CONSOLIDATED INCOME STATEMENT
FOR THE YEAR ENDED 31 DECEMBER 2018

	Notes	Business performance[1] US$m	Exceptional items and certain re-measurements US$m	Reported 2018 US$m	*Business performance[1] US$m	*Exceptional items and certain re-measurements US$m	*Reported 2017 US$m
Revenue	3	**5,829**	**–**	**5,829**	6,395	–	6,395
Cost of sales	5a	**(5,110)**	**–**	**(5,110)**	(5,610)	–	(5,610)
Gross profit		**719**	**–**	**719**	785	–	785
Selling, general and administration expenses	5b	**(216)**	**–**	**(216)**	(235)	–	(235)
Exceptional items and certain re-measurements	6	**–**	**(356)**	**(356)**	–	(456)	(456)
Other operating income	5e	**22**	**–**	**22**	20	–	20
Other operating expenses	5f	**(10)**	**–**	**(10)**	(10)	–	(10)
Operating profit/(loss)		**515**	**(356)**	**159**	560	(456)	104
Finance income	7	**14**	**–**	**14**	10	–	10
Finance expense	7	**(81)**	**–**	**(81)**	(80)	–	(80)
Share of net profit of associates and joint ventures	17	**15**	**–**	**15**	11	–	11
Profit/(loss) before tax		**463**	**(356)**	**107**	501	(456)	45
Income tax (expense)/credit	8a	**(113)**	**67**	**(46)**	(138)	66	(72)
Net profit/(loss)		**350**	**(289)**	**61**	363	(390)	(27)
Attributable to:							
Petrofac Limited shareholders		**353**	**(289)**	**64**	361	(390)	(29)
Non-controlling interests	13	**(3)**	**–**	**(3)**	2	–	2
		350	**(289)**	**61**	363	(390)	(27)
Earnings/(loss) per share (US cents)							
Basic	9	**104.4**	**(85.5)**	**18.9**	106.2	(114.7)	(8.5)
Diluted	9	**102.3**	**(83.7)**	**18.6**	106.2	(114.7)	(8.5)

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

1 This measurement is shown by the Group as a means of measuring underlying business performance, see note 2 and Appendix A on page 177.

CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 2018

	Notes	2018 US$m	2017 US$m
Reported net profit/(loss)		**61**	(27)
Other comprehensive (loss)/income to be reclassified to consolidated income statement in subsequent periods			
Net changes in fair value of derivatives and financial assets designated as cash flow hedges	26	**(24)**	46
Foreign currency translation gains/(losses)	26	**17**	(9)
Other comprehensive (loss)/ income to be reclassified to consolidated income statement in subsequent periods		**(7)**	37
Other comprehensive (loss)/income reclassified to consolidated income statement			
Net (gains)/losses on maturity of cash flow hedges recycled in the year	26	**(3)**	13
Other comprehensive (loss)/income reclassified to consolidated income statement		**(3)**	13
Total comprehensive income for the year		**51**	23
Attributable to:			
Petrofac Limited shareholders		**53**	10
Non-controlling interests	13	**(2)**	13
		51	23

CONSOLIDATED BALANCE SHEET
AT 31 DECEMBER 2018

	Notes	2018 US$m	2017 US$m
Assets			
Non-current assets			
Property, plant and equipment	12	**685**	1,092
Goodwill	14	**73**	76
Intangible assets	16	**56**	76
Investments in associates and joint ventures	17	**30**	74
Other financial assets	18	**406**	553
Contract assets	21	**40**	–
Deferred consideration	15	**61**	–
Deferred tax assets	8c	**126**	101
		1,477	1,972
Current assets			
Inventories	19	**21**	8
Trade and other receivables	20	**1,431**	2,020
Contract assets	21	**1,998**	–
Work in progress	21	**–**	2,223
Related party receivables	31	**1**	1
Other financial assets	18	**144**	146
Income tax receivable		**8**	9
Cash and short-term deposits	22	**726**	967
		4,329	5,374
Assets held for sale	15	**–**	217
		4,329	5,591
Total assets		**5,806**	7,563
Equity and liabilities			
Equity			
Share capital	23	**7**	7
Share premium	23	**4**	4
Capital redemption reserve	23	**11**	11
Employee Benefit Trust shares	24	**(107)**	(102)
Other reserves	26	**95**	110
Retained earnings		**697**	882
Equity attributable to Petrofac Limited shareholders		**707**	912
Non-controlling interests	13	**302**	36
Total equity		**1,009**	948
Non-current liabilities			
Interest-bearing loans and borrowings	27	**376**	854
Provisions	28	**243**	269
Other financial liabilities	18	**341**	443
Deferred tax liabilities	8c	**43**	67
		1,003	1,633
Current liabilities			
Trade and other payables	29	**962**	1,675
Contract liabilities	21	**504**	–
Billings in excess of cost and estimated earnings	21	**–**	198
Interest-bearing loans and borrowings	27	**260**	725
Other financial liabilities	18	**139**	151
Income tax payable		**244**	251
Accrued contract expenses	32	**1,645**	1,956
Provisions	28	**40**	26
		3,794	4,982
Liabilities associated with assets held for sale	15	**–**	–
		3,794	4,982
Total liabilities		**4,797**	6,615
Total equity and liabilities		**5,806**	7,563

The consolidated financial statements on pages 113 to 176 were approved by the Board of Directors on 27 February 2019 and signed on its behalf by Alastair Cochran – Chief Financial Officer.

CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 31 DECEMBER 2018

	Notes	2018 US$m	*2017 US$m
Operating activities			
Profit before tax		**107**	45
Exceptional items and certain re-measurements	6	**356**	456
Profit before tax, exceptional items and certain re-measurements		**463**	501
Adjustments to reconcile profit before tax, exceptional items and certain re-measurements to net cash flows:			
Depreciation, amortisation and write-offs	5a, 5b	**141**	177
Expected credit loss allowance recognised during the year	20, 21	**1**	–
Share-based payments	5c	**17**	19
Difference between other long-term employment benefits paid and amounts recognised in the consolidated income statement	28	**7**	11
Net finance expense	7	**67**	70
Provision for onerous contracts and other provisions	28	**15**	39
Share of net profit of associates and joint ventures	17	**(15)**	(11)
Net other non-cash items		**(3)**	(17)
		693	789
Working capital adjustments:			
Inventories		**(17)**	–
Trade and other receivables		**(23)**	(10)
Contract assets		**316**	–
Work in progress		**–**	(41)
Related party receivables		**–**	3
Other current financial assets	18	**11**	67
Assets held for sale		**–**	(1)
Trade and other payables		**(103)**	(272)
Contract liabilities		**121**	–
Billings in excess of cost and estimated earnings		**–**	154
Accrued contract expenses		**(320)**	(113)
		678	576
Net other non-current items		**3**	(1)
Cash generated from operations		**681**	575
Restructuring, redundancy, migration costs and other exceptional items paid		**(24)**	(14)
Interest paid		**(69)**	(70)
Net income taxes paid		**(104)**	(69)
Net cash flows generated from operating activities		**484**	422
Investing activities			
Purchase of property, plant and equipment		**(90)**	(108)
Payments for intangible assets	16	**(8)**	(9)
Dividends received from associates and joint ventures	17	**11**	4
Net loans repaid by/(paid to) associates and joint ventures	17	**13**	(2)
Loans made to joint operation partners	18	**–**	(51)
Proceeds from disposal of property, plant and equipment	15	**152**	12
Proceeds from disposal of subsidiaries	11a	**130**	10
Interest received		**5**	3
Net cash flows used in investing activities		**213**	(141)
Financing activities			
Interest-bearing loans and borrowings, net of debt acquisition cost	18	**1,858**	1,105
Repayment of interest-bearing loans, borrowings and finance leases	18	**(2,833)**	(1,346)
Amounts received from non-controlling interest	11a	**224**	–
Purchase of Company's shares by Employee Benefit Trust	24	**(44)**	(39)
Dividends paid		**(128)**	(192)
Net cash flows used in financing activities		**(923)**	(472)
Net decrease in cash and cash equivalents		**(226)**	(191)
Net foreign exchange difference		**(5)**	4
Cash and cash equivalents at 1 January		**936**	1,123
Cash and cash equivalents at 31 December	22	**705**	936

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31 DECEMBER 2018

	Attributable to Petrofac Limited shareholders								
	Issued share capital US$m	Share premium US$m	Capital redemption reserve US$m	Employee Benefit Trust shares[1] US$m (note 24)	Other reserves US$m (note 26)	Retained earnings US$m	Total US$m	Non-controlling interests US$m	Total equity US$m
Balance at 1 January 2018	7	4	11	(102)	110	882	912	36	948
Opening reserve adjustment (note 2)	–	–	–	–	–	(116)	(116)	3	(113)
Balance at 1 January 2018 (adjusted)	7	4	11	(102)	110	766	796	39	835
Net profit/(loss)	–	–	–	–	–	64	64	(3)	61
Other comprehensive loss	–	–	–	–	(11)	–	(11)	1	(10)
Total comprehensive income	–	–	–	–	(11)	64	53	(2)	51
Purchase of Company's shares by Employee Benefit Trust (note 24)	–	–	–	(44)	–	–	(44)	–	(44)
Issue of Company's shares by Employee Benefit Trust (note 24)	–	–	–	39	(34)	(5)	–	–	–
Transfer to share-based payments reserve for Deferred Bonus Share Plan Invested Shares (note 25)	–	–	–	–	15	–	15	–	15
Credit to equity for share-based payments charge (note 25)	–	–	–	–	17	–	17	–	17
Income tax on share-based payments reserve	–	–	–	–	(2)	–	(2)	–	(2)
Recognised on disposal of 49% non-controlling interest of the Group's operations in Mexico (note 11a)	–	–	–	–	–	–	–	266	266
Dividends (note 10 and note 13)	–	–	–	–	–	(128)	(128)	(1)	(129)
Balance at 31 December 2018	**7**	**4**	**11**	**(107)**	**95**	**697**	**707**	**302**	**1,009**

	Attributable to Petrofac Limited shareholders								
	Issued share capital US$m	Share premium US$m	Capital redemption reserve US$m	Employee Benefit Trust shares[1] US$m (note 24)	Other reserves US$m (note 26)	Retained earnings US$m	Total US$m	Non-controlling interests US$m	Total equity US$m
Balance at 1 January 2017	7	4	11	(105)	73	1,107	1,097	26	1,123
Net (loss)/profit	–	–	–	–	–	(29)	(29)	2	(27)
Other comprehensive income	–	–	–	–	39	–	39	11	50
Total comprehensive income	–	–	–	–	39	(29)	10	13	23
Purchase of Company's shares by Employee Benefit Trust (note 24)	–	–	–	(39)	–	–	(39)	–	(39)
Issue of Company's shares to Group's employees by Employee Benefit Trust (note 24)	–	–	–	42	(38)	(4)	–	–	–
Transfer to share-based payments reserve for Deferred Bonus Share Plan Invested Shares (note 25)	–	–	–	–	16	–	16	–	16
Credit to equity for share-based payments charge (note 25)	–	–	–	–	19	–	19	–	19
Income tax on share-based payments reserve	–	–	–	–	1	–	1	–	1
Dividends (note 10 and note 13)	–	–	–	–	–	(192)	(192)	(3)	(195)
Balance at 31 December 2017	7	4	11	(102)	110	882	912	36	948

1 Shares held by Petrofac Employee Benefit Trust.

1 Corporate information

Petrofac Limited (the "Company") is a limited liability company registered and domiciled in Jersey under the Companies (Jersey) Law 1991 and is the holding company for the international group of Petrofac subsidiaries. Petrofac Limited and its subsidiaries at 31 December 2018 comprise the Petrofac Group (the "Group"). The Group's principal activity is the provision of services to the oil and gas production and processing industry.

The Group's consolidated financial statements for the year ended 31 December 2018 were authorised for issue in accordance with a resolution of the Board of Directors on 27 February 2019.

The Company's 31 December 2018 financial statements are shown on pages 184 to 201. Information on the Group's subsidiaries, associates and joint arrangements is contained in note 34 to these consolidated financial statements. Information on other related party transactions of the Group is provided in note 31.

2 Summary of significant accounting policies

2.1 Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and applicable requirements of Jersey law.

The consolidated financial statements have been prepared on a historical cost basis, except for derivative financial instruments, financial assets held at fair value through profit and loss, deferred consideration and contingent consideration that have been measured at fair value. The consolidated financial statements are presented in United States dollars and all values are rounded to the nearest million ("US$m"), except when otherwise indicated.

2.2 Presentation of results

The Group uses Alternative Performance Measures ("APMs") when assessing and discussing the Group's financial performance, financial position and cash flows that are not defined or specified under IFRS. The Group uses these APMs, which are not considered to be a substitute for or superior to IFRS measures, to provide stakeholders with additional useful information by adjusting for exceptional items and certain re-measurements which impact upon IFRS measures or, by defining new measures, to aid the understanding of the Group's financial performance, financial position and cash flows (refer note 6 and Appendix A on page 177 for details).

2.3 Adoption of new financial reporting standards, amendments and interpretations

Effective new financial reporting standards

The Group adopted IFRS 9 'Financial Instruments' and IFRS 15 'Revenue from Contracts with Customers' on 1 January 2018. The nature and effect of the changes are described below.

IFRS 9 'Financial Instruments'

IFRS 9 replaced IAS 39 'Financial Instruments: Recognition and Measurement' for annual periods beginning on or after 1 January 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement; impairment; and hedge accounting. Except for hedge accounting, which the Group applied prospectively, the Group applied IFRS 9 retrospectively, with the initial application date of 1 January 2018, without adjusting comparative information. A net cumulative catch-up adjustment of US$52m was recognised as a reduction to the opening balances of retained earnings of US$48m and non-controlling interests of US$4m (together 'opening reserves'), in the consolidated statement of changes in equity for the year ended 31 December 2018.

Classification and measurement

There was no impact to the consolidated balance sheet resulting from the Group applying the classification and measurement requirements of IFRS 9.

Impairment

The adoption of IFRS 9 fundamentally changed the Group's accounting for impairment losses for financial assets by replacing IAS 39's incurred loss approach with a forward-looking expected credit loss ("ECL") approach.

IFRS 9 requires the Group to measure and recognise ECLs on all applicable financial assets and contract assets arising from IFRS 15 'Revenue from Contracts with Customers' (e.g. trade receivables, contract assets, loans and receivables and bank balances), either on a 12-month or lifetime expected loss basis. The Group applied the simplified method and recognised lifetime ECLs on all trade receivables, contract assets, loans and receivables and bank balances.

The adoption of the ECL requirements of IFRS 9 resulted in an increased loss allowance relating to Group's financial assets and contract assets. The increase in loss allowance resulted in a reduction to opening reserves, at 1 January 2018, as follows:

	Impact US$m
Deferred tax assets	1
Total non-current assets	**1**
Trade and other receivables	(10)
Contract assets	(43)
Cash and short-term deposits	(1)
Total current assets	**(54)**
Total assets	**(53)**
Cumulative catch-up adjustment	
Retained earnings	(48)
Non-controlling interests	(4)
Total equity (opening reserves)	**(52)**
Deferred tax liabilities	(1)
Total liabilities	**(1)**
Total equity and liabilities	**(53)**

Hedge accounting

The Group applied the hedge accounting changes of IFRS 9 prospectively. At the date of the initial application, all the Group's existing hedging relationships were eligible to be treated as continuing hedging relationships. Consistent with prior periods, the Group continued to designate the fair value change of the entire forward contract in the Group's cash flow hedge relationships and, as such, the adoption of the hedge accounting requirements of IFRS 9 had no impact on transition.

IFRS 15 'Revenue from Contracts with Customers'

IFRS 15 established a five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

The Group adopted IFRS 15 using the modified retrospective method and elected to apply this method to those contracts that were not substantially completed at the date of initial application. Under this method comparative information was not restated, instead a net cumulative catch-up adjustment of US$61m was recognised as a reduction to the opening balance of retained earnings of US$68m and an increase to non-controlling interests of US$7m (together 'opening reserves'), in the consolidated statement of changes in equity for the year ended 31 December 2018.

Rendering of services

The Group provides fixed-price engineering, procurement and construction services and reimbursable engineering and production services to the oil and gas production and processing industry.

Fixed-price engineering, procurement and construction services contacts

The Group's contracts with customers for the provision of fixed-price engineering, procurement and construction services include a single performance obligation. The Group concluded that revenue from such services should be recognised over time given that the customer simultaneously receives and consumes the benefits provided by the Group.

Applying the input method

Prior to the adoption of IFRS 15, revenue from fixed-price engineering, procurement and construction contracts was recognised using the percentage-of-completion method based on client certified surveys of work performed, once the outcome of the contract could be estimated reliably.

IFRS 15 provides two alternative methods for recognising revenue i.e. the output method or the input method. The Group decided to adopt the input method since it faithfully depicts the Group's performance in transferring control of the goods and services to the customer, provides meaningful information in respect of satisfied and unsatisfied performance obligations towards the customer and also enables Management to better analyse estimation accruals (accrued contract expenses), which prior to the adoption of IFRS 15 was calculated as a difference between actual costs and percentage-of-completion based costs.

At 1 January 2018, the cumulative catch-up adjustment of US$40m, recognised as a reduction to the opening reserves, impacted the following consolidated balance sheet line items as a result of applying the input method to those contracts that were not substantially completed at the date of initial application:

	Input method US$m	Variable consideration US$m	Total impact US$m
Contract assets	(42)	(20)	(62)
Total assets	**(42)**	**(20)**	**(62)**
Cumulative catch-up adjustment			
Retained earnings	(47)	(21)	(68)
Non-controlling interests	7	–	7
Total equity (opening reserves)	**(40)**	**(21)**	**(61)**
Deferred tax liabilities	(8)	–	(8)
Total non-current liabilities	**(8)**	**–**	**(8)**
Income tax payable	(1)	(1)	(2)
Accrued contract expenses	7	2	9
Total current liabilities	**6**	**1**	**7**
Total liabilities	**(2)**	**1**	**(1)**
Total equity and liabilities	**(42)**	**(20)**	**(62)**

Variable consideration

Prior to the adoption of IFRS 15, variable consideration, e.g. variation orders, incentive income, claims and liquidated damages, were recognised in the consolidated financial statements when it was considered probable that the associated monetary amounts would be settled by the customer using Management's best estimate with reference to the contract, recent customer communications and other forms of documentary evidence.

Under IFRS 15 Management decided to use the expected value method to assess/re-assess variable consideration at contract inception and at each reporting date. This resulted in recognition of additional liquidated damages of US$2m and reduction in previously recognised variation orders of US$20m from applying the expected value method to those contracts that were not substantially completed at the date of initial application at 1 January 2018.

When assessing the likelihood of settlement with the customer, Management considers all relevant facts and circumstances available with reference to the contract, recent customer communication and other forms of documentary evidence available such that the amount of variable consideration assessed represents Management's expected value and the estimated variable consideration is not expected to be constrained.

At 1 January 2018, the cumulative catch-up adjustment of US$21m, recognised as a reduction to the opening reserves, impacted the consolidated balance sheet line items in the table above as a result of applying the expected value method to those contracts that were not substantially completed at the date of initial application.

Advance payments received from customers

Advance payments received from customers for fixed-price engineering, procurement and construction contracts are structured primarily for reasons other than the provision of finance to the Group, (e.g. mobilisation costs), and they do not provide customers with an alternative to pay in arrears. In addition, the length of time between when the customer settles amounts to which the Group has an unconditional right to payment and the Group transfers goods and services to the customer is relatively short. Therefore, the Group concluded that there was not a significant financing component within such contracts. Currently, the Group does not have any contracts where payments by a customer are over several years after the Group has transferred goods and services to the customer; if such cases arise in future the transaction price for such contracts will be determined by discounting the amount of promised consideration using an appropriate discount rate. There was no transition impact at 1 January 2018.

Reimbursable engineering and production services contracts

The Group's contracts with customers for the provision of reimbursable engineering and production services include distinct performance obligations based on the assessment that the service is capable of being distinct both individually and within the context of the contract. The Group concluded that the revenue from such services should be recognised over time given that the customer simultaneously receives and consumes the benefits provided by the Group, using the input method for measuring progress towards complete satisfaction of the performance obligation. Prior to adoption of IFRS 15 cost to cost method was used which is broadly in line with the input method. There is no transition impact at 1 January 2018.

Variable consideration

Prior to adoption of IFRS 15 incentive payments were included in revenue when the contract was sufficiently advanced that it was probable that the specified performance standards would be met or exceeded, and the amount of the incentive payments could be measured reliably. Under IFRS 15 variable consideration, e.g. incentive payments, bonuses, etc. are estimated at contract inception and at the end of each reporting period using the single most likely amount method, where the outcome is expected to be binary. The IFRS 15 method is consistent with the previous practice and there was no transition impact at 1 January 2018.

2 Summary of significant accounting policies
continued

Advance payments received from customers
The Group does not generally receive advances from customers for its reimbursable engineering and production services contracts. If advances are received these are likely to be short term in nature. The Group concluded that in such cases it will use the practical expedient provided in IFRS 15 not to adjust the promised amount of the consideration for the effects when the Group expects at contract inception the period between the transfer of a promised good or service to a customer and when the customer pays for that good or service will be one year or less. Therefore, for short-term advances, the Group will not account for a financing component even if it is a significant amount. There is no transition impact at 1 January 2018.

Sale of goods
The Group's contracts with customers for the sale of crude oil and gas generally include one performance obligation. The Group concluded that revenue from the sale of crude oil and gas should be recognised at a point in time when control of the asset is transferred to the customer, generally on delivery of the goods. Therefore, the adoption of IFRS 15 did not have any impact on revenue recognition.

The Group's Equity Upstream Investments and Production Enhancement Contracts are not impacted by the adoption of IFRS 15.

Warranty obligations
The Group provides assurance-type warranties to customers that the related product will function as the parties intended due to the product being compliant with contractual specifications. The Group does not provide warranties as a service. Assurance-type warranties which will continue to be accounted for in accordance with IAS 37 'Provisions, Contingent Liabilities and Contingent Assets' consistent with previous practice. There is no transition impact at 1 January 2018.

Principal versus agent considerations
The Group concluded that it operates as principal in all its contracts with customers. There is no transition impact at 1 January 2018.

Presentation and disclosure requirements
The Group discloses revenue recognised from contracts with customers disaggregated into categories that depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. The Group also disclosed information about the relationship between the disclosure of disaggregated revenue and revenue information disclosed for each operating segment. Refer to note 3 for the disclosure on disaggregated revenue.

Balance sheet reclassification
IFRS 15 requires contract assets and contract liabilities for individual customer contracts to be presented on a net basis. Prior to the adoption of IFRS 15 such balances were presented gross. IFRS 15 also requires any unconditional rights to consideration to be disclosed as a receivable and any conditional rights to consideration to be disclosed separately as a contract asset.

At the date of initial application, the following presentation and classification changes were made to the consolidated balance sheet line items as a result of applying IFRS 15 (note 21):

- 'Work-in-progress' was reclassified to 'Contract assets'
- 'Advances received from customers' of US$351m classified within 'Trade and other payables' for individual customer contracts were offset against 'Contract assets' in the Engineering & Construction operating segment
- 'Retention receivables' of US$379m classified within 'Trade and other receivables' were reclassified to 'Contract assets' mainly relating to the Engineering & Construction operating segment
- 'Billings in excess of cost and estimated earnings' was reclassified to 'Contract liabilities'
- 'Advances received from customers' of US$185m classified within 'Trade and other payables' for individual customer contracts that do not fully offset 'Contract assets' were reclassified to 'Contract liabilities'
- 'Trade receivables' of US$165m representing conditional rights to consideration were reclassified to 'Contract assets', of which US$144m related to the Integrated Energy Services operating segment and US$21m related to the Engineering & Production Services operating segment. Also, an amount of US$40m was reclassified from 'Trade receivables' to non-current contract assets representing non-current receivables and related to the Engineering & Production Services operating segment

2.4 Financial reporting standards, amendments and interpretations issued but not yet effective
Standards issued but not yet effective up to the date of issuance of the Group's consolidated financial statements are listed below and include only those standards and amendments that are likely to have an impact on the financial performance, position and disclosures of the Group at a future date. The Group intends to adopt these standards when they become effective.

IFRS 16 Leases
IFRS 16 was issued in January 2016 and it replaces IAS 17 'Leases', IFRIC 4 'Determining whether an Arrangement contains a Lease', SIC-15 'Operating Leases - Incentives' and SIC-27 'Evaluating the Substance of Transactions Involving the Legal Form of a Lease'. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under IAS 17. The standard includes two recognition exemptions for lessees – leases of 'low-value' assets (e.g. personal computers) and short-term leases (i.e. leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e. the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e. the right-of-use asset). Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

Lessees will be also required to remeasure the lease liability upon the occurrence of certain events (e.g. a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset.

The Group will implement IFRS 16 'Leases' on 1 January 2019 using the modified retrospective method, whereby the Group will measure the lease liability at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate at the date of initial application. A right-of-use asset will be recognised at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments, provision for onerous operating leases and rent-free period adjustments relating to that lease recognised in the balance sheet immediately before the date of initial application.

The Group will elect to apply IFRS 16 to contracts that were previously identified as operating leases in accordance with IAS 17 and IFRIC 4. Comparative information will not be restated. The Group will use the applicable exemptions of IFRS 16 and IFRS 16 will be applied to all non-cancellable leases except for those

with low value assets or with a lease term of 12 months or less containing no purchase options.

On 1 January 2019, the Group expects to recognise right-of-use assets of approximately US$40m – US$45m, within non-current assets in the consolidated balance sheet. These assets will be depreciated on a straight-line basis over the remaining term of each individual lease. There will be a lease liability of approximately US$80m – US$85m recognised at 1 January 2019, the majority of which will be recognised as a non-current liability in the consolidated balance sheet. Onerous operating leases of US$18m at 31 December 2018 and a rent-free period liability of US$9m at 31 December 2018 will be offset against right-of-use asset as at the date of initial application.

The preliminary estimated impact of implementing IFRS 16 on the Group's 2019 consolidated financial statements is as follows:

- a reduction to reported net profit by approximately US$1m and increase in finance expense by approximately US$1m
- with the exception of changes in classification, IFRS 16 will have no impact on the Group's reported total net cash flows
- an increase in EBITDA by approximately US$10m – US$12m

Implementation of IFRS 16 will depend on the classification of leases as either short term or long term and enforceability of leases as either cancellable or non-cancellable, which will be determined by reference to the contractual terms of each individual lease and is dependent on several factors which may change in future periods. The estimated 2019 consolidated financial statements impact is computed based on the information available to date and the actual impact of IFRS 16 on the Group's 2019 consolidated financial statements may differ from the estimates provided above.

