on Well Data Products

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

Impairment Evaluation Multi-client Library

When there are indicators that the net book value may not be recoverable, the library is tested for impairment 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 impairment of the multi-client library, see Note 8.

Joint Arrangements

A joint arrangement is a contractual arrangement providing that TGS and other parties undertake an economic activity that is subject to joint control [i.e., when the strategic, financial and operating policy decisions relating to the activities of the joint arrangement require the unanimous consent of the parties sharing control]. Joint arrangements are classified as joint operations or joint ventures, depending on the rights to the assets and obligations for the liabilities of the parties to the arrangements. If the parties to the joint arrangement have rights to the net assets of the arrangement, the arrangement is a joint venture. However, if the parties have rights to the assets and obligations to the 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 the multi-client library, its share of revenues from the sale of the multi-client survey, related amortization, and expenses. When TGS has a right to market and sell the seismic project, TGS enters into the license contracts with customers and invoices and collects payments from the customer. The related account receivable presented as gross, with the portion due to the partner upon collection from the customer is presented as debt to partners. Similarly, when a partner holds the right to market and sell the project and invoices and collects from the 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 expensed in the period in which the expenditure is incurred.

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

Research and Development Costs

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

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

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

Business Combinations and Goodwill

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

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

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

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interest over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized 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 2
Tangible Non-Current Assets	- Note 6
Impairment Testing of Goodwill	- Note 8
Impairment Testing Multi Client Library	- Note 8

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 8.

Provisions and Contingencies

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

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

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

For a description of contingent liabilities, see Note 23.

Income Taxes

Current Income Tax

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

Deferred Tax

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

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

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

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

Share-based Payments

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

The cost of equity-settled transactions (stock options, PSUs and the 2015-2018 plans of RSUs) is measured by reference to the fair value at the date on which they are granted. The fair value is determined by an external valuator using an appropriate pricing model.

The expense of equity-settled transactions is recognized, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award (the vesting date). The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and TGS' best estimate of the number of equity instruments that will ultimately vest. The statement of profit or loss expense or credit for a period represents the movement in cumulative expense recognized at the beginning and end of that period. No expense is recognized for awards that do not ultimately vest. The dilutive effect of outstanding options is reflected as additional share dilution in the computation of diluted earnings per share (further details are given in Note 11).

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 and PSUs are recognized as personnel costs.

Financial Instruments

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

The Company adopted IFRS 9 Financial Instruments as of 1 January 2018, see below for further information. In practice there is no change in the accounting policies for financial instruments for the Company due to implementation of IFRS 9, and no additional information on accounting policies under IAS 39 is provided.

Financial Assets

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

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

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

Financial Liabilities

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

Impairment of Financial Assets

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

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

Pensions

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

Leases – 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 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 of expected credit losses. Sales with deferred payments due to be settled more than twelve months or later are presented as non-current receivables.

Treasury Shares

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

In 2018, TGS applied for the first time, certain amendments to the standards, which are effective for annual periods beginning on or after 1 January 2018. 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.

IFRS 9 Financial Instruments

IFRS 9 Financial Instruments was effective from 1 January 2018. The standard includes revised guidance on classification and measurement of financial instruments, including a new expected credit loss model for calculating impairment of financial assets and new general hedge accounting requirements.

Changes in accounting policies resulting from the adoption of IFRS 9 are generally to be applied retrospectively, except that the group has taken advantage of the exemption allowing it not to restate comparative information for prior periods with respect to classification and measurement (including impairment) changes. Implementation of IFRS 9 did not have any effect on equity for the Company at transition.

IFRS 9 replaces the "incurred loss model" in IAS 39 with an "expected credit loss"

(ECL) model. For the Company, the new impairment model applies to financial assets measured at amortized cost, which are trade and other receivables, accrued revenues (contract assets), and cash and cash equivalents. Under IFRS 9, credit losses are generally recognized earlier than under IAS 39, and impairment losses are generally expected to increase and become more volatile. Due to the Company's history with very limited realized losses, its established policy, procedures and control relating to customer credit risk management and its previously applied policy for estimating credit losses, the Company has concluded that the loss provision at 1 January 2018 would not have increased under the IFRS 9 loss model, and no additional impairment has been recognized at transition to IFRS 9.

IFRS 9 contains three principal classification categories for financial assets: measured at amortized cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL). The classification of financial assets is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. IFRS 9 eliminates the previous IAS 39 categories of held to maturity, loans and receivables and available for sale. The Company has evaluated that its financial assets qualify for classification as measured at amortized cost. The Company has no investments in shares (equity investments) or derivatives.

IFRS 9 largely retains the existing requirements in IAS 39 for the classification and measurement of financial liabilities. The adoption of IFRS 9 has not had a significant effect on the Company's accounting policies related to financial liabilities.

IFRS 15 Revenue from Contracts with Customers

The Company has elected to apply the modified retrospective approach for the transition under IFRS 15. Under this approach, the comparative periods will not be restated, and the cumulative effect of initially applying IFRS 15 is recognized at the date of initial application on 1 January 2018. According to IFRS 15, sales of unfinished data is not recognized before the right of use 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.

Prior to implementing IFRS 15, the Company recognized revenue and amortization (expense) before the project was completed on a percentage of completion basis. During the work in progress phase, amortization was based on total cost versus forecasted total revenues of the project. Amortization was recorded in line with the recognition of revenues for each project during this phase.

As control over goods and services, according to IFRS 15, has not been transferred to the customer in the project phase and the multi-client survey is not ready for its intended use, there is no basis to commence amortization of project costs before the customer receives access to the finished data. Consequently, the amortization (expensing) of project costs has been adjusted to equity 1 January 2018 together with the related revenue that had been recognized in the project phase.

IFRS 15 has been applied retrospectively only to contracts that were not completed as of 1 January 2018.

As a consequence, some revenues relating to unfinished multi-client projects and associated amortization that were recognized in prior periods have been reversed as at 1 January 2018. The reversed revenues and amortization have been partly recognized in 2018 and will be partly reconized in future periods, without prior periods being restated.

The following table summarizes the impact, net of tax, of transition to IFRS 15 on retained earnings as of 1 January 2018.

Retained earnings	Impact of adopting IFRS 15 as of 1 January 2018
Prefunding and revenue from sale of contracts committed prior to completion of projects	149,010
Amortization of Multi Client Library	(78,832)
Related taxes	(15,283)
Reduced equity as of 1 January 2018	**54,895**

The following tables summarize the impacts of adopting IFRS 15 on the Company's statement of financial position as at 31 December 2018 and its statement of profit and loss and OCI for the year 2018 for each of the line items affected. There was no material impact on the Company's statement of cash flow for the year ended 31 December 2018.

