Independent auditor's report

To the members of Ultra Electronics Holdings plc

Opinion

In our opinion:

- + The financial statements of Ultra Electronics Holdings plc (the 'parent company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 December 2019 and of the group's profit for the year then ended.
- + The Group financial statements have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union.
- + The parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 "Reduced Disclosure Framework".
- + The financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements which comprise:

- + the consolidated income statement;
- + the consolidated statement of comprehensive income;
- + the consolidated and parent company balance sheets;
- + the consolidated and parent company statements of changes in equity;
- + the consolidated cash flow statement;
- + the statement of accounting policies; and
- + the related notes 1 to 47.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and IFRSs as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the Group and the parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We confirm that the non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the parent company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Summary of our audit approach

Key audit matters	The key audit matters that we identified in the current year were: + revenue and profit recognition; + valuation of goodwill and intangible assets; and + defined benefit pensions liabilities valuation.
	Within this report, key audit matters are identified as follows: Increased level of risk ←=→ Similar level of risk Update Decreased level of risk
Materiality	The materiality that we used for the Group financial statements was £5.1m which was determined on the basis of underlying profit before tax.
Scoping	We focused our Group audit scope primarily on the audit work at 16 locations, 12 of these were subject to a full audit, while the remaining four were subject to specified audit procedures where the extent of our testing was based on our assessment of the risks of material misstatement. These 16 locations accounted for 89% of Group revenue and 92% of underlying profit before tax.
Significant changes in our approach	In the current year, we have not considered management override of controls as a key audit matter, owing to an improvement in the overall performance of the Group, with results in line with budgets and forecasts. There are no other significant changes in our approach in the current year.

Independent auditor's report

To the members of Ultra Electronics Holdings plc continued

Conclusions relating to going concern, principal risks and viability statement

Going concern

to in relation to:

We have reviewed the Directors' statement of going concern on page 46 about whether they considered Going concern is the basis of preparation of it appropriate to adopt the going concern basis of accounting in preparing them and their identification of any material uncertainties to the Group's and Company's ability to continue to do so over a period of at least 12 months from the date of approval of the financial statements. financial statements. We considered as part of our risk assessment the nature of the Group, its business model and related

risks, including where relevant the impact of Brexit, the requirements of the applicable financial reporting framework and the system of internal control. We evaluated the Directors' assessment of the Group's ability to continue as a going concern, including challenging the underlying data and key assumptions used to make the assessment, and evaluated the Directors' plans for future actions in relation to their going concern assessment.

We are required to state whether we have anything material to add or draw attention to in relation to that statement required by Listing Rule 9.8.6R(3) and report if the statement is materially inconsistent with our knowledge obtained in the audit.

Based solely on reading the Directors' statements and considering whether they were consistent with

going concern, we are required to state whether we have anything material to add or draw attention

+ the disclosures on pages 42-46 that describe the principal risks, procedures to identify emerging risks,

+ the Directors' confirmation on page 40 that they have carried out a robust assessment of the principal

the knowledge we obtained in the course of the audit, including the knowledge obtained in the

evaluation of the Directors' assessment of the Group's and the Company's ability to continue as a

the financial statements that assumes an entity will remain in operation for a period of at least 12 months from the date of approval of the

We confirm that we have nothing material to report. add or draw attention to in respect of these matters.

Viability means the ability of the Group to continue over the time horizon considered appropriate by the Directors.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

and emerging risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity; or + the Directors' explanation on page 46 as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue

in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

and an explanation of how these are being managed or mitigated;

We are also required to report whether the Directors' statement relating to the prospects of the Group required by Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.

Key audit matters

Principal risks and viability statement

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

In the prior year, we included management override of controls as a key matter within our audit report, with a focus towards the classification of items presented in underlying and non-underlying results. This is not included as a key matter in the current year, owing to an improvement in the overall performance of the Group, with results in line with budgets and forecasts.

Revenue and profit recognition $\Leftarrow = \Rightarrow$

Key audit matter description	The Group recognised revenue of £825.4m in 2019 (2018: £766.7m), with sales recognised on both an over time (£488.5m) and on a point in time (£336.9m) basis in accordance with 'IFRS 15: Revenue from Contracts with Customer'.
	There is a specific risk arising from either error or fraud, that revenue and profit is recognised incorrectly based on judgements within the cost to complete estimate of significant contracts, or due to incorrect treatment of contracts, which include unusual or onerous terms.
	We consider that those contracts with a design phase have a heightened risk of cost escalation due to extended or unforeseen effort necessary to achieve contract milestones.
	Further, given the bespoke nature and the length of time to develop and manufacture many of Ultra's products and solutions, the contracts between Ultra and its customers can contain complex terms or contract variations and therefore there is also a risk that revenue is not recognised in accordance with such terms.
	Refer to page 148 (key sources of estimation uncertainty – contract revenue and profit recognition); pages 149-150 (accounting policies – revenue recognition); page 72 (Audit Committee Report – significant judgements considered; and page 114 (note 3 of the accounts).
How the scope of our audit responded to the key audit matter	We obtained an understanding of the relevant controls over the long-term contract accounting process.
	To assess whether revenue recognised to date is based on the current best estimate of the degree of work performed under the contract, for a sample of contracts we reviewed the evidence for the progress made against the contract, such as milestone completion.
	To verify the margin achieved on contracts recognised over time, we sought to confirm the costs to complete, by agreeing to evidence of committed spend, budgeted rates or actual costs incurred to date when compared with the remaining work to be performed under the contract. We reviewed the contract risk registers to provide evidence over the judgement taken when providing for the cost of mitigating technical risks and meeting future milestones.
	We understood and challenged management's judgements by referring to evidence, including signed contract terms and latest project status reports, and discussed contract progress and future risks with contract engineers. We also assessed the reliability of management estimates through consideration of the historical accuracy of prior period management estimates.
	For our sample of contracts, we made enquiries as to any unusual contract terms or side agreements separate to the original contract, in addition to testing a sample of billings and costs incurred to date.
Key observations	We considered the costs to complete on long-term contracts and therefore the revenue and margin recognised to be appropriate, based on the assessment of the risks remaining in the contracts and work performed to date.

Valuation of goodwill and intangible assets $\Leftarrow=\Rightarrow$

Key audit matter description	The Group held £365.9m (2018: £377.8m) of goodwill arising on its acquisitions made and £70.1m (2018: £93.2m) of acquired intangibles as at 31 December 2019. There is a risk that inappropriate judgements relating to future cash flow forecasts and discount rates are used which lead to the overstatement of the value-in-use, being the recoverable amount of these assets. This could therefore result in an impairment being required. This is particularly relevant given the volatility and uncertainty in defence spending in both new and traditional markets.
	We have focused this key audit matter on the following goodwill and acquired intangible asset balances:
	+ goodwill attributable to the C2ISR cash-generating unit group; and + certain acquired intangible assets associated with the Herley business
	Refer to page 148 (critical accounting estimates and assumptions – impairment testing); page 149 (accounting policies – goodwill); page 72 (Audit Committee report – significant judgements considered); and pages 119–121 (notes 13 and 14 of the accounts).



Independent auditor's report To the members of Ultra Electronics Holdings plc continued

How the scope of our audit responded to the key audit matter	We obtained an understanding of the relevant controls over the monitoring of the carrying value of goodwill and acquired intangibles.
	We challenged the discount rate and cash flow assumptions used by management in its impairment assessment. With the involvement of our valuation specialists we benchmarked the discount rate against independently available data, together with performing peer group analysis. We obtained support for secured orders and used our understanding of these orders to underpin the Group's cash flow forecasts, considered external data on forecast market growth as well as management's assessment of the impact of Brexit, and reviewed the historical performance of the businesses.
	Having challenged the assumptions, we checked that the impairment model had been prepared on the basis of management's assumptions and was arithmetically accurate. We challenged the appropriateness of management's sensitivities based on our work performed on the key assumptions, and recalculated these sensitised scenarios.
	With regards to the disclosures within the Annual Report, we assessed whether they appropriately reflect the facts and circumstances within management's assessment of impairment over goodwill and acquired intangibles.
Key observations	We are satisfied that headroom exists over the carrying value of the C2ISR cash-generating unit group, and the acquired intangible assets associated with the Herley business, and therefore no impairment has been recognised.

Defined benefit pension liabilities valuation $\Leftarrow \Rightarrow$

Key audit matter description	The Group operates defined benefit pension schemes in the UK, Switzerland and Canada. At 31 December 2019, the defined benefit pension scheme obligation was £403.0m (2018: £370.7m) which resulted in a net IAS 19 'Employment Benefits' deficit of £73.3m (2018: £73.0m). The UK scheme accounted for 97% of this net deficit.
	There is a risk that the assumptions used in determining the defined benefit obligation for the UK scheme are not appropriate, resulting in an inappropriate pension valuation which would have a material impact on the financial statements. The most sensitive assumption is the discount rate; however, we also focused our efforts on the inflation risk premium ("IRP") associated with the RPI inflation assumption given the reforms in this area.
	Refer to page 148 (key sources of estimation uncertainty – retirement benefit plans); page 153 (accounting policies – pensions); and page 72 (Audit Committee Report – significant issues considered), and pages 137– 141 (note 29 of the accounts).
How the scope of our audit responded to the key audit matter	We obtained un understanding of the relevant controls over the accounting for defined benefit pension scheme.
	With the involvement of our pension specialists we assessed the appropriateness of the assumptions through benchmarking to industry data and comparison with the peer group.
	We reviewed the suitability of the methodology used to value the defined benefit pension scheme obligation.
Key observations	Our assessment concluded that Ultra's pension assumptions overall lie within our acceptable range.

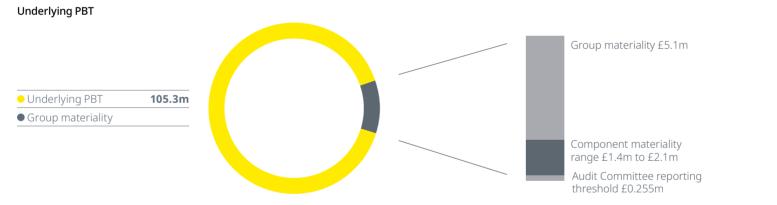
Our application of materiality

Materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Parent company financial statements
Materiality	£5.1m (2018: £5.0m)	£1.4m (2018: £2.0m)
Basis for determining materiality	5% (2018: 5%) of underlying profit before tax Underlying profit before tax is reconciled to statutory profit before tax in note 2 of	Parent company materiality represents less than 1% of net assets, but capped at 30% (2018: 40%) of the Group materiality.
	the accounts.	The parent company is also a component of the consolidated Group financial statements, and so the determined materiality has been capped by the level of materiality identified for the component audits.
Rationale for the benchmark applied	Underlying profit before tax is a key performance measure for the Group and the users of the financial statements; therefore it is an appropriate basis on which to determine materiality.	The parent company is non-trading, and we therefore consider that net assets is the most appropriate metric to determine materiality.



Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole. Group performance materiality was set at 70% of Group materiality for the 2019 audit (2018: 70%). In determining performance materiality, we considered the following factors:

- + We have been the auditor for a number of years, over which time we have developed an in depth understanding of the business and its environment.
- + The relative stability of the business and its operating environment is supported by a consistent number of significant risk balances identified through our detailed risk assessment compared with prior periods. No additional significant risks have been identified in the current year.
- + An overall improvement in performance of the business during the year and an increased level of stability within the Company's management team.
- + We have identified a low number of uncorrected and corrected misstatements in prior periods.

Error reporting threshold

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of £255k (2018: £250k), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

Independent auditor's report

To the members of Ultra Electronics Holdings plc continued

An overview of the scope of our audit

Identification and scoping of components

Our Group scoping was performed taking account of the following considerations:

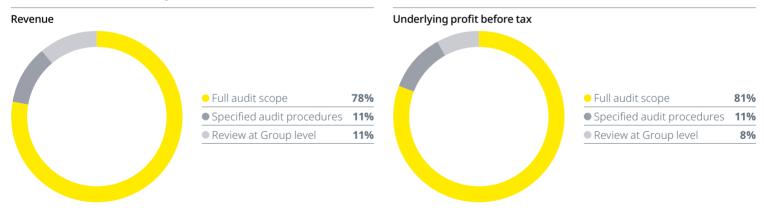
- + The Group is divided into 28 operating components (2018: 29) spread predominantly across four key territories the UK, USA, Canada and Australia. Each component sits within one of three divisions, with central oversight provided from management located in the UK and all results are consolidated at the Group level.
- + Scoping has remained broadly consistent with the prior year. Through our audit we have performed 12 (2018: 12) full-scope audits, along with 12 (2018: 12) components being reviewed centrally at the Group level, which is consistent with our prior-year scoping. We have also performed four specified procedure audits (2018: 5).
- + In addition, the Group disposed of two components during 2019 Airport Systems and Corvid Paygate. Both were audited centrally at the Group level, consistent with our audit approach from the prior year.
- + Components were selected based on their contribution to the consolidated revenue and underlying profit before tax for the Group. Of the 12 full-scope audits identified, four were considered to be significant components to the Group based on their revenue and underlying profit before tax contribution.

Working with other auditors

Each component in scope was subject to an audit materiality level between £1.4m and £2.1m (2018: £2.0m and £3.0m). This audit work on all components was performed by Deloitte member firms under the direction and supervision of the Group audit team. At Group level, we also tested the consolidation process and performed analytical procedures to assess whether there were any significant risks of material misstatement within the aggregated financial information of the remaining components, not subject to audit or audit of specified account balances.

We communicated the results of our risk assessment exercise to the component auditors and instructed them on the areas of significant risk, the procedures to be performed and timing of their reporting to us. We also provided direction on enquiries made by the component auditors through online and telephone conversations. All the findings identified were discussed with the component auditor in detail and further procedures to be performed were issued where relevant.

The Group audit team followed a programme of planned visits that has been designed so that on a rotational basis the Senior Statutory Auditor, or a senior member of the Group audit team, visits each of the primary operating components, including each of the significant components, on an annual basis and in addition to the work performed at the Group head office. In relation to the current year audit the Senior Statutory Auditor, or a senior member of the audit team, visited the USA and Canada, along with various locations in the UK.



Other information

The Directors are responsible for the other information. The other information comprises the information included in the Annual Report, other than the financial statements and our auditor's report thereon.	We have nothing to report in respect of these matters.
Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.	
In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.	
If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.	
 In this context, matters that we are specifically required to report to you as uncorrected material misstatements of the other information include where we conclude that: + Fair, balanced and understandable – the statement given by the Directors that they consider the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit. + Audit Committee reporting – the section describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee. + Directors' statement of compliance with the UK Corporate Governance Code – the parts of the Directors' statement required under the Listing Rules relating to the Company's compliance with the UK Corporate Governance Code ontaining provisions specified for review by the auditor in accordance with Listing Rule 9.8.10R(2) do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code. 	

Responsibilities of Directors

As explained more fully in the Directors' responsibilities statement, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group's and the parent company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Details of the extent to which the audit was considered capable of detecting irregularities, including fraud and non-compliance with laws and regulations are set out below.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Independent auditor's report

To the members of Ultra Electronics Holdings plc continued

Extent to which the audit was considered capable of detecting irregularities, including fraud

We identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and then design and perform audit procedures responsive to those risks, including obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion.

Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, we considered the following:

- + the nature of the industry and sector, control environment and business performance, including the design of the Group's remuneration policies, key drivers for Directors' remuneration, bonus levels and performance targets;
- + results of our enquiries of management and the Audit Committee about their own identification and assessment of the risks of irregularities;
- + any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
- identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
- detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud;
- the internal controls established to mitigate risks of fraud or non-compliance with laws and regulations
- + the matters discussed among the audit engagement team, including significant component audit teams and involving relevant internal specialists, including tax, pensions, and IT specialists regarding how and where fraud might occur in the financial statements and any potential indicators of fraud.

As a result of these procedures, we considered the opportunities and incentives that may exist within the organisation for fraud and identified the greatest potential for fraud in the following area: revenue and profit recognition. In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override.

We also obtained an understanding of the legal and regulatory frameworks that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the financial statements. The key laws and regulations we considered in this context included the UK Companies Act, Listing Rules, pensions legislation and tax legislation.

Audit response to risks identified

As a result of performing the above, we identified revenue and profit recognition as a key audit matter related to the potential risk of fraud. The key audit matters section of our report explains the matter in more detail and also describes the specific procedures we performed in response to that key audit matter.

In addition to the above, our procedures to respond to risks identified included the following:

- + reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- + enquiring of management, the audit committee and external legal counsel concerning actual and potential litigation and claims;
- + performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- + reading minutes of meetings of those charged with governance, reviewing internal audit reports and reviewing correspondence with HMRC; and
- + in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and all component audit teams, and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Report on other legal and regulatory requirements Opinions on other matters prescribed by the Companies Act 2006

In our opinion, the part of the Directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- + The information given in the strategic report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements.
- + The strategic report and the Directors' Report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and the parent company and their environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report.

Matters on which we are required to report by exception

Adequacy of explanations received and accounting records

Under the Companies Act 2006 we	are required to	report to voluit in	our onnion.
	arcicguncuto		our opinion.

- + We have not received all the information and explanations we require for our audit.
- + Adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us.
- + The parent company financial statements are not in agreement with the accounting records and returns.

Directors' remuneration

Under the Companies Act 2006 we are also required to report if, in our opinion, certain disclosures of Directors' remuneration have not been made or the part of the Directors' remuneration report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

We have nothing to	report in respect of
these matters.	

Other matters

Auditor tenure

Following the recommendation of the Audit Committee, we were appointed by the Board of Directors on 17 April 2003 to audit the financial statements for the year ending 31 December 2003 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments of the firm is 16 years, covering the years ending 31 December 2003 to 31 December 2019.

Consistency of the audit report with the additional report to the Audit Committee

Our audit opinion is consistent with the additional report to the Audit Committee we are required to provide in accordance with ISAs (UK).

Use of our report

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Alexander Butterworth ACA (Senior statutory auditor)

For and on behalf of Deloitte LLP Statutory Auditor Reading, United Kingdom 10 March 2020

Consolidated income statement

For the year ended 31 December 2019

	Netz	2019	2018
	Note	£m	£m
Revenue	3	825.4	766.7
Cost of sales		(586.3)	(544.6)
Gross profit		239.1	222.1
Other operating income	4	1.0	3.2
Administrative expenses		(135.6)	(140.3)
Other operating expenses	5	(8.9)	(3.3)
Significant legal charges and expenses	2	(1.4)	(2.3)
S3 programme	2	-	(6.5)
Impairment charges	2	-	(7.6)
Operating profit	6	94.2	65.3
Loss on disposals and held for sale	30	(0.9)	(0.7)
Retirement benefit scheme GMP equalisation	29	-	(3.2)
Investment revenue	8	11.3	6.2
Finance costs	9	(13.6)	(25.0)
Profit before tax		91.0	42.6
Тах	10	(16.4)	(10.2)
Profit for the year		74.6	32.4
Attributable to:			
Owners of the Company		74.5	32.4
Non-controlling interests		0.1	-
Earnings per ordinary share (pence)			
Basic	12	105.1	43.6
Diluted	12	104.9	43.6

The accompanying notes are an integral part of this consolidated income statement. All results are derived from continuing operations.

Consolidated statement of comprehensive income For the year ended 31 December 2019

	Note	2019 £m	2018 £m
Profit for the year		74.6	32.4
Items that will not be reclassified to profit or loss:			
Actuarial (loss)/profit on defined benefit pension schemes	29	(9.3)	4.6
Tax relating to items that will not be reclassified	10	1.6	(0.8)
Total items that will not be reclassified to profit or loss		(7.7)	3.8
Items that are or may be reclassified to profit or loss:			
Exchange differences on translation of foreign operations		(17.5)	21.1
Transfer from profit and loss on cash flow hedge		(0.3)	0.4
Profit/(loss) on loans used in net investment hedges		3.1	(11.5)
Loss on cash flow hedge		-	(0.6)
Tax relating to items that are or may be reclassified	10	0.1	0.1
Total items that are or may be reclassified to profit or loss		(14.6)	9.5
Other comprehensive (expense)/income for the year		(22.3)	13.3
Total comprehensive income for the year	27	52.3	45.7
Attributable to:			
Owners of the Company		52.2	45.7
Non-controlling interests		0.1	-

The accompanying notes are an integral part of this consolidated statement of comprehensive income.

