

CGG

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FINANCIAL REPORT
First Half Year 2019 Results
July 26, 2019

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FORWARD-LOOKING STATEMENTS

This document includes “forward-looking statements”. We have based these forward-looking statements on our current views and assumptions about future events.

These forward-looking statements involve certain risks and uncertainties. Factors that could cause actual results to differ materially from those contemplated by the forward-looking statements include, among others, the following factors:

- potential adverse effects on our liquidity or results of operations;
- the impact of the current uncertain economic environment and the volatility of oil and natural gas prices;
- the social, political and economic risks and other risks of our global operations;
- our ability to integrate successfully the businesses or assets we acquire;
- any write-downs of goodwill on our balance sheet;
- our ability to sell our seismic data library;
- exposure to foreign exchange rate risk and risks related to equities and financial instruments;
- our ability to finance our operations on acceptable terms;
- the weight of intra-group production on our results of operations;
- the timely development and acceptance of our new products and services;
- difficulties and costs in protecting intellectual property rights and exposure to infringement claims by others;
- our ability to attract and retain qualified employees;
- exposure to counter-party risk;
- ongoing operational risks and our ability to have adequate insurance against such risks;
- our liquidity and outlook;
- the level of capital expenditures by the oil and gas industry and changes in demand for seismic products and services;
- our clients’ ability to unilaterally delay or terminate certain contracts in our backlog;
- the effects of competition;
- our high level of fixed costs regardless of the level of business activity;
- the seasonal nature of our revenues;
- the costs of compliance with, or liabilities under, laws and governmental regulations, including for environmental, health and safety and taxation;
- the risks related to our information technology, including cyber security risks and risks of hardware and software failures;
- our indebtedness and the restrictive covenants in our debt agreements;
- our ability to access the debt and equity markets during the periods covered by the forward-looking statements, which will depend on general market conditions and on our credit ratings for our debt obligations;
- disruptions in our supply chain and third-party suppliers;
- exposure to interest rate risk;
- the implementation of the progressive exit of Acquisition businesses in 2019;
- the post safeguard and Chapter 11 impact on relations with clients, suppliers, and banks; and
- our success at managing the foregoing risks.

We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this document might not occur.

Certain of these risks are described in our Reference Document for the year ended December 31, 2018, the French version of which we filed with the AMF on April 5, 2019. Our Reference Document is available in French and English on our website at www.cgg.com or on the website maintained by the AMF (French only) at www.amf-france.org. You may request a copy of our Reference Document, which includes our complete audited financial statements, at no charge, by calling our investor relations department at + 33 1 6447 3811, sending an electronic message to invrelparis@cgg.com or invrelhouston@cgg.com or writing to CGG – Investor Relations Department, – 27, avenue Carnot – 91300 Massy, France.

FINANCIAL STATEMENTS

C G G UNAUDITED INTERIM CONSOLIDATED STATEMENTS OF OPERATIONS

Amounts in millions of US\$, except per share data or unless indicated	Three months ended June 30,	
	2019	2018 (restated*)
Operating revenues	335.3	250.4
Other income from ordinary activities	0.2	0.4
Total income from ordinary activities	335.5	250.8
Cost of operations	(248.8)	(170.9)
Gross profit	86.7	79.9
Research and development expenses, net	(6.3)	(3.9)
Marketing and selling expenses	(11.8)	(11.3)
General and administrative expenses	(16.9)	(22.0)
Other revenues (expenses), net	(0.1)	(3.8)
Operating income	51.6	38.9
Expenses related to financial debt	(33.8)	(33.7)
Income provided by cash and cash equivalents	0.9	0.4
Cost of financial debt, net	(32.9)	(33.3)
Other financial income (loss)	(0.4)	69.1
Income (loss) of consolidated companies before income taxes	18.3	74.7
Income taxes	(2.7)	(8.7)
Net income (loss) from consolidated companies	15.6	66.0
Share of income (loss) in companies accounted for under equity method	—	(0.3)
Net income (loss) from continuing operations	15.6	65.7
Net income (loss) from discontinued operations ⁽³⁾	(113.2)	(16.6)
Net income (loss)	(97.6)	49.1
<i>Attributable to :</i>		
<i>Owners of CGG S.A</i>	\$ (100.7)	47.4
<i>Owners of CGG S.A. ⁽²⁾</i>	€ (89.3)	39.4
<i>Non-controlling interests</i>	\$ 3.1	1.7
Weighted average number of shares outstanding	709,949,269	697,294,339
Dilutive potential shares from stock-options ⁽¹⁾	—	—
Dilutive potential shares from performance share plans ⁽¹⁾	—	—
Dilutive potential shares from warrants ⁽¹⁾	—	14,141,453
Dilutive weighted average number of shares outstanding adjusted when dilutive	709,949,269	711,435,792
Net income (loss) per share		
Basic	\$ (0.14)	0.07
Basic ⁽²⁾	€ (0.12)	0.06
Diluted	\$ (0.14)	0.07
Diluted ⁽²⁾	€ (0.12)	0.06

* In accordance with IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations", the profit and loss accounts related to the discontinued operations have been presented in the separate line item "Net income (loss) from discontinued operations" for the periods ended June 30, 2019 and 2018.

- (1) As our 2019 net result is a loss, stock options, performance shares plans, and warrants had an anti-dilutive effect; as a consequence, potential shares (3,276,580 shares) linked to those instruments were not taken into account in the diluted weighted average number of shares or in the calculation of diluted loss per share.
- (2) Corresponding to the half-year amount in euros less the first quarter amount in euros.
- (3) Net income (loss) from discontinued operations includes in 2019 US\$101 million of impairment loss recognized on the remeasurement to fair value less cost to sell of our JV disposal groups (loss of US\$59 million), Marine disposal group (loss of US\$45 million – see note 2 for context); and MultiPhysics disposal group (gain of US\$3 million).

See the notes to the Interim Consolidated Financial Statements

C G G
UNAUDITED INTERIM CONSOLIDATED STATEMENTS OF OPERATIONS

Amounts in millions of US\$, except per share data or unless indicated	Six months ended June 30,	
	2019	2018 (restated*)
Operating revenues	606.7	435.6
Other income from ordinary activities	0.4	0.7
Total income from ordinary activities	607.1	436.3
Cost of operations	(462.5)	(311.6)
Gross profit	144.6	124.7
Research and development expenses, net	(12.3)	(8.9)
Marketing and selling expenses	(21.7)	(22.1)
General and administrative expenses	(37.2)	(42.6)
Other revenues (expenses), net	(2.2)	(17.3)
Operating income	71.2	33.8
Expenses related to financial debt	(67.4)	(67.8)
Income provided by cash and cash equivalents	1.6	1.3
Cost of financial debt, net	(65.8)	(66.5)
Other financial income (loss)	0.5	831.4
Income (loss) of consolidated companies before income taxes	5.9	798.7
Income taxes	(5.6)	(23.9)
Net income (loss) from consolidated companies	0.3	774.8
Share of income (loss) in companies accounted for under equity method	0.1	(0.8)
Net income (loss) from continuing operations	0.4	774.0
Net income (loss) from discontinued operations ⁽³⁾	(128.5)	(78.3)
Net income (loss)	(128.1)	695.7
<i>Attributable to :</i>		
<i>Owners of CGG S.A</i>	\$ (134.6)	692.6
<i>Owners of CGG S.A. ⁽²⁾</i>	€ (118.9)	571.3
<i>Non-controlling interests</i>	\$ 6.5	3.1
Weighted average number of shares outstanding	709,948,484	501,946,362
Dilutive potential shares from stock-options ⁽¹⁾	—	—
Dilutive potential shares from performance share plans ⁽¹⁾	—	—
Dilutive potential shares from warrants ⁽¹⁾	—	16,019,532
Dilutive weighted average number of shares outstanding adjusted when dilutive	709,948,484	517,965,894
Net income (loss) per share		
Basic	\$ (0.19)	1.38
Basic ⁽²⁾	€ (0.17)	1.14
Diluted	\$ (0.19)	1.34
Diluted ⁽²⁾	€ (0.17)	1.10

* In accordance with IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations", the profit and loss accounts related to the discontinued operations have been presented in the separate line item "Net income (loss) from discontinued operations" for the periods ended June 30, 2019 and 2018.

- (1) As our 2019 net result is a loss, stock options, performance shares plans, and warrants had an anti-dilutive effect; as a consequence, potential shares (3, 246,586 shares) linked to those instruments were not taken into account in the diluted weighted average number of shares or in the calculation of diluted loss per share.
- (2) Converted at the average exchange rates of US\$1.1325 and US\$1.2122 per €1.00 for the periods ended June 30, 2019 and 2018, respectively.
- (3) Net income (loss) from discontinued operations includes in 2019 US\$94 million of impairment loss recognized on the remeasurement to fair value less cost to sell of our JV disposal groups (loss of US\$59 million), Marine disposal group (loss of US\$45 million - see note 2 for context); and MultiPhysics disposal group (gain of US\$10 million).