31 December 2018	As reported	Adjustments[1)]	Amounts without adoptino of IFRS 15
Non-current assets			
Multi-client library	870,495	(144,352)	726,143
Deferred tax asset	1,348	(900)	449
Total non-current assets	**970,674**	**(144,787)**	**825,887**
Equity	**1,251,699**	**13,697**	**1,265,397**

31 December 2018	As reported	Adjustments[1]	Amounts without adoption of IFRS 15
Non-current liabilities			
Deferred taxes	29,261	(2,033)	27,228
Total non-current liabilities	**34,275**	**(2,033)**	**32,242**
Current liabilities			
Accounts payable and debt to partners	39,922	47,460	87,382
Other current liabilities	271,454	(203,912)	67,542
Total current liabilities	**338,436**	**(156,452)**	**181,986**

[1] Adjustments relate to the treatment of prefunding and late participant multiclient revenue and amortization treatment

2018	As reported	Adjustments[1]	Amounts without adoption of IFRS 15
Net revenues	**614,239**	**(7,441)**	**621,680**
Amortization and impairment of multi client library	270,776	(65,520)	336,295
Total operating expenses	**384,213**	**(65,520)**	**449,733**
Taxes	57,971	16,881	41,090
Profit for the period	178,800	41,197	137,602
Total comprehensive income for the period	**178,800**	**41,197**	**137,602**

[1] Adjustments relate to the treatment of prefunding and late participant multiclient revenue and amortization

New Standards and Interpretations Issued, but not yet effective

IFRS 16 Leases

The Company is required to adopt IFRS 16 Leases from 1 January 2019. The Company has assessed the estimated impact that initial implementation of IFRS 16 will have on its consolidated financial statements, as described below.

IFRS 16 introduces a single, on-balance sheet lease accounting model for lessees. A lessee recognizes a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for short-term leases and leases of low-value items. Lessor accounting remains similar to the current standard – i.e. the lessor continue to classify leases as finance or operating leases.

Leases in which the Group is a Lessee

The Company will recognize new assets and liabilities for its operating leases of offices and data processing equipment. The nature of expenses related to those leases will now change because the Company will recognize a depreciation charge for right-of-use assets and interest expense for lease liabilities.

Previously, the Company recognized operating lease expense on a straight-line basis over the term of the lease, and recognized assets and liabilities only to the extent that there was a timing difference between actual lease payments and the expense recognized.

Based on the information currently available, the Company estimates that it will recognize additional lease liability of USD 42 million as at 1 January 2019, and a corresponding right of use as a lease asset.

Leases in which the Company is a Lessor

No significant impact is expected for leases in which the Company is a lessor.

Transition

TGS has chosen the modified retrospective approach for the implementation of IFRS 16 Leases where comparative figures are not restated. TGS has a limited number of leases, mainly related to office leases and leasing of computer equipment.

The Company will recognize a right of use asset equal to the lease liability. Short term leases and leases of low value are not included in the calculation of the lease liability and the right of use asset.

IFRIC 23 Uncertainty over Income Tax Treatments

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

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

The interpretation is effective for annual reporting periods beginning on or after 1 January 2019, but certain transition reliefs are available. The Company does not expect that IFRIC 23 will have any significant impact at the time of implementation.

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

2. Estimates and Assumptions

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

Impairment Evaluation of Multi-client Data Library

TGS performed impairment reviews and determined the value in use of the multi-client library during 2018. The Company estimated value in use based on discounted estimated future sales forecasts. The underlying estimates that form the basis for the sales forecast depend on variables such as the number of oil and gas exploration and production (E&P) companies operating in the area that would be interested in the data, overall E&P spending, expectations regarding hydrocarbons in the sector, whether licenses to perform exploration in the sectors exist or will be given in the future, expected farm-ins to licenses, relinquishments, etc. Changes in these estimates may potentially affect the estimated amount of future sales forecasts materially. The future sales forecasts are evaluated on a regular basis and impairments are recognized in the period they occur.

A 10% reduction in the net present value of estimated future revenues for all multi-client projects as of 31 December 2018 would have resulted in an impairment of USD 23.2 million.

For details about the book value, amortization and impairment of the multi-client library, see Note 7 and 8.

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

Impairment Evaluation of Goodwill

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

For details about goodwill and impairment, see Note 8

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 deferred tax assets, see Note 26.

Contingent Liabilities

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

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 18.

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 share-based payments, see Note 9.

3. Business Combinations

No significant business combinations, either individually or collectively, took place in 2018 or 2017.

4. Revenue from Contracts with Customers

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

Revenue Type	IFRS (As reported)	Adjustments	Segment
Prefunding	117,429	(12,367)	105,062
Late sales - unfinished data	69,743	19,808	89,550
Late sales - finished data	418,671	-	418,671
Proprietary	8,397	-	8,397
Total	**614,239**	**7,441**	**621,680**

Performance Obligations Pre-funding and Late Sales of Unfinished Data

Revenues from pre-funding contracts and contracts for late sales of unfinished data (i.e. contracts entered into after commencement of a survey, but prior to data being ready for delivery) are recognized when data transferred to the customers at an amount which reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. The Company has generally concluded that it is the principal in its revenue arrangements, because it typically controls the goods or services before transferring them to the customer.

Performance Obligations Late Sales of Finished Data

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

Performance Obligations Proprietary Sales

Revenue related to proprietary contracts are generally recognized over time in line with progress on the relevant projects.

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

Remaining perfomance obligations	2018
Within one year	219,495
Total	**219,495**

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

Receivables as included in Accounts receivables	31.12.2018	01.01.2018
Contract assets:		
Accounts receivables	215,046	157,423
Accrued unbilled revenue	133,810	97,285
Contract liabilities:		
Debt to partners	(39,921)	(60,666)
Deferred revenue	(231,818)	(214,913)

5. 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 using different principles for recognition of multi-client revenues and amortization of the multi-client library than the principles applied in the consolidated accounts, describe in Note 1 and Note 4. In the segment reports, revenues related to unfinished projects are recognized in accordance with percentage of completion of the relevant projects, while amortization in the work in progress phase is based on forecasted total revenues versus total forecasted cost. In the period after completion of the data, revenue recognition and amortization principles are consistent with those used for the consolidated accounts.

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

Transactions between operating segments are on an arm's-length basis in a manner similar to transactions with third parties. No inter-segment sales between the reportable segments have taken place during 2018 or 2017. Employee bonuses and cost related to share options are recognized within "Corporate costs".