Consolidated balance sheet

For the year ended 31 December 2019

	Note	2019 £m	2018 £m
Non-current assets			
Goodwill	13	365.9	377.8
Other intangible assets	14	92.7	113.9
Property, plant and equipment	15	64.2	62.6
Leased assets	16	36.1	-
Deferred tax assets	24	10.0	18.7
Derivative financial instruments	22	1.7	0.1
Trade and other receivables	19	13.7	22.6
		584.3	595.7
Current assets			
Inventories	17	90.7	88.6
Trade and other receivables	19	205.4	205.2
Tax assets	24	19.5	8.1
Cash and cash equivalents		82.2	96.3
Derivative financial instruments	22	3.2	0.3
Assets classified as held for sale	30	11.5	30.6
		412.5	429.1
Total assets		996.8	1,024.8
Current liabilities	20		(0.1.0, 0)
Trade and other payables	20	(192.3)	(212.2)
Tax liabilities	24	(4.7)	(5.0)
Derivative financial instruments	22	(0.5)	(5.5)
Borrowings	21	(8.2)	(175.8)
Liabilities classified as held for sale	30	(5.3)	(8.6)
Short-term provisions	25	(16.6)	(13.3)
Name and the latter of the lat		(227.6)	(420.4)
Non-current liabilities	20	(72.2)	(72.0)
Retirement benefit obligations	29	(73.3)	(73.0)
Other payables	20	(11.8)	(14.9)
Deferred tax liabilities	24	(16.3)	(10.5)
Derivative financial instruments	22	(0.2)	(1.0)
Borrowings	21	(228.8)	(78.0)
Long-term provisions	25	(8.2)	(6.2)
T-4-11-1-10-1		(338.6)	(183.6)
Total liabilities Net assets		(566.2) 430.6	(604.0) 420.8
Equity		450.0	420.8
Share capital	26	3.5	3.6
Share premium account	20	203.2	201.0
Capital redemption reserve		0.4	0.3
Reserve for own shares		(1.4)	(2.6)
Hedging reserve		(56.8)	(2.0)
Translation reserve		(50.8) 99.0	(59.7) 116.5
Retained earnings		99.0 182.6	161.7
Equity attributable to owners of the Company		430.5	420.8
Non-controlling interests			420.0
Total equity		0.1 430.6	420.8
		450.0	420.0

The financial statements of Ultra Electronics Holdings plc, registered number 02830397, were approved by the Board of Directors and authorised for issue on 10 March 2020.

On behalf of the Board,

S. PRYCE, Chief Executive **J. SCLATER**, Chief Financial Officer

The accompanying notes are an integral part of this consolidated balance sheet.

Consolidated cash flow statement

For the year ended 31 December 2019

	Note	2019 £m	2018 £m
Net cash flow from operating activities	27	94.6	86.7
Investing activities			
Interest received		0.7	0.7
Purchase of property, plant and equipment		(14.9)	(13.0)
Proceeds from disposal of property, plant and equipment		0.1	0.2
Expenditure on product development and other intangibles		(8.0)	(7.0)
Disposal of subsidiary undertakings	30	22.4	0.2
Net cash from/(used in) investing activities		0.3	(18.9)
Financing activities			
Issue of share capital		3.3	0.1
Share buy-back (including transaction costs)		(8.6)	(91.9)
Dividends paid		(36.7)	(36.9)
Loan syndication costs		(0.3)	(0.7)
Repayments of borrowings		(315.2)	(181.3)
Proceeds from borrowings		259.9	199.0
Principal payment on leases		(7.8)	-
Cash out-flow on closing out foreign currency hedging contracts		-	(11.1)
Net cash used in financing activities		(105.4)	(122.8)
Net decrease in cash and cash equivalents	27	(10.5)	(55.0)
Cash and cash equivalents at beginning of year		96.3	149.5
Effect of foreign exchange rate changes		(3.6)	1.8
Cash and cash equivalents at end of year		82.2	96.3

The accompanying notes are an integral part of this consolidated cash flow statement.

Consolidated statement of changes in equity For the year ended 31 December 2019

Equity attributable to equity holders of the parent

	Share capital £m	Share premium account £m	Capital redemption reserve £m	Reserve for own shares £m	Hedging reserve £m	Translation reserve £m	Retained earnings £m	Non- controlling interest £m	Total equity £m
Balance at 1 January 2018	3.9	200.9	-	(2.6)	(48.1)	95.4	262.6	-	512.1
Adoption of IFRS 15	-	-	-	_	-	-	(12.2)	_	(12.2)
Tax adjustment on adoption of IFRS 15	-	-	-	_	-	-	2.3	_	2.3
Restated total equity at 1 January 2018	3.9	200.9	-	(2.6)	(48.1)	95.4	252.7	-	502.2
Profit for the year	-	-	-	-	-	-	32.4	-	32.4
Other comprehensive income for the year	-	-	-	-	(11.6)	21.1	3.8	-	13.3
Total comprehensive income for the year	_	_	_	-	(11.6)	21.1	36.2	-	45.7
Equity-settled employee share schemes	-	0.1	-	-	-	-	1.6	-	1.7
Shares purchased in buyback	(0.3)	-	0.3	-	-	-	(91.9)	-	(91.9)
Dividend to shareholders	-	-	-	-	-	-	(36.9)	-	(36.9)
Balance at 31 December 2018	3.6	201.0	0.3	(2.6)	(59.7)	116.5	161.7	-	420.8
Adoption of IFRS 16	_	-	_	-	-	-	(2.0)	-	(2.0)
Restated total equity at 1 January 2019	3.6	201.0	0.3	(2.6)	(59.7)	116.5	159.7	-	418.8
Profit for the year	-	-	-	_	-	-	74.5	0.1	74.6
Other comprehensive income for the year	-	-	-	-	2.9	(17.5)	(7.7)	-	(22.3)
Total comprehensive income for the year	_	-	_	-	2.9	(17.5)	66.8	0.1	52.3
Equity-settled employee share schemes	-	2.2	-	_	-	-	1.9	-	4.1
Transfer from own shares	_	-	-	1.2	-	-	(1.2)	-	-
Tax on share-based payment transactions	_	-	-	-	-	-	0.7	-	0.7
Shares purchased in buyback	(0.1)	-	0.1	_	-	-	(8.6)	-	(8.6)
Dividend to shareholders	_	-	-	_	-	-	(36.7)	-	(36.7)
Balance at 31 December 2019	3.5	203.2	0.4	(1.4)	(56.8)	99.0	182.6	0.1	430.6

Notes to accounts – Group For the year ended 31 December 2019

1 Segment information

For management purposes, the Group is organised into three operating segments, which comprise the divisions Aerospace & Infrastructure, Communications & Security, and Maritime & Land. These operating segments are consistent with the internal reporting as reviewed by the CEO who is deemed to be the Chief Operating Decision-Maker. Each segment includes businesses with similar operating and market characteristics. See the Divisional reviews on pages 26–31 for further information. These segments have changed from 1 January 2020 as explained on pages 22–23.

	2019				2018	
	External revenue £m	Inter- segment £m	Total £m	External revenue £m	Inter- segment £m	Total £m
Revenue						
Maritime & Land	353.0	14.9	367.9	317.9	13.1	331.0
Communications & Security	267.9	3.5	271.4	252.6	8.9	261.5
Aerospace & Infrastructure	204.5	8.2	212.7	196.2	7.9	204.1
Eliminations	-	(26.6)	(26.6)	-	(29.9)	(29.9)
Consolidated revenue	825.4	-	825.4	766.7	-	766.7

All inter-segment trading is at arm's length.

			2019		
	Maritime & Land £m	Communications & Security £m	Aerospace & Infrastructure £m	Unallocated £m	Total £m
Underlying operating profit	52.5	38.6	27.1	-	118.2
Amortisation of intangibles arising on acquisition	(8.2)	(12.2)	(1.3)	-	(21.7)
Significant legal charges and expenses (see note 2)	-	-	(0.2)	(1.2)	(1.4)
Acquisition and disposal-related costs (see note 2)	(0.4)	(0.2)	(0.3)	-	(0.9)
Operating profit/(loss)	43.9	26.2	25.3	(1.2)	94.2
Loss on disposals and held for sale					(0.9)
Investment revenue					11.3
Finance costs					(13.6)
Profit before tax					91.0
Тах					(16.4)
Profit after tax					74.6

Significant legal charges and expenses include £1.2m of anti-bribery and corruption investigation costs and £0.2m on legal charges relating to the Ithra contract. Unallocated items are specific corporate level costs that cannot be allocated to a specific division.

For the year ended 31 December 2019

continued

1 Segment information continued

			2018		
	Maritime & Land £m	Communications & Security £m	Aerospace & Infrastructure £m	Unallocated £m	Total £m
Underlying operating profit	52.8	29.9	30.0	-	112.7
Amortisation of intangibles arising on acquisition	(12.5)	(14.4)	(1.4)	-	(28.3)
Impairment charge	(1.0)	-	(6.6)	-	(7.6)
Significant legal charges and expenses	-	-	-	(2.3)	(2.3)
Acquisition and disposal-related costs	(1.7)	(0.4)	(0.6)	-	(2.7)
S3 programme	(4.6)	(1.5)	(0.4)	_	(6.5)
Operating profit/(loss)	33.0	13.6	21.0	(2.3)	65.3
Disposals					(0.7)
Retirement benefit scheme GMP equalisation					(3.2)
Investment revenue					6.2
Finance costs					(25.0)
Profit before tax					42.6
Tax					(10.2)
Profit after tax					32.4

Significant legal charges and expenses in 2018 includes £2.3m incurred in relation to the ongoing anti-bribery and corruption investigation. The S3 programme is the Group's Standardisation & Shared Services programme that completed in 2018.

Capital expenditure, additions to intangibles and leased assets, depreciation and amortisation

	Capital expen additions to lease intangibles (exclu and acquired ir	ed assets and ding goodwill	Depreciation amortisatio	
	2019 £m	2018 £m	2019 £m	2018 £m
Maritime & Land	13.9	6.5	17.9	17.0
Communications & Security	16.5	9.3	23.0	19.5
Aerospace & Infrastructure	5.4	4.2	6.7	4.8
Total	35.8	20.0	47.6	41.3

The 2019 depreciation and amortisation expense includes £28.6m of amortisation charges (2018: £32.4m), £9.7m of property, plant and equipment depreciation charges (2018: £8.9m) and £9.3m of leased asset depreciation charges (2018: nil).

Total assets by segment

	2019 £m	2018 £m
Maritime & Land	262.0	247.2
Communications & Security	424.7	429.5
Aerospace & Infrastructure	193.5	224.5
	880.2	901.2
Unallocated	116.6	123.6
Consolidated total assets	996.8	1,024.8

Unallocated assets represent current and deferred tax assets, derivatives at fair value and cash and cash equivalents.

1 Segment information continued

Total liabilities by segment

	2019 £m	2018 £m
Maritime & Land	122.8	104.8
Communications & Security	110.0	87.5
Aerospace & Infrastructure	52.1	51.6
	284.9	243.9
Unallocated	281.3	360.1
Consolidated total liabilities	566.2	604.0

Unallocated liabilities represent derivatives at fair value, current and deferred tax liabilities, retirement benefit obligations, bank loans and loan notes.

Revenue by destination

The following table provides an analysis of the Group's sales by geographical market:

	2019 £m	2018 £m
North America	502.5	439.3
United Kingdom	171.1	171.5
Rest of World	95.9	93.0
Continental Europe	55.9	62.9
	825.4	766.7

During the year, there was one direct customer (2018: one) that individually accounted for greater than 10% of the Group's total turnover. Sales to this customer in 2019 were £182.4m (2018: £127.2m) across all segments.

Other information (by geographic location)

	Non-current a	assets	Total asse	ets	Capital expenditi additions to leased a intangibles (excludin and acquired inta	assets and ig goodwill
	2019 £m	2018 £m	2019 £m	2018 £m	2019 £m	2018 £m
UK	157.8	163.1	315.6	328.3	11.8	7.8
USA	320.9	322.6	425.5	439.8	16.6	7.5
Canada	88.5	82.5	129.9	118.2	7.1	4.3
Rest of World	5.5	8.7	9.2	14.9	0.3	0.4
	572.7	576.9	880.2	901.2	35.8	20.0
Unallocated	11.6	18.8	116.6	123.6	-	-
	584.3	595.7	996.8	1,024.8	35.8	20.0

For the year ended 31 December 2019

continued

2 Additional non-statutory performance measures

To present the underlying performance of the Group on a consistent basis year on year, additional non-statutory performance indicators are used. This analysis of the Group's operating results is presented to provide readers with additional performance indicators that are prepared on a non-statutory basis. It includes the key performance indicators (KPIs) for return on invested capital (ROIC) and organic growth in order book, revenue and underlying operating profit. This presentation is regularly reviewed by management to identify items that are unusual and other items relevant to an understanding of the Group's performance and long-term trends with reference to their materiality and nature. This additional information is not uniformly defined by all companies and may not be comparable with similarly titled measures and disclosures by other organisations. The non-statutory disclosures should not be viewed in isolation or as an alternative to the equivalent statutory measure. See page 155 for further details and definitions. Due to the adoption of IFRS 16, certain metrics, such as free cash flow and EBITDA, are not directly comparable with prior periods. The non-statutory performance measures are calculated as follows:

	2019 £m	2018 £m
Operating profit	94.2	65.3
Amortisation of intangibles arising on acquisition (see note 14)	21.7	28.3
Significant legal charges and expenses*	1.4	2.3
Acquisition and disposal-related costs	0.9	2.7
S3 programme	-	6.5
Impairment charges (see notes 13 and 14)	-	7.6
Underlying operating profit	118.2	112.7
Depreciation of property, plant and equipment (see note 15)	9.7	8.9
Depreciation of leased assets (see note 16)	9.3	-
Amortisation of internally generated intangible assets (see note 14)	2.9	1.5
Amortisation of software, patents and trademarks (see note 14)	4.0	2.6
EBITDA	144.1	125.7
Profit before tax	91.0	42.6
Amortisation of intangibles arising on acquisition (see note 14)	21.7	28.3
Acquisition and disposal related costs	0.9	2.7
Gain on fair value movements of derivatives (see note 22)	(10.6)	(5.5)
Loss on disposals and held for sale (see note 30)	0.9	0.7
Significant legal charges and expenses*	1.4	2.3
Loss on closing out foreign currency derivative contract	-	11.1
Net finance charge on defined benefit pensions (see note 9) †	-	1.9
S3 programme	-	6.5
Retirement benefit scheme GMP equalisation (see note 29)	-	3.2
Impairment charges (see notes 13 and 14)	-	7.6
Underlying profit before tax	105.3	101.4
Cash generated by operations (see note 27)	114.9	102.4
Principal payments on finance leases	(7.8)	102.4
Purchase of property, plant and equipment	(14.9)	(13.0)
Proceeds on disposal of property, plant and equipment	0.1	0.2
Expenditure on product development and other intangibles	(8.0)	(7.0)
Significant legal charges and expenses*	(6.0)	(7.0)
S3 programme	1.9	2.6
Acquisition and disposal-related payments	- 0.6	2.6
Underlying operating cash flow	86.8	89.3
Underlying operating cash conversion (KPI)	73%	79%
ייייט איז איז איז איז געריא איז געריא איז געריא איז געריא איז געריא איז געריא געריא געריא געריא געריא געריא גער עריגעריא געריא ג	/5%	/ 970

* Significant legal charges and expenses are the charges arising from investigations and settlement of litigation that are not in the normal course of business. Significant legal charges and expenses include £1.2m (2018: £2.3m) of anti-bribery and corruption investigation costs and £0.2m (2018: nil) on legal charges relating to the Ithra contract

† The pension finance charge is included within underlying finance costs from 1 January 2019

2 Additional non-statutory performance measures continued

	2019 £m	2018 £m
Net cash flow from operating activities	94.6	86.7
Interest received	0.7	0.7
Purchase of property, plant and equipment	(14.9)	(13.0)
Proceeds on disposal of property, plant and equipment	0.1	0.2
Expenditure on product development and other intangibles	(8.0)	(7.0)
Free cash flow	72.5	67.6
Net assets (2018 adjusted for IFRS 16 adoption impact, see note 36)	430.6	418.9
Net debt (2018 adjusted for IFRS 16 liability, see note 36)	154.8	197.0
Retirement benefit obligations (see note 29)	73.3	73.0
Net derivative financial instruments (see note 22)	(4.2)	6.4
Net tax assets	(8.5)	(11.3)
Total invested capital	646.0	684.0
Average invested capital	665.0	
Underlying operating profit	118.2	
ROIC (KPI)	17.8%	

Earnings per share

The reconciliation from statutory earnings to underlying earnings, as used for the underlying earnings per share metric, is set out in note 12.

Organic measures Organic growth for order book, revenue and underlying operating profit is calculated as follows:

	Order bo	Order book		Revenue		Underlying operating profit	
	£m	% impact	£m	% impact	£m	% impact	
2018	983.9		766.7		112.7		
Currency translation	(21.9)	-2.2	22.2	+2.9	3.0	+2.7	
Impact of IFRS 16 adoption	_	_	_	_	1.1	+1.0	
Disposals	(37.9)	-3.9	(16.0)	-2.1	(1.9)	-1.7	
2018 (for organic measure)	924.1		772.9		114.9		
Organic growth (KPI)	98.8	+10.7	52.5	+6.8	3.3	+2.9	
2019	1,022.9	+4.0	825.4	+7.7	118.2	+4.9	

For the year ended 31 December 2019

continued

3 Revenue

An analysis of the Group's revenue is as follows:

		2019			2018			
	Maritime & Land £m	Communications & Security £m	Aerospace & Infrastructure £m	Total £m	Maritime & Land £m	Communications & Security £m	Aerospace & Infrastructure £m	Total £m
Point in time	85.6	115.1	136.2	336.9	84.0	114.6	105.4	304.0
Over time	267.4	152.8	68.3	488.5	233.9	138.0	90.8	462.7
	353.0	267.9	204.5	825.4	317.9	252.6	196.2	766.7

The estimate of future costs on over-time contracts is a critical accounting estimate as set out on page 148. Across the aggregated portfolio of over time contracts open at 31 December 2019, a 1% increase in estimated costs to complete the portfolio equates to £5.1m. The impact on revenue would depend on the margin and percentage of completion of any given contract within the portfolio; however, when taken in aggregate, it is not likely to exceed £5.1m.

Revenue of £1.0m was recognised during the year ended 31 December 2019 in respect of performance obligations satisfied or partially satisfied in previous periods.

The table below notes the revenue expected to be recognised in the future that is related to performance obligations that are unsatisfied (or partially unsatisfied) at the reporting date.

	2020 £m	2021 £m	2022 and beyond £m	Total £m
Point in time revenue	271.3	83.0	61.0	415.3
Over-time revenue	323.8	136.4	147.4	607.6

4 Other operating income

Amounts included in other operating income were as follows:

	2019	2018
	£m	£m
Foreign exchange gains	1.0	3.2
	1.0	3.2

Foreign exchange gains and losses are impacted by gains or losses on foreign exchange transactions and revaluation of currency assets and liabilities.

5 Other operating expenses

Amounts included in other operating expenses were as follows:

	2019 £m	2018 £m
Amortisation of internally generated development costs (see note 14)	2.9	1.5
Foreign exchange losses	6.0	1.8
	8.9	3.3

6 Operating profit

Operating profit is stated after charging/(crediting):

	2019 £m	2018 £m
Raw materials and other bought in inventories expensed in the year	260.3	238.4
Staff costs (see note 7)	267.9	252.7
Depreciation of property, plant and equipment (see note 15)	9.7	8.9
Depreciation of leased assets (see note 16)	9.3	-
Amortisation of internally generated intangible assets (see note 14)	2.9	1.5
Amortisation of software, patents and trademarks (see note 14)	4.0	2.6
Amortisation of acquired intangible assets (see note 14)	21.7	28.3
Impairment of intangible assets (see notes 13 and 14)	-	7.6
Government grant income (see note 23)	(0.3)	(0.2)
Net foreign exchange gain	(5.9)	(7.2)
Loss on disposal of property, plant and equipment	0.1	0.1
Operating lease rentals		
– plant and machinery	n/a	0.9
- other	n/a	14.6
Short-term lease rentals	0.3	n/a
Low-value asset lease rentals	0.1	n/a
Income from property subletting	(0.7)	(0.6)
Research and development costs	30.1	26.4
Auditor's remuneration for statutory audit work (including expenses)	1.3	1.2

Analysis of auditor's remuneration

	2019 £m	2018 £m
Fees payable for the audit of the annual accounts	0.4	0.3
Fees payable for the audit of subsidiaries	0.9	0.9
Total for statutory Group audit services	1.3	1.2

Total non-audit services in 2019 were £11,000 (2018: £27,000). The Company-only audit fee included in the Group audit fee shown above was £20,000 (2018: £20,000).

7 Staff costs

Particulars of employees (including Executive Directors) are shown below. Employee costs during the year amounted to:

	2019	2018
	£m	£m
Wages and salaries	233.6	219.7
Social security costs	22.6	23.0
Pension costs	11.7	10.0
	267.9	252.7

The average monthly number of persons employed by the Group during the year was as follows:

	2019 Number	2018 Number
Production	1,690	1,788
Engineering	1,376	1,381
Selling	214	217
Support services	809	733
	4,089	4,119

Information on Directors' remuneration is given in the section of the remuneration report described as having been audited and those elements required by the Companies Act 2006 and the Financial Conduct Authority form part of these accounts.