Lessor accounting under IFRS 16 is substantially unchanged from current accounting under IAS 17 'Leases'. IFRS 16, which is effective for annual periods beginning on or after 1 January 2019, requires lessees and lessors to make more extensive disclosures than under IAS 17.

2.5 Basis of consolidation

The consolidated financial statements comprise the financial statements of Petrofac Limited (the "Company") and entities controlled by the Company (its subsidiaries) as at 31 December 2018. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption, and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- Contractual arrangements with the other vote holders of the investee
- Rights arising from other contractual arrangements
- Voting rights and potential voting rights of the Group

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the reporting period are included in the consolidated statement of other comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Net profit or loss and each component of other comprehensive income ("OCI") are attributed to Petrofac Limited shareholders and to non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to align their accounting policies with the Group's accounting policies.

All intra-group transactions, balances, income and expenses are eliminated on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group ceases to control a subsidiary, it derecognises the related assets (including goodwill), liabilities, non-controlling interest and other components of equity while any resultant gain or loss is recognised in the consolidated income statement. Any investment retained is recognised at fair value.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. All transaction costs associated with business combinations are charged to the consolidated income statement in the reporting period of such combination.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree. If the business combination is achieved in stages, any previously held equity interest is re-measured at its acquisition date fair value and any resulting gain or loss is recognised in the consolidated income statement.

Goodwill is initially measured at cost, being the excess of the aggregate consideration transferred and the fair value of the net assets acquired together with the amount recognised for non-controlling interests, and any previous interest held. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group reassesses whether it has correctly identified all the assets acquired and all the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain from a bargain purchase is recognised in the consolidated income statement.

Following initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is reviewed for impairment annually or more frequently if events or changes in circumstances indicate that the carrying amount may be impaired.

For the purpose of impairment testing, goodwill is allocated to the cash-generating units that are expected to benefit from the synergies of the combination. Each unit or units to which goodwill is allocated represents the lowest level within the Group at which the goodwill is monitored for internal management purposes and is not larger than an operating segment determined in accordance with IFRS 8 'Operating Segments'.

2 Summary of significant accounting policies
continued

Impairment is determined by assessing the recoverable amount of the cash-generating units to which the goodwill relates. Where the recoverable amount of the cash-generating units is less than the carrying amount of the cash-generating units and related goodwill, an impairment charge is recognised in the consolidated income statement.

Where goodwill has been allocated to cash-generating units and part of the operation within those units is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the value portion of the cash-generating units retained.

Investment in associates and joint ventures

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. There are two types of joint arrangements: joint venture and joint operation. A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. A joint operation is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities relating to the joint arrangement.

The considerations made in determining significant influence or joint control are like those necessary to determine control over subsidiaries.

The Group's investments in its associates and joint ventures are accounted for using the equity method. Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment separately.

The consolidated income statement reflects the Group's share of the net profits of the associate or joint venture. Any change in other comprehensive income ("OCI") of those investees is presented as part of the Group's consolidated statement of other comprehensive income. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the consolidated statement of changes in equity.

The Group's share of net profit or loss of associates and joint ventures is presented separately in the consolidated income statement outside operating profit and represents profit or loss after tax and non-controlling interests.

Any unrealised gains and losses resulting from transactions between the Group and associates and joint ventures are eliminated to the extent of the Group's ownership interest in these associates and joint ventures.

The financial statements of the associates and joint ventures are prepared for the same reporting period as the Group. When necessary, adjustments are made to align the accounting policies with those of the Group.

At end of each reporting period, the Group determines whether there is objective evidence that its investment in its associates or joint ventures are impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying amount and recognises any impairment loss as an exceptional item in the consolidated income statement.

Upon loss of significant influence over an associate or joint control over a joint venture, the Group measures and recognises any retained investment at fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in the consolidated income statement.

Joint operations

The Group's interests in joint operations are recognised in relation to its interest in a joint operation's:

- Assets, including its share of any assets held jointly
- Liabilities, including its share of any liabilities incurred jointly
- Revenue from the sale of its share of the output arising from the joint operation
- Share of the revenue from the sale of the output by the joint operation
- Expenses, including its share of any expenses incurred jointly

Under joint operations, Group incurred expenses and its share of the revenue earned are recognised in the consolidated income statement. Assets controlled and liabilities incurred by the Group are recognised in the consolidated balance sheet.

Foreign currency translation

The Group's consolidated financial statements are presented in United States dollars ("US$m"), which is also the Company's functional currency.

Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Functional currency is defined as the currency of the primary economic environment in which the entity operates. The Group uses the direct method of consolidation and on disposal of a foreign operation, the gain or loss that is reclassified to net profit or loss reflects the amount that arises from using this method.

Transactions and balances

Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date.

Differences arising on settlement or translation of monetary items are recognised in profit or loss with the exception of monetary items that are designated as part of the hedge of the Group's net investment of a foreign operation. These are recognised in the consolidated statement of other comprehensive income until the net investment is disposed of, at which time the cumulative amount is reclassified to profit or loss. Tax charges and credits attributable to exchange differences on those monetary items are also recognised in the consolidated statement of other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e. translation differences on items whose fair value gain or loss is recognised in the consolidated statement of other comprehensive income or profit or loss are also recognised in the consolidated statement of other comprehensive income or profit or loss, respectively).

Group subsidiaries

On consolidation, the assets and liabilities of subsidiaries with non-United States dollars functional currencies are translated into United States dollars at the rate of exchange prevailing at the reporting date and their income statements are translated at exchange rates prevailing at the transaction dates. The exchange differences arising on translation for consolidation are recognised in the consolidated statement of other comprehensive income. On disposal of a subsidiary with non-United States dollars functional currency, the component of the consolidated statement of other comprehensive income relating to currency translation is recognised in the consolidated income statement.

Any goodwill arising on the acquisition of a subsidiary with non-United States dollars functional currencies and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition are treated as assets and liabilities of the foreign operation and translated at the spot rate of exchange at the reporting date.

2.6 Significant accounting judgements and estimates

Judgements

In the process of applying the Group's accounting policies, management has made the following judgements, apart from those involving estimations, which have the most significant effect on the amounts recognised in the consolidated financial statements:

- Revenue recognition on fixed-price engineering, procurement and construction contracts: the Group measures progress and recognises revenue on fixed-price engineering, procurement and construction contracts using the input method, based on the actual cost of work performed at end of the reporting period as a percentage of the estimated total contract costs at completion. The input method faithfully depicts the Group's performance in transferring control of goods and services to the customer, provides meaningful information in respect of satisfied and unsatisfied performance obligations towards the customer
- Revenue recognition on consortium contracts: the Group recognises its share of revenue from contracts executed as part of a consortium. The Group uses the input method to recognise revenue for the reporting period and recognises its share of revenue and costs in accordance with the agreed consortium contractual arrangement. In selecting the appropriate accounting treatment, the main considerations are:
  - Determination of whether the joint arrangement is a joint operation or joint venture (though not directly related to revenue recognition this judgement has a material impact on presentation in the consolidated income statement) in accordance with IFRS 11 'Joint Arrangements'

In selecting the most relevant and reliable accounting policies in relation to revenue recognition, joint arrangement accounting and capitalisation of assets for contracts executed by the Integrated Energy Services ("IES") operating segment, the main considerations are as follows:

- Determination of whether the joint arrangement is a joint operation or joint venture (though not directly related to revenue recognition this judgement has a material impact on presentation in the consolidated income statement) in accordance with IFRS 11 'Joint Arrangements'
- The nature and extent, if any, of volume and price financial exposures under the terms of the contract
- The extent to which the Group's capital investment is at risk and the mechanism for recoverability under the terms of the contract
- At what point can the revenues from each type of contract be reliably measured and recognised in accordance with IFRS 15 'Revenue from Contracts with Customers'
- Whether there are any other remaining features unique to the contract that are relevant to the assessment of revenue recognition

Revenue recognition of IES contracts:

- The Group assesses on a case by case basis the most appropriate treatment for its various commercial structures which include Production Enhancement Contracts ("PECs") and Equity Upstream Investments including Production Sharing Contracts ("PSCs") (see accounting policies note on page 126 for further details)

IES contracts are classified in the consolidated balance sheet as follows:

- The Group assesses on a case by case basis the most appropriate consolidated balance sheet classification of its Production Enhancement Contracts and Equity Upstream Investments (see accounting policy notes on page 126)
- In selecting the most appropriate policies for IES contracts the main judgements are as follows:
  - The Mexican PEC assets are classified as oil and gas assets within property, plant and equipment in the consolidated balance sheet as there is direct exposure to variable field production levels, and indirect exposure to changes in hydrocarbon prices. These exposures impact the generation of cash from the assets and any financial return thereon, including the risk of negative financial return. Management believes this classification is most appropriate due to the nature of expenditure and it is aligned with our treatment in respect of PSC arrangements where the risk/reward profile is similar
  - Upon migration of PEC to PSC arrangements, the existing PEC net assets will be derecognised and an oil and gas asset within property, plant and equipment, representing the Group's ownership interest in the PSC, will be recognised in the consolidated balance sheet. Any gain or loss arising on the migration will be recognised as an exceptional item in the consolidated income statement. The migrated PSC arrangements will be treated as a joint operation since all the decisions concerning the relevant activities of the unincorporated joint operation will require unanimous consent of the joint operation partners

2 Summary of significant accounting policies continued

Estimation uncertainty

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

- Liquidated damages ("LDs"): the Group provides for LD claims, using the expected value approach to assess/re-assess LDs at contract inception and at each reporting date, where the customer has the contractual right to apply LDs and where it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the LD is subsequently resolved. This requires a probabilistic assessment of the monetary amount of LDs payable which involves a number of Management judgements and assumptions, (e.g. contractual position with the customer, negotiations with the customer specifically relating to extension of time ("EoT"), past experience with the customer, etc.), regarding the amounts to recognise in contract accounting. No additional amounts were provided during the year for LD claims (2017: US$4m)
- Contract costs to complete estimates: at the end of the reporting period the Group is required to estimate costs to complete on fixed-price contracts, based on work to be performed beyond the reporting period. This involves objective evaluation of project progress against the delivery schedule, evaluation of work to be performed and the associated costs to fully deliver the contract to the customer. This estimate will impact revenues, cost of sales, contract assets, contract liabilities and accrued contract expenses
- Recognition of variation orders ("VOs"): the Group recognises revenues and margins from VOs using the expected value approach to assess/re-assess VOs at contract inception and at each reporting date where it is considered highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the VO is subsequently resolved. In performing the assessment Management considers the likelihood of such settlement being made by reference to the contract, customer communications and other forms of documentary evidence. At 31 December 2018, the work in progress line item in the consolidated balance sheet includes variation orders of US$235m (2017: US$374m)
- Onerous contract provisions: the Group recognises an onerous contract provision (IAS 37 'Provisions, Contingent Liabilities and Contingent Assets') for future losses on contracts where it is considered probable that contract costs are likely to exceed revenues at contract completion. Estimating future losses involves making a number of assumptions, (e.g. contractual position with the customer, vendors and subcontractors, negotiations with the customer, vendors and subcontractors, cost to complete estimates, past experience with the customer, vendors and subcontractors, etc.), about the achievement of contract performance targets and the likely levels of future cost escalation over time. The carrying amount of onerous contract provisions at 31 December 2018 was US$18m (2017: US$16m). See note 28
- Onerous operating lease provision: the Group provides for future costs on its non-cancellable operating leases where it is considered probable that the leasehold office buildings will remain vacant or underutilised in future years due to reduced business activity. Assumptions involve an estimate of future business growth and the likely levels of occupancy over time. The carrying amount of the onerous operating lease provision at 31 December 2018 was US$18m (2017: US$18m). See note 28
- Impairment of goodwill: the Group determines whether goodwill is impaired at least on an annual basis. This requires an estimation of the value in use of the cash-generating units to which the goodwill is allocated. Estimating the value in use requires the Group to make an estimate of the expected future cash flows from each cash-generating unit and also to determine an appropriate discount rate in order to calculate the present value of those cash flows. The carrying amount of goodwill at 31 December 2018 was US$73m (2017: US$76m). See note 14
- Deferred tax assets: the Group recognises deferred tax assets on all applicable temporary differences where it is probable that the tax assets estimated are realised and future taxable profits will be available for utilisation. This requires Management to make judgements and assumptions regarding the interpretation of tax laws and regulations as they apply to events in the period and the amount of deferred tax that can be recognised based on the magnitude and likelihood of future taxable profits which are estimated from management assumptions with respect to the outcome of future events. The carrying amount of net deferred tax assets at 31 December 2018 was US$128m (2017: US$101m). Included within the gross assets is US$33m (2017: US$33m) on which a management judgement has been made on the probable treatment of the Migration of Santuario Production Enhancement Contract (PEC) to Production Sharing Contract (PSC) for tax purposes, based on professional external advice
- Income tax: Group entities are routinely subject to tax audits and assessments including processes whereby tax return filings are discussed and agreed with the relevant tax authorities. Whilst the ultimate outcome of such tax audits and discussions cannot be determined with certainty, Management estimates the level of tax provisioning required for amounts where there is a probable future outflow, based on the applicable law and regulations, historic outcomes of similar audits and discussions, professional external advice and consideration of the progress on, and nature of, current discussions with the tax authority concerned. The ultimate outcome following resolution of such audits and assessments may be materially higher or lower than the amount provided. The carrying amount of uncertain tax positions ("UTPs"), recognised within income tax payable line item of the consoldated balance sheet at 31 December 2018, was US$101m (2017: US$93m)
- Other taxes payable: the Group accrues indirect taxes, such as value added tax, to the extent it is probable that there will be an associated tax payment or receipt in respect of relevant income and expenses. This requires Management to make judgements and assumptions on the application of tax laws and regulations to events in the period. The ultimate outcome may result in materially higher or lower payments or receipts
- Recoverable amount of property, plant and equipment, intangible assets and other financial assets: the Group determines at the end of the reporting period whether there are indicators of impairment in the carrying amount of its property, plant and equipment, intangible assets and other financial assets. Where indicators exist, an impairment test is undertaken which requires management to estimate the recoverable amount of its assets which is initially based on its value in use. When necessary, fair value less costs of disposal is estimated, for example, by reference to quoted market values, similar arm's length transactions involving these assets or risk adjusted discounted cash flow models. For the following specific assets, certain assumptions and estimates have been made in determining recoverable amounts. Should any changes occur in these assumptions, further impairment may be required in future periods:
  - In respect of oil and gas assets in Mexico there were no indicators for impairment at 31 December 2018, mainly relating to the oil price assumptions and the reserves for oil and gas production. The recoverable amount of the assets is influenced

by the timing and outcome of ongoing contractual negotiations in respect of the outstanding PECs migration to PSCs. Key judgements include the expected working interest in the PSCs and financial and fiscal terms achieved upon migration. Management considered the impact of delay in migration and believed that the carrying amount of the assets in Mexico of US$526m reflected an expected outcome of a commercial negotiation in respect of migrations.
  - Block PM304 oil and gas asset in Malaysia had a carrying amount of US$234m (2017: US$244m); the recoverable amount, which was based on fair value less cost of disposal, was higher than the asset's carrying amount
- Recoverable amount of contingent consideration: the carrying amount of the Pánuco contingent consideration was US$45m at 31 December 2018, after recognising a fair value loss of US$43m during 2018 as an exceptional item in the consolidated income statement. The downward fair value adjustment was a significant Management estimate in response to considerable uncertainty concerning the timing and outcome of migration of the Pánuco PEC to a PSC and whether the contingent consideration pay out conditions will be achieved. Management considered alternative scenarios to assess the recoverability of the Pánuco contingent consideration, including but not limited to the impact of delay in migration or renegotiation of the contingent consideration in the event of migration to another form of contract. Based on this assessment Management esimated that the carrying amount of the contingent consideration of US$45m reflected an expected outcome of a commercial negotiation in respect of migration or an alternative migration. This was a significant accounting estimate made by Management to determine the fair value of the contingent consideration at 31 December 2018. A fair value loss would be recognised in the consolidated income statement if the actual outcome of the migration or commercial negotiation is different to Management's current expectation
- Recoverable amount of deferred consideration: the deferred consideration relating to disposal of JSD6000 installation vessel (the "vessel"), representing a contractual right to the Group, was recognised as a non-current asset in the consolidated balance sheet. The deferred consideration was initially measured and recognised at fair value and will be subsequently measured at fair value through profit or loss with any fair value gain and loss recognised as an exceptional item in the consolidated income statement. The fair value of the deferred consideration, with Management's current involvement and recent discussions with the Group's partner in the construction of the vessel, is based on the assumption that the Group's partner has the continued intent and the required capabilities to complete the construction and commissioning of the vessel within the due timeframe. At the end of each reporting date, Management will review its estimate to assess the ability of the Group's partner to complete the construction and commissioning of the vessel and under such circumstances that may impair the Group's partner's ability to complete these activities, a fair value loss would be recognised in the consolidated income statement

In 2018, there were pre-tax impairment charges and fair value re-measurements of US$280m (2017: US$422m), post-tax US$211m (2017: US$367m) which are explained in note 6. The key sources of estimation uncertainty for these measurements are consistent with those disclosed in note 6

- Units of production depreciation: estimated proven plus probable reserves are used in determining the depreciation of oil and gas assets such that the depreciation charge is proportional to the depletion of the remaining reserves over the shorter of: life of the field or the end of the respective licence/concession period. These calculations require the use of estimates including the amount of economically recoverable reserves and future oil and gas capital expenditure (note 12)
- Decommissioning costs: the recognition and measurement of decommissioning provisions involves the use of estimates and assumptions which include the existence of an obligation to dismantle and remove a facility or restore the site on which it is located, the appropriate discount and inflation rates to use in determining the present value of the liability, the estimated costs of decommissioning based on internal and external estimates and the payment dates for expected decommissioning costs. As a result, actual costs could differ from estimated cost estimates used to provide for decommissioning obligations. The provision for decommissioning at 31 December 2018 of US$95m (2017: US$138m) represents management's best estimate of the present value of future decommissioning costs

2.7 Significant accounting policies

Revenue from contracts with customers

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

The Group provides warranties to customers with assurance that the related product will function as the parties intended because it complies with agreed-upon specifications. The Group does not provide warranties as a service, in addition to the assurance that the product complies with agreed-upon specifications, in its contracts with customers. As such, the Group expects that such warranties will be assurance-type warranties which will continue to be accounted for under IAS 37 'Provisions, Contingent Liabilities and Contingent Assets'.

Engineering & Construction (E&C)

For fixed-price engineering, procurement and construction contracts, the Group measures progress and recognises revenue using the input method, based on the actual cost of work performed at end of the reporting period as a percentage of total contract costs at completion once the outcome of a contract can be estimated reliably. In the early stages of contract completion, (i.e. contract progress up to between 15% to 35% depending on the risk evaluation for each individual contract taking into account contract value, duration and complexities involved in the execution of the contract), when the outcome of a contract cannot be estimated reliably, contract revenues are recognised only to the extent of costs incurred that are expected to be recoverable. The services provided under the contract are satisfied over time rather than at a point in time since the customer simultaneously receives and consumes the benefits provided by the Group.

The fixed-price engineering, procurement and construction contracts contain distinct goods and services but these are not distinct in the context of the contract and are therefore combined into a single performance obligation. At contract inception the Group considers the following factors to determine whether the contract contains a single performance obligation or multiple performance obligations:

- it provides a significant service of integrating the goods or services with other goods or services promised in the contract into a bundle of goods or services that represent the combined output or outputs for which the customer has contracted
- one or more of the goods or services significantly modifies or customises, or are significantly modified or customised by, one or more of the other goods or services promised in the contract
- the goods or services are highly interdependent or highly interrelated

2 Summary of significant accounting policies
continued

Contract modifications, e.g. variation orders, are accounted for as part of the existing contract, with a cumulative catch up adjustment to revenue. For material contract modifications a separate contract may be recognised, based on Management's assessment of the following factors:

- the scope of the contract increases because of the addition of promised goods or services that are distinct; and
- the price of the contract increases by an amount of consideration that reflects the Group's stand-alone selling prices of the additional promised goods or services and any appropriate adjustments to that price to reflect the circumstances of the particular contract

Variable consideration e.g. variation orders, liquidated damages and incentive payments are assessed/re-assessed using the expected value approach or most likely outcome method, as appropriate, at contract inception and at each reporting date where it is considered highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved. In performing the assessment Management considers the likelihood of such settlement being made by reference to the contract, customer communications and other forms of documentary evidence.

Revenues from cost-plus-fee contracts and reimbursable contracts are recognised using the input method for measuring progress towards complete satisfaction of the performance obligation.

An onerous contract provision is recognised for all losses expected to arise on completion of contracts entered into at the reporting date, whether or not work has commenced on these contracts.

Advance payments received from customers for fixed-price engineering, procurement and construction contracts are structured primarily for reasons other than the provision of finance to the Group, (e.g. mobilisation costs), and they do not provide customers with an alternative to pay in arrears. In addition, the length of time between when the customer settles amounts to which the Group has an unconditional right to payment and the Group transfers goods and services to the customer is relatively short. Therefore, the Group has concluded that there is not a significant financing component within such contracts. Currently, the Group does not have any contracts where payments by a customer are over several years after the Group has transferred goods and services to the customer; if such cases arise in future the transaction price for such contracts will be determined by discounting the amount of promised consideration using an appropriate discount rate.

Engineering & Production Services (EPS)

The Group's contracts with customers for the provision of reimbursable engineering and production services include distinct performance obligations based on the assessment that the service is capable of being distinct both individually and within the context of the contract. The services are satisfied over time given that the customer simultaneously receives and consumes the benefits provided by the Group, using the input method for measuring progress towards complete satisfaction of the performance obligation.

Variable consideration, e.g. incentive payments and performance bonuses will be estimated at contract inception and at the end of each reporting period using the single most likely amount approach, where the outcome is expected to be binary and where it is considered highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Revenues from fixed-price contracts are recognised using the input method, measured by milestones completed or earned value once the outcome of a contract can be estimated reliably. In the early stages of contract completion, when the outcome of a contract cannot be estimated reliably, contract revenues are recognised only to the extent of costs incurred that are expected to be recoverable.

The Group does not generally receive advances from customers for its reimbursable engineering and production services contracts. If advances are received these will only be short term. In such cases the Group applies the practical expedient provided in IFRS 15 'Revenue from Contracts with Customers', and will not adjust the promised amount of the consideration for the effects of a significant financing component in the contracts, where the Group expects at contract inception that the period between the Group transfer of a promised good or service to a customer and when the customer pays for that good or service will be one year or less. Therefore, for short-term advances, the Group will not account for a financing component even if it is a significant amount.

Integrated Energy Services (IES)

Production Enhancement Contracts (PEC)

Revenue from PECs is recognised based on the volume of hydrocarbons produced in the period and the agreed tariff and the reimbursement arrangement for costs incurred.

Equity Upstream Investments

Oil and gas revenues comprise the Group's share of sales from the processing or sale of hydrocarbons from the Group's Equity Upstream Investments on an entitlement basis, when the significant risks and rewards of ownership have been passed to the buyer.

Property, plant and equipment

Property, plant and equipment is measured at cost less accumulated depreciation and accumulated impairment charges. Cost comprises the purchase price or construction cost and any costs directly attributable to making that asset capable of operating as intended. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset. Depreciation is provided on a straight-line basis, other than on oil and gas assets, over the period as follows:

Oil and gas facilities	8 to 10 years
Plant and equipment	3 to 25 years
Buildings and leasehold improvements	3 to 20 years (or lease term if shorter)
Office furniture and equipment	2 to 4 years
Vehicles	3 to 5 years

Oil and gas assets are depreciated, on a field-by-field basis, using the unit-of-production method based on entitlement to proven and probable reserves, taking account of estimated future development expenditure relating to those reserves; refer to page 39 for life of these fields.

Each asset's estimated useful life, residual value and method of depreciation are reviewed and adjusted if appropriate at the end of the reporting period. No depreciation is charged on land or assets under construction.

The carrying amount of an item of property, plant and equipment is derecognised on disposal or when no future economic benefits are expected from its use. The gain or loss arising from the derecognition of an item of property, plant and equipment is included in the other operating income line item in the consolidated income statement when the asset is derecognised.

Intangible assets – non oil and gas assets

Intangible assets acquired in a business combination are initially measured at cost being their fair values at the date of acquisition and are recognised separately from goodwill where the asset is separable or arises from a contractual or other legal right and its fair value can be measured reliably. After initial recognition, intangible assets are carried at cost less accumulated amortisation and accumulated impairment charges.

Intangible assets with a finite life are amortised over their useful economic life using a straight-line method unless a better method reflecting the pattern in which the asset's future economic benefits are expected to be consumed can be determined. The amortisation charge of intangible assets is included in the selling, general and administration expenses line item of the consolidated income statement. The expected useful lives of assets are reviewed on an annual basis. Any change in the useful life or pattern of consumption of the intangible asset is treated as a change in accounting estimate and is accounted for prospectively by changing the amortisation period or method. Intangible assets are tested for impairment whenever there is an indication that the asset may be impaired.

Research and development costs

Research costs are expensed as incurred. Development expenditures are recognised as an intangible asset when the Group can demonstrate:

- the technical feasibility of completing the intangible asset so that the asset will be available for use or sale
- its intention to complete and its ability and intention to use or sell the asset
- how the asset will generate future economic benefits
- the availability of resources to complete the asset
- the ability to measure reliably the expenditure during development

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortisation and accumulated impairment charges. Amortisation of the asset begins when development is complete and the asset is available for use. It is amortised over the period of expected future benefit. Amortisation is included in the selling, general and administration expenses line item of the consolidated income statement. During the period of development, the asset is tested for impairment annually. At 31 December 2018, the carrying amount of capitalised development costs was US$7m (2017: US$nil). This amount relates to investment in the development and implementation of Group-wide cloud-based Enterprise Resource Planning ("ERP") and digital systems. The useful life of the ERP system when it is available for use is expected to be 4 to 7 years.

Oil and gas assets

Capitalised costs

The Group's activities in relation to oil and gas assets are limited to assets in the evaluation (or appraisal), development and production phases.

Oil and gas evaluation (or appraisal) and development expenditure is accounted for using the successful efforts method of accounting.