2018	North & South America	Europe & Russia	Africa, Middle East & Asia/Pacific	Other segments/ Corporate costs	Segments reported Consolidated	Adjustments[1]	Consolidated
Net operating revenues	356,432	144,137	52,717	68,394	621,680	(7,441)	614,239
Net external revenues	**356,432**	**144,137**	**52,717**	**68,394**	**621,680**	**(7,441)**	**614,239**
Costs of goods sold-proprietary & other	125	144	6	309	584	-	584
Amortization and impairment of multi-client library	214,937	70,517	27,798	23,043	336,295	(65,520)	270,775
Operational costs	9,159	4,262	5,126	85,408	103,954	-	103,954
Depreciation, amortization and impairment	632	38	50	8,177	8,897	-	8,897
Operating profit/(loss)	**131,578**	**69,176**	**19,737**	**(48,543)**	**171,946**	**58,079**	**230,025**

[1] Relates to revenues from unfinished data that has been recognized over time in segment reporting

Impairments of the multi-client library totaled USD 21.3 million for 2018.

2017	North & South America	Europe & Russia	Africa, Middle East & Asia/Pacific	Other segments/ Corporate costs	Segments reported Consolidated	Adjustments[1]	Consolidated
Net operating revenues	239,940	157,336	44,357	50,548	492,181	-	492,181
Net external revenues	**239,940**	**157,336**	**44,357**	**50,548**	**492,181**	**-**	**492,181**
Costs of goods sold-proprietary & other	71	445	30	19	565	-	565
Amortization and impairment of multi-client library	171,813	77,166	29,729	23,639	302,347	-	302,347
Operational costs	9,060	3,511	2,845	66,924	82,339	-	82,339
Depreciation, amortization and impairment	562	67	134	8,736	9,499	-	9,499
Operating profit/(loss)	**58,435**	**76,148**	**11,618**	**(48,771)**	**97,431**	**-**	**97,427**

[1] Prefunding and amortization treatment which was over time.

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

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

Operating profit/(loss)	2018	2017
Operating profit for reportable segments	278,570	146,199
Operating profit for other segments/corporate costs	(48,543)	(48,770)
Total segments	**230,025**	**97,429**
Financial income	6,980	2,998
Financial expenses	(991)	(1,640)
Exchange gains/losses	756	848
Profit/(loss) before taxes	**236,771**	**99,636**

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 was above 10% of total revenues and amounted to USD 68.0 million in 2018, arising from sales in NSA and EUR. In 2017, net revenues from one customer exceeded 10% of total revenues and amounted to USD 62.3 million, arising from sales in all geographic areas.

Analysis of external revenues:

External revenues	2018	2017
Prefunding	105,062	115,809
Late sales	508,221	369,379
Proprietary	8,397	6,993
Total net revenues	**621,680**	**492,181**

6. Tangible Non-Current Assets

2018

Acquisition Cost and Depreciation:	Machinery and Equipment	Buildings [2]	Total
Cost as of 1 January 2018	121,440	7,118	128,558
Additions	12,305	(30)	12,275
Disposals [1]	(8,832)	(81)	(8,913)
Cost as of 31 December 2018	124,913	7,007	131,920
Accumulated depreciation as of 1 January 2018	106,980	1,907	108,887
Depreciation for the year	2,280	1,626	3,906
Accumulated amortization/depreciation on disposals	(8,855)	(44)	(8,899)
Capitalized to the multi-client library	5,200	-	5,200
Accumulated depreciation as of 31 December 2018	105,605	3,489	109,094
Net book value as of 31 December 2018	19,308	3,518	22,826
Useful life	2 to 7 years	3 to 12 years	

[1] Losses on disposals during the year were recognized by USD 0.6 million
[2] Mainly leasehold improvements

2017

Acquisition Cost and Depreciation:	Machinery and Equipment	Buildings [2]	Total
Cost as of 1 January 2017	114,560	7,125	121,685
Additions	7,614	223	7,837
Disposals [1]	(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
Depreciation for the year	3,776	1,653	5,429
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	

[1] No gains or losses were recognized during the year
[2] Mainly leasehold improvements

7. Intangible Assets

2018

Acquisition Cost and Depreciation:	Goodwill	Multi-client Library	Multi-client Library In Progress[1]	Other Intangible Assets [2]	Total
Cost as of 31 December 2017	118,538	4,441,022	-	92,389	4,651,949
Opening balance adjustments	-	(44,617)	44,617	-	-
Cost as of 1 January 2018	**118,538**	**4,396,405**	**44,617**	**92,389**	**4,651,949**
Acquistion of assets from third parties	-	6,507	14,101	-	20,608
Additions	-	39,894	202,927	3,984	246,805
Transfers		20,697	(20,697)		-
Disposals	-	-	-	(6,012)	(6,012)
Cost as of 31 December 2018	**118,538**	**4,463,503**	**240,948**	**90,360**	**4,913,349**
Accumulated amortization and impairment as of 31 December 2017	50,615	3,642,007	-	79,247	3,771,869
Opening balance adjustments	-	(78,832)	-	-	(78,832)
Accumulated amortization and impairment as of 1 January 2018	50,615	3,563,175	-	79,247	3,693,037
Amortization for the year	-	249,504	-	4,159	253,663
Impairment for the year	-	21,277	-	-	21,277
Accumulated amortization on disposals	-	-	-	(1,412)	(1,412)
Accumulated amortization and impairment as of 31 December 2018	50,615	3,833,956	-	81,994	3,966,565
Net book value as of 31 December 2018	**67,925**	**629,547**	**240,948**	**8,366**	**946,784**
Useful life		4 to 7 years	3 to 7 years	3 to 7 years	

[1] Internally developed additions to the multi-client library represents USD 33.7 million [2] Other intangible assets are internally developed software

2017

Acquisition Cost and Depreciation:	Goodwill	Multi-client Library	Other Intangible Assets [2]	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 [1]	-	279,440	4,164	283,604
Cost as of 31 December 2017	**118,538**	**4,441,022**	**92,428**	**4,651,988**
Accumulated amortization and impairment as of 1 January 2017	50,615	3,339,661	79,295	3,469,571
Amortization for the year	-	294,819	-	294,819
Impairment for the year	-	7,527	-	7,527
Accumulated amortization/depreciation on disposals [1]	-	-	-	-
Accumulated amortization and impairment as of 31 December 2017	50,615	3,642,007	79,287	3,771,909
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		

[1] Internally developed additions to the multi-client library represents USD 70.8 million [2] Other intangible assets are internally developed software

8. Impairment Evaluation of Multi-client Library, Goodwill and Other Intangible Assets

Multi-client library

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

For the multi-client library, the value in use has been determined based on revenue and cash flow projections from financial estimates prepared by management. The approved budget has been used for 2019. The underlying estimates that form the basis for the sales forecast depend on variables such as the number of oil and gas exploration and production (E&P) companies operating in the area that would be interested in the data, overall E&P spending, expectations regarding hydrocarbons in the sector, whether licenses to perform exploration in the sectors exist or will be given in the future, expected farm-ins to licenses, relinquishments, etc. Local tax rates and sales costs are applied.