Notes to accounts – Group For the year ended 31 December 2019 continued

8 Investment revenue

	2019	2018
	£m	£m
Bank interest	0.7	0.7
Fair value movement on derivatives (see note 22)	10.6	5.5
	11.3	6.2

9 Finance costs

	2019 £m	2018 £m
Amortisation of finance costs of debt	0.7	0.8
Interest payable on bank loans, overdrafts and other loans	9.5	11.2
Finance charge on leases	1.5	-
Total borrowing costs	11.7	12.0
Retirement benefit scheme finance cost	1.9	1.9
Loss on closing out foreign currency derivative contract	-	11.1
	13.6	25.0

10 Tax

	2019	2018
	£m	£m
UK taxes		
Corporation tax	3.2	2.4
Adjustment in respect of prior years	(2.4)	2.7
	0.8	5.1
Overseas taxes		
Current taxation	10.1	7.5
Adjustment in respect of prior years	(1.7)	(0.4)
	8.4	7.1
Total current tax	9.2	12.2
Deferred tax		
Origination and reversal of temporary differences	7.0	(1.6)
Recognition of deferred tax assets	0.2	(0.4)
Total deferred tax (credit)/charge	7.2	(2.0)
Total tax charge	16.4	10.2

Corporation tax in the UK is calculated at 19.00% (2018: 19.00%) of the estimated assessable profit for the year.

Finance Act 2016 provides for a reduction in the main rate of corporation tax to 17% for the financial year beginning 1 April 2020. UK deferred tax at the balance sheet date has been calculated at 17% (2018: 17%). Deferred tax in other territories has been calculated at enacted tax rates that are expected to apply to the period when assets are realised or liabilities are settled. US deferred tax balances at 31 December 2019 have been calculated at 24% (2018: 24%). Taxation for other jurisdictions is calculated at the rates prevailing in the respective jurisdictions.

In addition to the amount charged to the income statement, the following amounts relating to tax have been recognised directly in other comprehensive income:

	2019 £m	2018 £m
Deferred tax		
Arising on income and expenses recognised in other comprehensive income:		
Actuarial gain on defined benefit pension schemes	(1.6)	(0.8)
Revaluation of interest rate hedge	0.1	0.1
Total income tax charge recognised directly in other comprehensive income	(1.5)	(0.7)

10 Tax continued

In addition to the amount charged to the income statement and other comprehensive income, the following amounts relating to tax have been recognised directly in equity:

	2019 £m	2018 £m
Deferred tax		
IFRS 16 adjustment	(0.6)	-
Change in estimated excess tax deductions related to share-based payments	(0.7)	-
IFRS 15 adjustment	-	2.3
Total income tax recognised directly in equity	(1.3)	2.3

The difference between the total current tax shown above and the amount calculated by applying the standard rate of UK corporation tax to the profit before tax is as follows:

	2019	2018
	£m	£m
Group profit before tax	91.0	42.6
Tax on Group profit at standard UK corporation tax rate of 19.00% (2018: 19.00%)	17.3	8.1
Tax effects of:		
Income that are not taxable/allowable in determining taxable profits	2.2	1.4
Derecognition/(recognition) of deferred tax assets	0.2	(0.4)
Expenses for which no deferred tax asset recognised	0.4	2.9
Different tax rates of subsidiaries operating in other jurisdictions	3.0	1.7
CFC exemption	(2.6)	(4.3)
Deferred tax differences on temporary differences	(0.1)	0.3
Patent Box	(0.5)	(0.3)
Adjustments in respect of prior years	(3.5)	0.8
Tax expense for the year	16.4	10.2

Included within the tax reconciliation are a number of non-recurring items, principally non-tax deductible one-off costs which fluctuate from year to year. The prior-year adjustment in 2019 includes releases of provisions for uncertain tax treatments, which are no longer required. In addition, a deferred tax asset was not recognised for certain expenses in our US business in both 2019 and 2018 and this will continue to be assessed annually. The differences attributable to the UK CFC exemption, Patent Box and higher overseas tax rates are expected to recur in the future (the level of profits in overseas jurisdictions and changes to the UK and overseas tax rates will affect the size of this difference in the future).

The Group is subject to enquiries and audits by tax authorities in the territories in which it operates. The Group considers material tax uncertainties on their individual merits in accordance with IFRIC 23 and, where appropriate, makes provisions in respect of the potential tax liabilities or restriction of tax benefits that may arise. As at 31 December 2019, the Group holds provisions for such potential issues of £2.2m (2018: £2.3m). These provisions relate to multiple issues, across the jurisdictions in which the Group operates. As the outcome relating to tax matters can be uncertain until a conclusion is reached with the relevant tax authority or through a legal process, the amount ultimately paid may differ materially from the amount accrued.

The company has benefited in the current year, and previous years, from a certain exemption in the UK Controlled Foreign Company (CFC) rules. On 2 April 2019, the European Commission concluded that the exemption, as applicable for years from 2013 through 2018, partly constituted illegal state aid. Ultra, the UK Government and other affected taxpayers have separately appealed this decision to the EU General Court. In common with other UK-based international companies whose arrangements were in line with UK CFC legislation, which applied up to 2018, HMRC may seek to recover alleged illegal aid from Ultra pending the resolution of EU litigation. HMRC initiated enquiries during 2019 in respect of this issue but to date no substantive progress has been made and the range of potential outcomes remains nil to £21m. No provision for this potential liability is made in these financial statements as it is not clear what, if any, the eventual financial result will be.

11 Dividends

Amounts recognised as distributions to equity holders in the year:

	2019 £m	2018 £m
Final dividend for the year ended 31 December 2018 of 37.0p (2017: 35.0p) per share	26.1	26.3
Interim dividend for the year ended 31 December 2019 of 15.0p (2018: 14.6p) per share	10.6	10.6
	36.7	36.9
Proposed final dividend for the year ended 31 December 2019 of 39.2p (2018: 37.0p) per share	27.8	26.4

The 2019 proposed final dividend of 39.2p per share is proposed to be paid on 18 May 2020 to shareholders on the register at 24 April 2020. It was approved by the Board after 31 December 2019 and has not been included as a liability as at 31 December 2019.

For the year ended 31 December 2019 continued

12 Earnings per share

	2019 pence	2018 pence
Basic underlying (see below)	119.5	109.5
Diluted underlying (see below)	119.5	109.5
Basic	119.4	43.6
	103.1	43.6
Diluted	104.9	43.0
The calculation of the basic, underlying and diluted earnings per share is based on the following data:		
	2019	2018
	£m	£m
Earnings		
Earnings for the purposes of basic earnings per share being profit for the year	74.5	32.4
Underlying earnings		
Profit for the period	74.5	32.4
Amortisation of intangibles arising on acquisition (net of tax)	16.9	22.0
Acquisition and disposal-related costs (net of tax)	0.1	2.7
Profit on fair value movements on derivatives (net of tax)	(8.8)	(6.4)
Net loss on disposals and held for sale (net of tax)	0.9	0.7
Significant legal charges and expenses (net of tax)	1.1	2.3
Net finance charge on defined benefit pensions (net of tax)*	-	1.9
S3 programme (net of tax)	-	5.1
Loss on closing out foreign currency derivative contract (net of tax)	-	11.1
Impairment charges (net of tax)	-	7.3
Retirement benefit scheme GMP equalisation (net of tax)	-	2.3
Earnings for the purposes of underlying earnings per share	84.7	81.4

The adjustments to profit are explained in note 2.

The weighted average number of shares is given below:

	2019 Number of shares	2018 Number of shares
Number of shares used for basic earnings per share	70,893,867	74,350,521
Effect of dilutive potential ordinary shares – share options	93,523	831
Number of shares used for fully diluted earnings per share	70,987,390	74,351,352
	2019 £m	2018 £m
Underlying profit before tax (see note 2)	105.3	101.4
Tax rate applied for the purposes of underlying earnings per share	19.4%	19.7%

During 2019, the Company purchased and cancelled 634,996 (2018: 6,288,127) shares. See note 26.

13 Goodwill

	2019	2018
	£m	£m
Cost		
At 1 January	438.5	451.8
Exchange differences	(10.6)	15.0
Disposals	(0.3)	_
Reclassified as held for sale (see note 30)	(3.3)	(28.3)
At 31 December	424.3	438.5
Accumulated impairment losses		
At 1 January	(60.7)	(57.3)
Impairment of goodwill	-	(6.6)
Reclassified as held for sale	-	6.6
Exchange differences	2.3	(3.4)
At 31 December	(58.4)	(60.7)
Carrying amount at 31 December	365.9	377.8

The Group's market-facing segments, which represent cash generating unit (CGU) groupings, are: Aerospace, Energy, Communications, C2ISR, Maritime and Underwater Warfare. These represent the lowest level at which the goodwill is monitored for internal management purposes. Goodwill is allocated to CGU groupings as set out below:

	2019	2018		
	Pre-tax	Pre-tax		
	Discount rate	Discount rate	2019	2018
	%	%	£m	£m
Aerospace	10.9 – 12.1	9.7	32.6	32.7
Energy	10.9 – 12.1	9.7 – 11.4	18.3	18.9
Aerospace & Infrastructure			50.9	51.6
Communications	10.9 – 12.4	9.7 – 11.4	87.7	92.3
C2ISR	10.9 – 12.4	10.7 – 11.4	116.5	120.0
Communications & Security			204.2	212.3
Maritime	10.9 – 12.1	9.7 – 11.4	34.2	35.1
Underwater Warfare	12.1 – 12.9	9.7 – 11.4	76.6	78.8
Maritime & Land			110.8	113.9
Total – Ultra Electronics			365.9	377.8

Notes to accounts – Group For the year ended 31 December 2019 continued

13 Goodwill continued

Goodwill is initially allocated, in the year a business is acquired, to the CGU group expected to benefit from the acquisition. Subsequent adjustments are made to this allocation to the extent that operations, to which goodwill relates, are transferred between CGU groups. The size of a CGU group varies but is never larger than a reportable operating segment. There have been no changes in the year.

The recoverable amounts of CGUs are determined from value-in-use calculations. In determining the value-in-use for each CGU, the Group prepares cash flows derived from the most recent financial budgets and strategic plans, representing the best estimate of future performance. These plans, which have been approved by the Board, include detailed financial forecasts and market analysis covering the expected development of each CGU over the next five years. The cash flows for the following 10 years are also included and assume a growth rate of 2.5% (2018: 2.5%) per annum. Cash flows beyond that period are not included in the value-in-use calculation.

The key assumptions used in the value-in-use calculations are those regarding the discount rate, future revenues, growth rates, forecast gross margins, underlying operating profit* and underlying operating cash conversion*. Management estimates the discount rate using pre-tax rates that reflect current market assessments of the time value of money and risks specific to the Group, being the Weighted Average Cost of Capital (WACC). The WACC is then risk-adjusted to reflect risks specific to each business. The pre-tax discount rate used during 2019 was 10.9% for UK (2018: 9.7%), 12.4% for Canada (2018: 10.7%), 12.1% for USA (2018: 11.4%) and 12.9% for Australia (2018: 9.7%). Future revenues are based on orders already received, opportunities that are known and expected at the time of setting the budget and strategic plans and future growth rates. Budget and strategic plan growth rates are based on a combination of historical experience, available government spending data, and management and industry expectations of the growth rates that are expected to apply in the major markets in which each CGU operates. Longer-term growth rates, applied for the 10-year period after the end of the strategic planning period, are set at 2.5%. Ultra considers the long-term growth rate to be appropriate for the sectors in which it operates. Forecast gross margins reflect past experience, factor in expected efficiencies to counter inflationary pressures, and also reflect likely margins achievable in the shorter-term period of greater defence spending uncertainty.

Within each of the strategic plans, a number of assumptions are made about business growth opportunities, contract wins, product development and available markets. A key assumption is that there will be continued demand for Ultra's products and expertise from a number of US government agencies and prime contractors during the strategic plan period.

Sensitivity analysis, which included consideration of the potential impacts of Brexit, has been performed on the value-in-use calculations to:

- (i) reduce the post-2024 growth assumption from 2.5% to nil;
- (ii) apply a 20% reduction to forecast operating profits in each year of the modelled cash inflows; and
- (iii) consider specific market factors as noted above.

The value-in-use calculations exceed the CGU carrying values after applying sensitivity analysis.

As set out in note 32, £3.3m of goodwill in the Communications & Security operating segment has been reclassified to held for sale.

From 1 January 2020, the CGU groupings will be revised to reflect the new Strategic Business Unit (SBU) structure of the Group.

+ The Aerospace and Energy CGUs are unchanged.

- + Forensic Technology, which is within the C2ISR CGU grouping, will form a new standalone CGU to reflect the business becoming an SBU from 1 January 2020. C\$45.0m of goodwill has been assigned to this CGU based on the proportion of net present value of future cash flows from Forensic Technology relative to the rest of C2ISR.
- + The remainder of C2ISR (i.e. excluding Forensic Technology) and the Communications CGU grouping are combined into one Intelligence & Communications CGU grouping to reflect that goodwill in the Intelligence & Communications SBU will be monitored at this level.
- + Maritime and Underwater Warfare are combined into one Maritime CGU grouping to reflect that goodwill in the Maritime SBU will be monitored at this level.

The 2019 impairment tests were re-run with consideration of the new CGU groupings; on this go-forward basis, the value-in-use calculations exceed the CGU carrying values after applying sensitivity analysis.

* See note 2

14 Other intangible assets

	Acquired intangibles			Internally generated	6 fi		
	Customer relationships £m	Intellectual property £m	Profit in order book £m	Other acquired £m	capitalised development costs £m	Software, patents and trademarks £m	Total £m
Cost							
At 1 January 2018	209.9	110.5	33.1	8.4	27.3	31.3	420.5
Foreign exchange differences	6.6	3.8	1.0	0.2	0.8	1.0	13.4
Additions	-	_	_	-	1.6	5.4	7.0
Reclassified as held for sale	(1.4)	_	(0.4)	-	-	(0.3)	(2.1)
Disposals	-	(10.8)	(0.5)	(0.9)	-	(1.0)	(13.2)
At 1 January 2019	215.1	103.5	33.2	7.7	29.7	36.4	425.6
Foreign exchange differences	(4.6)	(2.3)	(0.6)	(0.1)	(0.6)	(0.9)	(9.1)
Additions	-	_	-	-	1.1	6.9	8.0
Reclassified as held for sale (see note 30)	-	_	-	-	(0.3)	-	(0.3)
Reclassification from tangible fixed assets (see note 15)	-	_	-	-	-	1.4	1.4
Disposals	(8.1)	_	(3.2)	-	_	(0.2)	(11.5)
At 31 December 2019	202.4	101.2	29.4	7.6	29.9	43.6	414.1
Accumulated amortisation							
At 1 January 2018	(136.5)	(69.5)	(32.6)	(4.7)	(17.0)	(23.2)	(283.5)
Foreign exchange differences	(4.7)	(2.9)	(1.0)	(0.1)	(0.6)	(0.8)	(10.1)
Reclassified as held for sale	1.4	_	0.4	-	_	0.3	2.1
Impairment charges	-	_	-	-	(1.0)	-	(1.0)
Disposals	_	10.8	0.5	0.9	_	1.0	13.2
Charge	(15.5)	(11.4)	(0.5)	(0.9)	(1.5)	(2.6)	(32.4)
At 1 January 2019	(155.3)	(73.0)	(33.2)	(4.8)	(20.1)	(25.3)	(311.7)
Foreign exchange differences	3.6	1.9	0.6	0.1	0.5	0.7	7.4
Reclassified as held for sale (see note 30)	-	_	_	-	0.2	-	0.2
Disposals	8.1	_	3.2	-	_	0.2	11.5
Reclassification from tangible fixed assets (see note 15)	-	_	_	-	_	(0.2)	(0.2)
Charge	(12.2)	(8.6)	-	(0.9)	(2.9)	(4.0)	(28.6)
At 31 December 2019	(155.8)	(79.7)	(29.4)	(5.6)	(22.3)	(28.6)	(321.4)
Carrying amount							
At 31 December 2019	46.6	21.5	-	2.0	7.6	15.0	92.7
At 31 December 2018	59.8	30.5	_	2.9	9.6	11.1	113.9

Of the £46.6m net book value within customer relationships, £24.7m related to Herley and £10.8m related to Forensic Technology, with estimated weighted average remaining lives of 10.9 years and 8.5 years respectively. Of the £21.5m net book value within intellectual property, £10.5m related to Herley and £4.7m related to Forensic Technology, with estimated weighted average remaining lives of 6.0 years and 7.0 respectively. Of the £15.0m (2018: £11.1m) net book value within the software, patents and trademarks category, £0.2m (2018: £0.2m) related to patents and trademarks. The amortisation of intangible assets charge is included within administrative expenses. Intangible assets, other than goodwill, are amortised over their estimated useful lives, typically as follows:

Customer relationships	5 to 21 years
Intellectual property	5 to 10 years
Profit in acquired order book	1 to 3 years
Other acquired	1 to 5 years
Development costs	2 to 10 years
Other intangibles:	
Software	3 to 5 years
Patents and trademarks	10 to 20 years

Notes to accounts – Group For the year ended 31 December 2019 continued

15 Property, plant and equipment

	Land and buildings			
	Freehold £m	Short leasehold £m	Plant and machinery £m	Total £m
Cost				
At 1 January 2018	41.6	22.2	94.7	158.5
Foreign exchange differences	0.8	0.5	2.6	3.9
Additions	0.8	0.4	11.8	13.0
Disposals	-	(0.6)	(11.7)	(12.3)
Reclassified to held for sale	-	-	(4.1)	(4.1)
At 1 January 2019	43.2	22.5	93.3	159.0
Foreign exchange differences	(0.5)	(0.4)	(2.2)	(3.1)
Additions	0.7	2.1	12.1	14.9
Disposals	_	(0.1)	(2.3)	(2.4)
Reclassified to software (see note 14)	_	_	(1.4)	(1.4)
Reclassification	(0.7)	0.6	0.1	_
Reclassified to held for sale (see note 30)	_	(0.2)	(2.7)	(2.9)
At 31 December 2019	42.7	24.5	96.9	164.1
Accumulated depreciation				
At 1 January 2018	(9.2)	(14.3)	(75.8)	(99.3)
Foreign exchange differences	(0.1)	(0.5)	(1.8)	(2.4)
Charge	(1.0)	(1.8)	(6.1)	(8.9)
Disposals	-	0.6	11.1	11.7
Reclassification	0.8	(0.5)	(0.3)	_
Reclassified to held for sale	-	_	2.5	2.5
At 1 January 2019	(9.5)	(16.5)	(70.4)	(96.4)
Foreign exchange differences	0.1	0.2	1.5	1.8
Charge	(1.1)	(1.8)	(6.8)	(9.7)
Disposals	_	0.1	2.3	2.4
Reclassification to software (see note 14)	-	_	0.2	0.2
Reclassification	0.7	(0.6)	(0.1)	_
Reclassified to held for sale (see note 30)	-	0.2	1.6	1.8
At 31 December 2019	(9.8)	(18.4)	(71.7)	(99.9)
Carrying amount				
At 31 December 2019	32.9	6.1	25.2	64.2
At 31 December 2018	33.7	6.0	22.9	62.6

Freehold land amounting to £7.6m (2018: £6.9m) has not been depreciated. Included within Land and Buildings is £nil (2018: £nil) of assets in the course of construction.

16 Leased assets

The Group's leases relate to real estate, vehicles, printers & copiers and other equipment. The Group therefore splits the leases between the following categories: land and buildings, and plant and machinery.

	Land and buildings	Plant and machinery	Total
Cost	£m	£m	£m
At 1 January 2019	-	-	-
Adoption of IFRS 16 (see note 36)	34.4	1.4	35.8
Foreign exchange differences	(0.9)	-	(0.9)
Additions	12.9	_	12.9
Disposals	(1.8)	-	(1.8)
Reclassified to held for sale (see note 30)	(1.4)	_	(1.4)
At 31 December 2019	43.2	1.4	44.6
Accumulated depreciation			
At 1 January 2019	_	_	-
Foreign exchange differences	0.1	_	0.1
Charge	(8.7)	(0.6)	(9.3)
Disposals	0.4	_	0.4
Reclassified to held for sale (see note 30)	0.3	_	0.3
At 31 December 2019	(7.9)	(0.6)	(8.5)
Carrying amount			
At 31 December 2019	35.3	0.8	36.1

As permitted under IFRS 16 paragraph 6, the Group has elected not to recognise leases that are less than one year in length or are for a low-value asset (<£3.5k) on the balance sheet. These leases are expensed on a straight-line basis as short-term leases or leases of low-value assets. This expense is included in note 6. The finance charge on leases is included in note 9. Cash outflow in relation to leases is included in note 27. Some of our property that we lease is sublet to external parties; sublet income received on any of the above leases is also included in note 6.

17 Inventories

	2019 £m	2018 £m
Raw materials and consumables	51.9	56.1
Work in progress	31.4	23.7
Finished goods and goods for resale	7.4	8.8
	90.7	88.6

The amount of any write-down of inventory recognised as an expense in the year was £2.1m (2018: £2.3m).