See the notes to the Interim Consolidated Financial Statements

C G G
UNAUDITED INTERIM CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

Amounts in millions of US\$	Six months ended June 30,	
	2019 ^(*)	2018 ^(*)
Net income (loss) from statements of operations	(128.1)	695.7
Net gain (loss) on cash flow hedges	0.6	0.4
Exchange differences on translation of foreign operations	(0.1)	(10.6)
Net other comprehensive income (loss) to be reclassified in profit (loss) in subsequent period ⁽¹⁾	0.5	(10.2)
Net gain (loss) on actuarial changes on pension plan	(2.1)	(2.3)
Net other comprehensive income (loss) not to be reclassified in profit (loss) in subsequent period ⁽²⁾	(2.1)	(2.3)
Total other comprehensive income (loss) for the period, net of taxes ^{(1) + (2)}	(1.6)	(12.5)
Total comprehensive income (loss) for the period	(129.7)	683.2
<i>Attributable to :</i>		
<i>Owners of CGG S.A.</i>	<i>(136.2)</i>	<i>680.6</i>
<i>Non-controlling interests</i>	<i>6.5</i>	<i>2.6</i>

** Including other comprehensive income related to the discontinued operations.*

C G G
UNAUDITED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

Amounts in millions of US\$, unless indicated	June 30, 2019	December 31, 2018
ASSETS		
Cash and cash equivalents	441.2	434.1
Trade accounts and notes receivable, net	504.0	520.2
Inventories and work-in-progress, net	204.1	204.8
Income tax assets	75.8	72.1
Other current assets, net	135.8	99.1
Assets held for sale, net	209.3	195.5
Total current assets	1,570.2	1,525.8
Deferred tax assets	28.0	22.6
Investments and other financial assets, net	29.1	31.1
Investments in companies under equity method	3.4	0.1
Property, plant and equipment, net	325.9	189.2
Intangible assets, net	847.6	898.9
Goodwill, net	1,229.1	1,229.0
Total non-current assets	2,463.1	2,370.9
TOTAL ASSETS	4,033.3	3,896.7
LIABILITIES AND EQUITY		
Bank overdrafts	—	—
Current portion of financial debt	54.5	17.8
Trade accounts and notes payables	154.6	126.4
Accrued payroll costs	114.0	135.8
Income taxes payable	57.7	49.6
Advance billings to customers	22.4	35.7
Provisions — current portion	130.3	172.4
Other current liabilities	283.3	250.9
Liabilities directly associated with the assets classified as held for sale	266.5	131.7
Total current liabilities	1,083.3	920.3
Deferred tax liabilities	45.8	44.4
Provisions — non-current portion	78.8	95.9
Financial debt	1,269.8	1,148.9
Other non-current liabilities	3.6	13.1
Total non-current liabilities	1,398.0	1,302.3
Common stock 1,181,802,110 shares authorized and 709,949,912 shares with a €0.01 nominal value issued and outstanding at June 30, 2019 and 709,944,816 at December 31, 2018	8.7	8.7
Additional paid-in capital	3,184.6	3,184.6
Retained earnings	(1,585.1)	(1,457.8)
Other Reserves	(25.9)	(27.9)
Treasury shares	(20.1)	(20.1)
Cumulative income and expense recognized directly in equity	(0.3)	(0.9)
Cumulative translation adjustment	(55.2)	(55.1)
Equity attributable to owners of CGG S.A.	1,506.7	1,631.5
Non-controlling interests	45.3	42.6
Total equity	1,552.0	1,674.1
TOTAL LIABILITIES AND EQUITY	4,033.3	3,896.7

Closing rates were US\$1.1380 per €1.00 and US\$1.1450 per €1.00 for June 30, 2019 and December 31, 2018, respectively.

See the notes to the Interim Consolidated Financial Statements

C G G
UNAUDITED INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS

Amounts in millions of US\$	Six months ended June 30,	
	2019	2018 (restated*)
OPERATING		
Net income (loss)	(128.1)	695.7
Less: Net income (loss) from discontinued operations	(128.5)	(78.3)
Net income (loss) from continuing operations	0.4	774.0
Depreciation and amortization	65.1	52.7
Multi-client surveys depreciation and amortization	139.2	32.0
Depreciation and amortization capitalized in multi-client surveys	(4.0)	(10.3)
Variance on provisions	(0.6)	(21.2)
Stock based compensation expenses	2.5	—
Net (gain) loss on disposal of fixed and financial assets	0.1	(0.2)
Equity (income) loss of investees	(0.1)	0.8
Dividends received from investments in companies under equity method	—	—
Other non-cash items	0.8	(836.3)
Net cash-flow including net cost of financial debt and income tax	203.4	(8.5)
Less net cost of financial debt	65.8	66.5
Less income tax expense	5.6	23.9
Net cash-flow excluding net cost of financial debt and income tax	274.8	81.9
Income tax paid	(13.0)	(7.7)
Net cash-flow before changes in working capital	261.8	74.2
Change in working capital	66.5	47.1
- change in trade accounts and notes receivable	90.6	132.1
- change in inventories and work-in-progress	(4.4)	0.1
- change in other current assets	(23.2)	(4.7)
- change in trade accounts and notes payable	19.8	(23.4)
- change in other current liabilities	(16.3)	(57.0)
Net cash-flow provided by operating activities	328.3	121.3
INVESTING		
Total capital expenditures (including variation of fixed assets suppliers, excluding multi-client surveys)	(36.4)	(40.3)
Investment in multi-client surveys, net cash	(95.8)	(116.2)
Proceeds from disposals of tangible and intangible assets	—	0.3
Total net proceeds from financial assets	—	—
Acquisition of investments, net of cash and cash equivalents acquired	—	—
Variation in loans granted	—	(0.3)
Variation in subsidies for capital expenditures	—	—
Variation in other non-current financial assets	(1.4)	(6.1)
Net cash-flow used in investing activities	(133.6)	(162.6)
FINANCING		
Repayment of long-term debt	—	(195.3)
Total issuance of long-term debt	—	336.5
Lease repayments ⁽¹⁾	(28.7)	(2.9)
Change in short-term loans	—	(0.2)
Financial expenses paid	(40.1)	(31.8)
<i>Net proceeds from capital increase:</i>		
— from shareholders	—	129.1
— from non-controlling interests of integrated companies	—	—
<i>Dividends paid and share capital reimbursements:</i>		
— to shareholders	—	—
— to non-controlling interests of integrated companies	(3.8)	—
Acquisition/disposal from treasury shares	—	—
Net cash-flow provided by (used in) financing activities	(72.6)	235.4
Effects of exchange rates on cash	(0.3)	—
Impact of changes in consolidation scope	—	—
Net cash flows incurred by Discontinued Operations	(114.7)	(48.4)
Net increase (decrease) in cash and cash equivalents	7.1	131.5
Cash and cash equivalents at beginning of year	434.1	315.4
Cash and cash equivalents at end of period	441.2	446.9

* In accordance with IFRS 5 “Non-current Assets Held for Sale and Discontinued Operations”, the cash flow statements line items related to the discontinued operations have been presented in the separate line item “Net cash flows incurred by Discontinued Operations” for the periods ended June 30, 2019 and 2018.

(1) See note 1 and note 6 for more information on IFRS16 impact

See the notes to the Interim Consolidated Financial Statements

C G G
UNAUDITED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

Amounts in millions of US\$, except share data	Number of Shares issued	Share capital	Additional paid-in capital	Retained earnings	Other reserves	Treasury shares	Income and expense recognized directly in equity	Cumulative translation adjustment	Equity attributable to owners of CGG S.A.	Non- controlling interests	Total equity
Balance at December 31, 2017	<u>22,133,149</u>	<u>20.3</u>	<u>1,850.0</u>	<u>(1,354.6)</u>	<u>37.6</u>	<u>(20.1)</u>	<u>(0.8)</u>	<u>(43.3)</u>	<u>489.1</u>	<u>39.0</u>	<u>528.1</u>
IFRS 15 First Time Application				(21.2)					(21.2)		(21.2)
Balance at January 1, 2018	<u>22,133,149</u>	<u>20.3</u>	<u>1,850.0</u>	<u>(1,375.8)</u>	<u>37.6</u>	<u>(20.1)</u>	<u>(0.8)</u>	<u>(43.3)</u>	<u>467.9</u>	<u>39.0</u>	<u>506.9</u>
Net gain (loss) on actuarial changes on pension plan (1)				(2.3)					(2.3)		(2.3)
Net gain (loss) on cash flow hedges (2)							0.4		0.4		0.4
Exchange differences on foreign currency translation (3)								(10.1)	(10.1)	(0.5)	(10.6)
Other comprehensive income (1)+(2)+(3)				(2.3)			0.4	(10.1)	(12.0)	(0.5)	(12.5)
Net income (4)				692.6					692.6	3.1	695.7
Comprehensive income (1)+(2)+(3)+(4)				690.3			0.4	(10.1)	680.6	2.6	683.2
Share capital reduction		(20.0)	20.0						-		-
Capital increase	71,932,731	0.9	126.5						127.4		127.4
Debt equitization	484,509,122	5.9	1,187.9						1,193.8		1,193.8
Exercise of warrants	120,253,905	1.4	0.2						1.6		1.6
Cost of share-based payment				0.3					0.3		0.3
Exchange differences on foreign currency translation generated by the parent company					(71.0)				(71.0)		(71.0)
Changes in consolidation scope and other				0.1					0.1		0.1
Balance at June 30, 2018	<u>698,828,907</u>	<u>8.5</u>	<u>3,184.6</u>	<u>(685.1)</u>	<u>(33.4)</u>	<u>(20.1)</u>	<u>(0.4)</u>	<u>(53.4)</u>	<u>2,400.7</u>	<u>41.6</u>	<u>2,442.3</u>
Amounts in millions of US\$, except share data	Number of Shares issued	Share capital	Additional paid-in capital	Retained earnings	Other reserves	Treasury shares	Income and expense recognized directly in equity	Cumulative translation adjustment	Equity attributable to owners of CGG S.A.	Non- controlling interests	Total equity
Balance at December 31, 2018	<u>709,944,816</u>	<u>8.7</u>	<u>3,184.6</u>	<u>(1,457.8)</u>	<u>(27.9)</u>	<u>(20.1)</u>	<u>(0.9)</u>	<u>(55.1)</u>	<u>1,631.5</u>	<u>42.6</u>	<u>1,674.1</u>
IFRS 16 First Time Application ^(a)				8.4					8.4		8.4
Balance at January 1, 2019	<u>709,944,816</u>	<u>8.7</u>	<u>3,184.6</u>	<u>(1,449.4)</u>	<u>(27.9)</u>	<u>(20.1)</u>	<u>(0.9)</u>	<u>(55.1)</u>	<u>1,639.9</u>	<u>42.6</u>	<u>1,682.5</u>
Net gain (loss) on actuarial changes on pension plan (1)				(2.1)					(2.1)		(2.1)
Net gain (loss) on cash flow hedges (2)							0.6		0.6		0.6
Exchange differences on foreign currency translation (3)								(0.1)	(0.1)		(0.1)
Other comprehensive income (1)+(2)+(3)				(2.1)			0.6	(0.1)	(1.6)	-	(1.6)
Net income (4)				(134.6)					(134.6)	6.5	(128.1)
Comprehensive income (1)+(2)+(3)+(4)				(136.7)			0.6	(0.1)	(136.2)	6.5	(129.7)
Exercise of warrants	5,096								-		-
Dividends									-	(3.8)	(3.8)
Cost of share-based payment				2.4					2.4		2.4
Exchange differences on foreign currency translation generated by the parent company					2.0				2.0		2.0
Changes in consolidation scope and other				(1.4)					(1.4)		(1.4)
Balance at June 30, 2019	<u>709,949,912</u>	<u>8.7</u>	<u>3,184.6</u>	<u>(1,585.1)</u>	<u>(25.9)</u>	<u>(20.1)</u>	<u>(0.3)</u>	<u>(55.2)</u>	<u>1,506.7</u>	<u>45.3</u>	<u>1,552.0</u>

(a) See note 1 for more information on the application of IFRS 16 "Leases".