TGS is operating in a global industry. TGS' customers are operating on a global scale, and the market for TGS's products is global. The market for TGS' products is mainly mirrored by the market for oil and gas, which is a truly global commodity market with a global pricing pattern. Based on this, TGS is using the same pre-tax WACC of 12% for all the Cash Generating Units throughout the Company.

The table below shows the impairment charges recognized for the multi-client library:

Impairment of multi-client library	2018	2017
North and South America	9,995	90
Europe	4,487	3,213
Africa, Middle East and Asia Pacific	6,792	2,217
Land	1	2
Other	2	29
Total	**21,277**	**7,567**

Goodwill

The table below shows net book value of goodwill by cash generating unit.

Specification of goodwill:	Imaging	GPS Well Logs	GPS Interpretation	Arcis	Other	Total
Net book value as of 1 January 2018	27,928	12,791	7,558	18,581	1,067	67,925
Additions	-	-	-	-	-	-
Impairment	-	-	-	-	-	-
Net book value as of 31 December 2018	**27,928**	**12,791**	**7,558**	**18,581**	**1,067**	**67,925**

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

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 5.

Goodwill for all the CGUs has been tested for impairment. No impairments have been recognized during 2018 (2017: USD 0 million).

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) 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 2019. The value in use calculations has not assumed any growth in 2020. 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 has been 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 years projection period were discounted using the 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. In the most realistic negative scenarios, if TGS were to increase the WACC to 17%, or reduce the annual growth rate from 2% to 0% for all years, the valuation of the CGU does not fall below the 127 MUSD in NBV recognized in TGS financial statements at 31 December 2018.

Management does not see any other reasonable changes in the key assumptions that would cause the value in use to be lower than it's 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 2019. The value in use calculations have assumed 5% growth in 2020 and in 2021. 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 has been 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 the 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 other reasonable changes in the key assumptions that would cause the value in use to be lower than it's carrying value.

GPS Interpretations

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 has been 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 the 12% (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 it's 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 2019. 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 has been discounted using the 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 is not aware of any other reasonable changes in the key assumptions that would cause the value in use to be lower than it's carrying value.

9. Personnel Costs / Number of Employees / Remuneration to Executive Management, Board of Directors and Auditors

Personal cost	2018	2017
Payroll	79,691	70,485
Social security costs	8,096	5,552
Pension costs	4,034	3,281
Other employee related costs	4,797	5,948
Salaries capitalized to developed software	(5,004)	(1,384)
Cost of RSU/PSU	5,526	2,515
Salaries capitalized to multi-client library	(26,822)	(32,104)
Personnel costs	**70,318**	**54,293**
Cost of stock options (see Note 10)	-	243
Personnel costs and cost of stock options	70,318	54,536

The number of employees as of 31 December 2018 was 547 versus 597 as of 31 December 2017.

In 2018 TGS' Short-Term Incentive bonus plan was funded by allocating 12.75% of operating profit among all full-time employees. A similar plan is in place for 2019, with an allocation of 9.5% of operating profit. Employees are generally eligible to participate in the bonus plan after being employed for six months. The bonus is payable quarterly and the amount paid is directly proportional to the actual operating profit of TGS. An individual employee's relative share of the bonus pool is based on level of responsibility, individual contribution, performance versus previous year goals and benchmark data. All bonuses earned in respect of the 2018 bonus plan have been paid or accrued as of 31 December 2018. More information on the Short-Term Incentive is provided in the company's Declaration on Executive Remuneration, published contemporaneously with the Annual Report.

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

Executive Management	No. of Shares Held 31/12/2018	No. of Options Held 31/12/2018	No. of Options Granted in 2018	No. of Options Exercised in 2018	PSUs awarded in 2018	Total balance of free-standing warrants related to PSUs/RSUs
Kristian Johansen (CEO)	26,200	-	-	12,000	68,000	204,000
Sven B Larsen (CFO)	5,600	-	-	-	32,000	96,000
Knut Agersborg (VP Global Services)	5,300	-	-	-	25,000	71,000
Will Ashby (VP HR and Communication)	3,214	-	-	-	25,000	71,000
Katja Akentieva (SVP Onshore)	2,500	-	-	-	25,000	77,000
Zhiming Li (SVP Data Processing and Research & Development)	75,694	-	-	20,000	25,000	77,000
Tana Pool (VP General Counsel)	1,575	-	-	-	25,000	71,000
Fredrik Amundsen (SVP Europe & Asia Pacific)	4,750	-	-	10,100	25,000	77,000
Erik Finnstrom (SVP New Ventures)	500	-		-	25,000	25,000

The tables below show total expensed compensation to executive management:

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

Executive Management 2017	Salary	Bonuses	Other Benefits [1]	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 Akentieva	298	203	22	14	537
Zhiming Li	342	288	22	41	693
Tana Pool	305	172	22	2	501
Will Ashby	243	100	16	60	419
Fredrik Amundsen	208	220	15	-	443
Tanya Herwanger (Executive from January 2017)	178	71	16	-	265

TGS awards its executives Long Term Incentives with performance metrics measured over a period. In 2018, a limited number of performance share units (PSUs) were issued to the executive management under the 2018 Long Term Incentive Plan. The plan and status versus performance metrics is further described in the Declaration on Executive Remuneration. The 2018 plan is equity settled, and each of the PSUs represent the right to receive the maximum of one share. The 2018 plan also provides for the issuance of RSUs to non-executive key employees, as further described in the 2018 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 for CEO or CFO, 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 2018	Director's Fee [1]	Value of Shares Received [2]	Total Remunerations
Hank Hamilton (Chairman of the Board)	200	-	200
Mark Leonard	42	46	82
Vicki Messer	36	46	82
Tor Magne Lønnum	42	46	82
Wenche Agerup	36	46	82
Elisabeth Grieg	36	46	82
Torstein Sanness	36	46	82
Nils Petter Dyvik	36	46	82

Board of Directors 2017	Director's Fee [1]	Value of Shares Received [2]	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

[1] 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.