For the year ended 31 December 2019

continued

18 Over-time contract balances

Amounts receivable from over-time contract customers relates to work performed and revenue recognised on agreed contracts prior to the customer being invoiced.

The movement in the year of amounts receivable from over-time contract customers was as follows:

	Total £m
As at 1 January 2018	116.7
Adoption of IFRS 15	(10.5)
Foreign exchange differences	1.7
Revenue earned net of billings	1.0
Impairment	(1.2)
Reclassified to held for sale	(4.1)
As at 1 January 2019	103.6
Foreign exchange differences	(1.1)
Revenue earned net of billings	(11.2)
Reclassified to held for sale (see note 30)	(0.6)
As at 31 December 2019	90.7

The impairment recognised in 2018 relates to a non-core product line that was closed in the Maritime & Land division in the year.

Amounts payable to over-time contract customers relates to payments received from customers in relation to the contract prior to the work being completed and the revenue recognised.

The movement in the year of amounts payable to over-time contract customers was as follows:

	Total £m
As at 1 January 2018	(58.7)
Adoption of IFRS 15	(2.8)
Foreign exchange differences	(0.6)
Cash advances net of revenue recognised	(4.5)
Other	(3.0)
Reclassified to held for sale	6.1
As at 1 January 2019	(63.5)
Foreign exchange differences	1.0
Cash advances net of revenue recognised	(14.1)
Other	1.0
Reclassified to deferred income	2.4
Reclassified to contract loss provision (see note 25)	5.9
As at 31 December 2019	(67.3)

Within the opening 2019 balance of £63.5m, £44.4m was utilised during the period.

19 Trade and other receivables

	2019 £m	2018 £m
Non-current		
Amounts receivable from over-time contract customers (see note 18)	13.7	22.6
	13.7	22.6
	2019 £m	2018 £m
Current		
Trade receivables	108.4	109.2
Provisions against receivables	(1.8)	(3.9)
Net trade receivables	106.6	105.3
Amounts receivable from over-time contract customers (see note 18)	77.0	81.0
Other receivables	7.7	6.5
Prepayments	10.1	9.2
Accrued income	4.0	3.2
	205.4	205.2

Trade receivables do not carry interest. The average credit period on sale of goods is 30 days (2018: 36 days).

The Directors consider that the carrying amount of trade and other receivables approximates to their fair value.

The ageing profile of unprovided overdue trade receivables was as follows:

	2019 £m	Related provision £m	Total £m	2018 £m	Related provision £m	Total £m
1 to 3 months	13.4	-	13.4	18.0	(0.2)	17.8
4 to 6 months	2.8	-	2.8	1.4	-	1.4
7 to 9 months	0.6	(0.1)	0.5	0.8	(0.1)	0.7
Over 9 months	2.2	(1.7)	0.5	4.8	(3.6)	1.2
Total overdue	19.0	(1.8)	17.2	25.0	(3.9)	21.1

The Group makes provisions against its trade receivables based on expected credit losses where there are serious doubts as to future recoverability based on prior experience, on assessment of the current economic climate and on the length of time that the receivable has been overdue. All trade receivables that have been overdue for more than a year are provided for in full.

Movement in the provision for trade receivables was as follows:

	2019 £m	2018 £m
Current		ZIII
Balance at beginning of year	3.9	1.5
Foreign exchange differences	-	-
Increase in provision for trade receivables regarded as potentially uncollectable	0.5	2.6
Decrease in provision for trade receivables recovered during the year or provision utilised	(2.6)	(0.1)
Reclassified to held for sale (see note 30)	-	(0.1)
Balance at end of year	1.8	3.9

For the year ended 31 December 2019

continued

19 Trade and other receivables continued

Credit risk

Credit risk is defined as the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group mitigates this risk of financial loss by only dealing with creditworthy counterparties.

The credit risk on liquid funds and derivative financial instruments is limited because the counterparties are banks with high credit ratings assigned by international credit rating agencies.

While the Group has elements of concentration of credit risk, with exposure to a number of large counterparties and customers, the customers are mainly government agencies or multinational organisations with whom the Group has long-term business relationships. The Group has a small number of customers with individually significant amounts outstanding. These customers are considered to have low credit risk.

Ongoing credit evaluation is performed on the financial condition of accounts receivable and, when appropriate, action is taken to minimise the Group's credit risk.

The carrying amount of financial assets recorded in the financial statements (see note 22), net of any allowances for losses, represents the Group's maximum exposure to credit risk.

20 Trade and other payables

	2019	2018
Amounts included in current liabilities:	£m	£m
Trade payables	49.9	78.7
Amounts due to over-time contract customers (see note 18)	57.5	52.4
Other payables	22.2	20.6
Accruals	37.8	42.2
Deferred income	24.9	18.3
	192.3	212.2
Amounts included in non-current liabilities:		
Amounts due to over-time contract customers (see note 18)	9.8	11.1
Accruals and other payables	-	0.2
Deferred income	2.0	3.6
	11.8	14.9

The Directors consider that the carrying amount of trade and other payables approximates to their fair value.

21 Borrowings

	2019	2018
	£m	£m
Amounts due in less than one year:		
Bank loans	-	128.8
Unsecured loan notes	-	47.0
Lease liability	8.2	-
	8.2	175.8
Amounts due after more than one year:		
Bank loans	83.8	17.6
Unsecured loan notes	102.5	50.0
Government loans (see note 23)	9.5	10.4
Lease liability	33.0	-
	228.8	78.0
Total borrowings:		
Amount due for settlement within 12 months	8.2	175.8
Amount due for settlement after 12 months	228.8	78.0
	237.0	253.8

Included in total borrowings are syndication costs of £2.0m (2018: £2.4m), which are amortised over the duration of the loan. The Group's main financial covenants are that the ratio of net consolidated total borrowings/EBITDA is less than three, and that the net interest payable on borrowings is covered at least three times by EBITA.

22 Financial instruments and financial risk management

Derivative financial instruments

Exposure to currency and interest rate risks arises in the normal course of the Group's business. Derivative financial instruments are used to hedge exposure to all significant fluctuations in foreign exchange rates and interest rates.

Fair value measurements recognised in the balance sheet

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

+ Level 1 fair value measurements are those derived from quoted (unadjusted) active markets for identical assets or liabilities.

+ Level 2 fair value measurements are those derived from 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 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

All of Ultra's financial instruments have been assessed as Level 2 or Level 3. Further details on the Canadian government Strategic Aerospace and Defence Initiative (SADI) loan, which is classified as Level 3, are set out in note 24.

				2019
		Level 3 £m	Level 2 £m	Total £m
Financial assets at fair value		2111	2	2
Foreign exchange derivative financial instruments (through profit and loss)		_	4.9	4.9
Interest rate swap		_	-	-
Total		_	4.9	4.9
Financial liabilities at fair value				
Government loan (see note 23)		9.5	-	9.5
Foreign exchange derivative financial instruments (through profit and loss)		-	0.7	0.7
Total		9.5	0.7	10.2
				2010
		Level 3	Level 2	2018 Total
		£m	£m	£m
Financial assets at fair value				
Foreign exchange derivative financial instruments (through profit and loss)		-	0.1	0.1
Interest rate swap		-	0.3	0.3
Total		_	0.4	0.4
Financial liabilities at fair value				
Government loan (see note 23)		10.4	-	10.4
Foreign exchange derivative financial instruments (through profit and loss)		_	6.5	6.5
Total		10.4	6.5	16.9
	Current assets/(lia	bilities)	Non-current assets	/(liabilities)
	2019	2018	2019	2018
	£m	£m	£m	£m
Financial assets/(liabilities) carried at fair value through profit or loss				
Foreign exchange currency liabilities	(0.5)	(5.5)	(0.2)	(1.0)
Foreign exchange currency assets	3.2	-	1.7	0.1

For the year ended 31 December 2019

continued

22 Financial instruments and financial risk management continued

Financial assets

The financial assets of the Group were as follows:

	2019 £m	2018 £m
Cash and cash equivalents	82.2	96.3
Currency derivatives used for hedging and interest rate swap	4.9	0.4
Amounts receivable from over-time contract customers	90.7	103.6
Other receivables	7.7	6.5
Trade receivables	106.6	105.3
Accrued income	4.0	3.2

The Directors consider that the carrying amount for all financial assets approximates to their fair value.

Financial liabilities

The financial liabilities of the Group were as follows:

	2019 £m	2018 £m
Currency derivatives used for hedging	0.7	6.5
Bank loans and overdrafts	83.8	146.4
Loan notes	102.5	97.0
Government loans	9.5	10.4
Lease liabilities	41.2	-
Trade payables	49.9	78.7
Amounts due to over-time contract customers	67.3	63.5
Deferred consideration	2.3	2.4
Accruals	37.8	42.4
Other payables	22.2	20.6

The Directors consider that the carrying amount for all financial liabilities approximates to their fair value.

Liquidity risk

The Group maintains committed banking facilities with core banks to provide prudent levels of borrowing headroom.

The Group's banking facilities are provided by a small group of banks, led by The Royal Bank of Scotland. On 7 November 2017, the Group obtained a £300m revolving credit facility, £50m has an expiry date of November 2023 and £250m has an expiry date of November 2024. The facility incorporates an uncommitted £150m accordion. The facility is denominated in Sterling, US Dollars, Canadian Dollars, Australian Dollars and Euros and is used for balance sheet and operational needs. The Group repaid a \$165m term loan in the year.

All bank loans are unsecured. Interest was predominantly charged at 0.90% (2018: 0.96%) over base or contracted rate. At 31 December 2019, the Group had available £214m (2018: £280m) of undrawn, committed revolving credit facilities.

At 31 December 2019, the Group also has unsecured loan notes in issue to Prudential Investment Management Inc (Pricoa) of £50m with an expiry date of October 2025 (2018: £50m), and \$70m with an expiry date of January 2026 and January 2029 (2018: \$60m).

The Group is strongly cash-generative and the funds generated by operating companies are managed regionally to fund short-term local working capital requirements. Where additional funding is required, this is provided centrally through the Group's committed banking facilities.

The Group, through its Canadian subsidiary Ultra Electronics Tactical Communication Systems (TCS), participates in two Canadian programmes that provide government support in relation to the development of certain of its products. Further disclosure is provided in note 23.

A £5m overdraft and US\$2.5m overdraft are available for short-term working capital funding.

22 Financial instruments and financial risk management continued

The following table details the Group's remaining contractual maturity for its financial liabilities:

	Within 1 year £m	1 to 2 years £m	2 to 5 years £m	Over 5 years £m	Total £m
2019					
Bank loans and overdrafts	1.5	1.5	87.3	-	90.3
Loan notes	3.8	3.8	11.5	109.3	128.4
Government loans	-	2.2	3.9	3.4	9.5
Trade payables	49.9	-	-	-	49.9
Currency derivatives used for hedging and interest rate swap	0.5	0.1	0.1	-	0.7
Deferred consideration	-	-	2.3	-	2.3
Accruals	37.8	-	-	-	37.8
Other payables	22.2	-	-	-	22.2
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total
2018	£m	£m	£m	£m	£m
Bank loans and overdrafts	130.6	0.3	17.9	_	148.8
Loan notes	48.6	1.4	4.3	51.1	105.4
Government loans	_	_	_	10.4	10.4
Trade payables	78.7	_	-	_	78.7
Currency derivatives used for hedging and interest rate swap	5.5	0.6	0.4	_	6.5
Deferred consideration	0.1	-	2.3	-	2.4
Accruals	42.2	0.2	-	_	42.4
Other payables	20.6	_	-	_	20.6

The following table details the Group's contractual undiscounted cash inflows/(outflows) for its lease liabilities and lease subletting:

	Within 1 year £m	1 to 2 years £m	2 to 5 years £m	Over 5 years £m	Total £m
2019					
Lease liabilities	(10.0)	(9.1)	(19.0)	(9.8)	(47.9)
Subletting income	0.7	0.6	0.2	-	1.5

Capital risk management

The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximising the return to stakeholders through the optimisation of the debt and equity balance. The capital structure of the Group consists of debt, which includes the borrowings disclosed in note 21, cash and cash equivalents and equity attributable to equity holders of the parent, comprising issued capital, reserves and retained earnings as disclosed in the consolidated statement of changes in equity.

The Group is not subject to externally imposed capital requirements.

Currency risk

The Group uses currency derivatives in the form of forward currency contracts to hedge its foreign currency transaction risk. The currencies giving rise to this risk are primarily US Dollars and Canadian Dollars.

At 31 December 2019, the net fair value of the Group's currency derivatives is estimated to be an asset of approximately £4.2m (2018: liability £6.4m), comprising £4.9m assets (2018: £0.1m) and £0.7m liabilities (2018: £6.5m). The gain on derivative financial instruments included in the Group's consolidated income statement for the period was £10.6m (2018: gain £5.5m).

For the year ended 31 December 2019

continued

22 Financial instruments and financial risk management continued

The net notional or net contracted amounts of foreign currency-related forward sales contracts, classified by year of maturity are shown below.

	Not exceeding 1 year £m	Between 1 year and 5 years £m	Over 5 years £m	Total £m
2019				
US Dollars/Sterling	104.0	53.9	-	157.9
Euro/other currencies	(0.1)	(6.9)	-	(7.0)
Total	103.9	47.0	-	150.9
2018				
US Dollars/Sterling	66.8	24.3	_	91.1
Euro/other currencies	7.0	(8.4)	_	(1.4)
Total	73.8	15.9	_	89.7

Net investment hedges

As set out on page 154, from 1 January 2019 the Group revised its hedging strategy under IFRS 9 to reduce income statement volatility from re-valuation of US Dollar assets and liabilities held on the UK balance sheet; this has carried increasing US Dollar denominated assets from certain long-term programmes. From 1 January 2019, the net investment hedge was revised to eliminate this volatility. At the year end, the Group had net investments in US companies where the associated foreign currency translation risk was hedged by external borrowings in US Dollars. The net value of the external borrowings and the net US Dollar assets on the UK balance sheet do not exceed the net investments and meets the conditions required to qualify as effective hedges. The value of the net investment hedge was \$23m (2018; \$84m).

Interest rate risk

The Group held interest rate swaps until July 2019 to manage its exposure to interest rate movements on its bank borrowings. The interest rate swaps, denominated in US Dollars, had been entered into to achieve an appropriate mix of fixed and floating rate exposure reflecting the Group's policy. The swaps matured in July 2019 and had a fixed swap rate, including the bank margin, of 1.23%. The floating rates were US Dollar LIBOR. At the year end, the nominal amounts of the interest rate swaps were \$nil (2018: \$45m).

The interest rate swaps were designated effective cash flow hedges and the change in fair value is charged to equity. At 31 December 2019, the net fair value of interest rate swaps was £nil (2018: £0.3m). The amount recycled from the income statement during the year was £0.3m and has been credited to interest cost in the year (2018: £0.4m credited).

The Group has US\$70m of fixed rate debt with Pricoa at an interest rate of 4.54%, which is due for repayment in January 2026 and January 2029, and £50m of fixed rate debt with Pricoa at an interest rate of 2.87%, which is due for repayment in October 2025. The interest rate swaps and fixed rate Pricoa debt were entered into to achieve an appropriate mix of fixed and floating rate exposure reflecting the Group's policy.

The effective interest rates and repricing dates of the Group's financial assets and liabilities were as follows:

	Effective interest rate	Total £m	Within 1 year £m	1 to 2 years £m	2 to 5 years £m	5+ years £m
2019						
Cash and cash equivalents	0.70%	82.2	82.2	-	-	-
Loan notes	3.73%	102.5	-	-	-	102.5
Unsecured bank loans	1.74%	83.8	-	-	83.8	-
Government loans	4.43%	9.5	-	2.2	3.9	3.4
2018						
Cash and cash equivalents	0.57%	96.3	96.3	-	-	-
Loan notes	3.11%	97.0	47.0	-	-	50.0
Unsecured bank loans	2.46%	146.4	128.8	17.6	-	-
Government loans	4.43%	10.4	_	_	_	10.4

Market risk sensitivity analysis

Interest rate risk

During 2019, the Group's net borrowings were predominantly at floating interest rates. The Group has estimated the impact on the income statement of a 1% increase in market interest rates, from the average rates applicable during 2019. There is no significant difference between the amount recharged to the income statement and equity in the year.

22 Financial instruments and financial risk management continued

	Profit before tax £m
2019	1% change
Interest rate sensitivity	(1.4)
2018	
Interest rate sensitivity	(2.0)

Currency risks

The Group has estimated the impact on the income statement and equity of a 10% and 25% strengthening or weakening of average actual and transactional currency rates applicable during the year and a 10% and 25% change in the foreign exchange rates applicable for valuing foreign exchange derivative instruments.

	10% weakening	j of GBP	10% strengtheni	ng of GBP	25% weakening	j of GBP	25% strengtheni	ng of GBP
	Profit before tax	Equity	Profit before tax	Equity	Profit before tax	Equity	Profit before tax	Equity
	£m	£m	£m	£m	£m	£m	£m	£m
2019								
Transaction	7.6	7.6	(7.6)	(7.6)	22.9	22.9	(22.9)	(22.9)
P&L translation	7.8	7.3	(7.8)	(7.3)	19.5	21.9	(19.5)	(21.9)
Foreign exchange derivatives	(6.3)	(6.3)	12.8	12.8	(27.2)	(27.2)	23.2	23.2
Total foreign exchange	9.1	8.6	(2.6)	(2.1)	15.2	17.6	(19.2)	(21.6)
2018								
Transaction	5.5	5.5	(5.5)	(5.5)	16.4	16.4	(16.4)	(16.4)
P&L translation	4.6	4.1	(4.6)	(4.1)	11.5	12.3	(11.5)	(12.3)
Foreign exchange derivatives	(13.8)	(13.8)	0.8	0.8	(28.7)	(28.7)	9.0	9.0
Total foreign exchange	(3.7)	(4.2)	(9.3)	(8.8)	(0.8)	-	(18.9)	(19.7)

23 Government grants and loans

The Group, through its Canadian subsidiaries Ultra Electronics Tactical Communication Systems (TCS) and Ultra Electronics Maritime Systems (UEMS), participates in three Canadian programmes that provide government support in relation to the development of certain of its products.

Under the Strategic Aerospace and Defence Initiative (SADI), the Canadian Federal Government provides a long-term funding arrangement in respect of certain eligible research and development project costs. Under this arrangement, C\$31.8m was provided to TCS and will be reimbursed at favourable rates of interest over the period to 2032. Up to C\$8m will be provided to UEMS and reimbursed at favourable rates of interest over the period 2020 to 2033. The benefit of the below-market rate of interest has been calculated as the difference between the proceeds received and the fair value of the loans and has been credited to profit in the year.

The fair value of the loans has been calculated using a market interest rate for a similar instrument. The valuation used the discounted cash flow method and considered the value of expected payments using a risk-adjusted discount rate; the discount rate used was 18% for TCS and 15% for UEMS. For TCS, the amount repayable depends on future revenue growth of the TCS business to 2032 and will be between zero and x1.5 of the amounts received up to a maximum of C\$47.7m. For UEMS, the amount repayable depends on future revenue growth of the UEMS business from 2020 to 2033 and will be between x1.0 and x1.5 of the amounts received up until the end of the funding period in 2019. As at 31 December 2019, C\$3.5m (2018: C\$2.8m) had been received by UEMS. UEMS is requesting a four-year extension to the programme, which is currently under negotiation.

The significant unobservable inputs for this Level 3 financial instrument are: (i) whether, and by how much, TCS/UEMS revenues will grow during the periods to 2032/2033, and (ii) the specific years in which revenue will grow. There are significant inherent uncertainties in management's ability to forecast revenue over the following 15 years, particularly in later years. For TCS, if the compound annual revenue growth rate over the period from 2019 to 2032 was 3.0% higher than assumed in the valuation model, then the net present value of the liability as at 31 December 2019 would increase by C\$3.7m (£2.2m). If the forecast revenue growth occurs in earlier years than envisaged, then the net present value of the liability will increase; if the revenue growth increases were to occur one year earlier than assumed in the valuation model, then the net present value of the liability as at 31 December 2019 would increase by C\$0.2m (£0.1m).

TCS has also benefited from an Investissement Quebec (IQ) research and development programme, whereby IQ shared in the cost of research and development of certain specified new products. Under this arrangement, from 2010 to 2014 IQ financed C\$8.8M of eligible costs associated with these specified projects. The funding is repayable under a royalty arrangement over the period of 2014 to 2021, based on sales of specified products. As there is no minimum repayment, funding received in respect of the IQ programme has been included in the income statement. Royalties repaid have also been included as costs in the income statement in the period where they have been incurred.

Notes to accounts – Group

For the year ended 31 December 2019

continued

23 Government grants and loans continued

Amounts recognised in the financial statements in respect of these programmes were as follows:

	2019 £m	2018 £m
Fair value of loan brought forward	10.4	7.5
Contributions	(2.8)	1.6
Interest charged to finance costs	1.8	1.4
Foreign exchange differences	0.1	(0.1)
Fair value of loan carried forward	9.5	10.4
Government grants credited to profit in the year		
	2019	2018
	£m	£m

Canadian Government

24 Deferred tax

The following are the major deferred tax liabilities and assets recognised by the Group and movements thereon during the current and prior reporting period.