Evaluation expenditures

Expenditure directly associated with evaluation (or appraisal) activities is capitalised as an intangible oil and gas asset. Such costs include the costs of acquiring an interest, appraisal well drilling costs, payments to contractors and an appropriate share of directly attributable overheads incurred during the evaluation phase. For such appraisal activity, which may require drilling of further wells, costs continue to be recognised as an asset whilst related hydrocarbons are considered capable of commercial development. Such costs are subject to technical, commercial and management review to confirm the continued intent to develop, or otherwise extract value. When this is no longer the case, the costs are written-off in the consolidated income statement. When such assets are declared part of a commercial development, related costs are transferred to property, plant and equipment. All intangible oil and gas assets are assessed for any impairment prior to transfer and any impairment charge is recognised in the consolidated income statement.

Development expenditures

Expenditures relating to the development of assets which includes the construction, installation and completion of infrastructure facilities such as platforms, pipelines and vessels are capitalised within property, plant and equipment as oil and gas facilities. Expenditures relating to the drilling and completion of production wells are capitalised within property, plant and equipment as oil and gas assets.

Changes in unit-of-production factors

Changes in factors which affect unit-of-production calculations are dealt with prospectively in accordance with the treatment of changes in accounting estimates, not by immediate adjustment of amounts recognised in prior reporting periods.

Decommissioning

Provision for future decommissioning costs is made in full when the Group has an obligation to dismantle and remove a facility or an item of plant and to restore the site on which it is located, and when a reasonable estimate of that liability can be made. The amount recognised is the present value of the estimated future decommissioning costs. An amount equivalent to the discounted initial provision for decommissioning costs is capitalised and depreciated over the life of the underlying asset on a unit-of-production basis over proven and probable reserves. Any change in the present value of the estimated decommissioning costs is reflected as an adjustment to the provision and the oil and gas asset.

The unwinding of the discount applied to future decommissioning provisions is included in the finance expense line item in the consolidated income statement.

Impairment of non-current assets (excluding goodwill)

At each reporting date, the Group reviews the carrying amounts of its property, plant and equipment and intangible assets to assess whether there is an indication that those assets may be impaired. If any such indication exists, the Group makes an estimate of the asset's recoverable amount. An asset's recoverable amount is the higher of its fair value less costs of disposal and its value in use. In assessing value in use, the estimated future cash flows attributable to the asset are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Fair value less costs of disposal is based on the risk-adjusted discounted cash flow models and includes value attributable to contingent resources. A post-tax discount rate is used in such calculations. The Group uses pre-tax discount rate to discount pre-tax cash flows and post-tax discount rate to discount post-tax cash flows.

2 Summary of significant accounting policies
continued

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment charge is recognised immediately in the consolidated income statement, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior reporting periods. A reversal of an impairment loss is recognised immediately in the consolidated income statement, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment is treated as a revaluation increase.

Non-current assets held for sale
Non-current assets or disposal groups are classified as held for sale when it is highly probable that the carrying amount of the asset will be recovered principally through a sale transaction rather than through continuing use and the non-current assets or disposal group are available for immediate sale in their present condition. Assets are not depreciated when classified as held for sale.

Inventories
Inventories are valued at the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale. Cost comprises purchase price, cost of production, transportation and other directly allocable expenses.

Costs of inventories, other than raw materials, are determined using the first-in-first-out method. Costs of raw materials are determined using the weighted average method.

Contract assets and contract liabilities
Contract assets
A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration that is conditional.

Fixed-price engineering, procurement and construction contracts are presented in the consolidated balance sheet as follows:

- For each contract, the revenue recognised at the contract's measure of progress using input method, after deducting the progress payments received or receivable from the customers, is presented within the contract assets line item in the consolidated balance sheet as work in progress. The amounts recognised as work in progress are adjusted for any expected credit loss allowance using the probability of default of the counter party. The probability of default data for the counter party is sourced from a third-party provider

Contract liabilities
A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract.

Fixed-price engineering, procurement and construction contracts are presented in the consolidated balance sheet as follows:

- Where the payments received or receivable for any contract exceed revenue recognised, the excess is presented within the contract liabilities line item in the consolidated balance sheet as billings in excess of cost and estimated earnings

Incremental costs of obtaining a contract
The Group recognises an asset in respect of the incremental costs of obtaining a contract with a customer if the Group expects to recover those costs. Such capitalised costs are expensed over the life of the contract. The Group also applies the practical expedient to recognise the incremental costs of obtaining a contract as an expense when incurred if the amortisation period of the asset that the entity otherwise would have recognised is one year or less. At 31 December 2018, there were no such incremental costs recognised as an asset in the consolidated balance sheet.

Trade receivables
A trade receivable represents the Group's right to an amount of consideration that is unconditional (i.e. only the passage of time is required before payment of the consideration is due). Refer to accounting policies of financial assets on pages 129 and 130.

Cash and cash equivalents
Cash and cash equivalents consist of cash at bank and in hand and short-term deposits with an original maturity of three months or less, including expected credit loss allowance calculated based on the probability of default data for the counterparty sourced from a third-party provider.

For the purpose of the consolidated statement of cash flow, cash and cash equivalents consists of cash and cash equivalents as defined above, including outstanding bank overdrafts.

Provisions
Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. If the time value of money is material, provisions are discounted using a pre-tax rate that reflects, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognised in the consolidated income statement as a finance expense.

Fair value measurement
The Group measures financial instruments, such as derivatives, and contingent consideration receivable at fair value at each reporting date. Fair value related disclosures for financial instruments are disclosed in note 18.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data is available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 – Unadjusted quoted prices in active markets for identical financial assets or liabilities
- Level 2 – Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
- Level 3 – Inputs for the asset or liability that are not based on observable market data (unobservable inputs)

For assets and liabilities that are recognised in the consolidated financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

Financial assets and financial liabilities

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

Financial assets

Initial recognition and measurement

Financial assets are classified at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), fair value through profit or loss, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value, transaction costs that are attributable to the acquisition of the financial asset.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component are measured at the transaction price determined under IFRS 15 'Revenue from Contracts with Customers'.

In order for a financial asset to be classified and measured at amortised cost it needs to give rise to cash flows that are 'solely payments of principal and interest' ("SPPI") on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Subsequent measurement

For purposes of subsequent measurement financial assets are classified in the following categories:

- Amortised cost
- Financial assets at fair value through profit or loss

Amortised cost

This category is the most relevant to the Group and generally applies to trade and other receivables, receivable from joint operation partners for finance leases, deferred consideration receivable and advances relating to provision for decommissioning liability. The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

Financial assets at amortised cost are subsequently measured using the effective interest ('EIR') method and are subject to impairment. Gains and losses are recognised in the consolidated income statement when the asset is derecognised, modified or impaired.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss, or financial assets mandatorily required to be measured at fair value. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets at fair value through profit or loss are carried in the consolidated balance sheet at fair value with net changes in fair value recognised in the consolidated income statement.

Pánuco contingent consideration, contingent consideration relating to a disposal of 49% non-controlling interest of the Group's operations in Mexico and contingent consideration relating to a disposal of Group's shareholding in a wholly owned subsidiary, Petrofac GSA Holdings Limited, which owns a 20% ownership interest in the Greater Stella Area joint operation and a 25% interest in Petrofac FPF1 Limited, were recognised as financial assets at fair value through profit or loss within the other financial assets line item of the consolidated balance sheet. The fair value change relating to Pánuco contingent consideration was recognised as an exceptional item in the consolidated income statement. No other fair value movements occurred during 2018.

The fair value changes to undesignated forward currency contracts are reported within the other operating income/expenses line item in the consolidated income statement.

2 Summary of significant accounting policies
continued

Impairment of financial assets

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

For other financial assets measured at amortised cost ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL). There was no significant increase in the credit risk for such financial assets since the initial recognition.

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs (a lifetime ECL). Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. An impairment analysis by each operating segment is performed at each reporting date subject to the Group's established policies and procedures. Engineering & Construction and Integrated Energy Services operating segments that involve low population of high value receivables apply the probability of default data relating to each individual counterparty to calculate expected credit loss provision at each reporting date. The probability of default data for the counterparty is sourced from a third-party provider. Engineering & Production services operating segment that involves high population of low value receivables applies a provision matrix to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar loss patterns.
The expected credit loss calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and where possible, forecasts of future economic conditions. The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs are sensitive to changes in circumstances and of forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future.

The Group considers a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full. A financial asset is written off only when there is no reasonable expectation of recovering the contractual cash flows, based on contractual position agreed with the customer, contract close-out negotiations and objective evidence of the customer's inability to pay.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and trade and other payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts and derivative financial instruments.

Subsequent measurement

For purposes of subsequent measurement financial liabilities are classified in the following categories:

- Financial liabilities at fair value through profit or loss
- Loans and borrowings

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered by the Group that are not designated as hedging instruments in hedge relationships. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the consolidated income statement.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IFRS 9 'Financial Instruments' are satisfied. The Group has not designated any financial liability as at fair value through profit or loss.

Loans and borrowings

This category generally applies to interest-bearing loans and borrowings (note 27). After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in the other operating income/expenses line item in the consolidated income statement when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by considering any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance expense in the consolidated income statement. This category generally applies to interest-bearing loans and borrowings.

Derecognition of financial assets and liabilities

Financial assets

A financial asset (or, where applicable, a part of a financial asset) is derecognised where:

- The rights to receive cash flows from the asset have expired
- The Group retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a 'pass-through' arrangement; or
- The Group has transferred its rights to receive cash flows from the asset and either (a) has transferred substantially all the risks and rewards of the asset, or (b) has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset

Financial liabilities

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires.

If an existing financial liability is replaced by another from the same lender, on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability such that the difference in the respective carrying amounts together with any costs or fees incurred are recognised in the consolidated income statement.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

Derivative financial instruments and hedging

The Group uses derivative financial instruments such as forward currency contracts and oil price collars and forward contracts to hedge its risks associated with foreign currency and oil price fluctuations. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives that do not qualify for hedge accounting are taken to the consolidated income statement.

The fair value of forward currency contracts is calculated by reference to current forward exchange rates for contracts with similar maturity profiles. The fair value of oil price collar contracts is determined by reference to market values for similar instruments.

For the purposes of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability; or
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction

The Group formally designates and documents the relationship between the hedging instrument and the hedged item at the inception of the transaction, as well as its risk management objectives and strategy for undertaking various hedge transactions. The documentation also includes identification of the hedging instrument, the hedged item or transaction, the nature of risk being hedged and how the Group will assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in the hedging transactions are highly effective in offsetting changes in fair values or cash flows of the hedged items.

The treatment of gains and losses arising from revaluing derivatives designated as hedging instruments depends on the nature of the hedging relationship, as follows:

Cash flow hedges

For cash flow hedges, the effective portion of the gain or loss on the hedging instrument is recognised directly in the consolidated statement of other comprehensive income in net unrealised gains/(losses) on derivatives, while the ineffective portion is recognised in the consolidated income statement. Amounts taken to other comprehensive income are transferred to the consolidated income statement when the hedged transaction affects the consolidated income statement.

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, any cumulative gain or loss previously recognised in other comprehensive income remains separately in equity until the forecast transaction occurs and affects the consolidated income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in other comprehensive income is immediately transferred to the consolidated income statement.

Embedded derivatives

Contracts are assessed for the existence of embedded derivatives at the date that the Group first becomes party to the contract, with reassessment only if there is a change to the contract that significantly modifies the cash flows. Embedded derivatives which are not clearly and closely related to the underlying asset, liability or transaction are separated and accounted for as standalone derivatives.

Petrofac Employee Benefit Trust

The Petrofac Employee Benefit Trust (the "Trust") has been established with the Group's discretionary share scheme awards made to the employees of the Group. The Trust issues Company's shares to Group's employees on their respective vesting dates subject to satisfying any service and performance conditions of each scheme. The Trust continues to be included in the Group financial statements under IFRS 10 'Consolidated Financial Statements'.

Employee Benefit Trust ("EBT") shares

For the purpose of making awards under the Group's employee share schemes, shares in the Company are purchased and held by the Petrofac Employee Benefit Trust. All these shares have been classified in the consolidated balance sheet as EBT shares within equity. Shares vested during the year are satisfied with these shares.

Share-based payments

Employees (including Directors) of the Group receive remuneration in the form of share-based payment, whereby employees render services in exchange for shares or rights over shares ('equity-settled transactions').

Equity-settled transactions

The cost of equity-settled transactions with employees is measured by reference to the fair value at the date on which they are granted.

The cost of equity-settled transactions is recognised in the selling, general and administration expenses line item in the consolidated income statement, together with a corresponding increase in other reserves in the consolidated balance sheet, over the period in which the relevant employees become entitled to the award (the 'vesting period'). The cumulative expense recognised for equity-settled transactions at the end of the reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to the consolidated income statement for a period represents the movement in cumulative expense recognised from the beginning to the end of the reporting period.

No expense is recognised for awards that do not ultimately vest because non-market performance and/or service conditions have not been met. Where awards include a market or non-vesting condition, the transactions are treated as vested irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

2 Summary of significant accounting policies
continued

Equity awards cancelled, e.g. in case of good leavers, are treated as vesting immediately on the date of cancellation, and any expense not recognised for the award at that date is recognised in the consolidated income statement.

Pensions and other long-term employment benefits

The Group has various defined contribution pension schemes in accordance with the local conditions and practices in the countries in which it operates. The amount charged to the consolidated income statement in respect of pension costs reflects the contributions payable in the year. Differences between contributions payable during the year and contributions actually paid are shown as either accrued liabilities or prepaid assets in the consolidated balance sheet.

The Group's other long-term employment benefits are provided in accordance with the labour laws of the countries in which the Group operates, further details of which are given in note 28.

Income taxes

Income tax expense represents the sum of current income tax and deferred tax.

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. Taxable profit differs from profit as reported in the consolidated income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is recognised on all temporary differences at the balance sheet date between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit, with the following exceptions:

- Where the temporary difference arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, where the timing of reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future, and
- Deferred tax assets are recognised only to the extent that it is probable that a taxable profit will be available against which the deductible temporary differences and carried forward tax credits or tax losses can be utilised

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax assets to be utilised. Unrecognised deferred tax assets are reassessed at each balance sheet date and are recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured on an undiscounted basis at the tax rates that are expected to apply when the asset is realised or the liability is settled, based on tax rates and tax laws enacted or substantively enacted at the balance sheet date.

Current and deferred tax is charged or credited directly to other comprehensive income or equity if it relates to items that are credited or charged to, respectively, other comprehensive income or equity. Otherwise, income tax is recognised in the consolidated income statement.

Leases

The determination of whether an arrangement is or contains a lease is based on the substance of the arrangement at inception date and whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys the right to use the asset.

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Assets held under finance leases are recognised as non-current assets of the Group at the lower of their fair value at the date of commencement of the lease and the present value of the minimum lease payments. These assets are depreciated on a straight-line basis over the shorter of the useful life of the asset and the lease term. The corresponding liability to the lessor is included in the consolidated balance sheet as a finance lease obligation. Lease payments are apportioned between finance expense in the consolidated income statement and reduction of the lease obligation to achieve a constant rate of interest on the remaining balance of the liability. The Group entered various operating leases the payments for which are recognised as an expense in the consolidated income statement on a straight-line basis over the lease terms.

3 Revenue from contracts with customers

	2018 US$m	2017 US$m
Rendering of services	**5,613**	6,266
Sale of crude oil and gas	**216**	129
	5,829	6,395

Included in revenue from rendering of services are Engineering & Production Services revenue of a "pass-through" nature with zero or low margins amounting to US$366m (2017: US$461m).

Set out below is the disaggregation of the Group's revenue from contracts with customers:

Year ended 31 December 2018

	Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	Total US$m
Geographical markets				
Kuwait	1,648	3	–	1,651
Oman	596	343	–	939
Saudi Arabia	794	–	–	794
United Kingdom	2	515	58	575
United Arab Emirates	317	85	–	402
Turkey	–	238	–	238
Russia	232	4	–	236
Iraq	7	204	–	211
Germany	199	–	–	199
Algeria	156	–	–	156
Malaysia	54	17	42	113
Mexico	–	1	101	102
India	68	–	–	68
Singapore	–	–	48	48
Tunisia	–	3	28	31
Thailand	5	15	5	25
Bahrain	–	20	–	20
Others	–	21	–	21
Total revenue from contracts with customers	**4,078**	**1,469**	**282**	**5,829**
Type of goods or service				
Fixed-price	4,078	278	–	4,356
Reimbursable	–	1,191	66	1,257
Sale of crude oil and gas	–	–	216	216
Total revenue from contracts with customers	**4,078**	**1,469**	**282**	**5,829**
Customer type				
Government	3,295	414	101	3,810
Non-government	783	1,055	181	2,019
Total revenue from contracts with customers	**4,078**	**1,469**	**282**	**5,829**
Timing of revenue recognition				
Services transferred over time and associated performance obligations satisfied over time	4,078	1,469	66	5,613
Goods transferred and associated performance obligations satisfied at a point in time	–	–	216	216
Total revenue from contracts with customers	**4,078**	**1,469**	**282**	**5,829**

3 Revenue from contracts with customers
continued

Revenue disclosed in the above tables is based on where the customer is located. Revenue representing greater than 10% of Group revenue arose from two customers amounting to US$2,199m in the Engineering & Construction operating segment (2017: two customers, US$2,756m in the Engineering & Construction operating segment).

The transaction price allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December 2018 is as follows:

	Engineering & Construction US$m	Engineering & Production Services US$m	Total US$m
Within one year	4,036	1,309	**5,345**
More than one year	3,221	1,004	**4,225**
	7,257	2,313	**9,570**

4 Segment information

The Group organisational structure comprises the following three operating segments:

- Engineering & Construction (E&C), which provides fixed-price engineering, procurement and construction services to the onshore and offshore oil and gas industry
- Engineering & Production Services (EPS), which includes all reimbursable engineering and production services activities to the oil and gas industry
- Integrated Energy Services (IES), which is focused on delivering value from the existing asset portfolio

The Chief Operating Decision Maker (CODM) regularly reviews the performance of the operating segments to make decisions about resource allocations and to assess financial performance. Finance expense and income arising from borrowings and cash balances, which are not directly attributable to individual operating segments, are allocated to Corporate. In addition, certain shareholder services related costs, intra-group financing and consolidation adjustments are managed at Corporate and are not allocated to operating segments.

The Group's financial performance presented below also separately identifies the effect of exceptional items and certain re-measurements to provide users of the consolidated financial statements with a clear and consistent presentation of the underlying business performance of the Group; refer to note 6 and appendix A on page 177 for details.

The following tables contains financial information relating to the Group's operating segments for the year ended 31 December 2018 and the comparative information for the year ended 31 December 2017.

Year ended 31 December 2018

	Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	Corporate & others US$m	Consolidation adjustments & eliminations US$m	Business performance US$m	Exceptional items and certain re-measurements US$m	Reported US$m
Revenue								
External sales	4,078	1,469	282	–	–	5,829	–	5,829
Inter-segment sales	9	10	–	–	(19)	–	–	–
Total revenue	**4,087**	**1,479**	**282**	**–**	**(19)**	**5,829**	**–**	**5,829**
Operating profit/(loss)	349	132	51	(17)	–	515	(356)	159
Finance income	–	–	8	6	–	14	–	14
Finance expense	–	(4)	(16)	(61)	–	(81)	–	(81)
Share of net profit of associates and joint ventures	–	–	15	–	–	15	–	15
Profit/(loss) before tax	349	128	58	(72)	–	463	(356)	107
Income tax (expense)/credit	(70)	(28)	(20)	5	–	(113)	67	(46)
Net profit/(loss) after tax	279	100	38	(67)	–	350	(289)	61
Non-controlling interests	6	(4)	1	–	–	3	–	3
Net profit/(loss) for the year attributable to Petrofac Limited shareholders	**285**	**96**	**39**	**(67)**	**–**	**353**	**(289)**	**64**
EBITDA[1]	**388**	**138**	**160**	**(15)**	**–**	**671**		

1 Earnings before interest, tax, depreciation and amortisation (unaudited).

	Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	Corporate & others US$m	Consolidation adjustments & eliminations US$m	Total US$m
Other segment information						
Capital expenditures:						
Property, plant and equipment (note 12)	**14**	**3**	**43**	**4**	**–**	**64**
Intangible assets (note 16)	**–**	**–**	**–**	**7**	**–**	**7**
Charges:						
Depreciation (note 12)	**39**	**5**	**94**	**2**	**–**	**140**
Write off (note 12)	**–**	**1**	**–**	**–**	**–**	**1**
Exceptional items and certain re-measurements (pre-tax)	**8**	**24**	**302**	**22**	**–**	**356**
Other long-term employment benefits (note 28)	**19**	**1**	**–**	**1**	**–**	**21**
Share-based payments (note 25)	**13**	**1**	**1**	**2**	**–**	**17**

Year ended 31 December 2017

	*Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	Corporate & others US$m	Consolidation adjustments & eliminations US$m	*Business performance US$m	*Exceptional items and certain re-measurements US$m	Reported US$m
Revenue								
External sales	4,782	1,385	228	–	–	6,395	–	6,395
Inter-segment sales	19	7	–	–	(26)	–	–	–
Total revenue	4,801	1,392	228	–	(26)	6,395	–	6,395
Operating profit/(loss)	495	117	(38)	(13)	(1)	560	(456)	104
Finance income	–	–	7	3	–	10	–	10
Finance expense	–	–	(21)	(59)	–	(80)	–	(80)
Share of net profit of associates and joint ventures	–	(1)	12	–	–	11	–	11
Profit/(loss) before tax	495	116	(40)	(69)	(1)	501	(456)	45
Income tax (expense)/credit	(132)	(27)	19	2	–	(138)	66	(72)
Net profit/(loss) after tax	363	89	(21)	(67)	(1)	363	(390)	(27)
Non-controlling interests	(3)	1	–	–	–	(2)	–	(2)
Net profit/(loss) for the year attributable to Petrofac Limited shareholders	360	90	(21)	(67)	(1)	361	(390)	(29)
EBITDA[1]	540	123	97	(12)	–	748		

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance relating to the Engineering & Construction operating segment as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

1 Earnings before interest, tax, depreciation and amortisation (unaudited).

	Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	Corporate & others US$m	Consolidation adjustments & eliminations US$m	Total US$m
Other segment information						
Capital expenditures:						
Property, plant and equipment (note 12)	44	2	66	3	–	115
Intangible assets (note 16)	–	–	(1)[2]	–	–	(1)
Charges:						
Depreciation (note 12)	45	7	116	1	1	170
Amortisation and write off (note 16)	–	–	7	–	–	7
Exceptional items and certain re-measurements (pre-tax)[1]	173	22	245	16	–	456
Other long-term employment benefits (note 28)	21	1	–	–	–	22
Share-based payments (note 25)	15	1	1	2	–	19

1 Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance relating to the Engineering & Construction operating segment as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

2 Negative capital expenditure includes reversal of excess accruals of US$9m during 2017 (note 16).

4 Segment information
continued

Geographical segments
The following tables present revenue from external customers for the year ended 31 December 2017, based on their location and selected non-current assets by geographical segments for the years ended 31 December 2018 and 2017.

Year ended 31 December 2018

	Malaysia US$m	Mexico US$m	United Kingdom US$m	United Arab Emirates US$m	Kuwait US$m	Oman US$m	Other countries US$m	Total US$m
Non-current assets:								
Property, plant and equipment (note 12)	**311**	**242**	**21**	**74**	**26**	**4**	**7**	**685**
Goodwill (note 14)	**3**	**–**	**41**	**29**	**–**	**–**	**–**	**73**
Intangible oil and gas assets (note 16)	**43**	**–**	**–**	**–**	**–**	**–**	**–**	**43**
Other intangible assets (note 16)	**–**	**5**	**8**	**–**	**–**	**–**	**–**	**13**

Year ended 31 December 2017

	Kuwait US$m	Saudi Arabia US$m	Oman US$m	United Arab Emirates US$m	United Kingdom US$m	Algeria US$m	Malaysia US$m	Other countries US$m	Total US$m
Revenues from external customers	2,028	1,181	850	562	514	386	231	643	6,395

	Malaysia US$m	Mexico US$m	United Kingdom US$m	United Arab Emirates US$m	Tunisia US$m	Kuwait US$m	Other countries US$m	Total US$m
Non-current assets:								
Property, plant and equipment (note 12)	373	389	152	93	42	31	12	1,092
Goodwill (note 14)	3	–	44	29	–	–	–	76
Intangible oil and gas assets (note 16)	55	–	11	–	1	–	–	67
Other intangible assets (note 16)	–	9	–	–	–	–	–	9

5 Expenses

a. Cost of sales
Included in cost of sales are depreciation charged on property, plant and equipment of US$125m (2017: US$153m), intangible amortisation of US$nil (2017: US$1m), forward points and ineffective portions on derivatives designated as cash flow hedges of US$5m (2017: US$13m gain re-presented, see note 6). These amounts are an economic hedge of foreign exchange risk but do not meet the recognition criteria within IFRS 9 'Financial Instruments' and are most appropriately recognised in cost of sales.

b. Selling, general and administration expenses

	2018 US$m	2017 US$m
Staff costs	**134**	151
Depreciation (note 12)	**15**	17
Expected credit loss allowance (note 20 and note 21)	**1**	–
Write off property, plant and equipment (note 12)	**1**	–
Other operating expenses	**65**	67
	216	235

Other operating expenses consist mainly of office related costs, travel, professional services fees and contracting staff costs.

c. Staff costs

	2018 US$m	2017 US$m
Total staff costs:		
Wages and salaries	**918**	955
Social security costs	**33**	39
Defined contribution pension costs	**17**	14
Other long-term employee benefit costs (note 28)	**21**	22
Share-based payments costs (note 25)	**17**	19
	1,006	1,049

Of the US$1,006m (2017: US$1,049m) of staff costs shown above, US$872m (2017: US$898m) is included in cost of sales, with US$134m (2017: US$151m) in selling, general and administration expenses.