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

	No. of Restricted Shares Received during 2018	No. of Shares Held 31/12/2018
Hank Hamilton (Chairman of the Board)	-	1,352,400
Mark Leonard (Director)	1,650	22,150
Vicki Messer (Director)	1,650	13,050
Tor Magne Lønnum (Director)	1,650	9,850
Wenche Agerup (Director)	1,650	6,600
Elisabeth Grieg (Director)	1,650	5,945
Torstein Sanness (Director)	1,650	4,950
Nils Petter Dyvik (Director)	1,650	3,300

Compensation to the members of the Nomination Committee [1]	2018	2017
Tor Himberg-Larsen (Chairman)	15	24
Christina Stray	6	13
Herman Kleevan	6	14

[1] The table shows compensation paid during the year. The members of the committee receive compensation per meeting held.

Auditor's fee	2018	2017
KPMG		
Statutory audit	338	-
Other attestation services	3	-
Other Services	58	-
Total fees	399	-
EY		
Statutory audit	332	444
Tax advice services	41	20
Total fees	**373**	**464**

All amounts are exclusive of VAT.

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

10. Long Term Incentive Plans

In 2014 to 2018, TGS issued performance-based incentive awards to its executive team using metrics as described below and in the 2018 Declaration on Executive Remuneration. Prior to 2014, TGS issued stock options as long-term incentives.

When stock options are exercised, TGS issues new shares or transfers treasury shares. Options granted under the 2012 plan which expired in 2017, were secured by treasury shares. Options granted under the 2013 plan, which expired in 2018, were secured by free-standing warrants.

In 2014 a limited amount of restricted share units (RSUs) were issued to non-executive key employees other than the executive management. The 2014 restricted unit plan was a cash-settled plan measured at the end of each reporting period and was paid out in 2017 upon vesting, three years after grant. In addition, performance units were granted to executive management. This plan was also a cash-settled plan, the value was measured at the end of each reporting period, and the awards were paid out in 2017 at vesting.

In 2015 to 2018, a limited number of performance share units (PSUs) were issued to executives, while a limited amount of restricted share units (RSUs) were issued to non-executive 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 vest three years after grant. The 2015 PSU awards vested in 2018, with no pay-out due to the failure of all performance metrics. The RSUs awarded in 2015 also vested in 2018.

The actual number of shares to be received by holders of the 2018 PSUs are dependent on three performance metrics which are measured for the period 1 January 2018 through 31 December 2020 (2016 plan: 1 January 2017 through 31 December 2019);

- 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 the Declaration on Executive Remuneration. If all the performance metrics are fully earned, the payout percentage will be 100% which is equal to a total of 290,000 PSUs (2017 plan: 296,000 PSUs remaining at 31 December 2018). The fair value of the PSUs granted in 2018 is measured based on the market value at the grant date and expensed over the vesting period. The fair value does reflect 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 2018 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 143,900 RSUs were granted in 2018. (2017 plan: 141,000 RSUs).

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

Expenses related to share-base payment plans	2018	2017
Expense arising from equity-settled share-based payment plans	5,526	2,988
Expense arising from cash-settled share-based payment plans	-	254

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

The 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 value of the stock options has been determined by a level 3-technique from the fair value hierarchy, see also Note 15.

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

	2018		2017	
	No.	WAEP (NOK)	No.	WAEP (NOK)
Outstanding as of 1 January	904,805	46.8	1,352,801	114.71
Granted during the year	433,900	0.25	437,000	0.25
Adjusted quantity due to performance criteria	(226,201)		(157,925)	
Forfeited during the year	-		(23,230)	170.49
Exercised during the year	(301,900)	122.45	(703,841)	154.79
Expired during the year	-		-	
Outstanding as of 31 December	810,604	.25	904,805	46.80
Exercisable as of 31 December	-		232,300	

The weighted average remaining contractual life for the long-term incentive plans outstanding on 31 December 2018 is 1.68 years (2017: 1.59 years).

The weighted average fair value as of 31 December 2018 of the PSUs and RSUs granted during 2018 was NOK 319.31. The weighted average fair value of the PSUs and RSUs granted during 2017 was NOK 168.36.

The strike price for outstanding options at the end of 2017, which vested during 2018, was NOK 181.90.

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 RSU and PSU 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 as of 31 December 2018, the liabilities arising from the plans amounted to USD 0.5 million (2017: USD 0.4 million).

Outstanding PSUs and RSUs as of 31 December 2018:

No. of PSUs/RSUs	Exercise dates	Holders	Price/ conditions	Granted
143,000	See below[1]	Key employees	Fair market value (FMV) of a share including expected dividends	5 August 2016
273,000	See below[2]	Executive management	Fair market value (FMV) of a share including expected dividends, adjusted for performance criteria	5 August 2016
141,000	See below[3]	Key employees	Fair market value (FMV) of a share including expected dividends	4 August 2017
296,000	See below[4]	Executive management	Fair market value (FMV) of a share including expected dividends, adjusted for performance criteria	4 August 2017
143,900	See below[5]	Key employees	Fair market value (FMV) of a share including expected dividends	3 August 2018
290,000	See below[6]	Executive management	Fair market value (FMV) of a share including expected dividends, adjusted for performance criteria	3 August 2018
1,286,900				

1) The holders will receive maximum one share per unit on 5 August 2018.
2) The holders will receive one share per unit on 5 August 2019.
3) The holders will receive maximum one share per unit on 5 August 2019.
4) The holders will receive one share per unit on 4 August 2020.
5) The holders will receive maximum one share per unit on 4 August 2020.
6) The holders will receive maximum one share per unit on 3 August 2021.

PSUs and RSUs issued in 2016 and 2017 vest upon a change of control as defined in the plan documents. The PSUs and RSUs issued in 2018 do not include any change of control provisions and therefore do not vest upon a change of control. PSUs and RSUs are forfeited upon termination of employment, regardless of the reason.

11. 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 (RSUs and PSUs) into ordinary shares.