0.3

0.2

	Accelerated tax depreciation* £m	Employee share options costs £m	Derivatives £m	Retirement benefit obligations £m	Goodwill £m	Other £m	Total £m
At 1 January 2018	(4.0)	-	(0.2)	14.1	(11.6)	6.0	4.3
Credit/(charge) to income	(0.4)	_	1.2	(0.8)	-	2.0	2.0
Credit/(charge) to other comprehensive income	-	_	-	(0.7)	-	_	(0.7)
Credit direct to equity	-	_	_	-	-	2.2	2.2
Exchange differences	(0.1)	_	-	-	-	0.5	0.4
At 1 January 2019	(4.5)	-	1.0	12.6	(11.6)	10.7	8.2
Credit/(charge) to income	(1.9)	0.6	(1.7)	(1.7)	(1.4)	(1.0)	(7.1)
Credit to other comprehensive income	-	_	-	1.6	-	_	1.6
Credit/(charge) direct to equity	(0.6)	0.7	-	-	-	1.2	1.3
Exchange differences	0.2	_	-	-	0.1	(0.6)	(0.3)
Reclassification	-	_	-	-	-	(0.2)	(0.2)
At 31 December 2019	(6.8)	1.3	(0.7)	12.5	(12.9)	10.1	3.5
						2019 £m	2018 £m
Non-current assets						10.0	18.7
Current assets						13.0	-
Current liabilities						(3.2)	-
Non-current liabilities						(16.3)	(10.5)
						3.5	8.2

* Relates to property, plant and equipment and intangible assets

Deferred tax assets and liabilities are offset where the Group has a legally enforceable right to do so.

In 2018 we elected to present all deferred tax assets and liabilities as non-current in line with IAS 1.56. In order to provide more useful information to the users of the accounts, in 2019 we have elected to present deferred tax assets and liabilities split between current and non-current. If this same approach was adopted in 2018, then current deferred tax assets of £12.2m and current deferred tax liabilities of £0.3m would have been separately disclosed.

Unrecognised deferred tax assets

Deferred tax assets, in excess of offsetting tax liabilities, are recognised for loss carry forwards and deductible temporary differences to the extent that the utilisation against future taxable profits is probable. UK deferred tax assets of £2.1m (2018: £1.2m) and a US deferred tax asset of £3.7m (2018: £3.1m) have not been recognised, as their recovery is uncertain.

24 Deferred tax continued

Current tax assets in the consolidated balance sheet consists of:

	2019 £m	2018 £m
Current tax	6.5	8.1
Deferred tax	13.0	-
	19.5	8.1

Current tax liabilities in the consolidated balance sheet consists of:

	2019 £m	2018 £m
Current tax	(1.5)	(5.0)
Deferred tax	(3.2)	-
	(4.7)	(5.0)

25 Provisions

		Contract- related		
	Warranties £'000	provisions £'000	Other £'000	Total £'000
At 1 January 2019	6.3	6.5	6.7	19.5
Reclassified from over-time contract balances (see note 18)	_	5.9	-	5.9
Adoption of IFRS 16 (see note 36)	_	-	(0.9)	(0.9)
Created	1.7	9.7	2.0	13.4
Reversed	(1.7)	(1.3)	(1.2)	(4.2)
Utilised	(0.9)	(6.5)	(0.4)	(7.8)
Exchange differences	(0.1)	(0.4)	_	(0.5)
Reclassified to held for sale (see note 30)	(0.5)	-	(0.1)	(0.6)
At 31 December 2019	4.8	13.9	6.1	24.8
Included in current liabilities	3.3	9.6	3.7	16.6
Included in non-current liabilities	1.5	4.3	2.4	8.2
	4.8	13.9	6.1	24.8

Warranty provisions are based on an assessment of future claims with reference to past experience. Such costs are generally incurred within two years after delivery. Contract-related provisions – for example, including provisions for agent fees – are utilised over the period as stated in the contract to which the specific provision relates. To provide greater clarity to readers of the financial statements, all provisions relating to contract execution and delivery, which have previously been included within the over-time contract balances, have been reclassified into the contract-related provisions disclosure; the £5.9m reclassification is reflected above. Other provisions include reorganisation costs, deferred consideration and dilapidation costs. Reorganisation costs will be incurred over the period of the reorganisation, which is typically up to two years. Contingent consideration is payable when earnings targets are met. Dilapidations will be payable at the end of the contracted life, which is up to 15 years.

Notes to accounts – Group For the year ended 31 December 2019

continued

26 Share capital and share options

	2019	2019		
	No.	£m	No.	£m
Authorised:				
5p ordinary shares	90,000,000	4.5	90,000,000	4.5
Allotted, called-up and fully paid:				
5p ordinary shares	70,964,527	3.5	71,470,065	3.6

During 2019, the Company purchased and cancelled 634,996 shares (2018: 6,288,127). The shares were acquired at an average price of £13.41 per share (2018: £14.52), with prices ranging from £12.80 to £14.02 (2018: £12.87 to £16.90). The total cost of £8.6m (2018: £91.9m), including fees and stamp duty of £0.1m (2018: £0.6m), has been transferred to retained earnings. The total reduction in paid-up capital was £32,000 (2018: £0.3m).

129,458 ordinary shares having a nominal value of £6,473 were allotted during the year under the terms of the Group's various share option schemes. The aggregate consideration received was £2.2m.

The share premium account represents the premium arising on the issue of equity shares.

The "own shares reserve" represents the cost of shares in Ultra Electronics Holdings plc purchased in the market and held by the Ultra Electronics Employee Trust to satisfy options under the Group's Long-Term Incentive Plan ("LTIP") share schemes. At 31 December 2019, the number of own shares held was 131,542 (2018: 235,247).

Share options

The Group's equity-settled share-based payments are measured at fair value at the date of the grant. The fair value determined at the grant date is expensed on a straight-line basis over the vesting period, based on the Group's estimate of shares that will eventually vest. The Group recognised total expenses of £1,980,000 (2018: £1,493,000) in relation to equity-settled share-based payment transactions. Expected volatility was determined by calculating the historical volatility of the Group's share price.

During the year to 31 December 2019, the Group operated the following equity-settled share option schemes:

1. Savings-Related Share Option Schemes, Company Share Option Plan and Executive Share Option Scheme

A Savings-Related Share Option Scheme is open to all UK, US and Canadian employees and provides for a purchase price equal to the average of the daily average market price before the grant less 10%. The vesting period is two to five years. If the options remain unexercised after a period ranging from three to six months from the date of maturity, the options expire. Options are forfeited if the employee leaves the Group before the options vest.

The Company Share Option Plan provides share options for nominated employees in the UK. The purchase price is set at a mid-market price on the date of the grant. This is an approved scheme and vesting is unconditional. Options vest after three years and lapse after 10 years from the date of the grant.

The Executive Share Option Scheme provides share options for nominated employees in the UK, the USA and Canada. The purchase price is set at a mid-market price on the date of the grant. This is an unapproved scheme and vesting is unconditional. Options vest after three years and lapse after seven years from the date of the grant.

The number and weighted average exercise price of share options for all share-based payment arrangements (excluding LTIP) are as follows:

	Weighted average exercise price (£) 2019	Number of options 2019	Weighted average exercise price (£) 2018	Number of options 2018
Beginning of year	16.81	1,046,659	18.40	882,035
Granted during the year	16.08	324,784	14.60	309,271
Exercised during the year	16.92	(258,038)	15.44	(39,404)
Expired during the year	16.87	(142,648)	16.92	(105,243)
Outstanding at the end of the year	16.53	970,757	16.81	1,046,659
Exercisable at the end of the year	17.34	198,208	17.20	309,029
		2019		2018
Range of exercise price of outstanding options (£)		14.45 - 21.91		14.45 - 21.91
Weighted average remaining contracted life (years)		4.28		3.74
Weighted average fair value of options granted (\pounds)		3.22		2.84

26 Share capital and share options continued

2. Long-Term Incentive Plan

Details in relation to the Ultra Electronics Long-Term Incentive Plan 2007 awards to Executive Directors are included in the Directors' Remuneration Report on pages 74–91. In April 2019, LTIPs were also awarded to nominated employees and are subject to the same four performance metrics (see page 87) as the Executive Director awards. The awards will vest in April 2022 upon achievement of those performance targets and are conditional upon continued employment.

The number of the LTIPs are as follows:

	Number of options 2019	Number of options 2018
Beginning of year	683,006	571,135
Granted during the year	403,612	305,514
Exercised during the year	(3,692)	(15,277)
Expired during the year	(179,294)	(178,366)
Outstanding at the end of the year	903,632	683,006
	2019	2018
Weighted average remaining contracted life (years)	1.60	2.74
Weighted average fair value of options granted (£)	12.60	12.41

The weighted average contracted life in 2019 is less than three years due to the 2018 issuances upon appointment of the new Chief Executive and expiration of LTIPs granted in 2017 following changes to the executive management team.

27 Notes to the cash flow statement

	2019 £m	2018 £m
Operating profit	94.2	65.3
Adjustments for:		
Depreciation of property, plant and equipment	9.7	8.9
Amortisation of intangible assets	28.6	32.4
Amortisation of leased assets	9.3	_
Impairment charge	-	7.6
Cost of equity-settled employee share schemes	0.8	1.5
Adjustment for pension funding	(10.8)	(10.3)
Loss on disposal of property, plant and equipment	0.1	0.1
Increase in provisions	5.5	4.9
Operating cash flow before movements in working capital	137.4	110.4
Increase in inventories	(5.7)	(10.2)
Increase in receivables	(2.9)	(1.8)
(Decrease)/increase in payables	(13.9)	4.0
Cash generated by operations	114.9	102.4
Income taxes paid	(9.5)	(4.6)
Interest paid	(9.3)	(11.1)
Finance lease interest paid	(1.5)	-
Net cash from operating activities	94.6	86.7

The total cash outflow in 2019 relating to leases was £9.2m, of which £0.2m related to low-value or short-term leases not recognised on the balance sheet.

Notes to accounts – Group

For the year ended 31 December 2019

continued

27 Notes to the cash flow statement continued

Reconciliation of net movement in cash and cash equivalents to movements in net debt:

	2019 £m	2018 £m
Net increase in cash and cash equivalents	(10.5)	(55.0)
Cash inflow from movement in debt and finance leasing	55.3	(17.6)
Change in net debt arising from cash flows	44.8	(72.6)
Loan syndication costs	0.3	0.7
Lease liability	(41.2)	-
Amortisation of finance costs of debt	(0.7)	(0.8)
Translation differences	(0.5)	(10.3)
Movement in net debt in the year	2.7	(83.0)
Net debt at start of year	(157.5)	(74.5)
Net debt at end of year	(154.8)	(157.5)

Net debt comprised the following:

	2019 £m	2018 £m
Cash and cash equivalents	82.2	96.3
Borrowings	(237.0)	(253.8)
	(154.8)	(157.5)

Cash and cash equivalents comprise cash at bank and other short-term highly liquid investments with a maturity of three months or less.

Reconciliation of changes in financing liabilities:

	2019 £m	2018 £m
Borrowings at start of year	(253.8)	(224.0)
Repayments of borrowings	315.3	181.3
Proceeds from borrowings	(259.9)	(199.0)
Loan syndication costs	0.3	0.7
Amortisation of finance costs of debt	(0.7)	(0.8)
Lease liability recognition	(41.2)	-
Translation differences	3.0	(12.0)
Borrowings at end of year	(237.0)	(253.8)

28 Other financial commitments

a) Capital commitments

At the end of the year capital commitments were:

	2019 £m	2018 £m
Contracted but not provided	1.3	1.0

28 Other financial commitments continued

b) Lease commitments

At 31 December 2018, the Group had outstanding commitments for future minimum lease payments under non-cancellable operating leases, which fall due as follows:

	2018 £m
Within one year	10.4
Between one and five years	22.6
After five years	3.9
	36.9

IFRS 16 Leases standard came into effect on 1 January 2019. IFRS 16 requires that all leases and the related rights and obligations should be recognised on the lessee's balance sheet, unless the lease is less than one year in length or is for a low-value asset. Leases that do not meet these criteria are expensed on a straight-line basis. See note 38 for more details on IFRS 16.

29 Retirement benefit schemes

Some UK employees of the Group are members of the Ultra Electronics Limited defined benefit scheme which was established on 1 March 1994. The scheme was closed to new members in 2003. The scheme is a final salary scheme with the majority of members accruing 1/60th of their final pensionable earnings for each year of pensionable service, however; the scheme was closed to future benefit accrual from 5 April 2016. A defined contribution plan was introduced for other employees and new joiners in the UK. The latest full actuarial valuation of the defined benefit scheme was carried out as at 5 April 2019. The Group also operates two defined contribution schemes for overseas employees. In addition to these schemes, the Group's Tactical Communication Systems business based in Montreal, Canada, has three defined benefit schemes and the Swiss business of the Forensic Technology group has a defined benefit scheme.

Defined contribution schemes

The total cost charged to income in respect of the defined contribution schemes was £9.9m (2018: £9.7m).

Defined benefit schemes

All the defined benefit schemes were actuarially assessed at 31 December 2019 using the projected unit method.

In the UK, Ultra Electronics Limited sponsors the Ultra Electronics Pension Scheme, a funded defined benefit pension scheme. The scheme is administered within a trust which is legally separate from the Company. Trustees are appointed by both the Company and the scheme's membership and act in the interests of the scheme and all relevant stakeholders, including the members and the Company. The Trustees are also responsible for the investment of the scheme's assets.

This scheme provides pensions and lump sums to members on retirement and to their dependants on death.

The Trustees are required to use prudent assumptions to value the liabilities and costs of the scheme whereas the accounting assumptions must be best estimates.

Responsibility for making good any deficit within the scheme lies with the Company and this introduces a number of risks for the Company. The major risks are: interest rate risk, inflation risk, investment risk and longevity risk. The Company and Trustees are aware of these risks and manage them through appropriate investment and funding strategies. The Trustees manage governance and operational risks through a number of internal controls policies, including a risk register.

Investment strategy

The investment strategy is set by the Trustee of the scheme. The current strategy is broadly split into growth and matching portfolios. The growth portfolio is primarily invested in equities, property, diversified growth funds, private equity and private credit. The matching portfolio is invested primarily in bonds, through the absolute return bonds holding, and liability driven investment (LDI) funds. Part of the investment objective of the scheme is to minimise fluctuations in the scheme's funding levels due to changes in the value of the liabilities. This is primarily achieved through the use of the LDI funds that aim to hedge movements in the liabilities due to changes in interest rate and inflation expectations. Currently, the scheme targets hedging of around 65% on the technical provisions funding measure to both interest rate and inflation expectation changes. LDI primarily involves the use of government bonds and derivatives such as interest rate and inflation swaps. The main risk is that the investments held move differently to the liability exposures; this risk is managed by the Trustee, its advisers and the scheme's LDI manager, who regularly assess the position.

The assets held are also well diversified, across asset classes and investment managers. This reduces the risk of drops in the value of individual asset classes, or a particular manager underperforming its investment objectives, having a negative impact on the funding position of the scheme. The investment performance and liability experience are regularly reviewed by the Trustee, and the Trustee will consult with the Company over any changes to the investment strategy.

Rather than holding the underlying assets directly, the scheme invests in pooled investment vehicles managed by professional external investment managers, whom the Trustee has appointed with the help of its investment advisers. The equity and diversified growth fund valuations are based on quoted market prices, while the property, private equity, private credit, absolute return bonds and LDI are primarily unquoted. All valuations are provided by the respective investment manager.

Notes to accounts – Group

For the year ended 31 December 2019

continued

29 Retirement benefit schemes continued

GMP Equalisation

Following a High Court judgment on 26 October 2018, it became apparent across the UK pension industry that equalisation was required with respect to Guaranteed Minimum Pensions ("GMPs"). Scheme benefits earned in the period 17 May 1990 to 5 April 1997 may be affected by the requirement to equalise GMPs. It will take a considerable time for trustees and employers to decide on the approach for GMP equalisation, gather data, calculate the new benefits and cost, and ultimately make payments to members. The initial estimate for the Ultra Electronics Limited defined benefit scheme was that the impact was £3.2m; this was recorded as a debit to the income statement in 2018 with a corresponding increase in scheme liabilities. There have been no changes in estimates in 2019.

Valuation

The scheme is subject to regular actuarial valuations, which are usually carried out every three years. The last actuarial valuation of the scheme was on 5 April 2019. The next actuarial valuation is due to be carried out with an effective date of 5 April 2022. These actuarial valuations are carried out in accordance with the requirements of the Pensions Act 2004 and so include deliberate margins for prudence. This contrasts with these accounting disclosures, which are determined using best estimate assumptions.

The results of the 5 April 2019 valuation have been projected to 31 December 2019 by a qualified, independent actuary. The figures in the following disclosure were measured using the projected unit method.

Key financial assumptions used in the valuation of these schemes were as follows:

	UK 2019	Canada 2019	Switzerland 2019	UK 2018	Canada 2018	Switzerland 2018
Discount rate	1.95%	3.00%	0.00%	2.80%	3.75%	0.90%
Inflation rate – RPI	3.00%	3.00%	0.90%	3.20%	3.20%	1.10%
Inflation rate – CPI	2.20%	2.20%	0.90%	2.20%	2.20%	1.10%
Expected rate of salary increases	n/a	3.45%	1.00%	n/a	3.45%	1.00%
Future pension increases (pre 6/4/08)	2.85%	n/a	0.00%	2.95%	n/a	n/a
Future pension increases (post 6/4/08)	1.85%	n/a	0.00%	1.95%	n/a	n/a

For each of these assumptions there is a range of possible values. Relatively small changes in some of these variables can have a significant impact on the level of the total obligation. For the UK scheme, a 0.5% increase in the inflation assumption to 3.50% and a 0.5% decrease in the discount rate to 1.45% would increase the scheme's liabilities by 5.6% and 9.3% respectively. If the life expectancy of members was to increase by one year, the scheme liabilities would increase by 4.4%. The average duration of the scheme liabilities is 17 years (2018: 18 years).

The assumptions used are provided by Willis Towers Watson as Company advisers, and also by reference to the Bank of England gilt curve at a duration appropriate to the scheme's liabilities of 17 years.

The key demographic assumption used was in relation to the mortality rates of current and future pensioners. Due to the size of the scheme the mortality rates were based on standard tables, namely:

Current pensioners – males	95% of SAPS S3PMA with CMI 2018 projections and a 1.25% floor from 2013 (UK only)
Current pensioners – females	101% of SAPS S3PFA with CMI 2018 projections and a 1.25% floor from 2013 (UK only)
Future pensioners – males	95% of SAPS S3PMA with CMI 2018 projections and a 1.25% floor from 2013 (UK only)
Future pensioners – females	101% of SAPS S3PFA with CMI 2018 projections and a 1.25% floor from 2013 (UK only)

The mortality assumptions used in the valuation of the UK scheme make appropriate allowance for future improvements in longevity and are set out below:

	2019	2018
Current pensioners (at 65) – males	22 years	23 years
Current pensioners (at 65) – females	24 years	26 years
Future pensioners (at 65) – males	24 years	24 years
Future pensioners (at 65) – females	25 years	27 years

29 Retirement benefit schemes continued

Amounts recognised in the income statement in respect of the Group's defined benefit schemes were as follows:

	UK 2019 £m	Canada 2019 £m	Switzerland 2019 £m	Total 2019 £m	UK 2018 £m	Canada 2018 £m	Switzerland 2018 £m	Total 2018 £m
Current service cost	-	0.1	0.3	0.4	-	0.1	0.3	0.4
Administration expenses	-	0.1	-	0.1	-	0.1	_	0.1
Interest on pension scheme liabilities	9.7	0.4	0.1	10.2	9.1	0.4	_	9.5
GMP equalisation	-	-	-	-	3.2	_	_	3.2
Past service cost	-	-	(0.2)	(0.2)	-	-	-	-
Expected return on pension scheme assets	(7.8)	(0.4)	(0.1)	(8.3)	(7.2)	(0.4)	_	(7.6)
Charge	1.9	0.2	0.1	2.2	5.1	0.2	0.3	5.6

Of the current service cost for the year, £0.1 million (2018: £0.1 million) has been included in cost of sales, and £0.3 million (2018: £0.3 million) has been included in administrative expenses.

Actuarial gains and losses have been reported in the statement of comprehensive income.