NOTES TO THE UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

CGG S.A. (“the Company”), along with its subsidiaries (together, the “Group”) is a global participant in the geophysical and geological services industry, providing a wide range of data acquisition, processing and interpretation services as well as related imaging and interpretation software to clients in the oil and gas exploration and production business. It is also a global manufacturer of geophysical equipment.

Given that the Company is listed on a European Stock Exchange and pursuant to European regulation n°1606/2002 dated July 19, 2002, the accompanying interim condensed consolidated financial statements have been prepared in accordance with IAS34 as issued by the International Accounting Standards Board (IASB) and adopted by the European Union.

These interim condensed consolidated financial statements have been authorized for issue by the Board of Directors on July 25, 2019.

The interim condensed consolidated financial statements are presented in U.S. dollars and have been prepared on a historical cost basis, except for certain financial assets and liabilities that have been measured at fair value.

The preparation of consolidated financial statements in accordance with IFRS requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates due to changes in economic conditions, changes in laws and regulations, changes in strategy and the inherent imprecision associated with the use of estimates.

1.1 - Critical accounting policies

The interim condensed consolidated financial statements do not include all the information and disclosures required in the annual financial statements, and should be read in conjunction with the Group’s annual financial statements as of and for the year ended December 31, 2018 included in its Reference Document for the year 2018 filed with the AMF on April 5, 2019 and approved by the General Meeting on May 15, 2019.

The accounting policies adopted in the preparation of the interim condensed consolidated financial statements are consistent with those followed in the preparation of the Group’s annual financial statements for the year ended December 31, 2018, except for the adoption of the following new Standards, Amendments, and Interpretations:

- IFRS 16 — Leases
- Amendments to IFRS 9 — Prepayment features with negative compensation and modifications of financial liabilities
- IFRIC 23 — Uncertainty over income tax treatments
- Annual Improvements (2015-2017)
- Amendments to IAS 19 — Employee Benefits
- Amendments to IAS 28 — Long-term interests in associates and joint ventures

The impacts of the application of IFRS 16 (Leases) and IFRIC 23 (Uncertainty over income tax treatments) are detailed below. The adoption of the other Standards, Amendments, and Interpretations listed above had no impact on the Group’s interim financial statements.

The Group decided not to early adopt those Standards, Amendments and Interpretations that the European Union had adopted but that were not effective as of June 30, 2019, namely:

None

At the date of issuance of these consolidated financial statements, the following Standards, Amendments, and Interpretations were issued but not yet adopted by the European Union and were thus not effective:

- Amendments to the Conceptual Framework in IFRS Standards
- Amendment to IFRS 3 Business Combinations
- Amendments to IAS 1 and IAS 8: Definition of Material

We are currently reviewing these Standards, Amendments, and Interpretations to measure their potential impact on our consolidated financial statements.

IFRS 16 — Leases

IFRS 16 was issued in January 2016 and is endorsed by the EU. It supersedes IAS 17 Leases and a number of lease-related interpretations, and it results in almost all leases being recognized on the consolidated statement of financial position, as the distinction between operating and finance leases is removed for lessees. Under the new standard, both a right-of-use asset (the right to use the leased item) and a financial liability corresponding to the minimum lease payments are recognized. The only exemptions are for short-term leases and leases of low-value asset, and the Group has decided to use them both. Moreover, initial direct costs were not taken into account for the measurement of the right-of-use asset at the date of first time application. The Group has no material lease contracts as a lessor.

As at January 1, 2019, the Group had identified non-cancellable operating lease commitments of US\$499 million (undiscounted) which are relevant for IFRS 16 adoption. The commitments related to lease assets consist mainly of vessels (c. 60%), offices (c. 33%) and Subsurface Imaging servers (6%). It is worth noting that the right-of-use asset and the debt related to vessels leases with our GSS JV and some assets related to the Multi-Physics Business lines are respectively classified as “Assets held for sale” and “Liabilities directly associated with the assets classified as held for sale” according to IFRS 5. The discounted lease liability is US\$211 million for the assets classified as held for sale (or US\$ 300 million undiscounted).

As a result, the Group recognized right-of-use assets for continuing operations of US\$146 million (after impairment) from the identified operating lease commitments and a discounted lease liability of US\$154 million on January 1, 2019. In addition, the existing finance lease assets (US\$67 million) and liabilities (US\$50 million) determined in accordance with IAS 17 as at December 31, 2018 are classified in the same line item as the right-of-use assets and lease liabilities on operating leases determined in accordance with IFRS 16 on January 1, 2019.

The Group applies the modified retrospective approach starting January 1, 2019. Therefore, the cumulative effect of adopting IFRS 16 is recognized as an adjustment to the opening balance of retained earnings on January 1, 2019, with no restatement of comparative information. We applied the following practical expedients, as permitted by IFRS 16, on the transition date:

- Reliance on the previous definition of a lease (as provided by IAS 17 and IFRIC 4) for all contracts that existed on the date of initial application;
- The use of a single discount rate for a portfolio of leases with reasonably similar characteristics;
- Reliance on previous assessments on whether vessels leases are onerous applying IAS 37 Provisions, Contingent Liabilities and Contingent Assets and accordingly adjusting the right-of-use asset, instead of performing an impairment review for vessel leases;
- The accounting for operating leases with a remaining lease term of less than 12 months as at January 1, 2019 as short-term leases.

The following reconciliation to the opening balance for the lease liabilities as at January 1, 2019 is based upon the operating lease obligations as at December 31, 2018:

In millions of US\$	
- Vessels commitments related to Global Seismic Shipping (GSS)	358
- Commitments related to vessels cold stacked	7
Total bareboats	365
Real estate (excluding real estate previously classified as financial lease)	152
Machinery & Equipment	21
<u>Operating lease obligations at December 31, 2018</u> ^(a)	538
Leases added - previously not reported under IAS 17 ^(b) and hypothesis reassessment impact ^(c)	23
Future vessels commitments excluded ^(d)	(62)
<u>Gross lease liabilities at January 1, 2019</u>	499
Discounting	(135)
Leases liabilities directly associated with the assets classified as held for sale	(211)
<u>Additional Lease liabilities at January 1, 2019</u>	154
Present value of finance lease liabilities at December 31, 2018	50
<u>Total Lease liabilities at January 1, 2019</u>	204

(a) Short-term leases and low-value assets not included in the operating lease obligations reported as of December 31, 2018

(b) Mainly related to leases previously considered as non-material

(c) Mainly impact of lease period reassessment when Renewal option is estimated as being certain

(d) Related to Vessel commitments which were previously forecasted to begin in June 2020

The weighted average discount rate calculated without the liabilities directly associated with the assets classified as held for sale is 7.0%.

Opening consolidated statement of financial position

The cumulative effects on our consolidated statement of financial position due to the changes related to the adoption of IFRS 16 are disclosed in the table below:

In millions of US\$	Balance as of December 31, 2018	Balance as of January 1, 2019	Adjustments due to IFRS 16
<u>Assets</u>			
Assets classified as held for sale	195.5	338.7	143.2
Property, plant & equipment, net	189.2	334.9	145.7
<u>Liabilities</u>			
Financial liabilities - short-term	17.8	54.1	36.3
Provisions - short-term	172.4	168.7	(3.7)
Liabilities directly associated with the assets classified as held for sale ^(a)	131.7	274.9	143.2
Provisions - long-term	95.9	89.8	(6.1)
Financial liabilities - long-term	1,148.9	1,266.9	118.0
Other non-current liabilities	13.1	5.9	(7.2)
<u>Total Equity</u>	<u>1,674.1</u>	<u>1,682.5</u>	<u>8.4</u>

(a) The adjustment due to IFRS 16 includes leases liabilities directly associated with the assets classified as held for sale for US\$211 million and the release of US\$68 million of provision for onerous contracts related to the assets classified as held for sale.

If the lease portfolio and other parameters remain similar during the year 2019 compared to the status as of January 1, 2019, then the impact of IFRS 16 on the net income from continuing operations in 2019 is not expected to be material as the increase in depreciation and financial expense will be largely offset by the decrease in operating lease expense. Similarly, in 2019, operating cash flows from continuing operations are expected to increase and financing cash flows from continuing operations are expected to decrease by approximately US\$50 million as operating lease payments will be considered cash flows from financing activities.

IFRIC 23 — Uncertainty over income tax treatments

IFRIC 23 supplements IAS 12 “Income Taxes” by specifying arrangements for measuring and recognizing uncertainty relating to income tax. This interpretation is mandatory for accounting periods beginning on or after 1 January 2019. The implementation of IFRIC 23 has no impact on opening equity at January 1, 2019.

The amount of provisions reclassified as tax liabilities is US\$12 million.

1.2 - Use of judgment and estimates

Key judgments and estimates used in the financial statements are summarized in the following table:

Judgments and estimates	Key assumptions
Fair value of assets and liabilities acquired through purchase accounting	Pattern used to determine the fair value of assets and liabilities
Fair value of the shares issued	Fair value of the shares at the date of restructuring
Recoverability of client receivables	Assessment of clients' credit default risk
Classification of disposal groups as held for sale	Likelihood of disposal within twelve months
Valuation of disposal groups classified as held for sale	Assessment of disposal groups at fair value less cost to sell
Valuation of investments	Final terms of disposals are in line with currently contemplated terms
Amortization and impairment of multi-client surveys	Financial assets fair value Equity method companies fair value Expected sales for each survey
Depreciation and amortization of tangible and intangible assets	Assets useful lives
Recoverable value of goodwill and intangible assets	Expected geophysical market trends and timing of recovery Discount rate (WACC)
Post-employment benefits	Discount rate Participation rate to post employment benefit plans Inflation rate
Provisions for restructuring and onerous contracts	Assessment of future costs related to restructuring plans and onerous contracts
Provisions for risks, claims and litigations	Assessment of risks considering court rulings and attorney's positions
Revenue recognition	Contract completion rates Assessment of fair value of contracts identifiable parts
Development costs	Assessment of future benefits of each project
Deferred tax assets	Hypothesis supporting the achievement of future taxable benefits

1.3 - Accounting policies

Operating revenues

Revenues from contracts with customers are recognized using the five-step model of the IFRS 15 standard. The following provides a description of the main nature of our performances obligations broken down by business line, the timing of their satisfaction, and detail on the transaction prices and their allocations, if applicable.