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

	2018	2017
Net profit attributable to ordinary equity holders of the Parent	178,800	75,594
Weighted average number of ordinary shares (excluding treasury shares) for basic earnings per share	102,403	101,979
Effect of dilution: Share options, RSUs and PSUs	1,069	1,026
Weighted average number of ordinary shares (excluding treasury shares) adjusted for effect of dilution	103,472	103,005
Basic earnings per share	1.75	0.74
Diluted earnings per share	1.73	0.73

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

12. Equity and Shareholders' Authorizations

Ordinary Shares Issued and Fully Paid

	Number of shares	USD
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
Issued 28 February 2018 for cash on exercise of stock options	73,600	2
Issued 1 June 2018 for cash on exercise for stock options	129,500	4
Issued 23 August for cash on vesting of RSU	98,800	3
31 December 2018	102,647,790	3,672

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 2018, TGS held 104,630 treasury shares, 0.1% of the total shares issued (2017: 116,180 shares, 0.1%).

The following table shows the movement of treasury shareholdings:

	Number of shares	USD
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
9 May 2018, treasury shares distributed to Board members	(11,550)	(0.4)
31 December 2018	104,630	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 8 May 2018, the Board is authorized to, on behalf of the Company, increase share capital of the Company by up to NOK 2,560,487.25 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 2019, but no later than until 30 June 2019.

By resolution of the Annual General Meeting held 8 May 2018, 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 2,560,487.25, 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 2019, but no later than 30 June 2019.

During 2018, the Company increased the share capital by NOK 75,475 of which NOK 57,075 came from share capital increases between 8 May 2018 and 31 December 2018. The Company did not issue any convertible loans between 8 May 2018 and 31 December 2018.

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

By resolution of the Annual General Meeting held 8 May 2018, 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 2,560,487.25. 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 2019, however no longer than until 30 June 2019.

The Company did not acquire any shares for treasury between 8 May 2018 and 31 December 2018.

Shareholders' Authorization to the Board to Distribute Dividends

The Annual General Meeting held 8 May 2018 authorized the Board of Directors to distribute quarterly dividends on the basis of the 2017 annual accounts. 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 2019, but no later than 30 June 2019.

The authorization has been used for the following quarterly dividends:

- On 8 May 2018, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.20 per share (NOK 1.62) to the shareholders.
- On 1 August 2018, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.20 per share (NOK 1.62) to the shareholders.
- On 31 October 2018, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.20 per share (NOK 1.68) to the shareholders.
- On 6 February 2019, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.27 per share (NOK 2.30) to the shareholders.

The 20 Largest Shareholders as of 31 December 2018 as Registered with VPS:

	Name	Country		Shares	%
1	FOLKETRYGDFONDET	NORWAY		10,549,898	10.3%
2	THE BANK OF NEW YORK MELLON SA/NV	BELGIUM	NOM	8,859,176	8.6%
3	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	3,832,624	3.7%
4	RBC INVESTOR SERVICES TRUST	GREAT BRITAIN	NOM	3,586,008	3.5%
5	VERDIPAPIRFONDET DNB NORGE (IV)	NORWAY		2,704,589	2.6%
6	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	2,486,005	2.4%
7	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	2,208,285	2.2%
8	PARETO AKSJE NORGE VERDIPAPIRFOND	NORWAY		1,949,649	1.9%
9	INVESCO FUNDS	BELGIUM		1,838,350	1.8%
10	JPMORGAN CHASE BANK, N.A., LONDON	GREAT BRITAIN	NOM	1,570,628	1.5%
11	JP MORGAN SECURITIES PLC	BELGIUM		1,393,576	1.4%
12	HENRY HAYWOOD HAMILTON	U.S.A.		1,352,400	1.3%
13	THE NORTHERN TRUST COMP, LONDON BR	GREAT BRITAIN	NOM	1,331,094	1.3%
14	CLEARSTREAM BANKING S.A.	LUXEMBURG	NOM	1,303,746	1.3%
15	THE NORTHERN TRUST COMP, LONDON BR	GREAT BRITAIN	NOM	1,285,005	1.3%
16	SWEDBANK ROBUR SMABOLAGSFOND	GREAT BRITAIN		1,260,000	1.2%
17	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	1,208,908	1.2%
18	STATE STREET BANK AND TRUST COMP	U.S.A.	NOM	1,048,764	1.0%
19	JPMORGAN CHASE BANK, N.A., LONDON	GREAT BRITAIN	NOM	1,015,232	1.0%
20	CITIBANK, N.A.	GREAT BRITAIN	NOM	989,675	1.0%
	20 largest shareholders			**51,773,612**	**50.5%**
	Total number of shares, par value of NOK 0.25			**102,543,160**	**100.0%**

Norwegian shareholders held 32,264,178 (31.46%) of TGS' outstanding shares (excluding treasury shares) at 31 December 2018. Shares held in treasury as of 31 December 2018 were 104,630.

13. 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	2018	2017
Bank deposits	273,101	249,487
Restricted cash deposits	426	430
Total cash bank deposits	**273,527**	**249,917**

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

14. Related Parties

Terms and Conditions of Transactions with Related Parties

No material transactions took place during 2018 or 2017 with related parties. See Note 9 for further information of the remuneration to the Board of Directors and to the executive management.

See Note 22 for further information about the subsidiaries. Internal transactions are eliminated in the consolidated financial statements and do not represent transactions with related parties.

15. Financial Risk Management Objectives and Policies

TGS has various financial assets. These are mainly held in USD, which is the functional currency for 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 (2017: USD 1.7 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 653.7 million, of which cash and cash equivalents represented USD 273.5 million and other current assets represent USD 380.2 million. In comparison current liabilities amounted to USD 338.4 million. As of 31 December 2018, TGS considers the liquidity risk to be low.

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

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

2017	0-6 months	6-12 months	> 1 year	Total
Accounts payable and debt to partners	101,385	-	-	101,385
Taxes	-	25,197	-	27,197
Other non-current liabilities	-	-	2,850	2,850
Long-term debt	-	-	2,500	2,500
Total	**101,385**	**25,197**	**5,350**	**131,932**

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 18. TGS considers the concentration of risk with respect to trade receivables as low due to the company's credit rating policies and as our 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.

As of 31 December 2018, none of the outstanding accounts receivables were secured by ORRIs (2017: USD 0 million).

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

For details on other financial assets, please see Note 16.

Capital Management

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

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

As of 31 December 2018, total equity represented 77% of total assets (2017: 84%).

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

From 2016, TGS has paid quarterly dividends. The Annual General Meeting held 8 May 2018 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 6 February 2019, the Board of Directors resolved to pay a quarterly dividend of USD 0.27 (NOK 2.30) per share. The dividend was paid to the shareholders on 28 February 2019.