The average number of staff employed by the Group during the year was 11,500 (2017: 13,000).

d. Auditor's remuneration

The Group paid the following amounts to its auditor in respect of the audit of the financial statements and for other non-prohibited services provided to the Group:

	2018 US$m	2017 US$m
Group audit fee	**2**	2
Audit of subsidiaries' accounts	**1**	1
Others	**1**	1
	4	4

Others include audit related assurance services of US$437,000 (2017: US$427,000), tax advisory services of US$nil (2017: US$75,000) and other non-audit services of US$241,000 (2017: US$496,000).

e. Other operating income

	2018 US$m	2017 US$m
Foreign exchange gains	**4**	12
Other income	**18**	8
	22	20

Other income mainly comprised US$8m of forward points relating to undesignated forward currency contracts in the Corporate reporting segment; US$3m of scrap sales relating to two contracts in the Engineering & Construction operating segment; and a gain on sale of property, plant and equipment of US$1m relating to a contract in the Engineering & Construction operating segment (2017: US$4m recognised on re-recognition of finance leases relating to Block PM304 in Malaysia, note 12).

f. Other operating expenses

	2018 US$m	2017 US$m
Foreign exchange losses	**4**	5
Other expenses	**6**	5
	10	10

6 Exceptional items and certain re-measurements

	2018 US$m	2017[1] US$m
Impairment of assets	**235**	345
Fair value re-measurements	**45**	77
Losses on disposal	**28**	–
Restructuring and redundancy costs	**8**	4
Onerous leasehold property provisions	**18**	12
Other exceptional items	**22**	18
	356	456
Foreign exchange translation (gains)/losses on deferred tax balances	**2**	(11)
Tax relief on exceptional items and certain re-measurements	**(69)**	(55)
	(67)	(66)
Consolidated income statement charge	**289**	390

See note 2 and appendix A on page 177 for further details on APMs

[1]Re-presentation of business performance and exceptional items and certain re-measurements

During 2018, Management reassessed the reporting of alternative performance measures ("APMs"). This exercise involved re-evaluating the criteria for inclusion within exceptional items and certain re-measurements reporting which is in response to and consistent with the current regulatory focus on the use of APMs. Management applied new criteria, whereby it excluded certain items from exceptional items and certain re-measurements which could have been reasonably expected to occur in advance of the commencement of the reporting period and concluded that such items should be reclassified as business performance. Forward points and ineffectiveness in Kuwaiti dinar currency contracts met this criterion, since these forward points and ineffectiveness unwinds based on percentage-of-completion for each individual customer contract and therefore were excluded from exceptional items and certain re-measurements and were reclassified as business performance instead. Exclusion of forward rate movements in currency contracts from exceptional items and certain re-measurements and inclusion in business performance had no impact on the reliability of financial performance information but enhanced the relevance in measuring underlying business performance.

6 Exceptional items and certain re-measurements
continued

Consequently, the Group re-presented its 2017 comparative information relating to business performance and exceptional items and certain re-measurements and reclassified forward rate gains relating to Kuwaiti dinar forward currency contracts in the E&C operating segment of US$18m from exceptional items and certain re-measurements line item to cost of sales line item in the consolidated income statement. This resulted in a US$18m decrease in cost of sales, increase in business performance profit by US$18m, increase in exceptional items and certain re-measurements expense by US$18m (post-tax US$18m) and business performance diluted earnings per share increased to 106.2 US cents. The reported loss and reported diluted loss per share remained unaffected. The Group's reported effective tax rate reduced to 27.5%. The re-presentation had no impact on the consolidated balance sheet. An amount of US$18m was reclassified from exceptional items and certain re-measurements line item to net other non-cash items line item within operating cash flow in the consolidated statement of cash flows. Cash flows from investing activities and cash flows from financing activities remained unaffected.

Impairment of assets

On 30 July 2018, the Group signed a Sale and Purchase Agreement ("SPA") with Perenco (Oil and Gas) International Limited to dispose a 49% non-controlling interest of the Group's operations in Mexico (note 11a). A pre-tax impairment charge of US$156m (post-tax US$111m), which included disposal costs of US$6m, was recognised as an exceptional item in the consolidated income statement attributable to the Integrated Energy Services operating segment. The impairment charge was allocated proportionately to property, plant and equipment and intangible assets (note 12 and note 16). Of the total post-tax impairment charge of US$111m, the Group recognised US$110m (post-tax) as an exceptional item in the consolidated income statement for the six months ended 30 June 2018. The additional impairment charge of US$1m (post-tax US$1m) was recognised as an exceptional item in the consolidated income statement at completion date, related to an increase in disposal costs.

On 26 August 2018, the Group signed a SPA with Ithaca Energy (UK) Limited to fully dispose of its shareholding in a wholly owned subsidiary, Petrofac GSA Holdings Limited, which owned a 20.0% ownership interest in the Greater Stella Area joint operation and a 24.8% interest in Petrofac FPF1 Limited (note 11a). A pre-tax impairment charge of US$79m (post-tax US$55m), which included disposal costs of US$1m, was recognised as an exceptional item in the consolidated income statement for the six months ended 30 June 2018, attributable to the Integrated Energy Services operating segment. Further, a loss on disposal of US$16m was recognised at completion date, refer losses on dispoal section below for details.

Fair value less costs of disposal is determined by discounting the post-tax cash flows expected to be generated from oil and gas production net of disposal costs considering assumptions that market participants would typically use in estimating fair values. Post-tax cash flows are derived from projected production profiles for each asset considering forward market commodity prices over the relevant period and, where external forward prices are not available, the Group's Board-approved five-year business planning assumptions were used. As each field has different reservoir characteristics and contractual terms the post-tax cash flows for each asset are calculated using individual economic models, which include assumptions around the amount of recoverable reserves, production costs, life of the field/licence period and the selling price of the commodities produced.

Fair value re-measurements

At 31 December 2018, Management reviewed the carrying amount of the Pánuco contingent consideration and as a result of this review recognised a downward fair value movement of US$43m (post-tax US$43m) in the Integrated Energy Services operating segment. The downward fair value adjustment was a significant Management judgement in response to considerable uncertainty concerning the timing and outcome of the Pánuco Production Enhancement Contract (PEC) migration to a Production Sharing Contract (PSC) and whether the contingent consideration pay out conditions will be achieved. Management considered alternative scenarios to assess the recoverability of the Pánuco contingent consideration, including but not limited to the impact of delay in migration or renegotiation of the contingent consideration in the event of migration to another form of contract. Based on this assessment Management estimated that the carrying amount of the contingent consideration of US$45m (note 18) reflected an expected outcome of a commercial negotiation in respect of migration or an alternative migration. This was a significant accounting estimate made by Management to determine the fair value of the contingent consideration at 31 December 2018. A fair value loss would be recognised in the consolidated income statement if the actual outcome of the migration or commercial negotiation is different to Management's current expectation.

At 31 December 2018, Management reviewed the carrying amount of the deferred consideration associated with the disposal of JSD6000 installation vessel and as a result of this review recognised a downward fair value movement of US$2m (post-tax US$2m) in the Engineering & Construction operating segment, see note 15 (2017: a downward fair value movement of US$77m, post-tax US$77m was recognised in respect of Greater Stella Area).

Losses on disposal

On 27 June 2018, the Group signed an Asset Purchase Agreement with Perenco Tunisia Oil and Gas Limited to dispose of its oil and gas assets in Tunisia. The disposal, which related to the Integrated Energy Services operating segment, was completed on 13 December 2018 and a loss on disposal of US$4m (post-tax US$4m) was recognised as an exceptional item in the consolidated income statement (note 11a).

On 26 August 2018, the Group signed a Sale and Purchase Agreement with Ithaca Energy UK Ltd for the disposal of its wholly owned subsidiary, Petrofac GSA Holdings Limited, which owned a 20% interest in the Great Stella Area joint operation and a 25% interest in Petrofac FPF1 Limited, previously classified as an investment in associate. The disposal, which related to the Integrated Energy Services operating segment, was completed on 11 December 2018, and a loss on disposal of US$16m (post-tax US$16m) was recognised as an exceptional item in the consolidated income statement (note 11a).

On 24 April 2018, the Group signed an Asset Purchase Agreement with Shanghai Zhenhua Heavy Industries Co Ltd, for the disposal of the JSD6000 installation vessel. A loss on disposal of US$8m was recognised as an exceptional item in the consolidated income statement in the Engineering & Construction operating segment (note 15).

Restructuring and redundancy costs

The Group recognised a charge of US$8m (post-tax US$8m) relating to restructuring and staff redundancy mainly attributable to the Engineering & Production Services and Integrated Energy Services operating segments (2017: US$4m, post-tax US$4m).

Onerous leasehold property provision

An onerous leasehold property provision of US$18m, post-tax US$18m (2017: US$12m, post-tax US$12m) was recognised for the estimated future costs relating to vacant and under-utilised leasehold office buildings in the UK for which the leases expire between 2020 to 2026 (note 28).

Other exceptional items

Other exceptional items include US$15m, post-tax US$15m (2017: US$16m, post-tax US$16m) of professional fees relating to the Corporate reporting segment; US$6m, post-tax US$3m (2017: US$nil, post-tax US$nil) associated with the debt acquisition cost amortisation for SACE and UKEF Export Credit Agency Funding relating to the Corporate reporting segment (note 27); and Mexican PEC migration costs of US$1m, post-tax US$1m (2017: US$1m, post-tax US$1m) relating to the Integrated Energy Services operating segment.

Taxation

US$2m of foreign exchange loss on the retranslation of deferred tax balances denominated in Malaysian ringgits have been recognised during the year in respect of oil and gas activities in Malaysia, relating to the Integrated Energy Services operating segment, due to an approximate 5% weakening in the Malaysian ringgit against the US dollar (2017: US$11m gain).

7 Finance income/(expense)

	2018 US$m	2017 US$m
Finance income		
Bank interest	**5**	3
Unwinding of discount on receivables (note 18 and note 21)	**9**	7
Total finance income	**14**	10
Finance expense		
Group borrowings	**(60)**	(59)
Finance leases	**(11)**	(14)
Unwinding of discount on non-current contract assets	**(4)**	–
Unwinding of discount on provisions (note 28)	**(6)**	(7)
Total finance expense	**(81)**	(80)

8 Income tax

a. Tax on ordinary activities

The major components of income tax expense/(credit) are as follows:

	Business performance[1] US$m	**Exceptional items and certain re-measurements US$m**	**Reported 2018 US$m**	Business performance[1] US$m	Exceptional items and certain re-measurements US$m	Reported 2017 US$m
Current income tax						
Current income tax expense	**112**	**–**	**112**	137	(2)	135
Adjustments in respect of previous years	**(3)**	**–**	**(3)**	(4)	–	(4)
Deferred tax						
Relating to origination and reversal of temporary differences	**8**	**(67)**	**(59)**	(34)	(64)	(98)
Derecognition of deferred tax previously recognised	**(3)**	**–**	**(3)**	39	–	39
Adjustments in respect of previous years	**(1)**	**–**	**(1)**	–	–	–
Income tax expense/(credit) reported in the consolidated income statement	**113**	**(67)**	**46**	138	(66)	72
Income tax reported in equity						
Deferred tax related to items charged directly to equity	**2**	**–**	**2**	–	–	–
Foreign exchange movements on translation	**1**	**–**	**1**	(5)	–	(5)
Income tax reported in equity	**–**	**–**	**–**	(1)	–	(1)
Income tax expense reported in equity	**3**	**–**	**3**	(6)	–	(6)

1 This measurement is shown by the Group as a means of measuring underlying business performance, see note 2 and appendix A on page 177.

8 Income tax
continued

The split of the Group's income tax expense between current and deferred tax varies from year to year depending largely on:

- the variance between tax provided on the percentage of completion of contracts compared to that paid on accrued income for fixed-price engineering, procurement and construction contracts; and
- the tax deductions available for expenditure on Production Sharing Contracts ("PSCs") and Production Enhancement Contracts ("PECs"), which are partially offset by the creation of losses.

See 8c below for the impact on the movements in the year.

b. Reconciliation of total tax expense

A reconciliation between income tax expense and the product of accounting profit multiplied by the Company's domestic tax rate is as follows:

	Business performance[1] US$m	Exceptional items and certain re-measurements US$m	Reported 2018 US$m	*Business performance[1] US$m	*Exceptional items and certain re-measurements US$m	Reported 2017 US$m
Profit before tax	**463**	**(356)**	**107**	501	(456)	45
At Jersey's domestic income tax rate of 0.0% (2017: 0.0%)	**–**	**–**	**–**	–	–	–
Expected tax charge in higher rate jurisdictions	**82**	**(36)**	**46**	73	(66)	7
Expenditure not allowable for income tax purposes	**13**	**19**	**32**	15	10	25
Income not subject to tax	**(2)**	**(57)**	**(59)**	(4)	–	(4)
Adjustments in respect of previous years	**(3)**	**–**	**(3)**	(4)	–	(4)
Adjustments in respect of deferred tax previously recognised/unrecognised	**(3)**	**–**	**(3)**	39	(2)	37
Unrecognised deferred tax	**21**	**4**	**25**	21	3	24
Other permanent differences	**5**	**3**	**8**	1	(11)	(10)
Effect of change in tax rates	**–**	**–**	**–**	(3)	–	(3)
At the effective income tax rate of 43.0% on reported profit before tax (2017: 160.0%)	**113**	**(67)**	**46**	138	(66)	72

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

1 This measurement is shown by the Group as a means of measuring underlying business performance, see note 2 and appendix A on page 177.

The Group's reported effective tax rate on reported profit before tax for the year ended 31 December 2018 was 43.0% (2017: 160.0%). The Group's business performance effective tax rate for the year ended 31 December 2018 was 24.4% (2017: 27.5%).

A number of factors have impacted the reported effective tax rate, with key drivers being: income not subject to tax and expenditure which is not allowable for tax purposes arising on disposals, impairment and fair value re-measurements of assets as well as the impact of losses created during the year for which the realisation against future taxable profits is not probable.

In line with prior years, the reported effective tax rate is also driven by the tax laws in the jurisdictions where the Group operates and generates profits.

c. Deferred tax

Deferred tax relates to the following:

	Consolidated balance sheet		Consolidated income statement	
	2018 US$m	2017 US$m	**2018 US$m**	2017 US$m
Deferred tax liabilities				
Accelerated depreciation for tax purposes	**50**	204	**(125)**	(75)
Profit recognition	**35**	42	**1**	(14)
Overseas earnings	**10**	8	**2**	2
Other temporary differences	**2**	6	**(4)**	5
Gross deferred tax liabilities	**97**	260		
Deferred tax assets				
Losses available for offset	**117**	221	**55**	34
Decelerated depreciation for tax purposes	**5**	3	**(2)**	–
Share-based payment plans	**2**	4	**–**	–
Profit recognition	**–**	–	**–**	–
Decommissioning	**25**	39	**14**	(3)
Other temporary differences	**31**	27	**(4)**	(8)
Gross deferred tax assets	**180**	294		
Net deferred tax asset and income tax credit	**83**	34	**(63)**	(59)
Of which: Deferred tax assets	**126**	101		
Deferred tax liabilities	**43**	67		

Included within the deferred tax asset are tax losses of US$384m (2017: $688m). This represents the losses which are expected to be utilised based on Management's projection of future taxable profits in the jurisdictions in which the losses reside.

The movements in deferred tax balances include balances disposed of during the year (note 11a) and the impact of changes in financial reporting standards (note 2.3) and are therefore not part of the tax expense/(credit) to the consolidated income statement for the year. These include US$39m of net deferred tax assets derecognised relating to the disposal of Petrofac GSA Holdings Limited and US$17m of net deferred tax liabilities derecognised relating to the disposal of oil and gas assets in Tunisia (note 11a).

d. Unrecognised tax losses and tax credits

Deferred tax assets are recognised for tax loss carry forwards and tax credits to the extent that the realisation of the related tax benefit through offset against future taxable profits is probable. The Group did not recognise gross deferred income tax assets on tax losses of US$1,061m (2017: US$1,157m).

	2018 US$m	2017 US$m
Expiration dates for tax losses No later than 2025	**3**	5
No expiration date	**1,046**	1,140
	1,049	1,145
Tax credits (no expiration date)	**12**	12
	1,061	1,157

During 2018, the Group utilised US$1m of previously unrecognised losses (2017: US$nil).

9 Earnings per share

Basic earnings per share is calculated by dividing the net profit for the year attributable to Petrofac Limited shareholders by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share is calculated by dividing the net profit attributable to Petrofac Limited shareholders, after adjusting for any dilutive effect, by the weighted average number of ordinary shares outstanding during the year, adjusted for the effects of ordinary shares granted under the share-based payment plans which are held in the Employee Benefit Trust.

The following reflects the net profit and share data used in calculating basic and diluted earnings per share:

	2018 US$m	*2017 US$m
Business performance net profit attributable to Petrofac Limited shareholders for basic and diluted earnings per share	**353**	361
Reported net profit/(loss) attributable to Petrofac Limited shareholders for basic and diluted earnings per share	**64**	(29)

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

9 Earnings per share
continued

	2018 Shares million	2017 Shares million
Weighted average number of ordinary shares for basic earnings per share[1]	**338**	340
Effect of dilutive potential ordinary shares granted under share-based payment plans[2]	**7**	–
Adjusted weighted average number of ordinary shares for diluted earnings per share	**345**	340

	2018 US cents	*2017 US cents
Basic earnings per share		
Business performance	**104.4**	106.2
Reported	**18.9**	(8.5)
Diluted earnings per share[2]		
Business performance	**102.3**	106.2
Reported	**18.6**	(8.5)

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

1 The weighted number of ordinary shares in issue during the year, excludes those held by the Employee Benefit Trust.

2 For the year ended 31 December 2017, potentially issuable ordinary shares under the share-based payment plans are excluded from the diluted earnings per ordinary share calculation, as their inclusion would decrease the loss per ordinary share.

10 Dividends paid and proposed

	2018 US$m	2017 US$m
Declared and paid during the year		
Equity dividends on ordinary shares: Final dividend for 2016 (US$0.438 per share)	**–**	148
Interim dividend 2017 (US$0.127 per share)	**–**	44
Final dividend for 2017 (US$0.253 per share)	**86**	–
Interim dividend 2018 (US$0.127 per share)	**42**	–
	128	192

	2018 US$m	2017 US$m
Proposed for approval at the Annual General Meeting ("AGM")		
(not recognised as a liability as at 31 December)	**88**	88
Equity dividends on ordinary shares: Final dividend for 2018: US$0.253 per share (2017: US$0.253 per share)	**88**	88

11 Disposals and business combinations

a. Disposals

During 2018, the Group entered into the following disposal transactions relating to the Integrated Energy Services operating segment.

Disposal of oil and gas assets in Tunisia

On 27 June 2018, the Group signed an Asset Purchase Agreement with Perenco Tunisia Oil and Gas Limited to dispose of its oil and gas assets in Tunisia. The disposal, which related to the Integrated Energy Services operating segment, was completed on 13 December 2018 and the Group received US$25m cash consideration as at that date. Consequently, a loss on disposal of US$4m was recognised as an exceptional item in the consolidated income statement (note 6), as follows:

	US$m
Fair value less cost of disposal	25
Net assets derecognised:	
Property, plant and equipment (note 12)	(42)
Intangible assets (note 16)	(1)
Inventories (note 19)	(4)
Trade and other receivables (note 20)	(14)
Provisions (note 28)	5
Deferred tax liabilities (note 8c)	17
Trade and other payables (note 29)	2
Income tax payable	8
	(29)
Loss on disposal (note 6)	(4)

Disposal of Petrofac GSA Holdings

On 26 August 2018, the Group signed a Sale and Purchase Agreement ("SPA") with Ithaca Energy UK Ltd for the disposal of its wholly owned subsidiary, Petrofac GSA Holdings Limited ("GSA"), which owned a 20% interest in the Great Stella Area joint operation and a 25% interest in Petrofac FPF1 Limited, previously classified as an investment in associate. The disposal, which related to the Integrated Energy Services operating segment, was completed on 11 December 2018, and a loss on disposal of US$16m was recognised as an exceptional item in the consolidated income statement (note 6). The net assets of GSA on the date of completion were US$199m. The fair value of consideration comprised cash consideration of US$106m, deferred consideration of US$59m and contingent consideration of US$19m with associated disposal costs of US$1m.

Cash consideration of US$106m was received by the Group on the date of completion; the deferred consideration of US$59m, recoverable over a period of four years under the terms of the SPA, was initially recognised at fair value using a discount rate of 8.4% and will subsequently be measured at amortised cost as a non-current financial asset in the consolidated balance sheet (note 18). No unwinding of the discount on the deferred consideration was recognised from the date of disposal to the end of the reporting period in the consolidated income statement.

The contingent consideration of US$19m is dependent upon certain performance conditions being satisfied and is recoverable over a period of one year and was recognised as a current financial asset in the consolidated balance sheet (note 18). The contingent consideration was initially measured and recognised at fair value and will subsequently be measured at fair value with any fair value gain and loss recognised as an exceptional item in the consolidated income statement. No fair value movement was recognised from the date of completion to the end of the reporting period. The fair value of the contingent consideration reflected Management's expectation of meeting certain performance conditions by applying a risk factor (a Level 3 measurement of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement') to the maximum contingent consideration receivable. A 10% increase in risk the factor would result in a negative fair value change of US$3m.

A loss on disposal of US$16m (note 6) relating to the Integrated Energy Services operating segment was recognised as an exceptional item in the consolidated income statement as follows:

	US$m
Fair value less cost of disposal	183
Net assets derecognised:	
Property, plant and equipment (note 12)	(48)
Intangible assets (note 16)	(11)
Investment in associates and joint ventures (note 19)	(35)
Other financial assets (note 18)	(132)
Deferred tax assets (note 8c)	(39)
Trade and other receivables (note 20)	(8)
Provisions (note 28)	20
Trade and other payables (note 29)	[1]54
	(199)
Loss on disposal (note 6)	(16)

1 Includes accrued capital expenditure of US$44m.

11 Disposals and business combinations
continued

Disposal of 49% non-controlling interest of the Group's operations in Mexico

On 30 July 2018, the Group signed a Sale and Purchase Agreement ("SPA") with Perenco (Oil and Gas) International Limited to dispose a 49% non-controlling interest of the Group's operations in Mexico. A pre-tax impairment charge of US$156m (post-tax US$111m), which included disposal costs of US$6m, was recognised as an exceptional item in the consolidated income statement attributable to the Integrated Energy Services operating segment (note 6). The impairment charge was allocated proportionately to property, plant and equipment and intangible assets (note 12 and note 16). Of the total post-tax impairment charge of US$111m, the Group recognised US$110m (post-tax) as an exceptional item in the consolidated income statement for the six months ended 30 June 2018. The transaction was treated as an adjusting event after the reporting period, since the fair value of consideration receivable under the SPA as at that date provided evidence of the conditions that effected the recoverable amount of the assets at the end of that reporting period. The additional impairment charge of US$1m (post-tax US$1m) was recognised as an exceptional item in the consolidated income statement at completion date, related to an increase in disposal costs.

The disposal, which related to the Integrated Energy Services operating segment, was completed on 18 October 2018 and represented a transaction between equity holders under IFRS 10 'Consolidated Financial Statements'. The fair value of consideration received was recognised within equity as a non-controlling interest of US$266m (note 13). Disposal costs of US$6m were incurred which were incremental costs to the Group and were directly attributable to the disposal. The disposal costs primarily related to professional services provided by third parties and remained unpaid at the end of the reporting period (note 29).

The fair value of consideration comprised cash consideration of US$224m which was received by the Group on the date of completion and contingent consideration of US$42m, recoverable over a period of three years, which was recognised as a non-current financial asset in the consolidated balance sheet (note 18). The contingent consideration was initially measured and recognised at fair value and will subsequently be also measured at fair value with any fair value gain and loss recognised as an exceptional item in the consolidated income statement. No fair value movement was recognised from the date of disposal to the end of the reporting period. The fair value of the contingent consideration took into consideration Management's expectation of future field development programme and migration terms relating to the Group's Magallanes and Arenque Production Enhancement Contracts by applying a risk factor (a Level 3 measurement of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement') to the maximum contingent consideration receivable. A 10% increase in risk factor would result in a negative fair value change of US$7m.

Management also made a judgement on the probable treatment of the disposal proceeds for tax purposes, based on professional external advice. A different treatment could result in an income tax charge of US$10m (2017: US$nil).

b. Business combinations

The following two business combinations took place during 2017.

Greater Stella Area (GSA) licence

On 21 September 2017, upon receiving Oil and Gas Authority ("OGA") approval in the UK, the Group acquired a 20% ownership interest in the GSA field in the North Sea. The transaction was treated as an acquisition of an interest in a joint operation and IFRS 3 'Business Combination' requirements were applied. The interest acquired is classified as a joint operation, as contractually all the decisions concerning the relevant activities of the unincorporated joint arrangement require unanimous consent of the joint arrangement partners. The acquisition during 2017 related to the Integrated Energy Services operating segment.

The Group's share of the fair value of the identifiable assets and liabilities of the joint operation recognised at the date of acquisition was as follows:

	US$m
Property, plant and equipment (note 12)	149
Receivable from the Greater Stella Area joint operation partners (note 18)	80
	229
Less:	
Provision for decommissioning (note 28)	(19)
Fair value of net assets acquired	210

At the date of acquisition, the receivable in respect of the GSA development had a carrying amount of US$250m (note 18) of which, US$210m was contributed to acquire a 20% ownership interest in the joint operation which resulted in no gain or loss on the transaction. The remaining US$40m was recognised as a long-term receivable from the GSA joint operation partners (note 18).

The fair value of property, plant and equipment was determined using risk adjusted cash flow projections (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement') discounted at a post-tax rate of 9.5%. Management used forward curve oil prices of US$53 per barrel and forward curve gas prices of US$6 per mcf from the date of acquisition until June 2019. For later periods, the long-term planning oil price assumptions used were US$70 per barrel from July 2019 to December 2019, and US$75 per barrel for 2020 and beyond. The long-term planning gas price assumptions used were US$8 per mcf from July 2019 to December 2019, and US$9 per mcf for 2020 and beyond.

The financial asset represents the discounted value of the long-term receivables due from the GSA joint operation partners and is accounted for on an amortised cost basis using a contractually agreed discount rate of 8.5% with the unwinding interest income being recognised as finance income in the consolidated income statement.

Migration of Santuario Production Enhancement Contract ("PEC") to Production Sharing Contract ("PSC")

On 18 December 2017, the Group migrated its existing Santuario PEC to acquire a 36% ownership interest in a PSC. The Group now has a proportional interest in the PSC assets, operates under a different commercial model and acts as an Operator on behalf of the joint arrangement partners. The PSC will run for 25 years, with two optional five-year extensions. The PSC was treated as a joint operation since contractually all the decisions concerning the relevant activities of the unincorporated joint arrangement require unanimous consent of the joint arrangement partners. The transaction was treated as an acquisition of an interest in a joint operation and IFRS 3 'Business Combination' requirements were applied. The acquisition during 2017 related to the Integrated Energy Services operating segment.