Acquisition (classified as discontinued operations)

Marine exclusive contracts

Under our marine exclusive contracts, we acquire seismic data for a specific customer. We recognize these revenues over time. The measure of revenue recognized is based on the data acquired and delivered to the customer.

Either the total price of the contract, for turnkey and lump sum contracts, or the unitary prices, for day-rate contracts or contracts based on square kilometers are specified in the contract. With respect to contracts for both the acquisition and processing of data, the allocation is based on the stand-alone selling price of each service with revenue recognized according to respective percentages of completion.

In most cases, invoicing is carried out on a monthly basis, based on the amount of data acquired and delivered to the customer, as evidenced by a customer acceptance. As the acceptance is often obtained a few days after the balance sheet date, the counterpart of the revenue during the month is recorded as unbilled revenue, i.e. as a contract asset.

When the costs are expected to be recovered, i.e. when the contract margin is positive, the costs related to the transit of the vessel toward the survey area are recognized as an asset to fulfil the contract. They are then expensed over the duration of the

survey.

Land exclusive and Multi Physics contracts

Under our land exclusive and multi physics contracts, we acquire seismic data for a specific customer. We recognize these revenues over time. For Land turnkey contracts, the measure of revenue recognized is based on direct cash costs. For land day rate and MultiPhysics contracts, the measure of revenue recognized is based on monthly reports of data acquired or services rendered.

Either the total price of the contract, for turnkey and lump sum contracts, or the unitary prices, for day-rate or contracts on square kilometers, are specified in the contract. With respect to contracts for both the acquisition and processing of data, the allocation is based on the stand-alone selling price of each service with revenue recognized according to respective percentages of completion.

In most cases, invoicing is carried out on a monthly basis, based on the amount of data acquired and delivered to the customer, evidenced by a customer acceptance. As the acceptance is often obtained after the balance sheet date, the counterpart of the revenue during the month is recorded as unbilled revenue, i.e. as a contract asset.

When the costs are expected to be recovered, i.e. when the contract margin is positive, the costs related to the mobilization of a Land crew are recognized as an asset to fulfill the contract. They are then expensed over the duration of the survey.

GGR

Geoscience (previously known as Subsurface Imaging & Reservoir) contracts

Under our Geoscience contracts, we process seismic data for a specific customer. These contracts may encompass one or several performance obligations. For each performance obligation, we recognize the revenues over time as the services are rendered. The measure of revenue recognized is based on the time spent over the total time expected to satisfy the performance obligation. The balance of revenue recognized that has not yet been invoiced to the clients is recorded as an unbilled revenue, i.e. as a contract asset.

We also recognize revenue related to the sale of software upon delivery of the software and of the access code/key as the case may be, to the client. We recognize revenue related to the maintenance of the software over time during the specific contractual period. In case of a contract providing for both the sale and maintenance of software, the price allocation is based on the stand-alone selling price of each component and the revenue for the software is recognized upon delivery, while the maintenance revenue is recognized over time. In most cases, only one invoice is issued for such contracts upon license delivery and the amount corresponding to the maintenance is recorded as deferred revenues, i.e. as a contract liability, at invoicing.

We also provide geological consulting services or training for specific customers. We recognize the revenues over time as the services are rendered.

We provide licenses to use geological data to several clients. We recognize the revenue upon delivery of the data to the client.

In addition, we provide licenses to access dynamic geological databases for a specific duration. We recognize the revenue related to such licenses over the duration of the contract. In most cases, only one invoice is issued for such contracts at the beginning of the year and the total amount is recorded as deferred revenues, i.e. as a contract liability, at invoicing.

Multi-clients after sales contracts and prefunding contracts

Pursuant to our multi-client after sales contracts, we provide non-exclusive licenses to use seismic processed data to several clients. We recognize the revenue upon delivery of the data to the client. In certain cases, significant after sales agreements contain multiple deliverable elements, and the associated revenues are allocated to the various elements based on specific objective evidence of the stand-alone sale price for such elements, regardless of any separate allocations stated within the contract for each element. In these cases, one invoice is issued upon delivery of the data for the total contractual amount.

In certain circumstances, revenue can also be recognized relating to a performance obligation that has already been fulfilled in the past. This happens when one client is already in possession of the license for certain data and either (i) the client is taken-over by a competitor who does not yet have the license for such data (and thus is required to pay a transfer fee) or (ii) the client involves another partner, not already having access to the licensed data, for the exploration of the block (farm-in, uplift). Such revenue is recognized when there is an agreement on the fee and, in the case of transfer fee, when the buyer notifies us that they will not return the data to the Group.

Equipment

We recognize revenues on equipment sales upon delivery to the customer, i.e. when control is transferred. When such contracts require a partial or total advance payment, such payments are recorded as advance billings to customers, i.e. as a contract liability.

We recognize the sale of software upon delivery of the software to the client. We recognize the maintenance of the software over time during the specific contractual period. In case of a contract providing for both the sale and maintenance of software, the price allocation is based on the stand-alone selling price of the software and the revenue for the software is recognized upon delivery, while the maintenance revenue is recognized over time. In most cases, we issue only one invoice, issued upon license delivery, and the amount corresponding to the maintenance is recorded as deferred revenues, i.e. as a contract liability, at invoicing.

Multi-client surveys (intangible assets)

Multi-client surveys consist of seismic surveys to be licensed to customers on a non-exclusive basis. All costs directly incurred in acquiring, processing and otherwise completing seismic surveys are capitalized into the multi-client surveys (including transit costs when applicable). The carrying amount of our multi-client library is stated on our statement of financial position at the aggregate of those costs less accumulated amortization. Whenever there is an indication that a survey may be impaired, an impairment test is performed. A systematic impairment test of all delivered surveys is performed at least at delivery date and for the yearly closing.

Before October 1, 2018, each survey was amortized in a manner that reflected the pattern of consumption of its economic benefits during both prefunding and after-sale periods. An amortization rate of 80% corresponding to the ratio of capitalized costs to total expected sales over the accounting life of the survey was applied to each normative sale, unless specific indications led to application of a different rate. If that was the case, the amortization rate was adjusted to reflect the commercial effects of price elements.

The Group decided from October 1, 2018 to adopt a 4 years straight-line post-delivery amortization in accordance with the industry standard.

Development costs (intangible assets)

Expenditures on research activities undertaken with the prospect of gaining new scientific or technological knowledge and understanding are recognized in the income statement as expenses as incurred and are presented as “Research and development expenses — net”. Expenditures on development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes, are capitalized if:

- the project is clearly defined, and costs are separately identified and reliably measured,
- the product or process is technically and commercially feasible,
- we have sufficient resources to complete development, and
- the intangible asset is likely to generate future economic benefits, either because it is useful to us or through an existing market for the intangible asset itself or for its products.

The expenditures capitalized include the cost of materials, direct labor and an appropriate proportion of overhead. Other development expenditures are recognized in the income statement as expenses as incurred and are presented as “Research and development expenses — net”.

Capitalized development expenditures are stated at cost less accumulated amortization and impairment losses.

Capitalized development costs are amortized over 5 years.

Research and development expenses in our income statement represent the net cost of development costs that are not capitalized, of research costs, offset by government grants acquired for research and development.

Goodwill

Goodwill is determined according to IFRS 3 Revised — Business Combinations. Goodwill is not amortized but subject to an impairment test at least once a year at the statement of financial position dates or when a triggering event occurs.

Discontinued operations and non-current assets held for sale

Assets classified as assets held for sale correspond to non-current assets for which the net book value will be recovered by a sale rather than by their use in operations. Assets held for sale are valued at the lower of historical cost and fair value less cost to sell.

Non-current assets and disposal groups comprising assets and liabilities that are expected to be recovered primarily through sale rather than through continuing use are classified as held for sale.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the consolidated statement of financial position. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the consolidated statement of financial position. The prior periods are not restated.

A discontinued operation is a component of an entity that has either been disposed of or is classified as held for sale, and represents a separate major line of business or geographical area of operations; and is a part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or is a subsidiary acquired exclusively with a view to sell.

Any gain or loss from disposal, together with the results of these operations until the date of disposal, is reported separately as discontinued operations in the consolidated statements of cash flows and consolidated statements of operations presented. The prior periods are restated accordingly.

Lease accounting - Change in accounting policies with effect from January 1, 2019 as a result of the adoption of IFRS 16:

Whereas until the end of 2018, we made a distinction between finance leases (presented on the balance sheet) and operating leases (off-balance sheet commitments), we recognized as from January 1, 2019 right-of-use assets on the balance sheet and corresponding lease liabilities (measured on a present value basis). These liabilities reflect the expected lease payments to be made in the future, estimated at the commencement date of the leases and discounted. We use a single discount rate for a portfolio of leases with reasonably similar characteristics. After initial recognition, these lease liabilities are measured at amortized cost.

The right-of-use assets (mainly comprising the initial lease liability) are measured at cost and depreciated over their useful life on a straight-line basis. The right-of-use assets are presented in the statement of financial position under the caption "Property, plant and equipment" and the lease liabilities are presented as "Financial debt" and "Current portion of financial debt".

Interest expense is capitalized and each lease payment represents a principal repayment, including capitalized interest.

The Group uses the two exemptions provided for by the standard allowing for non- recognition in the balance sheet: short-term lease contracts and lease contracts for which the underlying assets have a low value.

- Short duration lease contracts (contracts whose duration is equal to or less than 12 months).
- Low value assets lease contracts (contracts with assets with a value equal to or less than US\$5,000)

NOTE 2— SIGNIFICANT EVENTS

In June 2019, we signed a binding term-sheet with Shearwater GeoServices Holding AS (Shearwater) for a strategic partnership in marine seismic acquisition services and the creation of a new streamer technology company.

The term-sheet covers the purchase by Shearwater of five high-end streamer vessels jointly owned by CGG Marine Resources Norge AS and Eidesvik Offshore ASA (“Eidesvik Offshore”), with mutual commitments securing CGG access to strategic vessel capacity for future multi-client projects while securing Shearwater a commitment of cash flow and activity for multiple years. Additionally, the term-sheet covers the creation of a technology partnership under the Sercel brand name and with CGG’s majority ownership, for the development, manufacturing, commercialisation and support of marine streamer seismic acquisition systems.

CGG will continue to operate the vessels and execute on-going acquisition contracts and customer commitments until deal closure.