The amount included in the balance sheet arising from the Group's obligations in respect of its defined benefit retirement schemes is as follows:

	UK 2019 £m	Canada 2019 £m	Switzerland 2019 £m	Total 2019 £m	UK 2018 £m	Canada 2018 £m	Switzerland 2018 £m	Total 2018 £m
Fair value of scheme assets	315.2	8.0	6.5	329.7	281.7	9.6	6.4	297.7
Present value of scheme liabilities	(386.4)	(8.4)	(8.2)	(403.0)	(353.1)	(10.1)	(7.5)	(370.7)
Scheme deficit	(71.2)	(0.4)	(1.7)	(73.3)	(71.4)	(0.5)	(1.1)	(73.0)
Related deferred tax asset	12.1	0.1	0.3	12.5	12.3	0.1	0.2	12.6
Net pension liability	(59.1)	(0.3)	(1.4)	(60.8)	(59.1)	(0.4)	(0.9)	(60.4)

Movements in the present value of defined benefit obligations during the year were as follows:

	5	9	5					
	UK	Canada	Switzerland	Total	UK	Canada	Switzerland	Total
	2019	2019	2019	2019	2018	2018	2018	2018
	£m	£m	£m	£m	£m	£m	£m	£m
Present value of obligation at 1 January	(353.1)	(10.1)	(7.5)	(370.7)	(371.3)	(10.7)	(7.0)	(389.0)
Current service cost	-	(0.1)	(0.3)	(0.4)	_	(0.1)	(0.3)	(0.4)
Interest cost	(9.7)	(0.4)	(0.1)	(10.2)	(9.1)	(0.4)	_	(9.5)
Actuarial gains and losses	(38.7)	(0.6)	(1.2)	(40.5)	16.4	0.2	0.1	16.7
Exchange difference	-	-	0.2	0.2	_	0.3	(0.4)	(0.1)
Insured pensioner adjustment	-	-	-	-	_	(0.1)	_	(0.1)
GMP equalisation	-	-	-	-	(3.2)	-	_	(3.2)
Past service cost	-	-	0.2	0.2	-	-	-	-
Liabilities extinguished on settlements	-	2.3	-	2.3	-	-	-	-
Benefits paid	15.1	0.5	0.5	16.1	14.1	0.7	0.1	14.9
Present value of obligation								
at 31 December	(386.4)	(8.4)	(8.2)	(403.0)	(353.1)	(10.1)	(7.5)	(370.7)
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Notes to accounts – Group For the year ended 31 December 2019

continued

29 Retirement benefit schemes continued

Movements in the fair value of scheme assets during the year were as follows:

	UK	Canada	Switzerland	Total	UK	Canada	Switzerland	Total
	2019 £m	2019 £m	2019 £m	2019 £m	2018 £m	2018 £m	2018 £m	2018 £m
Fair value at 1 January	281.7	9.6	6.4	297.7	289.8	10.6	5.9	306.3
Expected return on scheme assets	7.8	0.4	0.1	8.3	7.2	0.4	_	7.6
Actuarial gains and losses	30.4	0.5	0.3	31.2	(11.2)	(0.9)	_	(12.1)
Exchange differences	-	-	(0.1)	(0.1)	-	(0.3)	0.3	_
Employer contributions	10.4	0.4	0.3	11.1	10.0	0.5	0.3	10.8
Insured pensioner adjustment	-	-	-	-	_	0.1	-	0.1
Assets distributed on settlements	-	(2.3)	-	(2.3)	_	_	-	_
Administration expenses	-	(0.1)	-	(0.1)	-	(0.1)	-	(0.1)
Benefits paid	(15.1)	(0.5)	(0.5)	(16.1)	(14.1)	(0.7)	(0.1)	(14.9)
Fair value at 31 December	315.2	8.0	6.5	329.7	281.7	9.6	6.4	297.7
Scheme assets were as follows:								
	UK	Canada	Switzerland	Total 2019	UK 2018	Canada 2018	Switzerland	Total 2018
	2019 £m	2019 £m	2019 £m	2019 £m	2018 £m	2018 £m	2018 £m	2018 £m
Fair value:								
Equities	73.0	2.6	2.2	77.8	73.9	2.3	2.1	78.3
Bonds	-	5.0	1.7	6.7	_	4.6	1.7	6.3
Property	26.0	-	0.9	26.9	25.2	_	1.0	26.2
Other assets	15.3	0.4	1.4	17.1	0.6	2.7	1.3	4.6
Other investment funds:								
Absolute return	86.8	-	0.3	87.1	83.6	_	0.3	83.9
LDI	96.1	-	-	96.1	82.8	_	-	82.8
Multi-asset credit	18.0	-	-	18.0	15.6	-	_	15.6
	315.2	8.0	6.5	329.7	281.7	9.6	6.4	297.7

The analysis of the actuarial loss in the consolidated statement of comprehensive income was as follows:

	UK 2019 £m	Canada 2019 £m	Switzerland 2019 £m	Total 2019 £m	UK 2018 £m	Canada 2018 £m	Switzerland 2018 £m	Total 2018 £m
Actual return less expected return on pension scheme assets	30.4	0.5	0.3	31.2	(11.2)	(0.9)	_	(12.1)
Experience gains arising on scheme liabilities	(7.3)	0.1	(0.1)	(7.3)	(3.7)	_	(0.1)	(3.8)
Changes in assumptions underlying the present value of the scheme liabilities	(31.4)	(0.7)	(1.1)	(33.2)	20.1	0.2	0.2	20.5
	(8.3)	(0.1)	(0.9)	(9.3)	5.2	(0.7)	0.1	4.6

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29 Retirement benefit schemes continued

Cumulative actuarial losses, net of deferred tax, recognised in the consolidated statement of comprehensive income at 31 December 2019 were £78.2 million (2018: £68.9 million). The five-year history of experience adjustments is as follows:

	2019 £m	2018 £m	2017 £m	2016 £m	2015 £m
Present value of defined benefit obligations	(403.0)	(370.7)	(389.0)	(400.5)	(322.4)
Fair value of scheme assets	329.7	297.7	306.3	287.3	237.6
Scheme deficit	(73.3)	(73.0)	(82.7)	(113.2)	(84.8)
Experience adjustments on scheme liabilities	(7.3)	(3.8)	(0.8)	4.0	-
Percentage of scheme liabilities	(1.8%)	(1.0%)	(0.2%)	1.0%	-
Experience adjustment on scheme assets	31.2	(12.1)	15.3	40.7	(7.9)
Percentage of scheme assets	9.5%	(4.1%)	5.0%	14.2%	(3.3%)

The amount of contributions expected to be paid to defined benefit schemes per annum is £11.0m until March 2025.

30 Acquisitions and disposals

Disposals

The Aerospace & Infrastructure division disposed of the Airport Systems business on 1 February 2019 to ADB SAFEGATE. The Communications & Security division disposed of Corvid Paygate Limited on 24 June 2019 to Jonas Computing (UK) Limited. The assets and liabilities of Corvid Paygate Limited were not material to the Group. The impact of these disposals is as follows:

	2019 £m
Goodwill and intangible fixed assets	22.1
Property, plant and equipment	1.5
Leased assets	1.4
Inventories	0.2
Trade and other receivables	7.6
Trade and other payables	(9.9)
Lease liability	(1.5)
Total	21.4
Proceeds received	(22.0)
Gain on disposal	(0.6)

In addition, £0.4m was received in 2019 in relation to the final payment from the sale of the Fuel Cell business in December 2018.

In October 2019, agreement was reached to dispose of the Communications & Security division's small Ottawa-based electronic intelligence business to private investors; in accordance with IFRS 5 the assets were classified as held for sale and written down to their recoverable amount in 2019. This resulted in a loss of £1.5m recognised in the 2019 income statement, which is calculated as per the table below. The disposal completed in January 2020.

	£m
Property, plant and equipment	-
Trade and other receivables	0.7
Trade and other payables	(1.1)
Cash	1.9
Total	1.5
Proceeds received	-
Loss arising upon classification of held for sale	1.5

The net loss arising from the assets disposed of in the year (£0.6m gain) and the loss arising on classification of held for sale (£1.5m loss) was £0.9m.



Notes to accounts – Group

For the year ended 31 December 2019

continued

30 Acquisitions and disposals continued

As at 31 December 2019, assets and liabilities have been classified as held for sale for net assets planned to be disposed of in the following 12 months, which are shown in the table below at their fair value. All of these assets and liabilities are held within the Communications & Security division. The assets and liabilities of the Ottawa electronic intelligence business disposed of in January 2020 were not material to the Group and were classified as held for sale in these accounts at the impaired value.

Goodwill and intangible fixed assets Property, plant and equipment Leased assets Inventories	2019 £m
Leased assets Inventories	3.4
Inventories	1.1
	1.1
Trade and other was exited by	2.5
Trade and other receivables	3.4
Total assets classified as held for sale	11.5
Trade and other payables	(5.3)
Total liabilities classified as held for sale	(5.3)
Net assets classified as held for sale	6.2

31 Related party transactions

Remuneration of key management personnel

The remuneration of key management personnel, which includes the Directors of the Group, is set out below in aggregate for each of the categories specified in IAS 24: Related Party Disclosures. Further information about the remuneration of individual Directors is provided in the audited part of the Directors' Remuneration Report on page 85.

	2019 £m	2018 £m
Short-term employee benefits	5.1	3.3
Post-employment benefits	0.4	0.3
Termination benefits	0.2	-
Share-based payments	4.3	3.7
	10.0	7.3

32 Non-controlling interests

There is a 5% non-controlling interest in the Group's Corvid Holdings Limited subsidiary. Before any intra-Group eliminations, the consolidated revenue of the subsidiary in the year was £3.7m (2018: £4.3m), the gain was £1.4m (2018: £0.6m loss) and the net assets were £3.8m (2018: £2.3m). Sales to Group companies were £2.4m (2018: £2.4m).

During 2019, Corvid Paygate Limited was disposed of, which formed part of the Corvid Holdings Limited group. Refer to note 30 for more details. The gain on disposal has been included in the Corvid Holdings Limited gain above.

33 Contingent liabilities

The Group has entered into a number of guarantee and performance bond arrangements in the normal course of business, totalling £55.1m (2018: £50.6m).

The nature of much of the contracting work performed by the Group means that there are occasional contractual issues, variations and renegotiations that arise. In addition, the Group is, from time to time, party to legal proceedings and claims which arise in the ordinary course of business. The Oman Airport IT contract between the Sultanate of Oman, Ministry of Transport & Communications and Ithra (Ultra Electronics in collaboration with Oman Investment Corporation LLC, the legal entity established with the sole purpose of delivering that contract and which was placed into voluntary liquidation in March 2015) was terminated in February 2015 and there are various proceedings in relation to that contract and its termination. There remains significant uncertainty regarding the likely outcome of these proceedings and it is not possible to reliably estimate the financial effect that may result from the ultimate outcome. Further, as previously announced, investigations associated with conduct of business issues in Algeria and the Philippines are ongoing, and Ultra continues to cooperate with the relevant authorities. It is not yet possible to estimate the time scale in which these investigations might be resolved, or to reliably predict their outcomes.

As disclosed in note 10, the Company has benefited in the current year, and previous years, from a certain exemption in the UK Controlled Foreign Company ("CFC") rules. On 2 April 2019, the European Commission concluded that the exemption, as applicable for years from 2013 through 2018, partly constituted illegal state aid. Ultra, the UK Government and other affected taxpayers have separately appealed this decision to the EU General Court. In common with other UK-based international companies whose arrangements were in line with UK CFC legislation, which applied up to 2018, HMRC may seek to recover alleged illegal aid from Ultra pending the resolution of EU litigation. HMRC initiated enquiries during 2019 in respect of this issue but to date no substantive progress has been made and the range of potential outcomes remains nil to £21m. No provision for this potential liability is made in these financial statements as it is not clear what, if any, the eventual financial result will be.

34 Additional information as required by Listing Rules Requirement 9.8.4

+ Long-term incentive schemes – see Directors' Remuneration Report

- + Allocation of equity securities for cash see note 27
- + Election of independent Directors see Directors' Report on page 92

+ Contractual arrangements - see Directors' Report on page 92

- + Details of independent Directors see Corporate Governance Report on pages 52–53
- + Substantial shareholders see Directors' Report on page 92

No profit forecasts are issued by the Group and no Directors have waived any current or future emoluments. No shareholders have waived or agreed to waive dividends. None of the shareholders are considered to be a Controlling Shareholder (as defined in Listing Rules 6.1.2A).

35 Related undertakings

The Company owns either directly or indirectly the ordinary share capital of the following undertakings:

Company name	Country incorporated	% owned	Direct/Indirect (Group interest)
3e Technologies International Inc.	United States	100%	Indirect (Group interest)
AEP Networks Inc.	United States	100%	Indirect (Group interest)
AEP Networks Limited	Ireland	100%	Direct
AEP Networks Limited	United Kingdom	100%	Indirect (Group interest)
CORVID Holdings Limited	Guernsey	95%	Direct
CORVID Protect Holdings Limited	Guernsey	95%	Indirect (Group interest)
DF Group Limited	United Kingdom	100%	Direct
EMS Development Corporation	United States	100%	Indirect (Group interest)
ERAPSCO	United States	50%	Indirect (Group interest)
EW Simulation Technology Limited	United Kingdom	100%	Indirect (Group interest)
Flightline Electronics Inc.	United States	100%	Indirect (Group interest)
Forensic Technology (Europe) Limited	Ireland	100%	Direct
Forensic Technology AEC Thailand Limited	Thailand	100%	Direct
Forensic Technology Inc.	United States	100%	Direct
Forensic Technology Mexico S. de RL. de C.V	Mexico	100%	Indirect (Group interest)
Forensic Technology-Tecnologia Forense Ltda	Brazil	100%	Indirect (Group interest)
Giga Communications Limited	United Kingdom	100%	Direct
GIGASAT, INC.	United States	100%	Direct
Gigasat. Asia Pacific Pty Limited	Australia	100%	Indirect (Group interest)
Herley Industries Inc.	United States	100%	Indirect (Group interest)
Herley-CTI Inc.	United States	100%	Indirect (Group interest)
Projectina AG	Switzerland	100%	Direct
Prologic Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics (USA) Group Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics Advanced Tactical Systems Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics Aneira Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics Australia Pty Limited	Australia	100%	Direct
Ultra Electronics Avalon Systems Pty Limited	Australia	100%	Indirect (Group interest)
Ultra Electronics Canada Inc.	Canada	100%	Direct
Ultra Electronics Connecticut LLC	United States	100%	Indirect (Group interest)
Ultra Electronics Defense Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics DNE Technologies Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics Enterprises (USA) LLC	United States	100%	Indirect (Group interest)
Ultra Electronics Finance Limited	Jersey	100%	Indirect (Group interest)
Ultra Electronics Forensic Technology Inc./ Les Technologies Ultra Electronics Forensic Inc.	Canada	100%	Direct

Notes to accounts - Group

For the year ended 31 December 2019 continued

35 Related undertakings continued

Company name	Country incorporated	% owned	Direct/Indirect (Group interest)
Ultra Electronics Hong Kong Holdings Limited	Hong Kong	100%	Direct
Ultra Electronics ICE, Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics in collaboration with Oman Investment Corporation LLC (in liquidation)	Oman	70%	Direct
Ultra Electronics Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics Investments (USA) LLC	United States	100%	Indirect (Group interest)
Ultra Electronics Limited	United Kingdom	100%	Direct
Ultra Electronics Maritime Systems Inc.	Canada	100%	Indirect (Group interest)
Ultra Electronics Measurement Systems Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics Ocean Systems Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics Pension Trustee Company Limited	United Kingdom	100%	Indirect (Group interest)
Ultra Electronics Precision Air and Land Systems Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics Secure Intelligence Systems Inc.	United States	100%	Indirect (Group interest)
Ultra Electronics Swiss Holdings Company Limited	United Kingdom	100%	Indirect (Group interest)
Ultra Electronics TCS Inc.	Canada	100%	Indirect (Group interest)
Ultra Electronics TopScientific Aerospace Limited	Hong Kong	50%	Direct
UnderSea Sensor Systems Inc.	United States	100%	Indirect (Group interest)
Vados Systems Limited	United Kingdom	100%	Indirect (Group interest)
Weed Instrument Company Inc.	United States	100%	Indirect (Group interest)

The principal activity of the trading subsidiary undertakings is the design, development and manufacture of electronic systems for the international defence and aerospace markets.

Registered Office: Ultra Electronics Holdings plc, 35 Portman Square, Marylebone, London, W1H 6LR, England.

36 IFRS 16 Leases

Background

IFRS 16 Leases came into effect on 1 January 2019 and replaced IAS 17 and IFRIC 4. IFRS 16 requires that all leases and the related rights and obligations should be recognised on the lessee's balance sheet, unless the lease is less than one year in length or is for a low-value asset. Leases that do not meet these criteria are expensed on a straight-line basis.

For each lease, a liability for lease obligations to be incurred in the future must be recognised. Correspondingly, a right-of-use asset is capitalised. The asset and liability are initially measured at the present value of all future lease payments plus directly attributable costs.

Under IFRS 16, previous lease charges (recognised in gross profit or indirect costs) are replaced with depreciation on the right-of-use asset and interest on the lease liability in the consolidated income statement. In addition, the cash impact of the lease is split between the principal and interest, with net cash flow remaining unchanged to pre-IFRS 16 cash flow.

The Group has made use of the practical expedient available on transition to IFRS 16 not to reassess whether a contract is or contains a lease.

Therefore, the definition of a lease in accordance with IAS 17 and IFRIC 4 continues to apply to those leases entered or modified before 1 January 2019. For leases entered into or modified on or after 1 January 2019, a contract will be determined as a lease if the Group has control of the leased asset, as defined by IFRS 16. The following practical expedients, permitted by IFRS 16, have also been utilised:

- + the application of a single discount rate to a portfolio of similar characteristic leases;
- + reliance on prior IAS 37 assessments of onerous leases as an alternative to performing an impairment review on transition;
- + the use of hindsight: for property leases with historical extension option exercise dates, hindsight was applied such that the initial lease period also includes the extension period; similarly, if the exercise date for a termination option had already passed by the transition date, it was assumed that the termination option was not exercised; and
- + the exclusion of initial direct costs from the measurement of the leased asset on transition.

For the measurement of the right-of-use assets at the date of transition, initial direct costs were not taken into account. Additionally, the Group had one sublet that was determined as a finance lease and therefore the opening lease liability and right-of-use asset were adjusted for the sublease income for this property. as required under IFRS 16. For the measurement of the lease liabilities at the date of first-time application the value was adjusted for any prepaid or accrued lease payments.

36 IFRS 16 Leases continued

Initial recognition

The Group has adopted the modified retrospective approach as permitted under IFRS 16 and has recognised the cumulative effect of applying IFRS 16 at the 1 January 2019 transitional date. The prior period has not been restated; the adjustment to opening retained earnings of £2.0m (£2.6m before tax) at 1 January 2019 is reflected in the consolidated statement of changes in equity.

The Group's impacted leases relate to real estate, vehicles, printers and copiers and other equipment. The Group therefore chose to split the leases between the following categories: property and non-property. The table below sets out the 1 January 2019 opening balance sheet impact arising from the adoption of IFRS 16:

	at 31 December 2018 £m	Property leases adjustment £m	Non-property leases adjustment £m	Tax £m	at 1 January 2019 £m
Leased assets – Right-of-use asset	-	34.4	1.4	-	35.8
Lease liability	-	(38.1)	(1.4)	-	(39.5)
Lease accruals	(0.2)	0.2	_	_	-
Onerous lease provisions	(0.9)	0.9	_	-	-
Tax liabilities	(15.5)	-	_	0.6	(14.9)
Net assets	420.8	(2.6)	_	0.6	418.8
Retained earnings	161.7	(2.6)	_	0.6	159.7

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

	Property leases £m	Non-property leases £m	Total £m
Operating lease commitment at 31 December 2018	35.4	1.5	36.9
Discounted at 1 January 2019	31.7	1.4	33.1
Recognition exemption for:			
Short-term leases	(0.1)	_	(0.1)
Leases of low-value assets	_	-	-
Removal of service charges / utilities	(2.8)	-	(2.8)
Reduction for subletting	(0.2)	-	(0.2)
Change in lease length assumption	8.9	-	8.9
Change in lease cost increase assumption	(0.1)	-	(0.1)
Change due to phasing of payments	(0.1)	-	(0.1)
Other adjustments	0.8	_	0.8
Lease liabilities recognised at 1 January 2019	38.1	1.4	39.5

The lease liabilities were discounted as at 1 January 2019; the weighted average discount rate was 3.9% for property leases and 2.4% for non-property leases. The Group's property leases range from one year to 25 years in length and are based primarily in the UK, North America and Canada. The Group's non-property leases range from one year to seven years.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The asset and liability are initially measured at the present value of all future lease payments plus directly attributable costs. Payments made before the commencement date and incentives received from the lessor are also included in the carrying amount of the right-of-use asset. The asset is then amortised over the useful life of the lease on a straight-line basis. Further details on the valuation of the right-of-use asset and the lease liability and the discount rate applied in calculating the present value are discussed below.

During the year ended 31 December 2019, in relation to leases under IFRS 16, the Group recognised depreciation of £9.3m and a finance charge on leases of £1.5m.