At the date of acquisition, the existing oil and gas assets of the Santuario PEC were fair valued using the risk adjusted cash flow projections (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement') discounted at a post-tax rate of 9.5%. This resulted in an impairment charge of US$29m (post-tax US$20m) being recognised as an exceptional item in the consolidated income statement (note 6). The carrying amount of the assets and liabilities shown below relating to the Santuario PEC were derecognised from the consolidated balance sheet and represented the fair value of consideration for acquiring a 36% ownership interest in the PSC.

	US$m
Property, plant and equipment (note 12)	100
Intangible assets (note 16)	5
Inventories (note 19)	2
Trade and other receivables (note 20)	128
Provision for decommissioning (note 28)	(10)
Deferred tax liabilities (note 8c)	(2)
Trade and other payables (note 29)	(17)
Carrying amount of net assets derecognised	206

The Group's share of fair value of the identifiable assets and liabilities of the PSC at the date of acquisition was as follows:

	US$m
Property, plant and equipment (note 12)	213
Less:	
Provision for decommissioning (note 28)	(5)
Deferred tax liabilities (note 8c)	(2)
Fair value of net assets acquired	206

The fair value of property, plant and equipment was determined using risk adjusted cash flow projections (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement') discounted at a post-tax rate of 9.5%.

12 Property, plant and equipment

	Oil and gas assets US$m	Oil and gas facilities US$m	Land, buildings and leasehold improvements US$m	Plant and equipment US$m	Vehicles US$m	Office furniture and equipment US$m	Assets under construction US$m	Total US$m
Cost								
At 1 January 2017	1,146	420	361	40	24	173	359	2,523
Recognised on acquisition (note 11b)	362	–	–	–	–	–	–	362
Additions	65	–	7	–	–	8	35	115
Derecognised on migration of Santuario PEC to PSC (note 11b)	(218)	–	–	–	–	–	–	(218)
Derecognised due to change in finance lease terms (note 18)	–	(239)	–	–	–	–	–	(239)
Re-recognised due to change in finance lease terms (note 18)	–	179	–	–	–	–	–	179
Disposals	–	(47)	–	–	–	(2)	–	(49)
Transfer from intangible oil and gas assets (note 16)	(1)	–	–	–	–	–	–	(1)
Transfer to assets held for sale (note 15)	–	–	–	–	–	–	(393)	(393)
Write off	–	–	–	–	–	(1)	–	(1)
Exchange difference	–	–	2	1	–	4	–	7
At 1 January 2018	1,354	313	370	41	24	182	1	2,285
Additions	43	–	8	–	1	11	1	64
Change in decommissioning estimates (note 28)	(24)	–	–	–	–	–	–	(24)
Disposals	(336)	–	(6)	(3)	(2)	(8)	–	(355)
Transfer from intangible oil and gas assets (note 16)	12	–	–	–	–	–	–	12
Transfers	–	–	–	2	–	(2)	–	–
Write off (note 5)	–	–	–	(1)	–	–	(1)	(2)
Exchange difference	–	–	(1)	(1)	–	(5)	–	(7)
At 31 December 2018	**1,049**	**313**	**371**	**38**	**23**	**178**	**1**	**1,973**
Depreciation & impairment								
At 1 January 2017	(466)	(245)	(201)	(31)	(22)	(140)	–	(1,105)
Charge for the year	(92)	(22)	(35)	(2)	(1)	(18)	–	(170)
Impairment charge (note 6)	(135)	(25)	–	–	–	–	(176)	(336)
Derecognised on migration of Santuario PEC to PSC (note 11b)	118	–	–	–	–	–	–	118
Derecognised due to change in finance lease terms (note 18)	–	91	–	–	–	–	–	91
Disposals	–	37	–	–	–	2	–	39
Transfer to assets held for sale (note 15)	–	–	–	–	–	–	176	176
Write off	–	–	–	–	–	1	–	1
Exchange difference	–	–	(2)	(1)	–	(4)	–	(7)
At 1 January 2018	(575)	(164)	(238)	(34)	(23)	(159)	–	(1,193)
Charge for the year	(73)	(19)	(32)	(1)	(1)	(14)	–	(140)
Impairment charge (note 6)	(226)	–	–	–	–	–	–	(226)
Disposals	246	–	6	3	2	8	–	265
Transfers	–	–	–	(1)	–	1	–	–
Write off (note 5)	–	–	–	1	–	–	–	1
Exchange difference	–	–	–	–	–	5	–	5
At 31 December 2018	**(628)**	**(183)**	**(264)**	**(32)**	**(22)**	**(159)**	**–**	**(1,288)**
Net carrying amount:	**421**	**130**	**107**	**6**	**1**	**19**	**1**	**685**
At 31 December 2017	779	149	132	7	1	23	1	1,092

Additions

Additions to oil and gas assets in the Integrated Energy Services operating segment mainly comprised GSA capital expenditure of US$13m; US$19m related to Santuario Production Sharing Contract ("PSC") and Magallanes and Arenque Production Enhancement Contracts ("PECs") in Mexico; and US$11m related to Block PM304 in Malaysia (2017: GSA capital expenditure of US$63m and Santuario PSC and Arenque PEC in Mexico of US$2m). Additions to land, buildings and leasehold improvements of US$8m (2017: US$7m) mainly comprise project camps and temporary facilities associated with the Engineering & Construction operating segment. Additions to office furniture and equipment mainly comprised IT related capital expenditure of US$3m in the Corporate reporting segment.

Disposals

Oil and gas assets with a carrying amount of US$90m were derecognised during the year due to the disposal of oil and gas assets in Tunisia and the disposal of Petrofac GSA Holdings Limited (note 11a). During 2017, the disposal of oil and gas facilities having a carrying amount of US$10m related to a disposal of the FPSO Opportunity vessel associated with the Integrated Energy Services operating segment (note 6).

Depreciation

The depreciation charge in the consolidated income statement is split between US$125m (2017: US$153m) in cost of sales and US$15m (2017: US$17m) in selling, general and administration expenses.

Assets under finance lease arrangement

Included in 'oil and gas facilities' and 'plant and equipment' is property, plant and equipment under finance lease agreements, for which the net book values are as follows:

Net book value	2018 US$m	2017 US$m
At 1 January	**150**	174
Derecognised due to change in finance lease terms	**–**	(148)
Re-recognised due to change in finance lease terms	**–**	179
Impairment	**–**	(18)
Depreciation	**(22)**	(37)
At 31 December	**128**	150

13 Non-controlling interests

Petrofac Emirates LLC, Petrofac Netherlands Holdings B.V. and Petro Oil and Gas Limited, three non-wholly owned subsidiaries, are determined to be material to the Group. The proportion of the nominal value of issued shares controlled by the Group is disclosed in note 34.

Movement of non-controlling interest in Petrofac Emirates LLC, Petrofac Netherland Holding BV and Petro Oil and Gas Limited	2018 US$m	2017 US$m
At 1 January	**36**	25
(Loss)/profit for the year	**(3)**	3
Opening adjustment relating to adoption of IFRS 9 and IFRS 15 (note 2)	**3**	–
Disposal of 49% non-controlling interest of the Group's operations in Mexico (note 11a)	**266**	–
Net unrealised gains on derivatives	**1**	11
Dividend paid	**(1)**	(3)
At 31 December	**302**	36

The balance of non-controlling interests relates to other non-wholly owned subsidiaries that are not considered to be material to the Group.

13 Non-controlling interests
continued

Summarised financial information for Petrofac Emirates LLC, Petrofac Netherlands Holdings B.V. and Petro Oil and Gas Limited, three non-wholly owned subsidiaries, which have non-controlling interests that are considered material to the Group is shown below:

	Petrofac Netherlands Holdings B.V. and Petro Oil and Gas Limited		Petrofac Emirates LLC	
Summarised income statement	*2018 US$m	2017 US$m	2018 US$m	2017 US$m
Revenue	34	–	338	534
Cost of sales	(32)	–	(329)	(495)
Gross profit	2	–	9	39
Selling, general and administration expenses	(1)	–	(14)	(19)
Other income	1	–	5	–
Finance expense	(1)	–	(11)	(8)
Income tax expense	(1)	–	–	–
Net profit/(loss) for the year	–	–	(11)	12
Attributable to non-controlling interest	–	–	(3)	3
Net unrealised losses on derivatives				
Net unrealised losses on derivatives at 1 January	–	–	(5)	(48)
Other comprehensive income during the year	–	–	4	43
Net unrealised losses on derivatives at 31 December	–	–	(1)	(5)
Net unrealised losses on derivatives attributable to non-controlling interest (note 26)	–	–	–	(1)
Total comprehensive (loss)/ income attributable to non-controlling interest	–	–	(2)	14
Summarised balance sheet				
Non-current assets	315	–	134	200
Current assets	351	–	585	592
Total assets	666	–	719	792
Non-current liabilities	62	–	8	3
Current liabilities	61	–	566	646
Total liabilities	123	–	574	649
Total equity	543	–	145	143
Attributable to non-controlling interest	266	–	36	36

	Petrofac Netherlands Holdings B.V. and Petro Oil and Gas Limited		Petrofac Emirates LLC	
Summarised cash flow statement	*2018 US$m	2017 US$m	2018 US$m	2017 US$m
Operating	(18)	–	258	(187)
Investing	(6)	–	39	(1)
Financing	5	–	(243)	–
	(19)	–	54	(188)

* The summarised income statement and summarised cash flow statement only present financial performance and cash flow information post non-controlling interest dilution i.e. from 18 October 2018 to the end of the reporting period.

Dividends of US$3m were declared by Petrofac Emirates LLC during 2018 (2017: US$12m), of which US$1m was attributable to the non-controlling interest (2017: US$3m). There was no cash outflow to the non-controlling interest since the dividends were adjusted against the receivable balance included within current assets in the individual financial statements of Petrofac Emirates LLC.

14 Goodwill

A summary of the movements in goodwill is presented below:

	2018 US$m	2017 US$m
At 1 January	**76**	72
Exchange difference	**(3)**	4
At 31 December	**73**	76

Goodwill resulting from business combinations has been allocated to two cash-generating units for impairment testing as follows:

- Engineering & Construction
- Engineering & Production Services

These cash-generating units represent the lowest level within the Group at which goodwill is monitored for internal management purposes. The Group considers cash-generating units to be individually significant where they represent greater than 25% of the total goodwill balance.

Recoverable amounts have been determined based on value in use calculations, using discounted pre-tax cash flow projections. Management has adopted cash flow projections that are based on a three-year business plan approved by the Board for the Engineering & Construction and Engineering & Production Services cash-generating units.

Carrying amount of goodwill allocated to each group of cash-generating units

	2018 US$m	2017 US$m
Engineering & Construction	**32**	32
Engineering & Production Services	**41**	44
	73	76

Key assumptions used in value in use calculations

Market share: the key management assumptions relate to maintaining existing levels of business and growing organically in international markets.

Discount rate: Management used a pre-tax discount rate of 11.6% per annum (2017: 11.6% per annum) derived from the estimated weighted average cost of capital of the Group. A 100-basis point increase in the pre-tax discount rate to 12.6% would result in no additional impairment charges.

15 Assets held for sale

JSD6000 installation vessel

On 24 April 2018, the Group signed an Asset Purchase Agreement with Shanghai Zhenhua Heavy Industries Co Ltd (the 'Purchaser'), for the disposal of the JSD6000 installation vessel (the 'vessel'). The disposal consideration comprised cash consideration of US$167m and deferred consideration of US$63m representing a 10% ownership interest in a Special Purpose Vehicle that will own the vessel upon construction and commissioning by the Purchaser. It is estimated that construction and commissioning of the vessel will be completed by mid-2021. Disposal costs were estimated to be US$20m, mainly comprising technical assistance to the Purchaser over the construction period and storage costs for the owner furnished equipment. The disposal costs were incremental costs to the Group and were directly attributable to the disposal of the vessel.

Cash consideration of US$162m was received by the Group during 2018; the remaining balance of US$5m will be received upon commissioning of the vessel and was recognised as a non-current financial asset measured at amortised cost in the consolidated balance sheet (note 18).

The deferred consideration of US$63m, being a contractual right to the Group, was recognised as a non-current asset in the consolidated balance sheet. The deferred consideration was initially measured and recognised at fair value and will subsequently be also measured at fair value with any fair value gain and loss recognised as an exceptional item in the consolidated income statement. The fair value of the deferred consideration took into consideration, amongst other factors, an independent broker's valuation of the vessel (a Level 3 measurement of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement'). A fair value movement of US$2m was recognised as an exceptional item in the consolidated income statement at the end of the reporting period (note 6) which reduced the deferred consideration to US$61m at 31 December 2018. A 10% decrease in the valuation of the vessel would result in a negative fair value change of US$6m.

The fair value of deferred consideration, with Management's current involvement and recent discussions with the Purchaser, assumes that the Purchaser has the intent and the required capabilities to complete the construction and commissioning of the vessel within the due timeframe. At each reporting date, Management will continue to review its judgement to assess the ability of the Purchaser to complete the construction and commissioning of the vessel and under such circumstances that may impair the Purchaser's ability to complete these activities, a fair value loss would be recognised as an exceptional item in the consolidated income statement.

15 Assets held for sale
continued

A loss on disposal of US$8m relating to the Engineering and Construction operating segment was recognised as an exceptional item in the consolidated income statement as follows:

	US$m
Cash consideration received during 2018	162
Present value of cash consideration receivable upon commissioning (note 18)	4
Fair value of deferred consideration at the time of disposal	63
Less: present value of disposal costs[1]	(20)
Fair value less cost of disposal	209
Less: carrying amount of asset held for sale derecognised at the date of completion	(217)
Loss on disposal (note 6)	(8)

1 Net disposal costs of US$10m were paid in cash at 31 December 2018. The balance disposal cost of US$10m was recognised as a provision in the consolidated balance sheet (note 28).

16 Intangible assets

	2018 US$m	2017 US$m
Intangible oil and gas assets		
Cost:		
At 1 January	67	80
Additions	–	8
Accrual adjustment	–	(9)
Transfer to oil and gas assets (note 12)	(12)	1
Derecognised on disposal (note 11a)	(12)	–
Impairment (note 6)	–	(7)
Write off (note 5a and note 5b)	–	(6)
Net book value of intangible oil and gas assets at 31 December	43	67
Other intangible assets		
Cost:		
At 1 January	26	41
Additions	7	–
Derecognised on Santuario PEC to PSC (note 11)	–	(6)
Impairment (note 6)	–	(1)
Write off	–	(9)
Exchange difference	–	1
At 31 December	33	26
Accumulated amortisation:		
At 1 January	(17)	(25)
Amortisation (note 5a and note 5b)	(1)	(1)
Derecognised on Santuario PEC to PSC (note 11)	–	1
Impairment (note 6)	(3)	–
Write off	–	9
Exchange difference	1	(1)
At 31 December	(20)	(17)
Net book value of other intangible assets at 31 December	13	9
Total intangible assets	56	76

Intangible oil and gas assets
Intangible oil and gas assets represents expenditure directly associated with evaluation or appraisal activities related to Block PM304 in Malaysia.

Other intangible assets
Other intangible assets comprised project development expenditure, customer contracts, proprietary software and patent technology. Such intangible assets are amortised over their estimated economic useful life on a straight-line basis and the related amortisation charges included in cost of sales and selling, general and administration expenses (note 5a and 5b). The additions of US$7m (2017: US$nil) relates to investment in the development and implementation of Group-wide cloud-based Enterprise Resource Planning ("ERP") and digital systems.

17 Investments in associates and joint ventures

	Associates US$m	Joint ventures US$m	Total US$m
As at 1 January 2017	60	5	65
Loans (repaid)/advanced by associates and joint ventures	(8)	10	2
Share of net profit/(loss)	12	(1)	11
Dividends received	(3)	(1)	(4)
As at 1 January 2018	61	13	74
Loans repaid by associates and joint ventures	(13)	–	(13)
Disposal of investment in Petrofac FPF1 Limited (note 11a)	(35)	–	(35)
Share of net profit/(loss)	15	–	15
Dividends received	(8)	(3)	(11)
As at 31 December 2018	**20**	**10**	**30**

Dividends received during the year include US$6m received from PetroFirst Infrastructure Limited, US$2m received from PetroFirst Infrastructure 2 Limited, US$2m received from Spiecapag – Petrofac International Limited and US$1m received from TTE Petrofac Limited (2017: US$2m received from PetroFirst Infrastructure Limited, US$1m received from PetroFirst Infrastructure 2 Limited and US$1m received from TTE Petrofac Limited).

Investment in associates

	2018 US$m	2017 US$m
PetroFirst Infrastructure Limited	**16**	16
Petrofac FPF1 Limited	**–**	40
PetroFirst Infrastructure 2 Limited	**4**	5
	20	61

Interest in associates

Summarised financial information of associates, based on their IFRS financial statements, and a reconciliation with the carrying amount of the investment in associates in the consolidated balance sheet are set out below:

	2018 US$m	2017 US$m
Revenue	**105**	104
Cost of sales	**(37)**	(38)
Gross profit	**68**	66
Net finance expense	**(9)**	(11)
Net profit	**59**	55
Group's share of net profit for the year	**15**	12
Non-current assets	**192**	418
Current assets	**25**	39
Total assets	**217**	457
Non-current liabilities	**83**	123
Current liabilities	**47**	43
Total liabilities	**130**	166
Net assets	**87**	291
Group's share of net assets	**20**	61
Carrying amount of the investment in associates	**20**	61

A list of all associates is disclosed in note 34.

No associates had contingent liabilities or capital commitments as at 31 December 2018 and 2017.

Investment in joint ventures

	2018 US$m	2017 US$m
Takatuf Petrofac Oman LLC	**10**	10
Spiecapag – Petrofac International Limited	**–**	2
TTE Petrofac Limited	**–**	1
	10	13

17 Investments in associates and joint ventures
continued

Interest in joint ventures

Summarised financial information of the joint ventures, based on their IFRS financial statements, and a reconciliation with the carrying amount of the investment in joint ventures in the consolidated balance sheet are set out below:

	2018 US$m	2017 US$m
Revenue	**2**	1
Cost of sales	**(2)**	(1)
Gross profit	**–**	–
Selling, general and administration expenses	**–**	(2)
Profit/(loss) before tax	**–**	(2)
Income tax (credit)/expense	**–**	–
Net profit/(loss)	**–**	(2)
Group's share of net profit/(loss) for the year	**–**	(1)
Non-current assets	**26**	34
Current assets	**4**	8
Total assets	**30**	42
Non-current liabilities	**–**	–
Current liabilities	**4**	11
Total liabilities	**4**	11
Net assets	**26**	31
Group's share of net assets	**10**	13
Carrying amount of the investment in joint ventures	**10**	13

A list of all joint ventures is disclosed in note 34.

The Group's share of capital commitments relating to a training centre in Oman was US$2m (2017: US$5m). No joint ventures had contingent liabilities as at 31 December 2018 and 2017. The joint ventures cannot distribute their distributable reserves until they obtain consent from the joint venture partners.

18 Other financial assets and other financial liabilities

Other financial assets	Classification	2018 US$m	2017 US$m
Non-current			
Receivable from joint operation partners for finance leases	Amortised cost	**237**	305
Deferred consideration receivable from Ithaca Energy UK Ltd (note 11a)	Amortised cost	**59**	–
Pánuco contingent consideration	Fair value through profit and loss	**45**	49
Contingent consideration arising from the disposal of 49% non-controlling interest of Group's operations in Mexico (note 11a)	Fair value through profit and loss	**42**	–
Receivable from Shanghai Zhenhua Heavy Industries Co Ltd (note 15)	Amortised cost	**4**	–
Receivable from the Greater Stella Area (GSA) joint operation partners (note 11a)	Amortised cost	**–**	124
Forward currency contracts designated as hedges (note 33)	Designated as cash flow hedges	**1**	23
Restricted cash	Amortised cost	**–**	40
Advances relating to decommissioning provision	Amortised cost	**18**	12
		406	553
Current			
Receivable from joint operation partners for finance leases	Amortised cost	**76**	76
Contingent consideration receivable arising from the disposal of Petrofac GSA Holdings Limited (note 11a)	Fair value through profit and loss	**19**	–
Pánuco contingent consideration	Fair value through profit and loss	**–**	39
Forward currency contracts designated as hedges (note 33)	Designated as cash flow hedges	**25**	21
Forward currency contracts undesignated (note 33)	Fair value through profit and loss	**14**	1
Restricted cash	Amortised cost	**10**	9
		144	146
Other financial liabilities			
Non-current			
Finance lease creditors (note 30)	Loans and borrowings	**339**	435
Forward currency contracts designated as hedges (note 33)	Designated as cash flow hedges	**2**	8
		341	443
Current			
Finance lease creditors (note 30)	Loans and borrowings	**112**	112
Forward currency contracts designated as hedges (note 33)	Designated as cash flow hedges	**17**	16
Forward currency contracts undesignated (note 33)	Fair value through profit and loss	**3**	9
Oil derivative (note 33)	Designated as cash flow hedges	**–**	2
Interest payable	Loans and borrowings	**7**	12
		139	151

Receivable from joint operation partners for finance leases

The current and non-current receivable from joint operation partners represented 70% of the finance lease liability in respect of oil and gas facilities in Malaysia that are recognised 100% in the Group's consolidated balance sheet. This treatment is necessary to reflect the legal position of the Group as the contracting counterparty for this lease. The Group's 30% share of this liability was US$134m (2017: US$163m). At 31 December 2018, Management concluded that no expected credit loss allowance against the receivable from joint operation partners for finance leases was necessary, since under the joint operating agreement any default by the joint arrangement partners is fully recoverable through a recourse available to the non-defaulting partner through a transfer or an assignment of defaulting partner's equity interest.

Deferred consideration receivable from Ithaca Energy UK Ltd

The deferred consideration, recoverable over a period of four years under the terms of the Sales and Purchase Agreement, of US$59m from Ithaca Energy UK Ltd relating to the disposal of Petrofac GSA Holdings Limited, was initially recognised at fair value using a discount rate of 8.4% and will subsequently be measured at amortised cost. No unwinding of the discount on the deferred consideration was recognised from the date of disposal to the end of the reporting period in the consolidated income statement. There was no significant increase in the credit risk for such financial asset since the initial recognition.

18 Other financial assets and other financial liabilities
continued

Pánuco contingent consideration

A reconciliation of the fair value measurement of the Pánuco contingent consideration is presented below:

	2018 US$m	2017 US$m
Opening balance	**88**	–
Initial recognition	**–**	85
Fair value loss (note 6)	**(43)**	–
Unwinding of discount	**–**	3
As at end of the reporting period	**45**	88

Receivable from Greater Stella Area joint operation partners

On 26 August 2018, the Group signed a Sale and Purchase Agreement with Ithaca Energy UK Ltd for the disposal of its wholly owned subsidiary, Petrofac GSA Holdings Limited, which owned a 20% interest in the Great Stella Area (GSA) joint operation and a 25% interest in Petrofac FPF1 Limited, previously classified as an investment in associate. As a result, the receivable's carrying amount of US$132m was derecognised at the completion date (note 11a). During the year, the Group recognised finance income of US$8m, related to discount unwinding, in the consolidated income statement.

Restricted cash

The Group had outstanding letters of guarantee, including performance, advance payments and bid bonds against which the Group had pledged or restricted cash balances.

Advances relating to decommissioning provision

Advances relating to decommissioning provision represents advance payments to a customer for settling decommissioning liability, relating to the Group's assets in Malaysia, when they become due. The advance of US$6m made during the year was presented in the consolidated statement of cash flows as a cash outflow within investing activity.

Changes in liabilities arising from financing activities

Year ended 31 December 2018

	1 January 2018 US$m	Cash inflows US$m	Cash outflows US$m	Derecognised US$m	New leases US$m	Cash outflows paid by joint operation partners US$m	31 December 2018 US$m
Interest-bearing loans and borrowings[1]	1,565	1,858	(2,803)	–	–	–	620
Finance lease creditors	547	–	(30)	–	–	(66)	451
At 31 December 2018	**2,112**	**1,858**	**(2,833)**	**–**	**–**	**(66)**	**1,071**

1 Interest-bearing loans and borrowings excludes overdrafts since these are included within cash and equivalents.

Year ended 31 December 2017

	1 January 2017 US$m	Cash inflows US$m	Cash outflows US$m	Derecognised US$m	New leases US$m	Cash outflows paid by joint operation partners US$m	31 December 2017 US$m
Interest-bearing loans and borrowings[1]	1,762	1,106	(1,303)	–	–	–	1,565
Finance lease creditors	596	–	(43)	(506)	597	(97)	547
At 31 December 2018	2,358	1,106	(1,346)	(506)	597	(97)	2,112

1 Interest-bearing loans and borrowings excludes overdrafts since these are included within cash and equivalents. Debt acquisition costs paid during 2017 amounted to US$1m.

The Group recognises the gross liability for finance leases in its financial statements, however the cash flows above represent the Group's 30% share of the payments.

During 2017, the Group renegotiated its existing finance leases relating to Block PM304 in Malaysia. As a result, the Group derecognised its existing finance lease liabilities of US$506m (Group's 30% ownership interest US$152m) and re-recognised finance lease liabilities of US$597m (Group's 30% ownership interest US$179m), under the revised finance lease terms. A net gain of US$4m (note 5d) was recognised on the re-recognition since the gain on re-recognition of finance lease asset was partly offset by a loss on re-recognition of finance lease liability (note 12).