It is the intention of both companies to execute final transaction agreements and close before year-end. The final transaction agreements are subject to approval by lenders of Global Seismic Shipping AS (GSS), the ship-owning company jointly held by CGG and Eidesvik Offshore ASA.

The completion of the transaction is subject to approvals by the competent authorities and other customary conditions in relevant countries, including work council consultation.

The term-sheet includes agreements for a five-year utilization commitment for an annual minimum of two vessel-years over the period. The agreement for vessel capacity will ensure CGG access to strategic capacity for its future multi-client projects through Shearwater’s global fleet of 21 high-end 3D and OBS vessels. Following this transaction Shearwater will have a fleet of 23 vessels, including three OBS MPVs (Multi Purpose Vessel) and two dedicated source vessels.

At the same time, it will provide Shearwater with a guaranteed cash flow and activity level, resulting in a greatly improved visibility and more robust business models for both companies. The vessel acquisition will be a pure asset transfer, which will include the five high-end units and two additional legacy vessels. Shearwater will assume the net liabilities associated with the vessels at time of completion. Shearwater will also take over five complete streamer sets owned by CGG.

NOTE 3— FACTORING AND REVERSE FACTORING

In 2019, we benefited from a reverse factoring program from one of our clients. As of June 30, 2019, we had transferred US\$9.8 million of notes receivable as part of this agreement. The risks retained by the Group were mainly the risk of payment delay up to 60 days and the risk of commercial litigation. These risks were historically low with the transferred client. As a consequence, the Group retained an amount of US\$1.0 million to the extent of its continuing involvement. Related costs recorded in operating income are not significant.

NOTE 4— ANALYSIS BY OPERATING SEGMENT

Group organization

Strategic Plan, changed segment presentation and discontinued operations

We organize our activities in four segments for financial reporting: (i) Contractual Data Acquisition, (ii) Geology, Geophysics & Reservoir (“GGR”), (iii) Equipment and (iv) Non-Operated Resources (“NOR”).

In November 2018, at our “Capital Markets Day”, we announced a new strategy for our group that includes the transition to an asset-light model by reducing CGG’s exposure to the data acquisition business. *For more information, refer to note 2 to our consolidated annual financial statements in our 2018 Reference Document*

As a result of these strategic announcements and actions undertaken since then, our Contractual Data Acquisition segment and part of our Non-Operated Resources segment are now presented as discontinued operations in our income statement and assets held for sale on our balance sheet in accordance with IFRS 5. This presentation applied for the first time as of and for the year ended December 31, 2018. The discussion in this operating and financial review is based on the new presentation.

The implementation costs of our strategic plan described above (referred to as the “CGG 2021 Plan”) are reported in the related Contractual Data Acquisition business lines

Description of our segments

Financial information by segment is reported in accordance with our internal reporting system and provides internal segment information that is used by the chief operating decision maker to manage and measure performance. A summary of our segments is set out below:

Continuing operations:

- **GGR**

This operating segment comprises the Geoscience business line (processing and imaging of geophysical data, reservoir characterization, geophysical consulting and software services, geological data library and data management solutions) and the Multi-client Data business line (development and management of seismic surveys that we undertake and license to a number of clients on a non-exclusive basis). Both activities regularly combine their offerings, generating overall synergies between their respective activities.

- **Equipment**

This operating segment comprises our manufacturing and sales activities for seismic equipment used for data acquisition, both on land and marine. The Equipment segment carries out its activities through our subsidiary Sercel.

Discontinued operations:

- **Contractual Data Acquisition**

This operating segment comprises the following business lines:

- Marine: offshore seismic data acquisition undertaken by us on behalf of a specific client; and
- Land and Multi-Physics: other seismic data acquisition undertaken by us on behalf of a specific client

- **NOR**

We started implementing our Transformation Plan in the first quarter of 2014 to address the cyclical trough in the seismic market, and as market conditions deteriorated further, we implemented additional steps, ultimately downsizing our marine fleet to five 3D high-end vessels. As a result, some of our owned vessels were not operated for a certain period of time. In April 2017, with the new ownership set up of our fleet, the non-operated vessels and their related costs (cold-stacking costs notably) were transferred to Global Seismic Shipping AS (“GSS”), in which we own a 50% stake accounted for under the equity method. The costs of the non-operated acquisition resources as well as the costs of the Transformation Plan linked to the downsizing of our Contractual Data Acquisition businesses are reported in the discontinued operations portion of this segment. The capital employed includes mainly the 50% share in GSS moved to assets held for sale, and the remaining provisions related to the Transformation Plan.

Performance indicators

As a complement to Operating Income, EBIT may be used by management as a performance indicator for segments because it captures the contribution to our results of the significant businesses that are managed through our joint ventures.

We define EBIT as Operating Income plus our share of income in companies accounted for under the equity method.

We define EBITDAs as earnings before interest, tax, income from equity affiliates, depreciation, amortization net of amortization expense capitalized to multi-client, and share-based compensation cost. Share-based compensation includes both stock options and shares issued under our share allocation plans. EBITDAs is presented as additional information because we understand that it is one measure used by certain investors to determine our operating cash flow and historical ability to meet debt service and capital expenditure requirements.

Inter-segment transactions are made at arm’s length prices. They relate primarily to geophysical equipment sales made by the Equipment segment. These inter-segment revenues and the related earnings are eliminated in consolidation in the tables that follow under the column “Eliminations and other”.

Operating Income and EBIT may include non-recurring items, which are disclosed in the reportable segment if material. General corporate expenses, which include Group management, financing, and legal activities, have been included in the column “Eliminations and other” in the tables that follow. The Group does not disclose financial expenses or financial revenues by segment because they are managed at the Group level.

Identifiable assets are those used in the operations of each segment. Unallocated and corporate assets consist of “investments and other financial assets” and “cash and cash equivalents” of our consolidated statement of financial position. The group does not track its assets based on country of origin.

Capital employed is defined as “total assets” excluding “cash and cash equivalents” less (i) “current liabilities” excluding “bank overdrafts” and “current portion of financial debt” and (ii) “non-current liabilities” excluding “financial debt”.

The following tables also present operating revenues, Operating Income, EBITDAs, and EBIT by segment.

Segment figures are before application of IFRS 15 and exclude the impact of the Transformation Plan and Financial Restructuring

Analysis by segment

Six months ended June 30, 2019

In millions of US\$, except for assets and capital employed in billions of US\$	GGR	Equipment	Eliminations and other	Segment figures	IFRS 15 adjustments	Transformation Plan / Financial restructuring	Consolidated Total / As reported
Revenues from unaffiliated customers	400.5	222.2	–	622.7	(16.0)	–	606.7
Inter-segment revenues ⁽¹⁾	–	6.0	(6.0)	–	–	–	–
Operating revenues	400.5	228.2	(6.0)	622.7	(16.0)	–	606.7
Depreciation and amortization (excluding multi-client surveys)	(49.1)	(15.7)	(0.3)	(65.1)	–	–	(65.1)
Depreciation and amortization of multi-client surveys	(162.6)	–	–	(162.6)	23.4	–	(139.2)
Operating income ⁽²⁾	44.9	34.7	(15.9)	63.7	7.5	–	71.2
EBITDAS	254.0	50.5	(14.6)	289.9	(15.9)	–	274.0
Share of income in companies accounted for under equity method	0.1	–	–	0.1	–	–	0.1
Earnings Before Interest and Tax ⁽²⁾	44.9	34.7	(15.8)	63.8	7.5	–	71.3
Capital expenditures (excluding multi-client surveys) ⁽³⁾	26.2	9.3	0.9	36.4	–	–	36.4
Investments in multi-client surveys, net cash	95.8	–	–	95.8	–	–	95.8
Capital employed ⁽⁴⁾	2.0	0.6	(0.2)	2.4	–	–	2.4
Total identifiable assets ⁽⁴⁾	2.2	0.7	0.7	3.6	–	–	3.6

(1) Sale of equipment to the Contractual Data Acquisition segment, which is classified as, discontinued operation.

(2) “Eliminations and other” corresponded to general corporate expenses.

(3) Capital expenditures included capitalized development costs of US\$(16.4) million for the six months ended June 30, 2019. “Eliminations and other” corresponded to the variance of suppliers of assets for the six months ended June 30, 2019.

(4) Capital employed and identifiable assets related to discontinued operations are included under the column “Eliminations and other”.

Six months ended June 30, 2018 (restated)

In millions of US\$, except for assets and capital employed in billions of US\$	GGR	Equipment	Eliminations and other	Segment figures	IFRS 15 adjustments	Transformation Plan / Financial restructuring	Consolidated Total / As reported
Revenues from unaffiliated customers	388.4	119.9	–	508.3	(72.7)	–	435.6
Inter-segment revenues ⁽¹⁾	–	28.7	(28.7)	–	–	–	–
Operating revenues	388.4	148.6	(28.7)	508.3	(72.7)	–	435.6
Depreciation and amortization (excluding multi-client surveys)	(37.7)	(14.8)	(0.2)	(52.7)	–	–	(52.7)
Depreciation and amortization of multi-client surveys	(83.8)	–	–	(83.8)	51.8	–	(32.0)
Operating income ⁽²⁾	102.5	(8.9)	(21.9)	71.7	(20.9)	(17.0)	33.8
EBITDAS	213.7	6.0	(21.8)	197.9	(72.7)	(17.0)	108.2
Share of income in companies accounted for under equity method ⁽¹⁾	(0.8)	–	–	(0.8)	–	–	(0.8)
Earnings Before Interest and Tax ⁽²⁾	101.7	(8.9)	(21.9)	70.9	(20.9)	(17.0)	33.0
Capital expenditures (excluding multi-client surveys) ⁽³⁾	29.6	11.2	(0.5)	40.3	–	–	40.3
Investments in multi-client surveys, net cash	116.2	–	–	116.2	–	–	116.2
Capital employed ⁽⁴⁾	2.3	0.6	0.3	3.2	–	–	3.2
Total identifiable assets ⁽⁴⁾	2.6	0.6	0.6	3.8	0.1	–	3.9

(1) Sale of equipment to the Contractual Data Acquisition segment, which is classified as, discontinued operation.

(2) “Eliminations and other” includes US\$(18.3) million of general corporate expenses and US\$(3.6) million of intra-group margin.

(3) Capital expenditures included capitalized development costs of US\$(16.1) million for the six months ended June 30, 2018.

- “Eliminations and other” corresponded to the variance of suppliers of assets for the six months ended June 30, 2018.
- (4) Capital employed and identifiable assets related to discontinued operations are included under the column “Eliminations and other”.