Short-term leases and leases of low-value assets

The Group has elected not to recognise leases that are less than one year in length or are for a low-value asset (<£3.5k) on the balance sheet. These leases are expensed on a straight-line basis as short-term leases or leases of low-value assets.



Notes to accounts - Group For the year ended 31 December 2019 continued

36 IFRS 16 Leases continued

Valuation of lease liabilities and right-of-use assets

IFRS 16 requires the Group to make judgements that impact the initial valuation of the lease liabilities and the right-of-use assets. These judgements include: determining what contracts are in scope of IFRS 16, determining the lease contract term and determining the interest rate used for discounting future cash flows.

The lease term is the non-cancellable period of the lease contract. It can also be impacted by periods covered by an option to extend the lease if the Group is reasonably certain that it will exercise that option. For lease contracts with an indefinite term the Group estimates the length of the contract to be equal to the economic useful life of the asset or typical market contract term. The lease term is used to determine the depreciation rate of right-of-use assets.

For property leases, the Group has assumed that, for leases that are due to expire within three years of the transition date, these will be renewed for the same length of time as the initial lease term, except where lease-specific non-renewal information was already known at the transition date.

The lease liability is measured at amortised cost using the effective interest method. The present value of the lease payment is determined using the discount rate. The Group has used two discount rates for each country the lease is based in; one for property and one for non-property leases. The discount rate is determined based on: 1) the risk-free rate on government bonds in the location and currency of the lease over a similar term as the lease; 2) the Group's borrowing rate; and 3) an-asset specific premium. Discount rates remain the same throughout the lease unless the lease term or renewal assumptions change, and range between 0.5% and 11.9%.

Onerous lease provisions are offset against the right-of-use asset and replaced by an annual assessment of impairment on the right-of-use assets in accordance with IAS 36. Additionally, under IFRS 16, lease incentives (e.g. rent-free periods) will be recognised as part of the measurement of the right-of-use asset and lease liability, rather than recognised as a separate liability as under IAS 17.

The lease liability and right-of-use asset are remeasured when there is a change in the future lease payments arising from a change in the expected lease term, or a change in the estimated total cost of the lease.

Subletting

The Group sublets some property space to third parties. For these sublets, the Group first determines if the sublet lease is an operating or finance lease. This is determined as a finance lease if substantially all of the risks and rewards of the property are transferred to the lessee through the lease, otherwise it is classified as an operating lease.

When the sublease is considered as a finance lease, the discounted value of the cash income from the sublet is deducted from the right-of-use asset and liability of the Group's lease (head lease) for that property unless the head lease is a short lease or a low-value asset lease.

If the sublease is considered an operating lease, then the payments received from the lease are recognised as income on a straight-line basis.

in respect of the Group's consolidated financial statements

A summary of the Group's principal accounting policies, all of which have been applied consistently across the Group throughout the current and preceding year, unless otherwise stated, is set out below:

Basis of accounting

The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs"). The financial statements have also been prepared in accordance with IFRSs adopted by the European Union and therefore comply with Article 4 of the EU IAS regulations.

The consolidated financial information has been prepared on the historical cost basis except for certain assets and liabilities which are measured at fair value, see note 22.

Adoption of new and revised standards

The following IFRIC interpretations, amendments to existing standards and new standards have been adopted in the current year but have not impacted the reported results or the financial position:

+ IFRIC 23 Uncertainty over Income Tax Treatments.

The following standards were adopted in the current year and have had the impact as set out below:

+ IFRS 16 Leases.

The impact of IFRS 16 on the accounts has been set out in note 36.

At the date of authorisation of these financial statements, the following standards and interpretations, which have not been applied in these financial statements, were in issue but not yet effective: + None

The Directors anticipate that the adoption of these standards and interpretations in future periods will have no material impact on the financial statements of the Group, except for: + None.

Going concern

The Directors have, at the time of approving the financial statements, a reasonable expectation that the Group has adequate resources to continue to adopt the going concern basis of accounting in preparing the financial statements. Further detail is contained in the Strategic Report on page 46.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company (its subsidiaries) made up to 31 December each year. Control is achieved when the Company:

- + has the power over the investee;
- + is exposed, or has rights, to variable returns from its involvement with the investee; and
- + has the ability to use its power to affect its returns.

The Company reassesses 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 listed above.

Consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ceases when the Company loses control of the subsidiary. Specifically, income and expenses of subsidiaries acquired or disposed of during the year are included in the consolidated statements of profit or loss and other comprehensive income from the date the Company gains control until the date when the Company ceases to control the subsidiary. Profit or loss and each component of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the 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 bring their accounting policies into line with the Group's accounting policies.

All intra-Group assets, liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiary. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to the owners of the Company.

When the Group loses control of a subsidiary, the profit or loss on disposal is calculated as the difference between: (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest; and (ii) the previous carrying amount of the assets (including goodwill) and liabilities of the subsidiary and any non-controlling interests. Amounts previously recognised in other comprehensive income in relation to the subsidiary are accounted for (i.e. reclassified to profit or loss or transferred directly to retained earnings) in the same manner as would be required if the relevant assets or liabilities were disposed of. The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition of an investment in an associate or jointly controlled entity.

Critical accounting judgements and key sources of estimation uncertainty

In the application of the Group's accounting policies, the Directors are required to make judgements (other than those involving estimations) that have a significant impact on the amounts recognised and to make estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates on a ongoing basis and, in 2018 and 2019, included consideration of the potential impacts of Brexit. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects both current and future periods.

Critical judgements in applying the Group's accounting policies

The following are the critical judgements, apart from those involving estimations (which are dealt with separately below), that the Directors have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in financial statements.

In the course of preparing the financial statements, no judgements have been made in the process of applying the Group's accounting policies, other than those involving estimates, that have had a significant effect on the amounts recognised in the financial statements.

in respect of the Group's consolidated financial statements continued

Critical accounting judgements and key sources of estimation uncertainty continued

Critical accounting estimates and assumptions

The key assumptions concerning the future, and other key sources of estimation uncertainty at the reporting period, that may 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.

Contract revenue and profit recognition

A significant proportion of the Group's activities are conducted under long-term contract arrangements and are accounted for in accordance with IFRS 15 Revenue from Contracts with Customers. This revenue is derived from a large number of individual contracts across the Group. Revenue and profit recognition on these contracts is based on estimates of future costs as well as an assessment of contingencies for technical risks and other risks; for example, assessment of the time and cost required to design, build, integrate and test a new product where the technology involved is currently at a low technology readiness level, and other risks such as the ability to obtain the necessary customer specification approval, or regulatory approvals. There are no individual contracts where the estimation uncertainty is considered to have a significant risk of resulting in a material adjustment within the next financial year; however, a quantification of the impact across the aggregated portfolio of over-time contracts of a 1% increase in estimated costs to complete is included in note 3.

Retirement benefit plans

The Group accounts for its post-retirement pension plans in accordance with IAS 19 Employee Benefits.

The main assumptions used in determining the defined benefit post-retirement obligation include the discount rate used in discounting scheme liabilities, the inflation rate, the expected rate of future pension increases, expected returns on scheme assets and future mortality assumptions. For each of these assumptions, there is a range of possible values. Relatively small changes in some of these variables can have a significant impact on the level of the total obligation.

The valuation of pension scheme assets and liabilities at a specific point in time rather than over a period of time can lead to significant annual movements in the pension scheme deficit as calculated under IAS 19, but it has no impact on short-term cash contributions since these are based upon separate independent actuarial valuations.

Details of the pension scheme estimates, assumptions and obligations at 31 December 2019 are provided in note 29.

Impairment testing

Each year, the Group carries out impairment tests of its goodwill balances which requires estimates to be made of the value-in-use of its cash-generating units (CGUs). These value-in-use calculations are dependent on estimates of future cash flows and long-term growth rates of the CGUs. Further details on these estimates are provided in note 13.

Proxy Board

Certain Group companies in the USA undertake work of importance to US national security; consequently activities are conducted under foreign ownership regulations, which require operation under a Proxy Agreement. The regulations are intended to insulate these activities from undue foreign influence as a result of foreign ownership. The entity that is operated under the management of a Proxy Board is Ultra Electronics Advanced Tactical Systems Inc. (ATS).

The Directors consider that the Group has control over the operating and financial policies and results of this entity and therefore they are consolidated in the Group consolidated accounts in accordance with IFRS 10 Consolidated Financial Statements.

Business combinations

Acquisitions of subsidiaries and businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interest issued by the Group in exchange for control of the acquiree. Acquisition-related costs are recognised in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognised at their fair value at the acquisition date, except that: + deferred tax assets or liabilities and assets or liabilities related to employee benefit arrangements are recognised and measured in accordance with IAS 12 Income Taxes and IAS 19 Employee Benefits respectively; and

+ assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a bargain purchase gain.

When the consideration transferred by the Group in a business combination includes an asset or liability resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement period adjustments are adjustments that arise from additional information obtained during the 'measurement period' (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates in accordance with IFRS 9, or IAS 37 Provisions, Contingent Liabilities and Contingent Assets, as appropriate, with the corresponding gain or loss being recognised in profit or loss.

Business combinations continued

When a business combination is achieved in stages, the Group's previously held interests in the acquired entity are remeasured to their acquisition date fair value and the resulting gain or loss, if any, is recognised in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition-date that have previously been recognised in other comprehensive income are reclassified to profit or loss, where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised as of that date.

Goodwill

Goodwill is initially recognised and measured as set out above. Goodwill is not amortised but is reviewed for impairment at least annually. Any impairment is recognised immediately in the income statement and is not subsequently reversed.

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the combination. Cash-generating units or groups of cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Goodwill arising on acquisitions before the date of transition to IFRSs has been retained at the previous UK Generally Accepted Accounting Practice (GAAP) amounts subject to being tested for impairment at that date. Goodwill written off to reserves under UK GAAP prior to 1998 has not been reinstated and will not be included in determining any subsequent profit or loss on disposal.

Revenue recognition

The Group recognises revenue from the sales of goods and from long-term contracts. Revenue is measured based on the consideration specified in a contract. Revenue is recognised either when the performance obligation in the contract has been performed, i.e. 'point in time' recognition, or, over-time, as control of the performance obligation is transferred to the customer. Under a book-and-hold agreement with a customer, the Group may have physical possession of an asset that the customer controls, therefore the revenue is recognised when the customer has control of the asset. The Group follows the 'five step' model as set out in IFRS 15 to ensure that revenue is recognised at the appropriate point whether over time or at a point in time; the five steps are:

- 1. Identify the contract(s) with a customer.
- 2. Identify the performance obligations.
- 3. Determine the transaction price.
- 4. Allocate the transaction price to the performance obligations.
- 5. Recognise revenue as performance obligations are satisfied.

For each performance obligation, the Group determines if revenue will be recognised over time or at a point in time.

Over time

Performance obligations are satisfied over time if one of the following criteria is satisfied:

- + The customer simultaneously receives and consumes the benefits provided by the Group's performance as it performs.
- + The Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced.
- + The Group's performance does not create an asset with an alternative use to the Group and it has an enforceable right to payment for performance completed to date.

Revenue that is recognised over time is determined by reference to the stage of completion of the performance obligation. For each performance obligation to be recognised over time, revenue and attributable margin are calculated by reference to reliable estimates of transaction price and total expected costs, after making suitable allowances for technical and other risks, except in limited scenarios where the proportion of costs incurred would not be representative of the stage of completion. Owing to the complexity of some of the contracts undertaken by the Group, the cost estimation process and the allocation of costs and revenue to each performance obligation are carried out using the experience of the Group's engineers, project managers and finance and commercial professionals. Cost estimates are reviewed and updated on a regular basis. Some of the factors impacting cost estimates include the availability of suitably gualified labour, the nature and complexity of the work to be performed, the technology readiness level, the availability of materials and the performance of sub-contractors. Revenue and associated margin are recognised progressively as costs are incurred and as risks have been mitigated or retired.

For contracts with multiple activities or deliverables, management considers whether those promised goods and services are: (i) distinct – to be accounted for as separate performance obligations; (ii) not distinct – to be combined with other promised goods or services until a bundle is identified that is distinct; or (iii) part of a series of distinct goods and services that are substantially the same and have the same pattern of transfer to the customer. Goods and services are distinct if the customer can benefit from them on their own or together with other resources that are readily available to the customer and they are separately identifiable in the contract. For example, certain Ultra contracts might be to design and build a system as one performance obligation when the criteria above are assessed. Other Ultra contracts might contain one performance obligation to design a system and a separate obligation to build them.

At the start of a contract, the total transaction price is estimated as the amount of consideration to which the Group expects to be entitled in exchange for transferring the promised goods and services to the customer, excluding sales taxes. The transaction price is allocated to each performance obligation based on relative standalone selling prices of all items in the contract. This could be based on list prices, external market evidence or, where individual tailored products are concerned, based on the estimated expected costs to produce the item or deliver the services, plus a reasonable margin to reflect the risk of delivering the product or service. Variable consideration (for example, discounts dependent on sales levels, returns, refunds, rebates and other incentives) is included based on the expected value, or most likely amount, only to the extent that it is highly probable that there will not be a reversal in the amount of cumulative revenue recognised.

The transaction price does not include estimates of consideration resulting from contract modifications, such as change orders, until they have been approved by the parties to the contract. A contract modification exists when the parties to the contract approve a modification that either changes existing or creates new enforceable rights and obligations.

in respect of the Group's consolidated financial statements continued

Revenue recognition continued

Payment terms vary from contract to contract but will typically be 30 days from the date of invoice. The Group's contracts are not considered to include significant financing components on the basis that there is no difference between the consideration and the cash selling price.

Incremental costs of obtaining a contract are capitalised to the extent that they are recoverable from the customer and the anticipated contract period will be more than one year. Incremental costs are those that would not have arisen if the contract had not been obtained. Unconditional bid or proposal costs would not be capitalised as costs to obtain a contract because they are incurred whether the contract is obtained or not. Ultra has not capitalised any such costs to date. The effect of a contract modification on the transaction price and the Group's measure of progress towards the satisfaction of the performance obligation is recognised either as: (i) an additional separate contract; (ii) as a termination of the existing contract and creation of a new contract; or (iii) as part of the original contract using a cumulative catch-up.

Where the outcome of a long-term contract cannot be estimated reliably, contract revenue is recognised to the extent of contract costs incurred that it is probable will be recoverable. Contract costs are recognised as expenses in the period in which they are incurred.

When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately.

Point in time

If performance obligations do not meet the criteria to recognise revenue over time, then revenue from the sale of goods or services is recognised at a point in time. This is measured at the fair value of the consideration received or receivable and represents amounts receivable for goods or services provided in the normal course of business, net of discounts, VAT and other sales-related taxes. Revenue is normally recognised when control of the goods or services have transferred to the customer. This may be:

- + at the point of physical delivery of goods and acceptance by the customer;
- + when the customer has legal title to the asset;
- + when the customer has the significant risks and rewards of ownership of the asset; or
- + when customer-specific acceptance criteria have been met e.g. when product testing has been completed.

In the majority of cases, revenue is recognised at the point of physical delivery and acceptance by the customer, and the Group has the right to payment.

Contract assets and liabilities

The timing of payments received from customers, relative to the recording of revenue, can have a significant impact on the contract-related assets and liabilities recorded on the Group's balance sheet.

The majority of development programmes have payment terms based on contractual milestones, which are not necessarily aligned to when revenue is recognised, particularly for those contracts with revenue recognised over-time by reference to the stage of completion. This can lead to recognition of revenue in advance of customer billings; 'amounts receivable from over time contract customers' relates to work performed and revenue recognised on agreed contracts prior to the customer being invoiced. On other development programmes, a proportion of the transaction price is received in advance and consequently a contract liability arises; 'amounts payable to over-time contract customers' relates to payments received from customers in relation to the contract prior to the work being completed and the revenue recognised.

For contracts where revenue is recognised at a point in time, 'deferred income' recorded on the balance sheet represents payments received from customers prior to the work being completed and the revenue recognised, and 'accrued income' recorded on the balance sheet represents any revenue recognised on agreed contracts prior to the customer being invoiced.

When a good or service provided is returned or to be refunded the revenue is reversed equal to the amount originally recognised as revenue for that good or service. Consideration of returns and refunds is made when calculating the transaction price to be allocated to the performance obligation.

A warranty may represent a separate performance obligation if it is distinct from the other elements of the contract (i.e. it can be sold separately and provides additional goods and services beyond the agreed-upon specifications), otherwise it is treated as a provision. Most warranties are treated as provisions. If it is a separate performance obligation, then the revenue is recognised when the control of the additional good or service under the warranty is passed to the customer.

Research and development

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

Any internally generated intangible asset arising from development activities is recognised only if an asset is created that can be identified, it is probable that the asset created will generate future economic benefit and the development cost of the asset can be measured reliably.

Internally generated assets are amortised on a straight-line basis over their useful lives. Where no internally generated intangible asset can be recognised, development expenditure is recognised as an expense in the period in which it is incurred.

Other intangible assets

Costs associated with producing or maintaining computer software programmes for sale are recognised as an expense as incurred. Costs that are directly associated with the development of identifiable and unique software products controlled by the Group, that will generate economic benefits exceeding costs beyond one year and that can be measured reliably, are recognised as intangible assets. Capitalised software development expenditure is stated at cost less accumulated amortisation and impairment losses. Amortisation is provided on a straight line basis over the estimated useful life of the related asset (see note 14).

Acquired computer software licences for use within the Group are capitalised as intangible assets on the basis of the costs incurred to acquire and bring to use the specific software.

Patents and trademarks are stated initially at historical cost. Patents and trademarks have definite useful lives and are carried at cost less accumulated amortisation and impairment losses.

Intangible assets arising from a business combination whose fair value can be reliably measured are separated from goodwill and amortised over their remaining estimated useful lives.

Impairment of fixed assets

At each balance sheet date, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. Where the asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. An intangible asset with an indefinite useful life is tested for impairment annually and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing the value in use, the estimated future cash flows are discounted to their present value. 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 loss is recognised as an expense immediately.

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 years. A reversal of an impairment loss is recognised as income immediately, except for goodwill.

Property, plant and equipment

Property, plant and equipment is shown at original historical cost, net of depreciation and any provision for impairment.

Depreciation is provided at rates calculated to write off the cost, less estimated residual value, of each asset on a straight-line basis over its expected useful life as follows:

Freehold buildings	40 to 50 years
Short leasehold improvements	over remaining period of lease
Plant and machinery	3 to 20 years

Freehold land and assets under construction are not depreciated.

Leases

IFRS 16 Leases came into effect on 1 January 2019 and replaced IAS 17 and IFRIC 4. The Group has adopted the modified retrospective approach and has recognised the cumulative effect of applying IFRS 16 at the 1 January 2019 transitional date. The prior period has not been restated; the adjustment to opening retained earnings of ± 2.0 m (± 2.6 m before tax) at 1 January 2019 is reflected in the consolidated statement of changes in equity. IFRS 16 requires that all leases and the related rights and obligations should be recognised on the lessee's balance sheet, unless the lease is less than one year in length or is for a low value asset. Leases that do not meet these criteria are expensed on a straight-line basis.

For each lease, a liability for lease obligations to be incurred in the future must be recognised. Correspondingly, a right-of-use asset is capitalised. The asset and liability are initially measured at the present value of all future lease payments plus directly attributable costs.

Under IFRS 16, previous lease charges (recognised in gross profit or indirect costs) are replaced with depreciation on the right-of-use asset and interest on the lease liability in the consolidated income statement. In addition, the cash impact of the lease is split between the principal and interest, with net cash flow remaining unchanged to pre-IFRS 16 cash flow.

The Group's impacted leases relate to real estate, vehicles, printers & copiers and other equipment. The Group therefore chose to split the leases between the following categories: Property and Non-property.

The Group's property leases range from one year to 25 years in length and are based primarily in the UK, North America and Canada. The Group's non-property leases range from one year to seven years.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The asset and liability are initially measured at the present value of all future lease payments plus directly attributable costs. Payments made before the commencement date and incentives received from the lessor are also included in the carrying amount of the right-of-use asset. The asset is then amortised over the useful life of the lease on a straight-line basis. Further details on the valuation of the right-of-use asset and the lease liability and the discount rate applied in calculating the present value are discussed below.

Short-term leases and leases of low-value assets

As permitted under IFRS 16 paragraph 6, the Group has elected not to recognise leases that are less than one year in length or are for a low-value asset (≤ 1.5 k) on the balance sheet. These leases are expensed on a straight-line basis as short-term leases or leases of low-value assets.

Valuation of lease liabilities and right-of-use assets

IFRS 16 requires the Group to make judgements that impact the initial valuation of the lease liabilities and the right-of-use assets. These judgements include: determining what contracts are in scope of IFRS 16, determining the lease contract term and determining the interest rate used for discounting future cash flows.

The lease term is the non-cancellable period of the lease contract. It can also be impacted by periods covered by an option to extend the lease if the Group is reasonably certain that it will exercise that option. For lease contracts with an indefinite term, the Group estimates the length of the contract to be equal to the economic useful life of the asset or typical market contract term. The lease term is used to determine the depreciation rate of right-of-use assets.