Fair value measurement

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1: Unadjusted quoted prices in active markets for identical financial assets or liabilities
Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
Level 3: Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

Set out below is a comparison of the carrying amounts and fair values of financial instruments as at 31 December:

	Level	Carrying amount		Fair value	
		2018 US$m	2017 US$m	**2018 US$m**	2017 US$m
Financial assets					
Measured at amortised cost					
Cash and short-term deposits	Level 2	**726**	967	**726**	967
Restricted cash	Level 2	**10**	49	**10**	49
Receivable from joint operation partners for finance leases	Level 2	**313**	381	**313**	381
Deferred consideration receivable from Ithaca Energy UK Ltd (note 11a)	Level 2	**59**	–	**59**	–
Receivable from Shanghai Zhenhua Heavy Industries Co Ltd (note 15)	Level 3	**4**	–	**4**	–
Receivable from the Greater Stella Area joint operation partners	Level 2	**–**	124	**–**	124
Advances relating to provision for decommissioning liability	Level 2	**18**	–	**18**	–
Measured at fair value through profit and loss					
Pánuco contingent consideration	Level 3	**45**	88	**45**	88
Contingent consideration arising from the disposal of 49% non-controlling interest of Group's operations in Mexico (note 11a)	Level 3	**42**	–	**42**	–
Contingent consideration receivable arising from the disposal of Petrofac GSA Holdings Limited (note 11a)	Level 3	**19**	–	**19**	–
Sterling forward currency contracts – undesignated	Level 2	**13**	1	**13**	1
Euro forward currency contracts – undesignated	Level 2	**1**	–	**1**	–
Designated as cash flow hedges					
Euro forward currency contracts	Level 2	**25**	43	**25**	43
Russian ruble forward currency contracts	Level 2	**1**	–	**1**	–
Sterling forward currency contracts	Level 2	**–**	1	**–**	1
Financial liabilities					
Measured at amortised cost					
Interest-bearing loans and borrowings					
Senior Notes	Level 2	**–**	676	**–**	677
Term loans	Level 2	**424**	198	**425**	200
Revolving Credit Facility	Level 2	**77**	550	**80**	555
Export Credit Agency funding	Level 2	**114**	124	**115**	133
Bank overdrafts	Level 2	**21**	31	**21**	31
Finance lease creditors	Level 2	**451**	547	**451**	547
Interest payable	Level 2	**7**	12	**7**	12
Measured at fair value through profit and loss					
Sterling forward currency contracts – undesignated	Level 2	**1**	9	**1**	9
Euro forward currency contracts – undesignated	Level 2	**2**	–	**2**	–
Designated as cash flow hedges					
Euro forward currency contracts	Level 2	**7**	11	**7**	11
Malaysian ringgit forward currency contracts	Level 2	**–**	1	**–**	1
Kuwaiti dinar forward currency contracts	Level 2	**8**	12	**8**	12
Russian ruble forward currency contracts	Level 2	**3**	–	**3**	–
Sterling forward currency contracts	Level 2	**1**	–	**1**	–
Oil derivative	Level 2	**–**	2	**–**	2

Management assessed the carrying amounts of trade and other receivables and trade and other payables to approximate their fair values largely due to the short-term maturities of these instruments.

18 Other financial assets and other financial liabilities
continued

When the fair values of financial assets and financial liabilities recognised in the consolidated balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including discounted cash flow ("DCF") model. The inputs to these models are taken from observable markets where possible, but where such information is not available, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions relating to these factors could affect the recognised fair value of financial instruments and are discussed further below.

The following methods and assumptions were used to estimate the fair values for material financial instruments:

- The Group enters into derivative financial instruments with various counterparties, principally financial institutions with investment grade credit ratings. Foreign exchange forward contracts and commodity forward contracts are valued using valuation techniques, which employ the use of market observable inputs. The most frequently applied valuation techniques include forward pricing using present value calculations. The models incorporate various inputs including the credit quality of counterparties, foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationships and other financial instruments recognised at fair value.
- The fair value of deferred consideration receivable from Ithaca Energy UK Ltd is equivalent to its amortised costs determined as the present value of discounted future cash flows using the discount rate of 8.4% which includes the counterparty's risk of default.
- The Pánuco contingent consideration was fair valued at 31 December 2018, which resulted in a fair value loss of US$43m recognised as an exceptional item in the consolidated income statement. There is considerable uncertainty on the timing and ultimate terms of the Pánuco Production Enhancement Contract ("PEC") migration to a Production Sharing Contract ("PSC"). Management has considered alternative scenarios to assess the recoverability of the Pánuco contingent consideration including, but not limited to, the impact of delay in migration or renegotiation of the contingent consideration in the event of migration to another form of contract. Based on this assessment a fair value loss of US$43m was recognised reducing the carrying amount of the contingent consideration to US$45m. This is a significant accounting estimate made by Management to determine the fair value of the contingent consideration at 31 December 2018. A further fair value loss could be recognised as an exceptional item in the consolidated income statement if the outcome of the migration is less beneficial to the Group than Management's current expectation.
- The fair value of contingent consideration arising from the disposal of 49% non-controlling interest of Group's operations in Mexico and contingent consideration receivable arising from the disposal of Petrofac GSA Holdings Limited is calculated as explained in note 11a.
- The fair value of long-term interest-bearing loans and borrowings, finance lease creditors and receivable from joint operation partners for finance leases are equivalent to their amortised costs determined as the present value of discounted future cash flows using the effective interest rate.

19 Inventories

	2018 US$m	2017 US$m
Unutilised materials relating to a project in the Engineering & Construction operating segment	**15**	–
Crude oil	**4**	2
Stores and raw materials	**2**	6
	21	8

Inventories with a carrying amount of US$4m (note 11a) relating to the disposal of the oil and gas assets in Tunisia were derecognised during the year. Inventories expensed of US$71m (2017: US$97m) were included within cost of sales in the consolidated income statement.

20 Trade and other receivables

	2018 US$m	2017 US$m
Trade receivables	**829**	1,108
Retentions receivables (note 21)	**–**	379
Advances provided to vendors and subcontractors	**355**	261
Prepayments and deposits	**23**	35
Receivables from joint operation partners	**95**	96
Other receivables	**129**	141
	1,431	2,020

The decrease in trade receivables is mainly due to a reclassification of US$25m, relating to the Engineering & Production Services operating segment, to non-current contract assets (note 21); US$22m relating to the Integrated Energy Services Operating segment being derecognised upon disposal (note 11a); and a receipt of final settlement relating to two projects in the Engineering & Construction operating segment of US$86m. At 31 December 2018, the Group had an expected credit loss ("ECL") allowance of US$21m in accordance with IFRS 9 'Financial Instruments' (2017: US$14m in accordance with IAS 39 'Financial Instruments: Recognition and Measurement') against outstanding trade receivable balance of US$850m.

At the date of initial application of IFRS 15 'Revenue from Contracts with Customers' an amount of US$165m representing conditional rights to consideration was reclassified to 'Contract assets' line item in the consolidated balance sheet (note 2.3).

Trade receivables are non-interest bearing and credit terms are generally granted to customers on 30 to 60 days' basis. At 31 December 2018, the trade receivables were reported net of ECL allowance in accordance with IFRS 9. At 31 December 2017, the trade receivables were reported net of impairment allowance in accordance with IAS 39. The Group applied IFRS 9 retrospectively, with the initial application date of 1 January 2018, without adjusting the comparative information, therefore the 2018 and 2017 columns in the table below are not comparable.

The movement in ECL allowance during 2018 and movement in impairment allowance during 2017 against trade receivables was as follows:

	2018 (calculated in accordance with IFRS 9)	2017 (calculated in accordance with IAS 39)		
	ECL allowance US$m	Specific impairment US$m	General impairment US$m	Total US$m
At 1 January	**–**	11	2	13
Impairment allowance under IAS 39 reclassified at the date of initial application of IFRS 9	**14**	–	–	–
ECL allowance opening transition adjustment (note 2)	**10**	–	–	–
Reclassified to non-current contract assets (note 21)	**(4)**	–	–	–
Disposals (note 11a)	**(2)**	–	–	–
Charge/(reversal) during the year	**3**	3	(1)	2
Amounts written off	**–**	(1)	–	(1)
At 31 December	**21**	13	1	14

At 31 December 2018, the analysis of trade receivables is as follows:

	Number of days past due						
	< 30 days US$m	**31–60 days US$m**	**61–90 days US$m**	**91–120 days US$m**	**121–360 days US$m**	**> 360 days US$m**	**Total US$m**
ECL rate	**0.3%**	**0.1%**	**0.3%**	**1.9%**	**6.5%**	**36.6%**	
Estimated total gross carrying amount	**629**	**76**	**25**	**17**	**62**	**41**	**850**
Less: ECL allowance	**(2)**	**–**	**–**	**–**	**(4)**	**(15)**	**(21)**
Net trade receivables at 31 December 2018	**627**	**76**	**25**	**17**	**58**	**26**	**829**

For accounting policies adopted by the Group for computing the ECL allowance refer note 2 pages 129 and 130.

At 31 December 2017, the analysis of trade receivables is as follows:

		Number of days past due						
	Neither past due nor impaired US$m	< 30 days US$m	31–60 days US$m	61–90 days US$m	91–120 days US$m	121–360 days[2] US$m	> 360 days[2] US$m	Total US$m
Unimpaired	769	84	59	19	3	39	110	1,083
Impaired	–	–	–	–	4	20	15	39
	769	84	59	19	7	59	125	1.122
Less: impairment provision	–	–	–	–	–	(1)	(13)	(14)
Net trade receivables 2017	769	84	59	19	7	58	112	1,108

1 The credit quality of trade receivables that are neither past due nor impaired was assessed by management with reference to the historic payment track records of the counterparties together with the relevant current information in accordance with IAS 39 'Financial Instruments: Recognition and Measurement'.

2 Included within these aged trade receivables at 31 December 2017 are US$96m in the Engineering & Construction operating segment which will be recovered from the customers as part of the final settlement on the projects. Management reviewed the recoverability of these receivables and concluded that these will be recovered in full and no impairment provision is necessary at the end of the reporting period.

Advances provided to vendors and subcontractors represent payments made to certain vendors and subcontractors for projects in progress, that will be adjusted against the future progress billings by the vendors and subcontractors. The increase in advances provided to vendors and subcontractors of US$94m is mainly due to advances of US$102m relating to two projects in the Engineering & Construction operating segment.

Receivables from joint operation partners are recoverable amounts from partners on Block PM304, Santuario PSC and on consortium contracts in the Engineering & Construction operating segment.

Other receivables mainly consist of Value Added Tax recoverable of US$58m (2017: US$77m).

All trade and other receivables except 'advances provided to vendors and subcontractors' are expected to be settled in cash. Certain trade and other receivables will be settled in cash using currencies other than the reporting currency of the Group, and will be largely paid in sterling, euros and Kuwaiti dinars.

21 Contract assets and contract liabilities

a. Contract assets

	2018 US$m	2017 US$m
Work in progress	1,505	–
Retention receivables	308	–
Accrued income	185	–
	1,998	–

At 31 December 2018, work in progress includes variation orders pending customer approval of US$235m (2017: US$374m).

b. Contract liabilities

	2018 US$m	2017 US$m
Billings in excess of costs and estimated earnings	374	–
Advances received from customers	130	–
	504	–

c. Expected credit loss (ECL) allowance on contract assets

The below table provides information on expected credit loss allowance for each contract asset category at 31 December 2018:

	Non-current contract assets US$m	Work in progress US$m	Retention receivables US$m	Accrued income US$m	Total current contract assets US$m
ECL rate	9.0%	0.3%	9.9%	1.1%	
Estimated total gross carrying amount	44	1,510	342	187	2,039
Less: ECL allowance	(4)	(5)	(34)	(2)	(41)
Net contract assets at 31 December 2018	40	1,505	308	185	1,998

The movement in ECL allowance during 2018 against each contract asset category is as follows:

	Non-current contract assets US$m	Work in progress US$m	Retention receivables US$m	Accrued income US$m	Total current contract assets US$m
ECL allowance opening transition adjustment (note 2)	–	8	34	1	43
ECL allowance relating to non-current receivables reclassified from trade and other receivables (note 20)	4	–	–	–	–
Charge/(reversal) for the year	–	(3)	–	1	(2)
At 31 December 2018	4	5	34	2	41

d. Contract balances arising from contracts with customers

The Group's contract balances at the end of 31 December 2018 are as follows:

	2018 US$m
Trade receivables (note 20)	829
Non-current contract assets	40
Current contract assets	1,998
Contract liabilities	504

Trade receivables are non-interest bearing and credit terms are generally on terms of 30 to 60 days. Trade receivables represent the Group's right to consideration that is unconditional (i.e. only the passage of time is required before payment of the consideration is due).

Non-current contract assets represent amounts that were reclassified from trade and other receivables (note 20) and retention receivables (note 21d) due to a commercial settlement agreed with a customer during the year. These amounts are recoverable over a period of two years. The gross receivables of US$44m were discounted using a discount rate of 5.0%, which resulted in an upfront interest charge of US$4m recognised within finance expense line item of the consolidated income statement (note 7).

Contract assets represent right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration that is conditional. Upon achieving billing milestones, if any, in accordance with the contractual terms and acceptance of goods or services received by the customer, the amounts recognised as contract assets are reclassified to trade receivables.

Contract liabilities represent obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is made, or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract.

The Group recognised an ECL allowance on trade receivables and contract assets arising from contracts with customers, included within selling, general and administration expenses in the consolidated income statement, amounting to US$1m for the year ended 31 December 2018.

The table below provides details of key movements to contract assets and contract liabilities during the year:

	Contract assets				Contract liabilities	
	Non-current contract assets US$m	Work-in-progress US$m	Retention receivables US$m	Accrued income US$m	Billings in excess of cost and estimated earnings US$m	Advances received from customers US$m
Balances reclassified at the date of initial application of IFRS 15 'Revenue from Contracts with Customers' i.e. 1 January 2018 (note 2)	–	2,223	379	–	198	536
Cumulative catch-up adjustment at the date of initial application of IFRS 15 (note 2)	–	(62)	–	–	–	–
Offset of advances received from customers classified within trade and other payables for individual customer contracts against contract assets at the date of initial application of IFRS 15 (note 2)	–	(351)	–	–	–	(351)
Trade receivables representing conditional rights to consideration reclassified to contract assets at the date of initial application of IFRS 15 (note 2)	–	–	–	165	–	–
Expected credit loss allowance recognised at the date of initial application of IFRS 9 'Financial Instruments' i.e. 1 January 2018 (note 2)	–	(8)	(34)	(1)	–	–
Revenue recognised during the year from amounts included in contract liabilities at the beginning of the year	–	–	–	–	(198)	(156)
Amounts reclassified to non-current contract assets during the year	19	–	(19)	–	–	–
Amounts reclassified from trade and other receivables (note 20)	25	–	–	–	–	–
Finance expense associated with discounting (note 7)	(4)	–	–	–	–	–
Expected credit loss allowance reversal/(charge)	–	3	–	(1)	–	–

Revenue recognised during the year from performance obligations satisfied in previous years, resulting from change in transaction price, amounted to US$254m.

22 Cash and short-term deposits

	2018 US$m	2017 US$m
Cash at bank and in hand	**630**	808
Short-term deposits	**97**	159
ECL allowance	**(1)**	–
Total cash and short-term deposits	**726**	967

Short-term deposits are made for varying periods of between one day and three months depending on the immediate cash requirements of the Group and earn interest at respective short-term deposit rates. The fair value of cash and bank balances is US$726m (2017: US$967m).

For the purposes of the consolidated statement of cash flows, cash and cash equivalents comprise the following:

	2018 US$m	2017 US$m
Total cash and short-term deposits	**726**	967
Bank overdrafts (note 27)	**(21)**	(31)
	705	936

Cash and cash equivalents included amounts totalling US$145m (2017: US$63m) held by Group undertakings in certain countries whose exchange controls significantly restrict or delay the remittance of these amounts to foreign jurisdictions.

The Group applied IFRS 9 retrospectively, with the initial application date of 1 January 2018, and as at that date based on the probability of default data for the counterparties, sourced from a third-party provider, recognised an ECL allowance of US$1m. There was no movement in the expected credit loss allowance during the year.

23 Share capital

The share capital of the Company as at 31 December was as follows:

	2018 US$m	2017 US$m
Authorised		
750,000,000 ordinary shares of US$0.020 each (2017: 750,000,000 ordinary shares of US$0.020 each)	**15**	15
Issued and fully paid		
345,912,747 ordinary shares of US$0.020 each (2017: 345,912,747 ordinary shares of US$0.020 each)	**7**	7

All the allotted and issued shares, including those held by the Employee Benefit Trust, were fully paid.

There was no movement in the number of issued and fully paid ordinary shares during the year.

The share capital comprises only one class of ordinary shares. The ordinary shares carry a voting right and the right to a dividend.

Share premium: The balance on the share premium account represents the amount received in excess of the nominal value of the ordinary shares.

Capital redemption reserve: The balance on the capital redemption reserve represents the aggregated nominal value of the ordinary shares repurchased and cancelled.

24 Employee Benefit Trust ("EBT") shares

For the purpose of making awards under the Group's share-based payment plans, shares in the Company are purchased and held by the Petrofac Employee Benefit Trust. These shares have been classified in the consolidated balance sheet as EBT shares within equity.

The movements in total EBT shares are shown below:

	2018		2017	
	Number	US$m	Number	US$m
At 1 January	**6,226,375**	**102**	5,932,474	105
Purchase of Company's shares by EBT	**6,045,843**	**44**	3,406,314	39
Issue of Company's shares by EBT	**(3,207,299)**	**(39)**	(3,112,413)	(42)
At 31 December	**9,064,919**	**107**	6,226,375	102

Shares vested during the year include dividend shares of 353,528 shares (2017: 303,554 shares).

25 Share-based payment plans

Performance Share Plan ("PSP")

Under the PSP, share awards are granted to Executive Directors and a restricted number of other senior executives of the Group. The shares vest at the end of three years, subject to continued employment and the achievement of certain pre-defined and independent market and non-market-based performance conditions. The Group revised its PSP during 2017, and the market performance-based element of new awards is 70% dependent on the total shareholder return (TSR) of the Group compared with an index composed of selected relevant companies (for earlier awards TSR was 50%). The fair value of the shares vesting under this portion of the award is determined by an independent valuer using a Monte Carlo simulation model taking into account the terms and conditions of the plan rules and using the following assumptions at the date of grant:

	Executive Directors 2018 awards	Other participants 2018 awards	Executive Directors 2017 awards	Other participants 2017 awards	All participants 2016 awards	All participants 2015 awards
Expected share price volatility (based on median of comparator group's three-year volatilities)	**37.7%**	**37.7%**	39.1%	39.1%	31.9%	28.5%
Share price correlation with comparator group	**22.3%**	**22.3%**	26.6%	26.6%	28.9%	26.4%
Risk-free interest rate	**0.94%**	**0.94%**	0.2%	0.2%	0.6%	0.7%
Expected life of share award	**3 years**	**3 years**	3 years	3 years	3 years	3 years
Fair value of TSR portion	**285p**	**356p**	99p	124p	747p	562p

The non-market-based condition governing the vesting of the remaining 30% of the 2017 and 2018 awards is subject to achieving certain strategic targets i.e. cumulative Engineering & Construction business performance net profit, cumulative Engineering & Production Services business performance net profit, cumulative divestment proceeds and cumulative cash conversion over a three-year period. Each strategic target accounts for 7.5% for the purposes of awards vesting, save where adjusted by the Remuneration Committee. For earlier awards, 50% of the total award is subject to achieving between 0.0% and 7.5% earnings per share growth targets over a three-year period. The fair value of the equity-settled award relating to the non-market-based condition is estimated, based on the quoted closing market price of the Company's ordinary shares at the date of grant with an assumed annual vesting rate built into the calculation (subsequently trued up to the end of the reporting period on the actual leaver rate during the period from award date to the end of the reporting period) over the three-year vesting period of the plan.

Deferred Bonus Share Plan ("DBSP")

Under the DBSP selected employees are required to defer a proportion of their annual cash bonus into Company shares ("Invested Shares"). Following such an award, the Company will generally grant the participant an additional award of shares ("Matching Shares") bearing a specified ratio to the number of Invested Shares, typically a 1:1 ratio. Subject to a participant's continued employment, Invested and Matching Share awards vest one-third on the first anniversary of the grant, one-third on the second anniversary and the final proportion on the third anniversary of the grant date.

At the end of the reporting period the value of bonuses to be settled by shares cannot be determined until the Remuneration Committee has approved the portion of the employee bonuses to be settled in shares. Once the portion of the bonus to be settled in shares is determined, the final bonus liability to be settled in shares is transferred to the share-based payments reserve. The costs relating to Matching Shares are recognised over the corresponding vesting period and the fair values of the equity-settled Matching Shares granted to employees are based on the quoted closing market price at the date of grant with the charge to the consolidated income statement adjusted to reflect the expected vesting rate of the plan.

Share Incentive Plan ("SIP")

All UK employees, including UK Executive Directors, are eligible to participate in the SIP. Employees may invest up to sterling £1,800 per tax year of gross salary (or, if lower, 10% of salary) to purchase ordinary shares in the Company. There is no holding period for these shares.

Restricted Share Plan ("RSP")

Selected employees are allocated grants of shares on an ad hoc basis. The RSP is primarily, but not exclusively, used to make awards to individuals who join the Group part way through the year, having left accrued benefits with a previous employer. The fair values of the awards granted under the RSP at various grant dates during the year are based on the quoted market price at the date of grant adjusted for an assumed vesting rate over the relevant vesting period.

Share-based payment plans information

The details of the fair values and assumed vesting rates of the share-based payment plans are below:

	PSP (non-market based condition)						DBSP		RSP	
	Executive Directors		Other participants		Earlier awards: all participants					
	Fair value per share	Assumed vesting rate	Fair value per share	Assumed vesting rate	Fair value per share	Assumed vesting rate	Fair value per share	Assumed vesting rate	Fair value per share	Assumed vesting rate
2018 awards	**515p**	**19.9%**	**515p**	**19.9%**	**–**	**–**	**466p**	**94.6%**	**560p**	**95.0%**
2017 awards	353p	12.3%	441p	12.3%	–	–	839p	90.1%	572p	95.0%
2016 awards	–	–	–	–	982p	0.0%	982p	86.6%	859p	90.0%
2015 awards	–	–	–	–	890p	0.0%	890p	85.4%	927p	95.0%

The following table shows the movements in the number of shares held under the share-based payment plans outstanding but not exercisable:

	PSP		DBSP		RSP		Total	
	2018 Number	2017 Number	**2018 Number[1]**	2017 Number[1]	**2018 Number**	2017 Number	**2018 Number**	2017 Number
Outstanding at 1 January	**2,267,918**	1,457,306	**5,160,988**	5,055,234	**276,272**	397,891	**7,705,178**	6,910,431
Granted during the year	**1,262,668**	1,213,622	**4,774,002**	3,087,292	**736,973**	65,983	**6,773,643**	4,366,897
Vested during the year	**–**	–	**(2,676,496)**	(2,727,254)	**(127,270)**	(161,638)	**(2,803,766)**	(2,888,892)
Forfeited during the year	**(648,580)**	(403,010)	**(370,232)**	(254,284)	**(12,924)**	(25,964)	**(1,031,736)**	(683,258)
Outstanding at 31 December	**2,882,006**	2,267,918	**6,888,262**	5,160,988	**873,051**	276,272	**10,643,319**	7,705,178

1 Includes Invested and Matching Shares.

The number of shares still outstanding but not exercisable at 31 December for each award is as follows:

	PSP		DBSP		RSP		Total	
	2018 Number	2017 Number	**2018 Number[1]**	2017 Number[1]	**2018 Number**	2017 Number	**2018 Number**	2017 Number
2018 awards	**1,250,504**	–	**4,502,154**	–	**730,145**	–	**6,482,803**	–
2017 awards	**1,145,404**	1,213,622	**1,753,306**	2,925,254	**48,746**	65,983	**2,947,456**	4,204,859
2016 awards	**486,098**	540,266	**632,802**	1,406,064	**94,160**	190,594	**1,213,060**	2,136,924
2015 awards	**–**	514,030	**–**	829,670	**–**	19,695	**–**	1,363,395
Total awards	**2,882,006**	2,267,918	**6,888,262**	5,160,988	**873,051**	276,272	**10,643,319**	7,705,178

1 Includes Invested and Matching Shares.

The average share price of the Company's shares during 2018 was US$7.44, sterling equivalent of £5.55 (2017: US$7.83, sterling equivalent of £6.06).

25 Share-based payment plans
continued

The number of outstanding shares excludes the dividend shares shown below:

	PSP		DBSP		RSP		Total	
	2018 Number	2017 Number	**2018 Number[1]**	2017 Number[1]	**2018 Number**	2017 Number	**2018 Number**	2017 Number
Dividend shares outstanding at 31 December	**238,785**	199,135	**572,407**	573,987	**30,182**	25,204	**841,374**	798,326

1 Includes Invested and Matching Shares.

The charge in respect of share-based payment plans recognised in the consolidated income statement is as follows:

	PSP		DBSP[1]		RSP		Total	
	2018 US$m	2017 US$m	**2018 US$m**	2017 US$m	**2018 US$m**	2017 US$m	**2018 US$m**	2017 US$m
Share-based payment charge	**1**	2	**14**	15	**2**	2	**17**	19

1 Represents the charge on Matching Shares only.

The Group recognised a share-based payment charge of US$17m (2017: US$19m) in the consolidated income statement relating to the above employee share-based payment plans (see note 5c) which was transferred to the share-based payments reserve together with US$15m of the accrued bonus liability for the year ended 31 December 2017 (2017: 2016 bonus of US$16m).

For further details on the above employee share-based payment plans refer to pages 92, 95 to 97 and 100 of the Directors' remuneration report.

26 Other reserves

	Net unrealised gains/(losses) on derivatives US$m	Foreign currency translation US$m	Share-based payments reserve US$m	Total US$m
Balance at 1 January 2017	(19)	(9)	89	61
Net losses on maturity of cash flow hedges recycled in the year	13	–	–	13
Net changes in fair value of derivatives and financial assets designated as cash flow hedges	46	–	–	46
Foreign currency translation	–	(9)	–	(9)
Issue of Company's shares by Employee Benefit Trust	–	–	(38)	(38)
Transfer to share-based payments reserve for Deferred Bonus Share Plan Invested Shares (note 25)	–	–	16	16
Credit to equity for share-based payments charge (note 25)	–	–	19	19
Income tax on share-based payments reserve	–	–	1	1
Balance at 31 December 2017	40	(18)	87	109
Attributable to:				
Petrofac Limited shareholders	41	(18)	87	110
Non-controlling interests	(1)	–	–	(1)
Balance at 31 December 2017	40	(18)	87	109
Balance at 1 January 2018	40	(18)	87	109
Net gains on maturity of cash flow hedges recycled in the year	(3)	–	–	(3)
Net changes in fair value of derivatives and financial assets designated as cash flow hedges	(24)	–	–	(24)
Foreign currency translation	–	17	–	17
Issue of Company's shares by Employee Benefit Trust	–	–	(34)	(34)
Transfer to share-based payments reserve for Deferred Bonus Share Plan Invested Shares (note 25)	–	–	15	15
Credit to equity for share-based payments charge (note 25)	–	–	17	17
Income tax on share-based payments reserve	–	–	(2)	(2)
Balance at 31 December 2018	**13**	**(1)**	**83**	**95**
Attributable to:				
Petrofac Limited shareholders	13	(1)	83	95
Non-controlling interests	–	–	–	–
Balance at 31 December 2018	**13**	**(1)**	**83**	**95**

Net unrealised gains/(losses) on derivatives

The portion of gains or losses on cash flow hedging instruments that are determined to be effective hedges is included within this reserve net of related deferred tax effects. When the hedged transaction occurs or is no longer forecast to occur, the gain or loss is transferred from equity to the consolidated income statement. Realised net gains amounting to US$3m (2017: US$13m net loss) relating to foreign currency forward contracts and financial instruments designated as cash flow hedges have been recognised in cost of sales line item in the consolidated income statement.