The following table disaggregates our operating revenues by major sources for the six months ended June 30, 2019:

In millions of US\$	Six months ended June 30, 2019		
	GGR	Equipment	Consolidated Total
<i>Multi clients prefunding</i>	91.4	—	91.4
<i>Multi clients after sales</i>	124.7	—	124.7
Total Multi clients	216.1	—	216.1
Geoscience	184.4	—	184.4
<i>Equipment, Land equipment</i>	—	174.3	174.3
<i>Equipment, Marine equipment</i>	—	31.6	31.6
<i>Equipment, Downhole Gauges</i>	—	13.8	13.8
<i>Equipment, Non-Oilfield related</i>	—	8.5	8.5
Total equipment	—	228.2	228.2
Internal revenues	—	(6.0)	(6.0)
Total operating revenues before IFRS 15 impact	400.5	222.2	622.7
IFRS 15 impact on prefunding	(16.0)	—	(16.0)
Total Group operating revenues as reported	384.5	222.2	606.7

NOTE 5— LONG TERM INCENTIVE PLANS

Stock option plans

New stock option plans and performance shares allocation plan

On June 27, 2019, the Board of Directors allocated:

- 360,000 options to the Chief Executive Officer. Their exercise price is €1.52. The options vest in one batch, in June 2022. Such vesting is subject to performance condition related to the CGG share price. The options have an eight-year duration.
- 851,330 options to the Executive Leadership members. Their exercise price is €1.52. The options vest in two batches, in June 2021 (for 50% of the options allocated) and June 2022 (for 50% of the options allocated). Such vesting is subject to performance conditions related to the CGG share price. The options have an eight-year duration.
- 1,027,190 options to certain employees. Their exercise price is €1.52. The options vest in two batches, in June 2021 (for 50% of the options allocated) and June 2022 (for 50% of the options allocated). The options have an eight-year duration.
- 220,000 performance shares to the Chief Executive Officer. The performance shares vest in one batch in June 2022. The end of the acquisition period for the batch of these performance shares is set at the latest of the two following dates: June 27, 2022 or the date of the general meeting of shareholders convened to approve the 2021 financial statements provided that the Board of Directors decides that the performance conditions set forth in the plan regulation have been fulfilled.
- 518,660 performance shares to the Executive Leadership members and 1,269,060 performance shares to certain employees. The performance shares vest in two batches, in June 2021 (for 50% of the shares allocated) and June 2022 (for 50% of the shares allocated). The end of the acquisition period for the first batch of these performance shares is set at the latest of the two following dates: June 27, 2021 or the date of the general meeting of shareholders convened to approve the 2020 financial statements provided that the Board of Directors decides that the performance conditions set forth in the plan regulation have been fulfilled. The end of the acquisition period for the second batch of these performance shares is set at the latest of the two following dates: June 27, 2022 or the date of the general meeting of shareholders convened to approve the 2021 financial statements provided that the Board of Directors decides that the performance conditions set forth in the plan regulation have been fulfilled.

The main assumptions related to the June 27, 2019 stock option plan are as follows:

- CGG share price as of June 27, 2019: €1.64
- Volatility over 2 years: 55.52%
- Volatility over 3 years: 57.82%
- Risk-free rate: 0.00%

NOTE 6—LEASES

In the context of the transition to IFRS 16, the Group recognized right-of-use assets of US\$146 million (after impairments) from the identified operating lease commitments and a discounted lease liability of US\$154 million on January 1, 2019. *See note 1 for more information on the first application of IFRS 16.*

Leases expenses are shown as follows in the income statement for the first semester 2019:

In millions of US\$	Six months ended June 30, 2019
Lease Expense	
Amortization of Rights of Use Assets	(20.8)
Amortization of Rights of Use Assets for former finance lease	(1.4)
Interest on lease liabilities	(5.1)
Interest on lease liabilities for former finance lease	(1.1)
Total Amortization and Interest recognized for leases in IFRS 16 scope	(28.4)

The table above does not report sub-leases revenues, as they are not significant. Lease expenses related to the assets classified as held for sale are also not included.

Leases are shown as follows in the balance sheet as at June 30, 2019:

In millions of US\$	January 1, 2019	June 30, 2019
Assets		
<i>Non-current assets</i>		
Right-of-use assets - Property	189.0	176.3
Property formerly classified as Financial lease	66.8	65.3
Other Property ⁽¹⁾	122.2	111.0
Machinery & equipment	23.5	23.1
Total Right-of-use assets (net)	212.5	199.4

(1) The "Other Property" amount at January 1, 2019 includes an impairment of US\$8.6 million.

In millions of US\$	January 1, 2019	June 30, 2019
Equity and Liabilities		
<i>Non-current provisions and liabilities</i>		
Lease liabilities	162.6	147.3
<i>Current provisions and liabilities</i>		
Lease liabilities	41.7	42.1
Total	204.3	189.4

Cash Flow additional information:

In millions of US\$	Six months ended June 30, 2019
Property lease	18.7
Property formerly classified as financial lease	2.6
Other property	16.1
Machinery & equipment lease	10.0
Total cash flow for leases	(28.7)
Addition to rights of use assets	9.2

NOTE 7—SUBSEQUENT EVENTS

None

OPERATING AND FINANCIAL REVIEW

Group organization

Strategic Plan, changed segment presentation and discontinued operations

We organize our activities in four segments for financial reporting: (i) Contractual Data Acquisition, (ii) Geology, Geophysics & Reservoir (“GGR”), (iii) Equipment and (iv) Non-Operated Resources.

In November 2018, at our “Capital Markets Day”, we announced a new strategy for our group that includes the transition to an asset-light model by reducing CGG’s exposure to the data acquisition business. *For more information, refer to note 2 to our consolidated annual financial statements in our 2018 Reference Document*

As a result of these strategic announcements and actions undertaken since then, our Contractual Data Acquisition segment and part of our Non-Operated Resources segment are now presented as discontinued operations in our income statement and assets held for sale in our balance sheet in accordance with IFRS 5. This presentation applied for the first time as of and for the year ended December 31, 2018. The discussion in this operating and financial review is based on the new presentation.

The implementation costs of our strategic plan described above (referred to as the “CGG 2021 Plan”) are reported in the related Contractual Data Acquisition business lines

Description of our segments

Financial information by segment is reported in accordance with our internal reporting system and provides internal segment information that is used by the chief operating decision maker to manage and measure performance. A summary of our segments is set out below:

Continuing operations:

- **GGR**

This operating segment comprises the Geoscience business line (processing and imaging of geophysical data, reservoir characterization, geophysical consulting and software services, geological data library and data management solutions) and the Multi-client Data business line (development and management of seismic surveys that we undertake and license to a number of clients on a non-exclusive basis). Both activities regularly combine their offerings, generating overall synergies between their respective activities.

- **Equipment**

This operating segment comprises our manufacturing and sales activities for seismic equipment used for data acquisition, both on land and marine. The Equipment segment carries out its activities through our subsidiary Sercel.

Discontinued operations:

- **Contractual Data Acquisition**

This operating segment comprises the following business lines:

- Marine: offshore seismic data acquisition undertaken by us on behalf of a specific client; and
- Land and Multi-Physics: other seismic data acquisition undertaken by us on behalf of a specific client

- **NOR**

We started implementing our Transformation Plan in the first quarter of 2014 to address the cyclical trough in the seismic market, and as market conditions deteriorated further, we implemented additional steps, ultimately downsizing our marine fleet to five 3D high-end vessels. As a result, some of our owned vessels were not operated for a certain period of time. In April 2017, with the new ownership set up of our fleet, the non-operated vessels and their related costs (cold-stacking costs notably) were transferred to Global Seismic Shipping AS (“GSS”), in which we own a 50% stake accounted for under the equity method. The costs of the non-operated acquisition resources as well as the costs of the Transformation Plan linked to the downsizing of our Contractual Data Acquisition businesses are reported in the discontinued operations portion of this segment. The capital employed includes mainly the 50% share in GSS moved to assets held for sale, and the remaining provisions related to the Transformation Plan.

Factors affecting our results of operations

Our operating results are generally affected by a variety of factors, some of which are described below and others that are set out in paragraphs 1.3 “Business Overview” and 2.1 “Risks factors” in our 2018 Reference Document.

Fixed costs, Transformation Plan and fleet reduction

We have high fixed costs and seismic data acquisition activities that require substantial capital expenditures and long-term contractual commitments. As discussed below, we have taken steps to reduce our costs in the past, and our current strategy calls for the transition to an asset-light model with reduced exposure to the data acquisition business.

In order to lower our high fixed cost base in light of the difficult market environment, the Group took drastic measures to reduce the operated seismic fleet, as part of the Transformation Plan, from 18 vessels in 2014 to five 3D high-end vessels by the end of 2016, with a large percentage of the remaining vessels dedicated to multi-client programs.

In early 2017, we implemented additional measures to further reduce our maritime exposure and improve the fleet's competitiveness, reducing the cash burden of various charter agreements in respect of cold-stacked seismic vessels and an active seismic vessel through payments settled on a non-cash basis and implementing the new ownership set up for our seismic fleet, allowing us to access high-end capacity at a fair market price while externalizing the cold-stacking costs. We transferred the non-operated vessels and their related costs to GSS.

Because structural marine overcapacity continued putting pressure on prices down to very low level, we plan, as announced in November 2018, to downsize further the fleet to three vessels in 2019 and to find a strategic partnership with the objective to not operate any vessels by 2021. In June 2019, we signed a binding term-sheet with Shearwater GeoServices Holding AS (Shearwater) for a strategic partnership for high-end seismic vessels and the creation of a global leader in streamer technology.

As of June 30, 2019, the operated seismic fleet was composed of four 3D high-end vessels.

For more information on the strategic partnership, please refer to note 2 to our first-half 2019 Financial Report.

For more information on marine acquisition activity, please refer to paragraph 1.3.3.1 "Marine Data Acquisition Business Line" and note 2 to our consolidated annual financial statements in our 2018 Reference Document.

Write-offs, impairments and restructuring costs.

We have had in the past and may have in the future impairment losses as events or changes in circumstances occur that reduce the fair value of an asset below its book value. We may also have write-offs and non-recurring charges or restructuring costs.