Fair Value of Financial Instruments

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

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

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

31.12.2018	Financial instruments at amortized cost	Total
Assets		
Accounts receivable	215,046	215,046
Accrued revenues	133,810	133,810
Cash and cash equivalents	273,527	273,527
Total Financial assets	**622,383**	**622,383**
Liabilities		
Interest bearing loans and borrowings		
Long term debt	2,500	2,500
Derivatives		
Other financial liabilities		
Trade and other payables	80,065	80,065
Total financial liabilities	**82,565**	**82,565**

31.12.2017	Financial instruments at amortised cost	Total
Assets		
Accounts receivable	157,423	157,423
Accrued revenues	97,285	97,285
Cash and cash equivalents	249,917	249,917
Total Financial assets	**504,625**	**504,625**
Liabilities		
Interest bearing loans and borrowings		
Long term debt	2,500	2,500
Derivatives		
Other financial liabilities		
Trade and other payables	104,235	104,235
Total financial liabilities	**106,735**	**106,735**

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 16) and the receivables with extended payment terms have been determined by using a level 3-technique. The fair values are considered to be equal to net book values as the discount rate applied is consistent with the current interest rate. The fair value of the long-term debt has been determined by using a level 2-technique.

16. Other Non-current Assets and Liabilities

Other Non-current Assets

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 per 31 December 2018.

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 have a total value of gross USD 42.1 million (net to TGS of USD 29.4 million), One of the loans has been fully reserved for, and is recognized at USD 0 million as of 31 December 2018 (31 December 2017: USD 0 million). The second of the loans was written off as uncollectible in 2016.

Other Non-current Assets

	2018	2017
Other non-current receivables	180	496
Interest bearing loans	21,100	21,100
- Provision for impairment of interest bearing loans	(21,100)	(21,100)
Interest bearing loans written off during the year as uncollectible	-	-
Total other non-current assets	**180**	**496**

Non-current Liabilities

As of 31 December 2018, TGS has recognized other non-current liabilities of USD 0 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.

17. Joint Operations

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

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

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

	2018	2017
Gross revenues (projects invoiced by TGS)	346,666	275,817
Revenue share (projects invoiced by TGS)	(133,283)	(112,727)
Net revenues (projects invoiced by TGS)	213,383	163,090
Net revenues (projects invoiced by partner)	36,062	40,177
Net revenues joint operations	249,445	203,267
Amortization	187,481	117,593
Impairment	20,710	4,829
Net book value of multi-client library (joint operations) as of 31 December (recognized by TGS)	423,018	261,077

18. Accounts Receivables and Other Current Receivables

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

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

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

For certain multi-client library projects, TGS has cooperation agreements pursuant to which revenues are shared with other companies and/or governments. In such situations accounts receivables are presented gross for projects where TGS issues the licence agreement and is responsible for invoicing, while the related partner share is presented within "Accounts payable and debt to partners". See Note 24 for a breakdown of gross revenues and revenue share and Note 17 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.

	2018	2017
Accounts receivables	215,450	158,844
- Provision for impairment of accounts receivables	(404)	(1,421)
Accounts receivables - net	215,046	157,423
Accrued revenues	133,810	97,285
Other current receivables	31,353	18,939
Total	**380,209**	**273,647**

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

	Total	Not due	< 30 days	30 - 60 days	60 - 90 days	Over 90 days
2018	349,261	317,003	15,059	7,659	7,711	1,828

	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

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:

	2018	2017
As of 1 January	1,421	3,681
Provision for receivables impairment	404	94
Receivables written off during the year as uncollectible	(1,421)	(374)
Amount collected	-	(1,980)
As of 31 December	**404**	**1,421**

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 15.

19. Accounts Payables and Other Current Liabilites

	2018	2017
Accounts payable and debt to partners	39,922	101,385
Other current liabilities	271,454	68,345
Taxes	27,062	25,197
Total accounts payable and other payables	**338,438**	**194,927**

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

Other current liabilities consist of accrued expenses and deferred revenues.

20. Bank Overdraft Facility and Guarantees

3 Year Term Secured Revolving Credit Facility:

In October 2018, with closing in January 2019, TGS entered into a secured revolving credit facility of USD 100 million with an interest rate of LIBOR + 2% per interest period depending on what TGS selects and as per the defined terms of the revolving credit facility. The credit facility was closed in January 2019. TGS is obligated to pay an upfront fee of 0.60% of the facility amount and a commitment fee of 0.40 % per annum for the unused and uncancelled part of the facility, With respect to financial conditions, TGS must maintain (i) an equity ratio of 50% or more, (ii) a leverage ratio of no more than 1.00:1.00, (iii) EBITDA minus operational capex at zero or above, and (iv) must maintain a liquidity of USD 75 million on a consolidated basis. As of 21 March 2019 TGS had not drawn any amounts under the facility.

The facility is secured by a lien on the assets of the parent company and subsidiaries having net revenues representing 5% or more of the group's net revenues as defined in the facility (TGS AP Investment AS, TGS-Nopec Geophysical Company, A2D Technologies Inc, TGS Geophysical Company (UK) Limited, TGS Canada Corp.) and guaranteed by the same subsidiaries.

Guarantees

Per 31 December 2018, one bank guarantee has been issued on behalf of TGS of a total of USD 0.2 million related to a seismic program (2017: USD 0.2 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 2018 in these subsidiaries. TGS can make an annual election to support such guarantees for each financial year.

21. Commitments and Contingencies

Operating Leases

As of the end of 2018, TGS had entered into commitments for two 3D vessels, four OBN/Source vessels, two Multi Beam vessels, and one Coring vessel, in addition to two land crews. All these commitments will expire in 2019, and the amount committed, included contractual lease agreements, totaled USD 57 million for marine capacity and USD 18 million for land capacity (2017 total: USD 37 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 8.0 million were recognized as expenses in 2018 (2017: USD 7.1 million).

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

	2018	2017
Within one year	17,097	16,972
After one year but not more than five years	33,337	42,292
More than five years	3,427	6,757
	53,861	**66,021**

Contingent rent agreements

As of 31 December 2019, the deferred part of contingent rent agreements that is contigent on future sales, totaled USD 18 million (2017: USD 25.4 million).

22. Subsidiaries

As of 31 December 2018, 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%
OBS MC Investments I 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%

23. Contingent Liabilities

Økokrim Charges and Related Civil Matters

In May 2014, TGS was notified that Økokrim, the Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime, charged TGS for violations of the Norwegian Tax Assessment Act and the Norwegian Securities Trading Act related to a transaction entered into in May 2009 with Skeie Energy AS, later known as E&P Holding AS (Skeie). The charge claims that TGS contributed to unwarranted tax refunds received by Skeie under the Norwegian Petroleum Tax Act through licenses of seismic data to Skeie, 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.