The forward currency points element and ineffective portion of derivative financial instruments relating to forward currency contracts designated as cash flow hedges amounting to US$5m (2017: US$13m gain re-presented, see note 6) were recognised in cost of sales line item in the consolidated income statement.

Foreign currency translation reserve

The assets and liabilities of entities which have a non-United States dollar functional currency are translated into the Group's reporting currency, United States dollar, at the exchange rate prevailing at the end of the reporting period. The foreign currency differences arising on the translation are recognised in other reserves in equity.

Share-based payments reserve

The share-based payments reserve is used to recognise the value of equity-settled share-based payments awarded to employees and transfers out of this reserve are made upon vesting of the original share awards.

The transfer of US$15m (2017: US$16m) into the share-based payments reserve reflected the transfer from accrued bonus liability within trade and other payables in the consolidated balance sheet which has been voluntarily elected or mandatorily obliged to be settled in shares as part of the Deferred Bonus Share Plan (note 25).

27 Interest-bearing loans and borrowings

	2018 US$m	2017 US$m
Non-current		
Revolving Credit Facility	**80**	555
Export Credit Agency funding (SACE and UKEF facilities)	**–**	115
Term loans	**300**	200
	380	870
Less: Debt acquisition costs net of accumulated amortisation and effective interest rate adjustments	**(4)**	(16)
	376	854
Current		
Senior Notes	**–**	677
Export Credit Agency funding (SACE and UKEF facilities)	**115**	18
Term loans	**125**	–
Bank overdrafts	**21**	31
	261	726
Less: Debt acquisition costs net of accumulated amortisation and effective interest rate adjustments	**(1)**	(1)
	260	725
Total interest-bearing loans and borrowings	**636**	1,579

Details of the Group's interest-bearing loans and borrowings are as follows:

Revolving Credit Facility

The Group has a US$1,200m committed Revolving Credit Facility with a syndicate of international banks, which is available for general corporate purposes. US$200m of the facility will mature in June 2020 and the remaining US$1,000m will mature in June 2021. As at 31 December 2018, US$80m was drawn under this facility (2017: US$555m).

Interest is payable on the drawn balance of the facility and in addition utilisation fees are payable depending on the level of utilisation.

Export Credit Agency funding

In 2015, the Group entered into two term loan facilities guaranteed, respectively, by the Italian Export Credit Agency (SACE) and the UK Export Credit Agency (UKEF). Following the disposal of JSD6000 installation vessel and transfer of associated owner furnished equipment to the Purchaser during 2018 (note 15) the SACE and UKEF facilities will mature in June 2019. At 31 December 2018, the amortised cost of the liability has been adjusted to reflect the revised contractual cash flows, in line with the requirements of IFRS 9 'Financial Instruments', which resulted in a charge of US$6m being recognised as an exceptional item in the consolidated income statement (note 6). As at 31 December 2018, US$43m was drawn under the SACE facility (2017: US$50m) and US$72m was drawn under the UKEF facility (2017: US$83m). No further drawings can be made from these facilities.

In February 2019, after the end of the reporting period, the Group received a pre-payment waiver from the SACE Export Credit Agency facility Lenders (the "Lenders") and the associated facility will now mature in 2025. The waiver has been treated as a non-adjusting event after the reporting period, since provision of the waiver was at sole discretion of the Lenders.

Term loans

At 31 December 2018, the Group had in place five bilateral term loans with a combined total of approximately US$483m. As at that date, US$425m was drawn under these facilities (2017: US$200m). Of the total, US$25m is scheduled to mature in February 2019 and US$100m is scheduled to mature in August 2019. The balance will mature in 2020.

27 Interest-bearing loans and borrowings
continued

Senior Notes
The Group repaid aggregate principal amount of US$677m Senior Notes in October 2018.

Bank overdrafts
Bank overdrafts are drawn down in United States dollar and sterling denominations to meet the Group's working capital requirements. These are repayable on demand.

Compliance with covenants
The Revolving Credit Facility, the Export Credit Agency facilities and the term loans (together, the Senior Loans) are subject to two financial covenants relating to leverage and interest cover. The Group was compliant with these covenants for the year ending 31 December 2018.

The Senior Loans are senior unsecured obligations of the Company and will rank equally in right of payment with each other and with the Company's other existing and future unsecured and unsubordinated indebtedness.

28 Provisions
Non-current provisions

	Other long-term employment benefits provision US$m	Provision for decommissioning US$m	Onerous operating lease provision US$m	Other provisions US$m	Total US$m
At 1 January 2017	101	116	–	7	224
Additions during the year	22	1	12	–	35
Recognised on acquisition (note 11)	–	24	–	–	24
Derecognised on migration of existing Santuario PEC to PSC (note 11)	–	(10)	–	–	(10)
Paid during the year	(11)	–	–	–	(11)
Unwinding of discount	–	7	–	–	7
At 1 January 2018	112	138	12	7	269
Additions/(net reversals) during the year	21	(24)	18	9	24
Disposals (note 11a)	–	(25)	–	–	(25)
Paid during the year	(14)	–	–	(1)	(15)
Transfer (to)/from current	–	–	(15)	1	(14)
Unwinding of discount	–	6	–	–	6
Exchange difference	–	–	(2)	–	(2)
At 31 December 2018	**119**	**95**	**13**	**16**	**243**

Other long-term employment benefits provision
Labour laws in the United Arab Emirates require employers to provide for other long-term employment benefits. These benefits are payable to employees on being transferred to another jurisdiction or on cessation of employment based on their final salary and number of years' service. All amounts are unfunded. The long-term employment benefits provision is based on an internal end of service benefits valuation model with the key underlying assumptions being as follows:

	Senior employees	Other employees
Average number of years of future service	5	3
Average annual % salary increases	2%	2%
Discount factor	4%	4%

Senior employees are those earning a base of salary of over US$96,000 per annum.

Discount factor used represents basis yield on US high quality corporate bonds with duration corresponding to the liability at the end of the reporting period.

Provision for decommissioning
The decommissioning provision primarily relates to the Group's obligation for the removal of facilities and restoration of the sites at the Block PM304 in Malaysia, Santuario Production Sharing Contract ("PSC") and Magallanes and Arenque Production Enhancement Contracts ("PECs") in Mexico.

A reversal of US$32m was recognised for Block PM304 in Malaysia due to revised rates provided by the regulator in respect of daily charter rate for the decommissioning rig and support vessels (2017: relating to drilling of new wells of US$1m in respect of Block PM304 in Malaysia). An upward revision of US$8m to provision for decommissioning was recognised in respect of Santuario Production Sharing Contract ("PSC") and Magallanes and Arenque Production Enhancement Contracts ("PECs") in Mexico arising from changes to discount rate estimates reflecting current market assessments of the time value of money and the risks specific to the liability (2017: US$nil).

The liability is discounted at the rate of 4.1% on Block PM304 (2017: 4.5%), and 5.2% on Santuario PSC, Magallanes and Arenque PECs (2017: 7.5%).

The unwinding of the discount is recognised in the finance expense (note 7) line item of the consolidated income statement. The Group estimates that the cash outflows associated with these provisions will materialise in 2026 on Block PM304; in 2033 on Magallanes PEC; in 2040 on Santuario PSC; and in 2040 on Arenque PEC.

Onerous operating lease provision
Onerous operating lease provision represents the non-current amount of the estimated future costs relating to vacant and underutilised leasehold office buildings in the UK, for which the leases expire between 2020 to 2026. Additions to onerous operating lease provision of US$18m (2017: US$12m) during the year were recognised as an exceptional item in the consolidated income statement and relate to the Engineering & Productions Services operating segment (note 6).

Other provisions
This represents claim amounts of US$9m (2017: US$7m) against the Group which will be settled through the captive insurance company Jermyn Insurance Company Limited and US$6m (2017: US$nil) represents disposal costs associated with the disposal of JSD6000 installation vessel (note 15).

Current provisions

	Onerous operating lease provision US$m	Onerous contract provisions US$m	Other provisions US$m	Total US$m
Reclassified from accrued contract expenses	9	29	–	38
Amounts provided during the year	–	35	4	39
Utilised during the year	(3)	(48)	–	(51)
At 1 January 2018	6	16	4	26
Amounts provided during the year	–	148	26	174
Transfer from/(to) non-current	15	–	(1)	14
Utilised during the year	(16)	(146)	(12)	(174)
At 31 December 2018	**5**	**18**	**17**	**40**

Onerous operating lease provision
Onerous operating lease provision represents the current amount of the estimated future costs relating to vacant and underutilised leasehold office buildings in the UK, for which the leases expire between 2020 to 2026.

Onerous contract provisions
The Group provides for future losses on contracts where it is considered probable that the estimate at completion contract costs are likely to exceed estimate at completion contract revenues in future years. The amount of US$148m provided during the year relates to projects in the Engineering & Construction operating segment (2017: US$35m).

Other provisions
These include amounts provided by the Group for potential claims from vendors, disputes with customers, provision for disposal costs associated with the disposal of JSD6000 installation vessel and other claims. The amount of US$13m provided during the year relates to projects in the Engineering & Production Services operating segment (2017: US$4m) and US$13m relates to disposal costs associated with the disposal of JSD6000 installation vessel (2017: US$nil).

29 Trade and other payables

	2018 US$m	2017 US$m
Trade payables	**336**	419
Advances received from customers (note 21)	**–**	536
Accrued expenses	**431**	499
Other taxes payable	**71**	67
Other payables	**124**	154
	962	1,675

Accrued expenses include capital expenditure accruals relating to property, plant and equipment of US$10m (2017: US$74m) and intangible assets US$1m (2017: US$2m). The balance of accrued expenses primarily represents contract cost accruals relating to the Engineering & Construction operating segment and the Engineering & Production Services operating segment.

Trade and other payables of US$56m were derecognised during the year due to the disposal of oil and gas assets in Tunisia and the disposal of Petrofac GSA Holdings Limited (note 11a).

Other payables mainly consist of retentions held against vendors and subcontractors of US$110m (2017: US$115m).

Certain trade and other payables will be settled in currencies other than the reporting currency of the Group, mainly in sterling, euros and Kuwaiti dinars.

30 Commitments and contingent liabilities

Commitments

In the normal course of business, the Group will obtain surety bonds, letters of credit and guarantees, which are contractually required to secure performance, advance payment or in lieu of retentions being withheld. Some of these facilities are secured by issue of corporate guarantees by the Company and its subsidiaries in favour of the issuing banks.

At 31 December 2018, the Group had outstanding letters of guarantee, including performance, advance payments and bid bonds of US$4,721m (2017: US$4,923m) against which the Group had pledged or restricted cash balances of, in aggregate, US$10m (2017: US$49m).

At 31 December 2018, the Group had outstanding forward exchange contracts amounting to US$2,610m (2017: US$3,045m). These commitments consist of future gross obligations either to acquire or to sell designated amounts of foreign currency at agreed rates and value dates (note 33).

Operating leases

The Group has financial commitments in respect of non-cancellable operating leases for property and equipment. These non-cancellable leases have remaining non-cancellable lease terms of between one and 10 years and, for certain property leases, are subject to renegotiation at various intervals as specified in the lease agreements. The future minimum rental commitments under these non-cancellable leases are as follows:

	2018 US$m	2017 US$m
Within one year	**21**	19
After one year but not more than five years	**50**	46
More than five years	**29**	39
	100	104

Included in the above are commitments relating to the lease of property in United Kingdom of US$67m (2017: US$82m).

Minimum lease payments recognised as an operating lease expense during the year amounted to US$27m (2017: US$36m), of which US$14m (2017: US$17m) relates to cancellable operating leases and US$13m (2017: US$19m) relates to non-cancellable operating leases.

Finance leases

Long-term finance lease commitments as at 31 December 2018 and 31 December 2017 are as follows:

Year ended 31 December 2018

	Future minimum lease payments US$m	**Finance expense US$m**	**Present value US$m**
Oil and gas facilities and plant and equipment			
The commitments are as follows:			
Within one year	**139**	**27**	**112**
After one year but not more than five years	**326**	**42**	**284**
More than five years	**60**	**5**	**55**
	525	**74**	**451**

Year ended 31 December 2017

	Future minimum lease payments US$m	Finance expense US$m	Present value US$m
Oil and gas facilities and plant and equipment			
The commitments are as follows:			
Within one year	153	41	112
After one year but not more than five years	414	64	350
More than five years	95	10	85
	662	115	547

The finance lease assets mainly comprise oil and gas facilities in Block PM304 in Malaysia and the lease terms for these leases range between three to seven years. The above finance lease commitments include a 70% gross up of US$313m (2017: US$381m) on finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia, which is necessary to reflect the legal position of the Group as the contracting entity for these finance leases. The finance leases relating to Block PM304 in Malaysia include a renewal option of up to two years and a purchase option at the end of the lease term.

Capital commitments

At 31 December 2018, the Group had capital commitments of US$21m (2017: US$48m) excluding the above lease commitments.

Included in the US$21m of commitments are:

	2018 US$m	2017 US$m
Production Enhancement Contracts (PEC) in Mexico	**16**	18
Appraisal and development of wells in Block PM304 in Malaysia	**3**	13
Greater Stella Area field development costs in the North Sea	**–**	12
Oman training centre commitments	**2**	5

Contingent liabilities

As described in pages 5, 27 and 76 of the 2018 Annual Report, on 12 May 2017, the UK Serious Fraud Office ("SFO") announced an investigation into the activities of Petrofac, its subsidiaries, and their officers, employees and agents for suspected bribery, corruption, and/or money laundering. In February 2019 a former employee of a Petrofac subsidary admitted offences contrary to the UK Bribery Act 2010. No charges have been brought against any Group company or any other officers or employees to date. Although not charged, a number of Petrofac individuals and entities are alleged to have acted together with the individual concerned. The SFO investigation is ongoing. The existence of any possible future financial obligations (such as fines or penalties), or other consequences, is unable to be determined at this time.

The Group is aware of challenges to the historical application of National Insurance Contributions to workers in the UK Continental Shelf. At this point, the Group considers this to be a possible obligation whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group and therefore no provision has been recognised.

31 Related party transactions

The consolidated financial statements include the financial statements of Petrofac Limited and the subsidiaries listed in note 34. Petrofac Limited is the ultimate parent entity of the Group.

The following table provides the total amount of transactions entered with related parties:

		Amounts owed by related parties US$m	Amounts owed to related parties US$m
Joint ventures	**2018**	**–**	**–**
	2017	1	–
Associates	**2018**	**1**	**–**
	2017	–	–

All sales to and purchases from related parties are conducted on an arm's length basis and are approved by the operating segment's management.

All related party balances will be settled in cash.

Other Directors' interests include market-rate services of US$324,000 (2017: US$60,000), incurred in the ordinary course of business by the Engineering & Production Services operating segment. The Group Chief Executive is a beneficiary of a trust which has invested in a fund that has an equity interest in the company which provided the services. In May 2017, the board of directors approved a donation of up to US$5m over the course of 5 years to the American University of Beirut (AUB) to establish the Petrofac Fund for Engineers endowment fund, which will provide scholarships and internships to engineering students in memory of Mr Maroun Semaan, Petrofac's co-founder. In 2018, a US$1m (2017: US$nil) donation from the approved amount was made to the AUB. The Group Chief Executive is a trustee of the AUB.

Compensation of key management personnel

The following details remuneration of key management personnel of the Group comprising Executive and Non-executive Directors of the Company and other senior personnel. Further information relating to individual Directors of the Company is provided in the Directors' remuneration report on pages 90 to 101.

	2018 US$m	2017 US$m
Short-term employee benefits	**13**	11
Other long-term employment benefits	**1**	–
Share-based payments charge	**2**	2
Fees paid to Non-executive Directors	**1**	1
	17	14

32 Accrued contract expenses

The decrease in accrued contract expenses of US$311m is mainly due to higher vendor and subcontractor payment milestones achieved during the year in the Engineering & Construction operating segment.

33 Risk management and financial instruments

Risk management objectives and policies

The Group's principal financial assets and liabilities, other than derivatives, comprise trade and other receivables, other financial assets, related party receivables, cash and short-term deposits, interest-bearing loans and borrowings, trade and other payables and other financial liabilities.

The Group's activities expose it to various financial risks particularly associated with interest rate risk on its variable rate cash and short-term deposits, loans and borrowings and foreign currency risk on conducting business in currencies other than reporting currency as well as translation of the assets and liabilities of foreign operations to the reporting currency. These risks are managed from time to time by using a combination of various derivative instruments, principally forward currency contracts in line with the Group's hedging policies. The Group has a policy not to enter into speculative trading of financial derivatives.

The Board of Directors of the Company has established an Audit Committee which performs, amongst other roles, reviews on the effectiveness of the risk management and internal control systems to mitigate a range of risks, including financial risks, faced by the Group which is discussed in detail on pages 82 to 87.

The other main risks besides interest rate and foreign currency risk arising from the Group's financial instruments are credit risk, liquidity risk and commodity price risk and the policies relating to these risks are discussed in detail below:

Interest rate risk

Interest rate risk arises from the possibility that changes in interest rates will affect the value of the Group's interest-bearing financial liabilities and assets.

The Group's exposure to market risk arising from changes in interest rates relates primarily to the Group's long-term variable rate debt obligations and its cash and bank balances. The Group's policy is to manage its interest cost using a mix of fixed and variable rate debt. The Group's cash and bank balances are at floating rates of interest.

Debt is primarily in US dollars, linked to US dollar LIBOR (London Interbank Offered Rate). The Group uses derivatives to swap between fixed and floating rates. No such derivatives were outstanding at 31 December 2018. At 31 December 2018, the proportion of floating rate debt was 100% of the total financial debt outstanding (2017: 58%).

Interest rate sensitivity analysis

The impact on the Group's profit before tax and equity due to a reasonably possible change in interest rates on loans and borrowings at the reporting date is demonstrated in the table below. The analysis assumes that all other variables remain constant.

	Pre-tax profit		Equity	
	100 basis point increase US$m	100 basis point decrease US$m	100 basis point increase US$m	100 basis point decrease US$m
31 December 2018	**(13)**	**13**	**–**	**–**
31 December 2017	(16)	16	–	–

The following table reflects the maturity profile of the financial liabilities and assets that are subject to interest rate risk:

Year ended 31 December 2018

	Within 1 year US$m	1–2 years US$m	2–3 years US$m	3–4 years US$m	4–5 years US$m	More than 5 years US$m	Total US$m
Financial liabilities							
Floating rates							
Bank overdrafts (note 27)	**21**	**–**	**–**	**–**	**–**	**–**	**21**
Interest-bearing loans and borrowings (note 27)	**240**	**300**	**80**	**–**	**–**	**–**	**620**
	261	**300**	**80**	**–**	**–**	**–**	**641**
Financial assets							
Floating rates							
Cash and short-term deposits (note 22)	**726**	**–**	**–**	**–**	**–**	**–**	**726**
Restricted cash balances (note 18)	**10**	**–**	**–**	**–**	**–**	**–**	**10**
	736	**–**	**–**	**–**	**–**	**–**	**736**

Year ended 31 December 2017

	Within 1 year US$m	1–2 years US$m	2–3 years US$m	3–4 years US$m	4–5 years US$m	More than 5 years US$m	Total US$m
Financial liabilities							
Floating rates							
Bank overdrafts (note 27)	31	–	–	–	–	–	31
Interest-bearing loans and borrowings (note 27)	18	218	572	18	18	44	888
	49	218	572	18	18	44	919
Financial assets							
Floating rates							
Cash and short-term deposits (note 22)	967	–	–	–	–	–	967
Restricted cash balances (note 18)	9	39	–	–	1	–	49
	976	39	–	–	1	–	1,016

Financial liabilities in the above table are disclosed gross of debt acquisition costs and effective interest rate adjustments of US$5m (2017: US$16m).

Interest on financial instruments classified as floating rate is re-priced at intervals of less than one year. The other financial instruments of the Group that are not included in the above tables are non-interest bearing and are therefore not subject to interest rate risk.

Foreign currency risk

The Group is exposed to foreign currency risk on sales, purchases, and translation of assets and liabilities that are in a currency other than the functional currency of its operating units. The Group is also exposed to the translation of the functional currencies of its units to the United States dollar reporting currency of the Group.

The following table summarises the percentage of foreign currency denominated revenues, costs, financial assets and financial liabilities, expressed in United States dollar terms, of the Group totals.

	2018 % of foreign currency denominated items	2017 % of foreign currency denominated items
Revenues	**44.8%**	43.7%
Costs	**53.5%**	43.8%
Non-current financial assets	**4.4%**	4.5%
Current financial assets	**13.3%**	23.0%
Non-current financial liabilities	**20.9%**	0.0%
Current financial liabilities	**15.4%**	26.4%

The Group uses forward currency contracts to manage the currency exposure on transactions significant to its operations. It is the Group's policy not to enter into forward contracts until a highly probable forecast transaction is in place and to negotiate the terms of the derivative instruments used for hedging to match the terms of the hedged item to maximise hedge effectiveness.

Foreign currency sensitivity analysis

The income statements of foreign operations are translated into the reporting currency using a weighted average exchange rate of conversion. Foreign currency monetary items are translated using the closing rate at the reporting date. Revenues and costs in currencies other than the functional currency of an operating unit are recorded at the prevailing rate at the date of the transaction. The following significant exchange rates applied during the year in relation to United States dollars:

	2018		2017	
	Average rate	**Closing rate**	Average rate	Closing rate
Sterling	**1.34**	**1.28**	1.29	1.35
Kuwaiti dinar	**3.31**	**3.29**	3.30	3.32
Euro	**1.18**	**1.15**	1.13	1.20

33 Risk management and financial instruments
continued

The following table summarises the impact on the Group's profit before tax and equity (due to a change in the fair value of monetary assets, liabilities and derivative instruments) of a reasonably possible change in United States dollar exchange rates with respect to different currencies:

	Profit before tax		Equity	
	+10% US dollar rate increase US$m	–10% US dollar rate decrease US$m	+10% US dollar rate increase US$m	–10% US dollar rate decrease US$m
31 December 2018	**[1](12)**	**[1]12**	**14**	**(14)**
31 December 2017	(1)	1	(28)	28

1 Includes impact on pegged currencies mainly relating to interest bearing loans and borrowings denominated in Arab Emirates dirham.

Derivative instruments designated as cash flow hedges
At 31 December, the Group had foreign exchange forward contracts as follows:

	Contract value		Fair value (undesignated)		Fair value (designated)		Net unrealised gain/(loss)[1]	
	2018 US$m	2017 US$m	**2018 US$m**	2017 US$m	**2018 US$m**	2017 US$m	**2018 US$m**	2017 US$m
Euro purchases	**311**	105	**(1)**	–	**18**	32	**18**	50
Sterling sales	**(468)**	(485)	**12**	(8)	**(1)**	1	**(1)**	–
Kuwaiti dinar sales	**(942)**	(1,531)	**–**	–	**(8)**	(12)	**(1)**	(8)
Russian ruble purchases	**29**	–	**–**	–	**(2)**	–	**(2)**	–
Malaysian ringgit purchases	**–**	23	**–**	–	**–**	(1)	**–**	(1)
Japanese yen sales	**–**	(3)	**–**	–	**–**	–	**–**	–
Arab Emirates dirham purchases	**150**	–	**–**	–	**–**	–	**–**	–
Canadian dollar purchases	**8**	11	**–**	–	**–**	–	**–**	–
			11	(8)	**7**	20	**14**	41

1 Attributable to Petrofac Limited shareholders.

The above foreign exchange contracts mature and will affect income between January 2019 and August 2021 (2017: between January 2018 and February 2020).

At 31 December 2018, the Group had cash and short-term deposits designated as cash flow hedges with net unrealised loss of US$1m (2017: US$2m gain) as follows:

	Fair value		Net unrealised gain/(loss)[1]	
	2018 US$m	2017 US$m	**2018 US$m**	2017 US$m
Euro cash and short-term deposits	**16**	30	**(1)**	2
Sterling cash and short-term deposits	**3**	5	**–**	–
			(1)	2

1 Attributable to Petrofac Limited shareholders.

During 2018, net changes in fair value resulted in a loss of US$24m (2017: gain of US$48m) relating to these derivative instruments and financial assets were taken to equity and gains of US$3m (2017: losses of US$11m) were recycled from equity into cost of sales in the consolidated income statement. The forward points and ineffective portions of the above foreign exchange forward contracts and loss on undesignated derivatives of US$5m (2017: US$13m gain re-presented, see note 6) were recognised in the consolidated income statement (note 5a).

Commodity price risk – oil prices
No crude oil swaps were entered by the Group during 2018 to hedge oil production. The fair value of oil derivatives at 31 December 2018 was US$nil (2017: US$2m liability) with no unrealised gain or loss deferred in equity (2017: US$2m loss). During the year, US$2m loss (2017: US$2m loss) was recycled from equity into the consolidated income statement on the occurrence of the hedged transactions. No fair value gain or loss recognised in equity during 2018 (2017: US$2m loss).

Credit risk
The Group trades only with recognised, creditworthy third parties. Business Unit Risk Review Committees (BURRC) evaluate the creditworthiness of each individual third party at the time of entering into new contracts. Limits have been placed on the approval authority of the BURRC above which the approval of the Board of Directors of the Company is required. Receivable balances are monitored on an ongoing basis with appropriate follow-up action taken where necessary. At 31 December 2018, the Group's five largest customers accounted for 52.8% of outstanding trade receivables, contract assets and deferred consideration receivable from Ithaca Energy UK Ltd (2017: 62.3%).