In Continuing Operations, write-offs, impairments and restructuring costs amounted to US\$288 million in 2018, comprising:

- US\$240 million of impairments (mainly linked to the US Gulf of Mexico StagSeis data library for US\$197 million);
- US\$30 million of valuation allowance of Sercel inventory; and
- US\$18 million of costs relating to the Transformation Plan and the financial restructuring

In Discontinued Operations, write-offs, impairments and restructuring costs net of gains on sales of assets related to our Transformation Plan amounted to US\$27 million (mainly redundancy packages) in 2018. As part of the CGG 2021 Plan, we recognized US\$402 million of restructuring costs at operating income level in 2018, including:

- US\$139 million of write-offs and impairment of assets;
- US\$126 million of provisions for onerous contract related to the reduction of our operating fleet from 5 to 3 vessels; and
- US\$137 million of additional provisions mainly related to redundancy costs.

As part of the CGG 2021 Plan, in the Discontinued Operations, we recognized during the first semester of 2019 an impairment loss of US\$94 million on the remeasurement to fair value less cost to sell of our JV disposal group (loss of US\$59 million), Marine disposal group (loss of US\$45 million) and Multi-Physics disposal group (gain of US\$10 million).

We have also been involved in a number of business combinations in the past, leading to the recognition of large amounts of goodwill on our balance sheet. Goodwill on our balance sheet totalled US\$1,229 million as of June 30, 2019, and December 31, 2018. Goodwill is allocated to CGUs as described in note 11 to our consolidated 2018 annual financial statements. At each balance sheet date, if we expect that a CGU's recoverable amount will fall below the amount of capital employed recorded on the balance sheet, we may write down the value of given assets and/or the goodwill in part or in whole.

For more information, please refer to notes 5, 11 and 22 to our annual consolidated financial statements in our 2018 Reference Document.

Accounting policies

The following operating and financial review and prospects should be read in conjunction with our consolidated annual financial statements and the notes thereto included in our 2018 Reference Document and our consolidated interim financial statements and the notes thereto included in this report, which have been prepared in accordance with International Financial Reporting Standards (IFRS) and its interpretations as issued by the International Accounting Standards Board (IASB) and as adopted by the European Union as at June 30, 2019.

IFRS 15 application

We implemented IFRS 15 on January 1, 2018 with a modified retrospective application. The only change compared to Group historical practices was related to multi-client prefunding revenues. These prefunding revenues are recorded at delivery of the final data, whereas they were historically recorded based on percentage of completion. For internal reporting purposes, CGG continues using the historical method, with prefunding revenues recorded based on percentage of completion.

CGG, like other seismic players, presents a dual approach in the Group's results including:

- (i) one set of figures (the "as reported" figures) with prefunding revenue recognized in full only upon delivery of the final data; and
- (ii) a second set of figures (the "Segment" figures) produced in accordance with the Group's historical method for multi-client prefunding revenues, corresponding to the figures we use for internal management reporting purposes.

Please refer to note 1.3 "New standards impacts — IFRS 15 Revenue from Contracts with Customers, applied starting January 1, 2018" and note 19 "Revenue" to our consolidated annual financial statements in our 2018 Reference Document for more information.

Changes in estimate for multi-client surveys amortization

Since the majority of the multi-client surveys sales take place during the prefunding phase and the subsequent four years and in order to harmonize reporting practices with other multi-client players, we decided from October 1, 2018 to adopt a four-year straight-line post-delivery amortization in accordance with the industry standard. Amortization was previously based on the sales forecast method (80% of the sales in most cases).

The prefunding cost of sales, recognized concurrently with the revenue upon delivery of the survey, is calculated from October 1, 2018 as the difference between the total capitalized cost of a survey upon delivery and the fair value based upon discounted future expected sales. The net book value of the survey upon delivery thus equals the net present value of future expected sales. Prefunding cost of sales was previously 80% of the prefunding sales recognized upon delivery.

Please refer to note 1.4 "Changes in estimate for multi-client surveys amortization" to our consolidated annual financial statements in our 2018 Reference Document for more information.

IFRS 16 application

CGG implemented IFRS 16 effective January 1, 2019 with a modified retrospective application. Therefore, the cumulative effects of adopting IFRS 16 was recognized as an adjustment to the opening balance of retained earnings on January 1, 2019, with no restatement of comparative information.

If the lease portfolio and other parameters remain similar during the year 2019 compared to the status as of January 1, 2019, then the impact of IFRS 16 on the net income from continuing operations in 2019 is not expected to be material as the increase in depreciation and financial expense will be largely offset by the decrease in operating lease expense. Similarly, in 2019 operating cash flows from continuing operations are expected to increase by approximately US\$50 million and financing cash flows from continuing operations to decrease by the same amount, as repayment of the principal portion of the lease liabilities will be classified as cash flows used in financing activities, while previously the operating lease payments were classified as cash flows used in operating activities.

Please refer to note 1.1 "Critical accounting policies – IFRS 16 Leases" to our interim consolidated financial statements for more information.

Six months ended June 30, 2019 compared to six months ended June 30, 2018

Unless otherwise specified, comparisons made in this section are between the six months ended June 30, 2019 and the six months ended June 30, 2018. References to 2019 correspond to the six months ended June 30, 2019 and references to 2018

correspond to the six months ended June 30, 2018.

Operating revenues

The following table sets forth our operating revenues by division for each of the periods stated:

	Six months ended June 30,						Increase/(Decrease)	
	2019			2018 (restated)			2019 vs. 2018	
	Segment figures	IFRS 15 adjustments	As reported	Segment figures	IFRS 15 adjustments	As reported	Segment figures	As reported
	In millions of US\$							
Geoscience	184.3	—	184.3	193.5	—	193.5	(5)%	(5)%
Multi-client data	216.2	(16.0)	200.2	194.9	(72.7)	122.2	11%	64%
GGR Revenues	400.5	(16.0)	384.5	388.4	(72.7)	315.7	3%	22%
Equipment Revenues	228.2	—	228.2	148.6	—	148.6	54%	54%
Eliminated revenues and others	(6.0)	—	(6.0)	(28.7)	—	(28.7)	—	—
Total operating revenues	622.7	(16.0)	606.7	508.3	(72.7)	435.6	23%	39%

The respective contributions from the Group's businesses to our segment operating revenues were 64% from GGR and 36% from Equipment.

GGR

Operating revenues as reported from our GGR segment increased 22% at US\$385 million compared to 2018. Before IFRS 15 adjustments, GGR segment revenues increased 3% at US\$401 million from US\$388 million in 2018.

Geoscience

Operating revenues from our Geoscience business lines decreased 5% to US\$184 million in 2019 compared to US\$194 million in 2018 mainly due to project delays and increased focus on more profitable businesses. Recent contract awards and positive market signals provide confidence in second semester sequential revenue increase.

Multi-client Data

Multi-client data revenues as reported increased 64% in 2019 compared to 2018. Unlike the first six months of 2018, when no final data were delivered, we delivered US\$75 million in 2019. Before IFRS 15 adjustments, multi-client data segment revenues increased 11% at US\$216 million.

Prefunding revenues as reported were US\$75 million in 2019 while they were nil in 2018 as no final data delivery occurred during the period. Excluding IFRS 15 adjustment, prefunding segment revenues increased 25% to US\$91 million in 2019 from US\$73 million in 2018. The cash-prefunding rate was 95% in 2019 compared to 63% in 2018.

After-sales revenues increased 2% to US\$125 million in 2019 compared to US\$122 million in 2018 and were solid across all regions and particularly strong in Scandinavia during the second quarter.

Equipment

Total revenues for our Equipment segment (including internal and external sales) increased 54% to US\$228 million in 2019. Internal sales represented 3% of total revenues in 2019 compared to 19% in 2018. External revenues for our Equipment segment increased 85% to US\$222 million in 2019 from US\$120 million in 2018.

Land equipment sales represented 76% of total revenues in 2019, compared to 51% in 2018, driven by deliveries in the Middle East and North Africa in the second quarter of 2019, with notably three 508^{XT} systems delivered to clients.

Marine equipment sales represented 14% of total revenues in 2019 compared to 36% in 2018 with replacement market still constrained by low capex by marine contractors.

Downhole equipment sales were US\$14 million, with flat demand for artificial lift in the second quarter of 2019.

Operating expenses

The following table sets forth our operating expenses for each of the periods stated:

	Six months ended June 30,				Increase/(Decrease)	
	2019		2018 (restated)		2019 vs. 2018	
	Segment figures	As reported	Segment figures	As reported	Segment figures	As reported
	In millions of US\$					
Operating revenues	622.7	606.7	508.3	435.6	23%	39%
Cost of Operations	(485.9)	(462.5)	(363.4)	(311.6)	22%	39%
<i>% operating revenues</i>	<i>(78)%</i>	<i>(76)%</i>	<i>(71)%</i>	<i>(72)%</i>	—	—
Gross Margin	137.2	144.6	145.6	124.7	(6)%	16%
<i>% operating revenues</i>	<i>22%</i>	<i>24%</i>	<i>29%</i>	<i>29%</i>	—	—
Research and Development	(12.3)	(12.3)	(8.9)	(8.9)	38%	38%
<i>% operating revenues</i>	<i>(2)%</i>	<i>(2)%</i>	<i>(2)%</i>	<i>(2)%</i>	—	—
Marketing and Selling	(21.7)	(21.7)	(22.1)	(22.1)	(2)%	(2)%
<i>% operating revenues</i>	<i>(4)%</i>	<i>(4)%</i>	<i>(4)%</i>	<i>(5)%</i>	—	—
General and Administrative	(37.2)	(37.2)	(42.6)	(42.6)	(13)%	(13)%
<i>% operating revenues</i>	<i>(6)%</i>	<i>(6)%</i>	<i>(8)%</i>	<i>(10)%</i>	—	—
Other incomes (expenses)	(2.2)	(2.2)	(0.3)	(17.3)	633%	(87)%
Operating income	63.7	71.2	71.7	33.8	(11)%	111%
<i>% operating revenues</i>	<i>10%</i>	<i>12%</i>	<i>14%</i>	<i>8%</i>	—	—

The amortization costs of our seismic library as reported corresponded to 70% of the multi-client data revenues as reported in 2019 compared to 26% in 2018. Excluding IFRS 15 adjustments, the segment amortization costs of our seismic library increased to 75% of the multi-client data segment revenues in 2019 compared to 43% in 2018, mainly coming from the change in estimate for multi-client surveys amortization and a less favourable sales mix.

Please refer to note 1.4 “Changes in estimate for multi-client surveys amortization” to our consolidated financial statements in our 2018 Reference Document for more information.