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

In October 2018, the Oslo District Court released its decision, holding TGS guilty and assessing a corporate fine of NOK 90 million (approximately USD 11 million) (as expected, due to the rejection of the fine in 2017). The decision was split, with a majority of the court holding TGS guilty and the minority finding no guilt. TGS has appealed the decision, which deferred the payment of any fine. The appellate court granted the appeal in March 2019, and the appellate trial is expected to occur in late 2019/early 2020.

Despite the District Court's decision, the Company maintains that it acted diligently in connection with the transactions with Skeie and did not commit the alleged violations of the law. The Company believes the court's reasoning in the case is both legally and factually inaccurate and is not reflective of the evidence presented at trial. Accordingly, the Company 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 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 Norwegian Government has claimed that Skeie Technology is liable for the tax refunds obtained by Skeie under a parent guarantee issued by Skeie Technology on behalf of Skeie. These claims were unsuccessful in the trial court, and the Government has appealed, which will likely be decided in mid-2019, although the matter is subject to further appeal to the Supreme Court. The proceedings in the case brought by Skeie Technology against TGS (and others) have been stayed pending the resolution of the guarantee dispute between Skeie Technology and the Government. No specific damages have been asserted in the writ.
- In 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. In March 2018, the court stayed the proceedings by DNB pending the resolution of the guarantee dispute between Skeie Technology and the Government.

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

24. Gross and Net Revenues

TGS shares certain multi-client revenue with governments in certain countries and other companies pursuant to joint operations (see Note 17) and the governments in certain countries. Operating revenue is presented net of the portion shared. The table below provides the breakdown of gross revenue for 2017 and 2018.

	2018	2017
Gross revenues from sales	749,400	605,928
Revenue sharing	(135,161)	(113,747)
Net revenues	**614,239**	**492,181**

Revenue sharing includes amounts not considered to be classified as joint operations as reported in Note 17.

25. Financial Items

	2018	2017
Interest income	6,980	2,958
Exchange gains	2,930	2,664
Other financial income	-	-
Total financial income	9,910	5,622
Interest expense	(991)	(328)
Exchange loss	(2,172)	(1,815)
Other financial expenses	-	(1,271)
Total financial expenses	(3,163)	(3,414)
Net financial items	**6,746**	**2,207**

26. Tax Expense and Deferred Tax

	2018	2017
Profit before taxes		
Norway	128,449	52,207
Outside Norway	108,321	47,428
Total profit before taxes	236,771	99,636
Current taxes		
Norway	11,284	22,103
Outside Norway	23,119	11,588
Total current taxes	34,403	33,691
Changes in deferred taxes		
Norway	21,519	2,755
Outside Norway	2,049	(12,404)
Total changes in deferred taxes	23,568	(9,649)
Income tax expense reported in the income statement	**57,971**	**24,042**

Tax expense related to other comprehensive income	2018	2017
Tax expense - other comprehensive income	-	-

	2018	2017
Profit before taxes:	236,771	99,636
Expected income taxes according to corporate income tax rate in Norway	54,452	23,896
Tax rates outside Norway different from 23%/24%	3,247	6,527
Adjustment in respect of current income tax of previous year	(1,376)	(4,360)
Deferred tax asset related to stock options	(43)	217
Change in deferred tax asset not recognized	2,089	93
Non-taxable income	(880)	(1,720)
Withholding taxes expensed	-	316
Effect of change in tax rates	(128)	(11,742)
Non-deductible expenses	2,576	1,496
Currency effects	(1,964)	9,321
Income tax expense	**57,971**	**24,042**
Effective tax rate in %	**24%**	**24%**

Comments on Selected Line Items in the Preceding Table

Tax Rates different from the Norwegian tax rate

The tax rates for subsidiaries outside Norway are different than the Norwegian tax rate of 23% (2017: 24%) tax rate. After the tax rate reduction in the US, which lowered the tax rate from 35 % to 21 %, the difference between Norway and the subsidiaries outside Norway has been decreased.

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 9.8 million (2017: 28.6 million) where no deferred tax assets were recognized in the balance sheet, all of these unused tax losses sit in entities outside Norway.

Effect of change in tax rates

The effect of change in tax rates does mainly relate to deferred tax liability positions in Norway. Tax rate in Norway will change from 23% to 22% in 2019.

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

	2018	January 1 2018	2017
Differences that give raise to a deferred asset or a deferred tax liability			
Multi-client library/well logs	(15,579)	(1,446)	16,309
Fixed assets	(17,288)	(15,358)	(15,358)
Revenues on seismic projects in the work in progress phase	(0)	-	(28,278)
Goodwill and intangibles	(4,082)	(3,243)	(3,243)
Accruals	7,092	13,702	8,942
Interest deductions carried forward	-	-	-
Accounts receivable	253	(2,441)	(2,441)
Tax losses carried forward	1,547	2,074	2,074
Deferred revenue	(1,250)	507	507
Stock options	-	70	70
Financial instruments	-		-
Withholding taxes carried forward	408	1,890	1,890
Other	522	197	197
Total net deferred tax liability	**(28,377)**	**(4,048)**	**(19,331)**

Of which:

Change in net deferred tax liability	2018	2017
As of 1 January [1)]	4,048	29,718
Recognized in profit or loss	23,568	(9,649)
Withholding taxes recognized as deferred tax assets	-	(536)
Currency effects	761	(202)
As of 31 December	**28,377**	**19,331**

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.

A final ruling has not yet been issued by the ATO, and TGS remains of the opinion the factual differences between the operations of TGS and the specific fact pattern in the draft ruling may result in a different technical position. Therefore, it is not probable that there will be an outflow of resources embodying economic benefits necessary to settle an obligation, and no provisions have been made

27. Events After the Balance Sheet

On 6 February 2019, the Board of Directors resolved to pay a quarterly dividend of the NOK equivalent of USD 0.27 per share (NOK 2.30) to the shareholders. The dividend payments USD 27.4 million were made on 28 February 2018.

TGS entered into a revolving credit facility of USD 100 million. The facility, which closed on 25 January 2019, has a three-year maturity with a non-amortizing profile. It remains undrawn as of the date of this report. See Note 20.

On 27 March 2019, the Borgarting Court of Appeal notified TGS that it granted the appeal of the decision of the Oslo District Court issued in October 2018. See Note 23.

To the best of the management's and the directors' knowledge, there are no other significant subsequent events not described in this Annual Report that have occurred since 31 December 2018 that would impact the financial statements as presented for 2018.