With respect to credit risk arising from the other financial assets of the Group, which comprise cash and cash equivalents, current and non-current receivables from joint operation partners for finance leases and certain derivative instruments, the Group's exposure to credit risk arises from default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments.

Liquidity risk

The Group's objective is to ensure sufficient liquidity to support operations and future growth is available. The provision of financial capital and the potential impact on the Group's capital structure is reviewed regularly. The Group is not exposed to any external capital constraints. The maturity profiles of the Group's financial liabilities at 31 December are as follows:

Year ended 31 December 2018

	6 months or less US$m	6–12 months US$m	1–2 years US$m	2–5 years US$m	More than 5 years US$m	Contractual undiscounted cash flows US$m	Carrying amount US$m
Financial liabilities							
Interest-bearing loans and borrowings	**161**	**100**	**300**	**80**	**–**	**641**	**636**
Finance lease creditors	**76**	**63**	**121**	**205**	**60**	**525**	**451**
Trade and other payables (excluding other taxes payable)	**780**	**111**	**–**	**–**	**–**	**891**	**891**
Derivative instruments	**15**	**5**	**2**	**–**	**–**	**22**	**22**
Interest payments	**11**	**8**	**11**	**2**	**–**	**32**	**–**
	1,043	**287**	**434**	**287**	**60**	**2,111**	**2,000**

Year ended 31 December 2017

	6 months or less US$m	6–12 months US$m	1–2 years US$m	2–5 years US$m	More than 5 years US$m	Contractual undiscounted cash flows US$m	Carrying amount US$m
Financial liabilities							
Interest-bearing loans and borrowings	40	686	218	608	44	1,596	1,579
Finance lease creditors	86	67	122	292	95	662	547
Trade and other payables (excluding advances from customers and other taxes payable)	1,022	50	–	–	–	1,072	1,072
Derivative instruments	25	2	8	–	–	35	35
Interest payments	25	20	22	30	1	98	–
	1,198	825	370	930	140	3,463	3,233

The Group uses various funded facilities provided by banks and its own financial assets to fund the above-mentioned financial liabilities.

Capital management

The Group's policy is to maintain a robust capital base to support future operations, growth and maximise shareholder value.

The Group seeks to optimise shareholder returns by maintaining a balance between debt and equity attributable to Petrofac Limited shareholders and monitors the efficiency of its capital structure on a regular basis. The gearing ratio and return on shareholders' equity is as follows:

	2018 US$m	2017 US$m
Cash and short-term deposits	**726**	967
Interest-bearing loans and borrowings (A)	**(636)**	(1,579)
Net cash/(debt) (B)	**90**	(612)
Equity attributable to Petrofac Limited shareholders (C)	**707**	912
Reported net profit/(loss) for the year attributable to Petrofac Limited shareholders (D)	**64**	(29)
Gross gearing ratio (A/C)	**90.0%**	173.1%
Net gearing ratio (B/C)	**Net cash**	67.1%
Shareholders' return on investment (D/C)	**9.1%**	(3.2%)

34 Subsidiaries, associates and joint arrangements

At 31 December 2018, the Group had investments in the following active subsidiaries, associates and joint arrangements:

		Proportion of nominal value of issued shares controlled by the Group	
Name of entity	Country of incorporation	**2018**	2017
Active subsidiaries			
Petrofac Algeria EURL	Algeria	**100**	100
Petrofac International (Bahrain) S.P.C.	Bahrain	**100**	100
Petrofac South East Asia (B) Sdn Bhd	Brunei	**100**	–
Petrofac (Cyprus) Limited	Cyprus	**100**	100
Caltec Limited	England	**100**	100
Eclipse Petroleum Technology Limited	England	**100**	100
K W Limited	England	**100**	100
Oilennium Limited	England	**100**	100
Petrofac (Malaysia-PM304) Limited	England	**100**	100
Petrofac Contracting Limited	England	**100**	100
Petrofac Engineering Limited	England	**100**	100
Petrofac Services Limited	England	**100[1]**	100[1]
Petrofac Treasury UK Limited	England	**100[1]**	100[1]
Petrofac UK Holdings Limited	England	**100[1]**	100[1]
PetroHealth Limited	England	**100**	100
Petrofac Energy Developments UK Limited	England	**–**	100[1]
Petrofac Deutschland GmbH	Germany	**100**	100
Jermyn Insurance Company Limited	Guernsey	**100[1]**	100[1]
Petrofac Engineering India Private Limited	India	**100**	100
Petrofac Engineering Services India Private Limited	India	**100**	100
Petrofac Information Services Private Limited	India	**100**	100
Petrofac (JSD 6000) Limited	Jersey	**100**	100
Petrofac Energy Developments (Ohanet) Jersey Limited	Jersey	**100**	100
Petrofac Energy Developments International Limited	Jersey	**100[1]**	100[1]
Petrofac Facilities Management International Limited	Jersey	**100[1]**	100[1]
Petrofac FPF004 Limited	Jersey	**100**	100
Petrofac GSA Holdings Limited	Jersey	**–**	100[1]
Petrofac GSA Limited	Jersey	**–**	100
Petrofac Integrated Energy Services Limited	Jersey	**100[1]**	100[1]
Petrofac International Ltd	Jersey	**100[1]**	100[1]
Petrofac Offshore Management Limited	Jersey	**100**	100
Petrofac Platform Management Services Limited	Jersey	**100**	100
Petrofac Training International Limited	Jersey	**100[1]**	100[1]
Petro Oil & Gas Limited (note 13)	Jersey	**51[2]**	–
Petroleum Facilities E & C Limited	Jersey	**100[1]**	100[1]
Petrofac E&C Sdn Bhd	Malaysia	**100**	100

Name of entity	Country of incorporation	Proportion of nominal value of issued shares controlled by the Group 2018	2017
Petrofac Energy Developments Sdn Bhd	Malaysia	**100**	100
Petrofac Engineering Services (Malaysia) Sdn Bhd	Malaysia	**70**	70
PFMAP Sdn Bhd	Malaysia	**100**	100
Petrofac EPS Sdn. Bhd (formerly SPD Well Engineering Sdn Bhd)	Malaysia	**49[2]**	49[2]
H&L/SPD Americas S. de R.L.	Mexico	**100**	100
Petrofac Mexico SA de CV	Mexico	**100**	100
Petrofac Mexico Servicios SA de CV	Mexico	**100**	100
Operadora de Campos del Noreste S.A. de C.V.	Mexico	**–**	100
Petrofac Kazakhstan B.V.	Netherlands	**100**	100
Petrofac Netherlands Coöperatief U.A.	Netherlands	**100**	100
Petrofac Netherlands Holdings B.V. (note 13)	Netherlands	**51[2]**	100
Petrofac Treasury B.V.	Netherlands	**–**	100
Petrofac Nigeria B.V.	Netherlands	**100**	100
Petrofac Norge B.V.	Netherlands	**100**	100
PTS B.V.	Netherlands	**100**	100
Petrofac Energy Services Nigeria Limited	Nigeria	**100**	100
Petrofac International (Nigeria) Limited	Nigeria	**100**	40[2]
Petrofac Norge AS	Norway	**100**	100
Petrofac E&C Oman LLC	Oman	**100**	100
PKT Technical Services Ltd	Russia	**50[2]**	50[2]
PKT Training Services Ltd	Russia	**100**	100
Sakhalin Technical Training Centre	Russia	**100**	100
Petrofac Saudi Arabia Company Limited	Saudi Arabia	**100**	100
Atlantic Resourcing Limited	Scotland	**100**	100
Petrofac Facilities Management Group Limited	Scotland	**100**	100
Petrofac Facilities Management Limited	Scotland	**100**	100
Petrofac Training Group Limited	Scotland	**100**	100
Petrofac Training Holdings Limited	Scotland	**100**	100
Petrofac Training Limited	Scotland	**100**	100
Scotvalve Services Limited	Scotland	**100**	100
SPD Limited	Scotland	**100**	100
Stephen Gillespie Consultants Limited	Scotland	**100**	100
Petrofac South East Asia Pte Ltd	Singapore	**100[1]**	100[1]
Petrofac E&C International Limited	United Arab Emirates	**100**	100
Petrofac Emirates LLC (note 13)	United Arab Emirates	**75**	75
Petrofac FZE	United Arab Emirates	**100**	100
Petrofac International (UAE) LLC	United Arab Emirates	**100**	100
Petrofac Energy Developments (Ohanet) LLC	United States	**–**	100
Petrofac Inc.	United States	**100[1]**	100[1]
Petrofac Training Inc.	United States	**100**	100
SPD Group Limited	British Virgin Islands	**100**	100

34 Subsidiaries, associates and joint arrangements
continued

Associates

Name of associate	Principal activities	Country of incorporation	Proportion of nominal value of issued shares controlled by the Group 2018	2017
PetroFirst Infrastructure Limited	Leasing of floating platforms to oil and gas industry	Jersey	**20**	20
PetroFirst Infrastructure 2 Limited	Leasing of floating platforms to oil and gas industry	Jersey	**10**	10
Petrofac FPF1 Limited	Leasing of floating platforms to oil and gas industry	Jersey	**–**	25
Joint arrangements				
Joint ventures				
Socar – Petrofac LLC	Training services	Azerbaijan	**49**	–
Spiecapag – Petrofac International Limited	Engineering, procurement and construction management services	Jersey	**–**	50
TTE Petrofac Limited	Operation and management of a training centre	Jersey	**–**	50
China Petroleum Petrofac Engineering Services Cooperatief U.A.	Consultancy for Petroleum and chemical engineering	Netherlands	**49**	49
Takatuf Petrofac Oman LLC	Construction, operation and management of a training centre	Oman	**40**	40
Joint operations				
PetroAlfa Servicios Integrados de Energia SAPI de CV	Services to oil and gas industry	Mexico	**50[3]**	50[3]
PSS Netherlands B.V.	Engineering, procurement, supply of equipment and materials and related services to execute the Company's scope of work for a project in Thailand	Netherlands	**36[4]**	–
Bechtel Petrofac JV	Engineering, procurement and construction management of a project in UAE	Unincorporated	**35[5]**	35[5]
NGL 4 JV	EPC for a project in UAE	Unincorporated	**45[5]**	45[5]
Petrofac/Black & Veatch JV	Tendering and execution of a project in Kazakhstan	Unincorporated	**–**	80[5]
Petrofac/Bonatti JV	EPC for a project in Algeria	Unincorporated	**70[5]**	70[5]
Petrofac/Daelim JV	EPC for a project in Oman	Unincorporated	**50[5]**	50[5]
Petrofac/ETAP JV	Oil and gas exploration and production from Chergui concession	Unincorporated	**–**	45[5]
PM304 JV	Oil and gas exploration and production in Malaysia	Unincorporated	**30[5]**	30[5]
Petrofac/Samsung/CB&I CFP	EPC for a project in Kuwait	Unincorporated	**47[5]**	47[5]
Greater Stella Area joint operation	Oil and gas exploration and production in UK	Unincorporated	**–**	20[5]
Santuario Production Sharing Contract	Oil and gas exploration and production in Mexico	Unincorporated	**36[5]**	36[5]

Please note that only active entities are shown in the above tables. All dormant entities have been omitted.

1 Directly held by Petrofac Limited.
2 Entities consolidated as subsidiaries on the basis of control.
3 Joint arrangement classified as joint operation on the basis of contractual arrangement, whereby the activities of the arrangement are primarily designed for the provision of output to the venturers; this indicates that the venturers have rights to substantially all the economic benefits of the assets of the arrangement.
4 The joint arrangement is classified as a joint operation as, contractually, the joint operation partners have rights to the joint operation's assets and obligation for the joint operation's liabilities.
5 The unincorporated arrangement between the venturers is a joint arrangement as, contractually, all the decisions about the relevant activities require unanimous consent by the venturers. Unincorporated joint arrangements are recognised in the Group's financial statements as joint operations.

The Group's ownership interest in associates and joint ventures is disclosed on page 151 and page 152 respectively.

35 Changes in accounting policies and disclosures resulting from adoption of IFRS 15

Set out below are the amounts by which each line item in the consolidated income statement and consolidated balance sheet were affected as a result of adopting IFRS 15 'Revenue from Contracts with Customers' (note 2.3) as at and for the year ended 31 December 2018. The first column shows amounts prepared in accordance with IFRS 15 and the second column shows amounts that would have been prepared in accordance with the previous standards and the prevailing Group accounting policy. The adoption of IFRS 15 did not have a material impact on the consolidated statement of other comprehensive income nor the consolidated statement of cash flows.

Consolidated income statement for the year ended 31 December 2018

	Amounts prepared under IFRS 15 US$m	Pro forma US$m
Revenue	5,829	5,494
Cost of sales	(5,110)	(4,844)
Gross profit	719	650
Selling, general and administration expenses	(216)	(216)
Exceptional items and certain re-measurements	(356)	(356)
Other operating income	22	22
Other operating expenses	(10)	(10)
Operating profit	159	90
Finance income	14	14
Finance expense	(81)	(81)
Share of net profit of associates and joint ventures	15	15
Profit/(loss) before tax	107	38
Income tax expense	(46)	(35)
Net profit/(loss)	61	3
Attributable to:		
Petrofac Limited shareholders	64	2
Non-controlling interests	(3)	1
	61	3
Earnings/(loss) per share (US cents)		
Basic	18.9	0.6
Diluted	18.6	0.6

Consolidated balance sheet
as at 31 December 2018

	Amounts prepared under IFRS 15 US$m	Pro forma US$m
Assets		
Non-current assets		
Property, plant and equipment	685	685
Goodwill	73	73
Intangible assets	56	56
Investments in associates and joint ventures	30	30
Other financial assets	406	406
Contract assets	40	–
Other non-current assets	–	40
Deferred consideration	61	61
Deferred tax assets	126	126
	1,477	1,477
Current assets		
Inventories	21	21
Trade and other receivables	1,431	1,924
Contract assets	1,998	–
Work in progress	–	1,533
Related party receivables	1	1
Other financial assets	144	144
Income tax receivable	8	8
Cash and short-term deposits	726	726
	4,329	4,357
Total assets	5,806	5,834
Equity and liabilities		
Equity		
Share capital	7	7
Share premium	4	4
Capital redemption reserve	11	11
Employee Benefit Trust shares	(107)	(107)
Other reserves	95	95
Retained earnings	697	635
Equity attributable to Petrofac Limited shareholders	707	645
Non-controlling interests	302	306
Total equity	1,009	951
Non-current liabilities		
Interest-bearing loans and borrowings	376	376
Provisions	243	243
Other financial liabilities	341	341
Deferred tax liabilities	43	43
	1,003	1,003
Current liabilities		
Trade and other payables	962	1,324
Contract liabilities	504	–
Billings in excess of cost and estimated earnings	–	507
Interest-bearing loans and borrowings	260	260
Other financial liabilities	139	139
Income tax payable	244	233
Accrued contract expenses	1,645	1,377
Provisions	40	40
	3,794	3,880
Total liabilities	4,797	4,883
Total equity and liabilities	5,806	5,834

Appendix A

The Group references Alternative Performance Measures ("APMs") when evaluating the Group's reported financial performance, financial position and cash flows that are not defined or specified under International Financial Reporting Standards ("IFRS"). The Group considers that these APMs, which are not a substitute for or superior to IFRS measures, provide stakeholders with additional useful information by adjusting for certain reported items which impact upon IFRS measures or, by defining new measures, to aid the understanding of the Group's financial performance, financial position and cash flows.

APM	Description	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements	Rationale for adjustments
Group's business performance net profit attributable to Petrofac Limited shareholders (note A1)	Measures net profitability	Group's net profit/(loss)	Petrofac presents business performance APM in the consolidated income statement as a means of measuring underlying business performance. The business performance net profit measure excludes the contribution of impairments of assets, fair value re-measurements, losses on disposal, restructuring and redundancy costs, onerous leasehold property provision, certain Corporate reporting segment professional services and amortisation of debt acquisition cost, contract migration costs and material deferred tax movements arising due to foreign exchange differences in jurisdictions where tax is computed based on the functional currency of the country A re-presentation was made to the Group's business performance APM during the year, refer note 6 for details	The intention of this measure is to provide users of the consolidated financial statements with a clear and consistent presentation of underlying business performance and it excludes the impact of certain items to aid comparability
Business performance basic and diluted earnings per share attributable to Petrofac Limited shareholders (note A2)	Measures net profitability	Basic and diluted earnings per share		
Business performance earnings before interest, tax, depreciation and amortisation ("EBITDA") (note A3)	Measures operating profitability	Operating profit/(loss)	Excludes exceptional items and certain re-measurements, depreciation and amortisation and includes share of net profits from associates and joint ventures	The intention of this measure is to provide users of the consolidated financial statements with a clear and consistent presentation of underlying operating performance
Business performance effective tax rate ("ETR") (note A4)	Measures tax charge	Income tax expense	Excludes income tax credit related to exceptional items and certain re-measurements	The intention of this measure is to provide users of the consolidated financial statements with a clear and consistent presentation of underlying business performance ETR
Capital expenditure (note A5)	Measures net cash cost of capital investment	Net cash flows generated from/(used in) investing activities	Excludes dividends received from associates and joint ventures, net loans repaid by/(paid to) associates and joint ventures, proceeds from disposal of property, plant and equipment, proceeds from disposal of subsidiaries and interest received	Excludes items not considered relevant to capital investment
Free cash flow (note A6)	Measures net cash generated after operating and investing activities to finance returns to shareholders	Net cash flows generated from/(used in) operating activities plus net cash flows generated from/(used in) investing activities plus amounts received from non-controlling interest	n/a	n/a

APM	Description	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements	Rationale for adjustments
Working capital, balance sheet measure (note A7)	Measures the investment in working capital	No direct equivalent. Calculated as inventories plus trade and other receivables plus contract assets minus trade and other payables minus contract liabilities minus accrued contract expenses	n/a	n/a
Return on capital employed ("ROCE") (note A8)	Measures the efficiency of generating operating profits from capital employed	No direct equivalent. Calculated as business performance earnings before interest, tax and amortisation (EBITA) divided by capital employed (average total assets minus average current liabilities after adjusting for certain finance leases)	n/a	n/a
Cash conversion (note A9)	Measures the conversion of EBITDA into cash	No direct equivalent. Calculated as cash generated from operations divided by business performance EBITDA	n/a	n/a
Net finance lease liabilities (note A10)	Measures net finance lease liabilities	No direct equivalent. Calculated as gross finance lease liabilities minus 70% of finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia	n/a	n/a
Net debt (note A11)	Measures indebtedness	No direct equivalent. Calculated as interest-bearing loans and borrowings minus cash and short-term deposits	n/a	n/a
Net debt/EBITDA (note A12)	Measures leverage	No direct equivalent. Calculated as net debt divided by EBITDA	n/a	n/a
New order intake (note A13)	Provides visibility of future revenue	No direct equivalent. Calculated as net awards and net variation orders	n/a	n/a

A1. Business performance net profit attributable to Petrofac Limited shareholders

	2018 US$m	*2017 US$m
Reported net profit/(loss) (A)	**61**	(27)
Adjustments – exceptional items and certain re-measurements (note 6):		
Impairment of assets	**235**	345
Fair value re-measurements	**45**	77
Loss on disposal	**28**	–
Group reorganisation and redundancy costs	**8**	4
Onerous leasehold property provisions	**18**	12
Other exceptional items	**22**	18
Pre-tax exceptional items and certain re-measurements (B)	**356**	456
Foreign exchange translation (gains)/losses on deferred tax balances	**2**	(11)
Tax relief on exceptional items and certain re-measurements	**(69)**	(55)
Tax credit on exceptional items and certain re-measurements (C)	**(67)**	(66)
Post-tax exceptional items and certain re-measurements (D = B + C)	**289**	390
Group's business performance net profit (A + D)	**350**	363
Loss/(profit) attributable to non-controlling interest	**3**	(2)
Business performance net profit attributable to Petrofac Limited shareholders	**353**	361

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

A2. Business performance basic earnings per share attributable to Petrofac Limited shareholders

	2018 US$m	*2017 US$m
Reported net profit/(loss) attributable to Petrofac Limited shareholders (E)	**64**	(29)
Add: post-tax exceptional items and certain re-measurements (appendix A note A1)	**289**	390
Business performance net profit attributable to Petrofac Limited shareholders (E_1)	**353**	361

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

	2018 Shares million	2017 Shares million
Weighted average number of ordinary shares for basic earnings per share[1] (F) (note 9)	**338**	340
Weighted average number of ordinary shares for diluted earnings per share[1] (F_1) (note 9)	**345**	340

	2018 US cents	*2017 US cents
Basic earnings per share		
Business performance (E_1/ F x 100)	**104.4**	106.2
Reported (E/F x 100)	**18.9**	(8.5)
Diluted earnings per share[2]		
Business performance (E_1/F_1 x 100)	**102.3**	106.2
Reported (E/F_1 x 100)	**18.6**	(8.5)

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

1 The weighted number of ordinary shares in issue during the year, excludes those held by the Employee Benefit trust.

2 For the year ended 31 December 2017, potentially issuable ordinary shares under the share-based payment plans are excluded from the diluted earnings per ordinary share calculation, as their inclusion would decrease the loss per ordinary share.

A3. Business performance EBITDA

	2018 US$m	*2017 US$m
Reported operating profit/(loss)	**159**	104
Adjustments:		
Pre-tax exceptional items and certain re-measurements (appendix A note A1)	**356**	456
Share of net profits from associates and joint ventures (note 17)	**15**	11
Depreciation (note 12)	**140**	170
Amortisation and write off (note 5a and note 5b)	**1**	7
Business performance EBITDA	**671**	748

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

A4. Business performance ETR

	2018 US$m	*2017 US$m
Reported income tax expense	**46**	72
Add: Tax credit on exceptional items and certain re-measurements (appendix A note A1)	**67**	66
Business performance income tax expense (G)	**113**	138
Group's business performance net profit (appendix A note A1)	**350**	363
Group's business performance net profit before tax (H)	**463**	501
Business performance ETR (G/H x 100)	**24.4%**	27.5%

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

A5. Capital expenditure

	2018 US$m	2017 US$m
Net cash flows (from)/used in investing activities	**(213)**	141
Adjustments:		
Dividends received from associates and joint ventures	**11**	4
Net loans repaid by/(paid to) associates and joint ventures	**13**	(2)
Proceeds from disposal of property, plant and equipment	**152**	12
Proceeds from disposal of subsidiaries	**130**	10
Interest received	**5**	3
Capital expenditure	**98**	168

A6. Free cash flow

	2018 US$m	2017 US$m
Net cash flows generated from operating activities	**484**	422
Net cash flows generated from/(used in) investing activities	**213**	(141)
Amounts received from non-controlling interest	**224**	–
Free cash flow	**921**	281

A7. Working capital

	2018 US$m	2017 US$m
Inventories (note 19)	**21**	8
Trade and other receivables (note 20)	**1,431**	2,020
Contract assets (note 21)	**1,998**	–
Work in progress	**–**	2,223
Current Assets (I)	**3,450**	4,251
Trade and other payables (note 29)	**962**	1,675
Contract liabilities (note 21)	**504**	–
Billings in excess of cost and estimated earnings	**–**	198
Accrued contract expenses (note 32)	**1,645**	1,956
Current Liabilities (J)	**3,111**	3,829
Working capital (I – J)	**339**	422

A8. Return on capital employed

	2018 US$m	*2017 US$m
Reported operating profit/(loss)	**159**	104
Adjustments:		
Pre-tax exceptional items and certain re-measurements (appendix A note A1)	**356**	456
Share of profits from associates and joint ventures (note 17)	**15**	11
Amortisation (note 5a and 5b)	**–**	1
Business performance EBITA (K)	**530**	572
Total assets opening balance	**7,563**	8,241
Less: 70% on finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia	**(381)**	(414)
Adjusted total assets opening balance (L)	**7,182**	7,827
Total assets closing balance	**5,806**	7,563
Less: 70% on finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia (note A10)	**(313)**	(381)
Adjusted total assets closing balance (M)	**5,493**	7,182
Average total assets (N = (L + M)/2)	**6,338**	7,505
Current liabilities opening balance	**4,982**	5,029
Less: 70% on finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia (note A10)	**(76)**	(179)
Adjusted current liabilities opening balance (O)	**4,906**	4,850
Current liabilities closing balance	**3,794**	4,982
Less: 70% on finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia (note A10)	**(76)**	(76)
Adjusted current liabilities closing balance (P)	**3,718**	4,906
Average current liabilities (Q = (O + P)/2)	**4,312**	4,878
Capital employed (R = N – Q)	**2,026**	2,627
Return on capital employed (K/R x 100)	**26.2%**	21.8%

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

A9. Cash conversion

	2018 US$m	*2017 US$m
Cash generated from operations (S)	**681**	575
Business performance EBITDA (T)	**671**	748
Cash conversion (S/T x 100)	**101.5%**	76.9%

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

A10. Net finance lease liabilities

	2018 US$m	2017 US$m
Non-current liability for finance leases (note 18)	**339**	435
Current liability for finance leases (note 18)	**112**	112
Total gross liability for finance leases	**451**	547
70% gross up on non-current liability for finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia (note 18)	**237**	305
70% gross up on current liability for finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia (note 18)	**76**	76
Total 70% on finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia	**313**	381
Net non-current liability for finance leases	**102**	130
Net current liability for finance leases	**36**	36
Net liability for finance leases	**138**	166

A11. Net Debt

	2018 US$m	2017 US$m
Interest-bearing loans and borrowings (U) (note 27)	**636**	1,579
Less: Cash and short-term deposits (V) (note 22)	**(726)**	(967)
Net (cash)/debt (U – V)	**(90)**	612

A12. Net Debt/EBITDA

	2018 US$m	*2017 US$m
Net Debt (W) (appendix A note A11)	**NA**	612
Business performance EBITDA (X) (note A3)	**NA**	748
Net Debt/EBITDA (W/X)	**NA**	0.82

* Re-presented due to the reclassification of an item from exceptional items and certain re-measurements to business performance as set out in note 6 'exceptional items and certain re-measurements' to the consolidated financial statements.

A13. New order intake

	2018 US$m	2017 US$m
Engineering & Construction operating segment		
Net awards	**3,308**	3,711
Net variation orders	**527**	390
	3,835	4,101
Engineering & Production Services operating segment		
Net awards	**1,131**	992
Net variation orders	**74**	109
	1,205	1,101
New order intake	**5,040**	5,202