As a percentage of operating revenues as reported, cost of operations as reported increased to 76% in 2019 from 72% in 2018. Excluding IFRS 15 adjustments, segment cost of operations, as a percentage of the segment operating revenues, increased to 78% in 2019 from 71% in 2018, mainly as consequence of the significant growth in activity of our Equipment manufacturing segment and the change in estimate for multi-client survey amortization as described above.

The increase in research and development expenditures in 2019 compared to 2018 was mainly due to lower capitalization of development costs.

Marketing and selling expenses and general and administrative expenses decreased in 2019 compared to 2018 mainly due to continuous cost reduction measures and favourable exchange rate environment, with a rate of US\$1.13 per euro for the six months ended June 30, 2019 compared to US\$1.21 per euro for the six months ended June 30, 2018.

Other expenses of US\$2 million in 2019 corresponded to sundry rightsizing measures. Other expenses in 2018 included mainly US\$15 million of financial restructuring costs and fees.

Operating income

Operating income as reported amounted to a gain of US\$71 million in 2019 as a result of the factors described above, compared to a gain of US\$34 million in 2018. Excluding IFRS 15 adjustments, the impact of the Transformation Plan, the financial restructuring and provisions and impairments, segment operating income amounted to a gain of US\$64 million in 2019 compared to a gain of US\$72 million in 2018.

Segment operating income from our GGR segment was a gain of US\$45 million in 2019 compared to a gain of US\$103 million in 2018, mostly as a result of the change in multi-client surveys amortization.

Segment operating income from our Equipment segment amounted to a gain of US\$35 million compared to a loss of US\$9 million in 2018, due to strong volume increase in land equipment (with more 508^{XT} data acquisition systems) driving better absorption of manufacturing costs.

Equity in income of affiliates

Net income from investments accounted for under the equity method was nil in 2019, compared to a loss of US\$1 million

in 2018.

Financial income and expenses

Net cost of financial debt in 2019 was US\$66 million, compared to a net cost of US\$67 million in 2018.

Other financial income and expenses amounted to an income of US\$1 million in 2019, compared to an income of US\$831 million in 2018, mainly due to the strong positive impact of our financial restructuring for US\$771 million and first lien refinancing costs for US\$11 million (on a prorata basis).

Income taxes

Income taxes as reported amounted to an expense of US\$6 million in 2019 compared to an expense of US\$24 million in 2018.

Net Income from continuing operations

Net income from continuing operations as reported was nil in 2019 compared to a gain of US\$774 million in 2018 as a result of the factors discussed above.

Net Income from discontinued operations

Operating revenues for Contractual Data Acquisition increased 8% to US\$135 million in 2019 from US\$124 million in 2018.

Net loss from discontinued operations amounted to US\$129 million in 2019, including US\$94 million of impairment loss recognized on the remeasurement to fair value less cost to sell of our disposal groups. This compares to a loss of US\$78 million in 2018.

Net income

Net income as reported was a loss of US\$128 million in 2019 compared to a gain of US\$696 million in 2018 as a result of the factors discussed above.

Cash flows from continuing operations

Operating activities

The following table presents a summary of the net cash as reported related to operating activities for each of the periods stated:

	Six months ended June 30,	
	2019	2018 (restated)
	In millions of US\$	
Net cash before changes in working capital	261.8	74.2
Change in working capital	66.5	47.1
Net cash provided by operating activities	328.3	121.3

Before changes in working capital, net cash as reported provided by operating activities in 2019 was of US\$262 million compared to US\$74 million in 2018, mainly coming from increased profitability of our continuing operations in a context of strong revenue growth. Changes in working capital had a positive impact on cash from operating activities of US\$67 million in 2019, mainly due to significant decrease in accounts receivables (with the collection of the high revenue of the fourth quarter of 2018). The impact of changes in working capital was positive for US\$47 million in 2018.

Investing activities

The following table presents the main items linked to investing activities for each of the periods stated:

	Six months ended June 30,	
	2019	2018 (restated)
	In millions of US\$	
Net cash used in investing activities	133.6	162.6
Of which		
<i>Industrial capital expenditures</i>	20.0	24.2
<i>Capitalized development costs</i>	16.4	16.1
<i>Multi-client Data</i>	95.8	116.2

Our industrial capital expenditures include Sercel lease pool and asset suppliers' variance.

The decrease in Multi-client data investment was due to project delays. The allocation of the fleet to multi-client acquisition was 35% during the first six months of 2019 compared to 41% for the comparable period in 2018. In the second quarter of 2019, our multi-client program was focused on offshore projects in North Sea, Brazil where we started a 10,000 square km program and in the GOM where we completed our first nodes survey, and onshore projects in the Lower 48 in the United-States.

As of June 30, 2019, the net book value of our multi-client data library as reported was US\$597 million compared to US\$633 million as of December 31, 2018. Excluding IFRS 15 adjustments, the segment net book value of our multi-client data library was US\$458 million as of June 30, 2019, compared to US\$519 million as of December 31, 2018.

Financing activities

Net cash used by financing activities was US\$73 million during the six months ended June 30, 2019, compared to net cash provided of US\$235 million for the six months ended June 30, 2018 as the result of the finalization of our financial restructuring plan on February 21, 2018.

Net cash flows from discontinued operations

The following table presents a summary of the cash flow of the discontinued operations for each of the periods stated

	Six months ended June 30,	
	2019	2018
	In millions of US\$	
Net cash-flow from discontinued operations	(114.7)	(48.4)

The net cash flow from discontinued operations includes a significant negative change in working capital of US\$46 million in 2019.

Net financial debt

Net financial debt as of June 30, 2019 was US\$883 million compared to US\$733 million as of December 31, 2018. The increase in our net financial debt was mainly due to the impact of IFRS 16 application as of January 1, 2019 for US\$154 million. The ratio of net financial debt to equity was 59% as of June 30, 2019 compared to 45% as of December 31, 2018.

“Gross financial debt” is the amount of bank overdrafts, plus current portion of financial debt, plus financial debt, and “net financial debt” is gross financial debt less cash and cash equivalents. Net financial debt is presented as additional information because we understand that certain investors believe that netting cash against debt provides a clearer picture of our financial liability exposure. However, other companies may present net financial debt differently than we do. Net financial debt is not a measure of financial performance under IFRS and should not be considered as an alternative to any other measures of performance derived in accordance with IFRS.

The following table presents a reconciliation of net financial debt to financing items of our statement of financial position at June 30, 2019 and December 31, 2018:

In millions of US\$	June 30, 2019	December 31, 2018
Bank overdrafts	—	—
Current portion of long-term debt	54.5	17.8
Financial debt	1,269.8	1,148.9
Gross financial debt	1,324.3	1,166.7
Less cash and cash equivalents	(441.2)	(434.1)
Net financial debt	883.1	732.6

EBIT and EBITDAS (unaudited)

EBIT is defined as operating income plus our share of income in companies accounted for under the equity method. As a complement to operating income, EBIT may be used by management as a performance indicator for segments because it captures the contribution to our results of the significant businesses that we manage through our joint ventures.

EBITDAS is defined as earnings before interest, tax, income from equity affiliates, depreciation, amortization net of amortization expense capitalized to multi-client, and share-based compensation cost. Share-based compensation includes both stock options and shares issued under our share allocation plans. EBITDAS is presented as additional information because we understand that it is one measure used by certain investors to determine our operating cash flow and historical ability to meet debt service and capital expenditure requirements.

However, other companies may present EBIT and EBITDAS differently than we do. EBIT and EBITDAS are not a measure of financial performance under IFRS and should not be considered as an alternative to cash flow from operating activities or as a measure of liquidity or an alternative to net income as indicators of our operating performance or any other measures of performance derived in accordance with IFRS.

The following table presents a reconciliation of EBITDAS and EBIT to net income for the periods indicated:

	Six months ended June 30, 2019			
	Segment figures	Transformation Plan, provisions and impairments	IFRS 15 adjustment	
In millions of US\$				
EBITDAS	289.9	—	(15.9)	274.0
Depreciation and amortization	(65.1)	—	—	(65.1)
Multi-client surveys depreciation and amortization	(162.6)	—	23.4	(139.2)
Depreciation and amortization capitalized to multi-client surveys	4.0	—	—	4.0
Stock based compensation expenses	(2.5)	—	—	(2.5)
Operating income	63.7	—	7.5	71.2
Share of (income) loss in companies accounted for under equity method	0.1	—	—	0.1
EBIT	63.8	—	7.5	71.3
Cost of financial debt, net				(65.8)
Other financial income (loss)				0.5
Total income taxes				(5.6)
Net income (loss)				0.4

Six months ended June 30, 2018 (restated)

	Segment figures	Transformation Plan, provisions and impairments		As reported
		IFRS 15 adjustment		
		In millions of US\$		
EBITDAS	197.9	(17.0)	(72.7)	108.2
Depreciation and amortization	(52.7)	—	—	(52.7)
Multi-client surveys depreciation and amortization	(83.8)	—	51.8	(32.0)
Depreciation and amortization capitalized to multi-client surveys	10.3	—	—	10.3
Stock based compensation expenses	—	—	—	—
Operating income	71.7	(17.0)	(20.9)	33.8
Share of (income) loss in companies accounted for under equity method	(0.8)	—	—	(0.8)
EBIT	70.9	(17.0)	(20.9)	33.0
Cost of financial debt, net				(66.5)
Other financial income (loss)				831.4
Total income taxes				(23.9)
Net income (loss)				774.0

Contractual obligations (unaudited)

The following table sets forth our future cash obligations (not discounted) as of June 30, 2019:

	Payments Due by Period				
	Less than 1 year	2-3 years	4-5 years	More than 5 years	Total
	In millions of US\$				
Financial debt (including cumulated PIK) ^(a)	0.4	0.6	1,359.2	4.8	1,365.0
Other long-term obligations (cash interests)	84.1	176.4	126.3	—	386.8
Total long term debt obligations	84.5	177.0	1,485.5	4.8	1,751.8
Finance lease obligations	7.4	14.8	0.1	—	22.3
Operating leases	81.4	130.2	116.2	127.7	455.5
- Bareboat agreements covered by IFRS 16	36.0	72.0	72.0	100.0	280.0
- Other operating lease agreement covered by IFRS 16	45.4	58.2	44.2	27.7	175.5
Total contractual cash obligations ^(b)	173.3	322.0	1,601.8	132.5	2,229.6

(a) *PIK: payment-in-kind interest*

(b) *Payments in other currencies are converted into U.S. dollars at June 30, 2019 exchange rates.*