For property leases, the Group has assumed that for leases that are due to expire within three years of the transition date that these will be renewed for the same length of time as the initial lease term, except where lease-specific non-renewal information was already known at the transition date.

The lease liability is measured at amortised cost using the effective interest method. The present value of the lease payment is determined using the discount rate. The Group has used two discount rates for each country the lease is based in; one for property and one for non-property leases. The discount rate is determined based on: 1) the risk-free rate on government bonds in the location and currency of the lease over a similar term as the lease; 2) the Group's borrowing rate; and 3) an asset-specific premium. Discount rates remain the same throughout the lease unless the lease term or renewal assumptions change and range between 0.5% and 11.9%.

Onerous lease provisions are offset against the right-of-use asset and replaced by an annual assessment of impairment on the right-of-use assets in accordance with IAS 36. Additionally, under IFRS 16, lease incentives (e.g. rent-free periods) will be recognised as part of the measurement of the right-of-use asset and lease liability, rather than recognised as a separate liability as under IAS 17.

The lease liability and right-of-use asset are remeasured when there is a change in the future lease payments arising from a change in the expected lease term, or a change in the estimated total cost of the lease.

in respect of the Group's consolidated financial statements continued

Leases continued

Subletting

The Group sublets some property space to third parties. For these sublets, the Group first determines if the sublet lease is an operating or finance lease. This is determined as a finance lease if substantially all of the risks and rewards of the property are transferred to the lessee through the lease, otherwise it is classified as an operating lease.

When the sublease is considered as a finance lease, the discounted value of the cash income from the sublet is deducted from the right-of-use asset and liability of the Group's lease ('head lease') for that property unless the head lease is a short lease or a low value asset lease.

If the sublease is considered an operating lease, then the payments received from the lease are recognised as income on a straight-line basis.

For the year ended 31 December 2018, leases were accounted for according to IAS 17 and IFRIC 4; the 2018 accounting policy is noted below.

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. Rentals under operating leases, where the Group acts as either lessee or lessor, are charged on a straight-line basis over the lease term, even if the payments are not made on such a basis.

Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

Assets held under finance leases are recognised as assets of the Group at their fair value or, if lower, at the present value of the minimum lease payments, each determined at the inception of the lease. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation. Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly against income.

Inventories

Inventories are valued at the lower of cost (determined on a first-in, first-out basis and including an appropriate proportion of overheads incurred in bringing the inventories to their present location and condition) and net realisable value. Provision is made for any obsolete, slow-moving or defective items.

Trade receivables

Trade receivables are initially measured at fair value then subsequently remeasured at amortised cost less any impairment. An appropriate provision is recorded for expected credit losses in accordance with the simplified approach permitted under IFRS 9. The Group measures the provision at an amount equal to lifetime expected credit losses, estimated by reference to past experience and relevant forward-looking factors.

Amounts receivable from over-time contract customers

For a contract recognised over time under IFRS 15 the control of the product may be passed to the customer before the customer is invoiced. At this point, revenue is recognised and an asset is recorded on the balance sheet as an amount receivable from over-time contract customers. The amount receivable from over-time contract customers is classified as a current asset when it is to be invoiced within 12 months, otherwise it is recorded as a non-current asset. This asset is transferred to trade receivables once the customer is invoiced, following which cash is expected to be received per the agreed contractual terms. Refer to note 19 for details on the average debtor days.

Amounts due to over-time contract customers

For a contract recognised over time under IFRS 15, a payment may be received from the customer before the control of the product is passed to the customer. At this point a liability is recorded on the balance sheet as an amount due to over-time contract customers, which is recognised net of any refunds expected to be paid. This liability is derecognised when the control is passed to the customer and revenue can be recorded. Amounts due to over- time contract customers is recorded as a current liability when the revenue is expected to be recognised within the next 12 months, otherwise it is classified as a non-current liability.

Cash and cash equivalents

Cash and cash equivalents comprise cash in hand, call deposits and bank overdrafts, where there is right of offset. Bank overdrafts are presented as current liabilities to the extent that there is no right of offset with cash balances.

Assets and liabilities held for sale

Assets and liabilities classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell.

Assets and liabilities are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset is available for immediate sale in its present condition. Management must be committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Foreign currency

Transactions denominated in foreign currencies are recorded in the local currency at the actual exchange rates at the date of the transactions. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are reported at the rates of exchange prevailing at that date. Any gain or loss arising from a change in exchange rates subsequent to the date of the transaction is included as an exchange gain or loss in the income statement.

The trading results and cash flows of overseas undertakings are translated into Sterling, which is the functional currency of the Company, using the average rates of exchange during the relevant financial period. The balance sheets of overseas subsidiary undertakings are translated into Sterling at the rates ruling at the year end. Exchange differences arising from the retranslation of the opening balance sheets and results are classified as equity and transferred to the Group's translation reserve.

Goodwill and fair value adjustments on the acquisition of foreign entities are treated as assets and liabilities of the foreign entity and translated at the closing rate. The Group has elected to treat goodwill and fair value adjustments arising on acquisitions before the date of transition to IFRSs as Sterling-denominated assets and liabilities.

Borrowing costs

Borrowing costs are recognised in profit or loss in the period in which they are incurred, except where they relate to qualifying assets, in which case they are capitalised.

Government grants

Government grants are recognised in the income statement so as to match them with the expenditure towards which they are intended to contribute, to the extent that the conditions for receipt have been met and there is reasonable assurance that the grant will be received.

Government assistance provided in the form of below-market rate of interest loans are treated as government grants. The benefit of the below-market rate of interest is calculated as the difference between the proceeds received and the fair value of the loan and is matched against the related expenditure. The fair value of the loan is calculated using prevailing market interest rates.

Retirement benefit costs

The Group provides pensions to its employees and Directors through defined benefit and defined contribution pension schemes. The schemes are funded and their assets are held independently of the Group by trustees.

For defined benefit retirement schemes, the cost of providing benefits is determined using the projected unit Credit method, with actuarial valuations being carried out at each balance sheet date. The actuarial gains and losses are recognised in full in the period in which they occur. They are recognised outside the income statement and presented in the statement of comprehensive income.

Past service cost is recognised immediately to the extent that the benefits are already vested, and otherwise is amortised on a straight-line basis over the average period until the benefits become vested.

Curtailment gains or losses are recognised immediately in the income statement.

The retirement benefit obligation recognised in the balance sheet represents the present value of the defined benefit obligation as adjusted for unrecognised past service cost, and as reduced by the fair value of scheme assets.

Payments to defined contribution retirement schemes are charged as an expense as they fall due.

Trade payables

Trade payables are initially measured at fair value then subsequently remeasured at amortised cost.

Loans and overdrafts

Interest-bearing loans and overdrafts are recorded as the proceeds received, net of direct issue costs where there is a facility commitment. In these circumstances, issue costs are deducted from the value of the loan and amortised over the life of the commitment. Where there is no facility commitment, issue costs are written off as incurred. Finance charges including premiums payable on settlement or redemption are accounted for on an accruals basis in profit or loss using the effective interest rate method and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Share-based payments

The Group issues equity-settled share-based payments to certain employees. Equity-settled share-based payments are measured at fair value at the date of grant. The fair value determined at the grant date is expensed on a straight-line basis over the vesting period, based on the Group's estimate of shares that will eventually vest and adjusted for the effect of non-market-related conditions.

Fair value is measured by use of a Black-Scholes model for the share option plans and a stochastic model for awards made under the 2007 Long-Term Incentive Plan.

The credits in respect of equity-settled amounts are included in equity.

Provisions

Provisions, including property-related and contract-related provisions, are recognised in the balance sheet when the Group has a legal or constructive obligation as a result of a past event, and where it is probable that an outflow of economic benefits will be required to settle the obligation.

Provision is made for the anticipated cost of repair and rectification of products under warranty, based on known exposures and historical occurrences. Provisions for restructuring costs are recognised when the Group has a detailed formal plan for the restructuring that has been communicated to affected parties.

Equity instruments

Equity instruments issued by the Company are recorded at the proceeds received, net of direct issue costs.

Taxation

The tax expense represents the sum of the current tax payable and deferred tax.

The current tax payable is based on taxable profit for the year. Taxable profit differs from net profit as reported in the 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 the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit, and is accounted for using the balance sheet liability method. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the tax profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

in respect of the Group's consolidated financial statements continued

Taxation continued

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 profits will be available to allow all or part of the asset to be recovered.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised. Deferred tax is charged or credited in the income statement, except when it relates to items charged or credited directly to equity, in which case the deferred tax is also dealt with in equity.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities.

Derivative financial instruments IFRS 9

Ultra uses derivative financial instruments, principally forward foreign currency contracts and interest rate swaps, to reduce its exposure to exchange rate and interest rate movements. Ultra does not hold or issue derivatives for speculative or trading purposes.

From 1 January 2019, the Group revised its hedging strategy under IFRS 9 to reduce income statement volatility from re-valuation of US Dollar assets and liabilities held on the UK balance sheet. Although the Group has forward foreign exchange contracts in place to reduce the currency exposure arising from the net US Dollar cash generation of its UK businesses, the balance sheet, which has carried increasing US dollar denominated assets from certain long-term programmes, has not been hedged prior to the conversion of those assets into cash. From 1 January 2019, the net investment hedge was revised to eliminate this volatility.

Classification and measurement

All financial instruments are initially measured at fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs.

IFRS 9 divides all financial assets that were previously in the scope of IAS 39 into two classifications - those measured at amortised cost and those measured at fair value. Where assets are measured at fair value, gains and losses are either recognised entirely in profit or loss (fair value through profit or loss, FVTPL), or recognised in other comprehensive income (fair value through other comprehensive income, FVTOCI).

A debt instrument is measured at amortised cost if: a) the objective is to hold the financial asset for the collection of the contractual cash flows; and b) the contractual cash flows under the instrument solely represent payments of principal and interest. A debt instrument is measured at FVTOCI if: a) the objective is to hold the financial asset both for the collection of the contractual cash flows and selling financial assets, and b) the contractual cash flows under the instrument solely represent payments of principal and interest. All other debt instruments must be measured at FVTPL.

Hedge accounting

Hedge accounting will not generally be applied to transactional hedging relationships, such as hedges of forecast or committed transactions. However, hedge accounting will be applied to translational hedging relationships where it is permissible under IFRS 9. When hedge accounting is used, the relevant hedging relationships will be classified as fair value hedges. cash flow hedges or net investment hedges. In order to qualify for hedge accounting, the hedge relationship must meet the following effectiveness criteria at the beginning of each hedged period:

- + There is an economic relationship between the hedged item and the hedging instrument.
- + The effect of credit risk does not dominate the value changes that result from that economic relationship.
- + The hedge ratio of the hedging relationship is the same as that actually used in the economic hedge.

If a hedging relationship ceases to meet the hedge effectiveness requirement relating to the hedge ratio but the risk management objective for that designated hedging relationship remains the same, the hedge ratio of the hedging relationship is adjusted so that it meets the gualifying criteria.

Where the hedging relationship is classified as a fair value hedge, the carrying amount of the hedged asset or liability will be adjusted by the increase or decrease in the fair value attributable to the hedged risk and the resulting gain or loss will be recognised in the income statement where permissible under IFRS 9.

Where the hedging relationship is classified as a cash flow hedge or as a net investment hedge, to the extent that the hedge is effective, changes in the fair value of the hedging instrument will be recognised directly in equity. Any gain or loss relating to the ineffective portion is recognised immediately in the income statement. For cash flow hedges of forecasted future transactions, when the hedged item is recognised in the financial statements, the accumulated gains and losses recognised in equity will be either recycled to the income statement or, if the hedged items result in a non-financial asset, will be recognised as adjustments to its initial carrying amount.

Impairment

The amount of expected credit losses is updated at each reporting date.

Income statement

Additional line items are disclosed in the consolidated income statement when such presentation is relevant to an understanding of the Group's financial performance.

Operating profit

Operating profit is stated after charging restructuring costs but before investment income and finance costs.

Exceptional items

When items of income or expense are material and they are relevant to an understanding of the entity's financial performance, they are disclosed separately within the financial statements. Such exceptional items include material costs or reversals arising from a restructuring of the Group's operations, material creation or reversals of provisions, and material litigation settlements.

Non-statutory and underlying performance measures

In the analysis of the Group's operating results, earnings per share and cash flows, information is presented to provide readers and stakeholders with additional performance indicators that are prepared on a non-statutory basis. This 'underlying' presentation is regularly reviewed by management to identify items that are unusual and other items relevant to an understanding of the Group's performance and long-term trends with reference to their materiality and nature. The non-statutory performance measures are consistent with how business performance is planned and reported within the internal management reporting to the divisional management teams, Executive Committee and to the Board. Some of the measures are used for setting remuneration targets. The Group also uses 'organic' performance measures for the order book, order intake and the income statement. Explanations of how they are determined, and how they reconcile to IFRS statutory measures, are set out below. This additional non-statutory information is not uniformly defined by all companies and may not be comparable with similarly titled measures and disclosures by other organisations.

The non-statutory disclosures should not be viewed in isolation or as an alternative to the equivalent statutory measure. Information for separate presentation is considered below:

- + Contract losses arising in the ordinary course of trading are not separately presented; however, losses (and subsequent reversals) are separately disclosed in situations of a material dispute which are expected to lead to arbitration or legal proceedings. Significant legal charges and expenses are also separately disclosed; these are the charges arising from investigations and settlement of litigation that are not in the normal course of business.
- + One-off GMP Equalisation charge arising on defined benefit pension scheme in 2018.
- + Material costs or reversals arising from a significant restructuring of the Group's operations, such as the S3 programme, and costs of closure of product lines, businesses or facilities, are presented separately.
- + Disposals of businesses or investments in associates or joint ventures, or impairments of related assets are presented separately.
- + The amortisation of intangible assets arising on acquisitions and impairment of goodwill or intangible assets are presented separately.
- + Acquisition and disposal-related costs comprise external legal and adviser costs directly related to mergers and acquisitions activity, adjustments to contingent consideration, payment of retention bonuses, and fair value adjustments for acquired inventory calculated in accordance with IFRS 13.
- + IAS 37 requires the Group to discount provisions using a pre-tax discount rate that reflects the current assessment of the time value of money and the risks specific to the liability. This discount unwind is presented separately when the provision relates to acquisition contingent consideration.
- + Derivative instruments used to manage the Group's foreign exchange exposures are 'fair valued' in accordance with IFRS 9. This creates volatility in the valuation of the outstanding instruments as exchange rates move over time. This has minimal impact on profit over the full term of the instruments, but can cause significant volatility on particular balance sheet dates. Consequently, the gain or loss is presented separately.
- + The defined benefit pension net interest charge arising in accordance with IAS 19 was presented separately for periods up until 31 December 2018. From 1 January 2019, this cost is included within underlying finance charges.

These items and the calculation of underlying profit measures are shown in note 2.

The related tax effects of the above items are reflected when determining underlying earnings per share, as set out in note 12.

The Group is cash-generative and reinvests funds to support the continuing growth of the business. It seeks to use an accurate and appropriate measure of the funds generated internally while sustaining this growth. For this, the Group uses underlying operating cash flow, rather than cash generated by operations, as its preferred indicator of cash generated and available to cover non-operating expenses such as tax and interest payments. Management believes that using cash generated by operations, with the exclusion of net expenditure on property, plant and equipment and outflows for capitalised product development and other intangibles, would result in an underreporting of the true cash cost of sustaining a growing business. The reconciliation for underlying operating cash flow and cash conversion is shown in note 2.

EBITDA is the underlying operating profit for the year, before depreciation charges and before amortisation arising on non-acquired intangible assets, and adjusted to remove the EBITDA generated by businesses up to the date of their disposal in the period. Net debt used in the net debt/EBITDA metric comprises borrowings including pension liabilities and IFRS 16 lease liabilities, less cash and cash equivalents. For covenant purposes, net debt does not include pension liabilities and all impacts of IFRS 16 are removed from EBITDA and net debt.

A revised and simplified ROIC measure was established in 2019. This is calculated as underlying operating profit as a percentage of invested capital (average of opening and closing balance sheets). Invested capital is defined as net assets of the Group, excluding net debt and lease liability, pension obligations, tax and derivatives. This allows ROIC to be calculated on the operating assets of the business within the control of management. The calculation for ROIC is shown in note 2. ROIC under the previous measure, as still used in the LTIP targets for the 2017 – 2019 issuances, is calculated as underlying operating profit expressed as a percentage of invested capital (average of opening and closing balance sheets). Invested capital is calculated as net assets of the Group (after adjusting for exchange rate fluctuations and to eliminate the impact of the 2017 equity raise and subsequent buy-back) adjusted for amortisation and impairment charges arising on acquired intangible assets and goodwill, and the add-back of other non-underlying performance items, such as tax, fair value movements on derivatives, the S3 programme, acquisition and disposal-related costs and the Ithra (Oman) contract, impacting the balance sheet.

Average Working Capital Turn (AWCT) is the ratio of the 12 month average month-end working capital (defined as the total of inventory, receivables and payables excluding IFRS 16 lease liabilities) to gross revenue, calculated at constant FX rates.

Organic measures

The divisional management teams, the Executive Team and the Board review and compare current and prior year Group and divisional performance on an organic basis. Organic growth (of revenue, profit or orders) is the annual rate of increase that was achieved at constant currencies, assuming that acquisitions made during the prior-year were only included for the same proportion of the current year, and adjusted for disposals to reflect the comparable period of ownership. The organic measure also eliminates the impact of adoption of new accounting standards IFRS 16 in 2019 and IFRS 15 in 2018.

The constant exchange comparison retranslates the prior year reported results from the prior year's average exchange rates into the current year's average exchange rates.

Company balance sheet For the year ended 31 December 2019

		2019	2018
	Note	£m	£m
Fixed assets			
Property, plant and equipment	37	1.8	0.6
Investments	38	749.5	748.3
Leased assets	39	2.5	_
		753.8	748.9
Current assets			
Debtors: Amounts falling due within one year	40	7.9	5.2
Cash and cash equivalents		3.8	-
		11.7	5.2
Creditors: Amounts falling due within one year	42	(140.0)	(260.9)
Net current liabilities		(128.3)	(255.7)
Total assets less current liabilities		625.5	493.2
Creditors: Amounts falling due after more than one year	43	(188.8)	(67.6)
Net assets		436.7	425.6
Capital and reserves			
Share capital	45	3.5	3.6
Share premium account	46	203.2	201.0
Capital redemption reserve	46	0.4	0.3
Retained earnings brought forward	46	223.2	141.7
Profit and loss account movement for year	46	7.8	81.6
Own shares	46	(1.4)	(2.6)
Shareholders' funds		436.7	425.6

The financial statements of Ultra Electronics Holdings plc, registered number 02830397, were approved by the Board of Directors and authorised for issue on 10 March 2020.

On behalf of the Board,

S. PRYCE, Chief Executive J. SCLATER, Chief Financial Officer

The accompanying notes are an integral part of this balance sheet.

Company statement of changes in equity For the year ended 31 December 2019

	Share capital £m	Share premium account £m	Capital redemption reserve £m	Profit and loss account £m	Own shares £m	Total £m
Balance at 1 January 2018	3.9	200.9	-	269.0	(2.6)	471.2
Retained profit for the year	-	-	-	81.5	_	81.5
Total comprehensive income for the year	_	-	_	81.5	-	81.5
Issue of share capital	-	-	-	-	_	-
Equity-settled employee share schemes	-	0.1	_	1.6	_	1.7
Shares purchased in buyback	(0.3)	_	0.3	(91.9)	_	(91.9)
Dividends paid	-	-	-	(36.9)	_	(36.9)
Balance at 31 December 2018	3.6	201.0	0.3	223.3	(2.6)	425.6
Balance at 1 January 2019	3.6	201.0	0.3	223.3	(2.6)	425.6
Adoption of IFRS 16	-	-	-	-	_	-
Retained profit for the year	-	-	-	52.3	_	52.3
Total comprehensive income for the year	-	-	-	52.3	-	52.3
Issue of share capital	-	-	-	-	_	-
Equity-settled employee share schemes	-	2.2	-	1.9	_	4.1
Transfer from own shares	-	-	-	(1.2)	1.2	-
Shares purchased in buyback	(0.1)	_	0.1	(8.6)	-	(8.6)
Dividends paid	-	_	-	(36.7)	-	(36.7)
Balance at 31 December 2019	3.5	203.2	0.4	231.0	(1.4)	436.7

Notes to accounts – Company For the year ended 31 December 2019

37 Property, plant and equipment

	Total £m
Cost	
At 1 January 2018	2.1
Additions	0.1
At 1 January 2019	2.2
Additions	1.3
Disposals	(0.9)
At 31 December 2019	2.6
Accumulated depreciation	
At 1 January 2018	(1.5)
Charge	(0.1)
At 1 January 2019	(1.6)
Charge	(0.1)
Disposals	0.9
At 31 December 2019	(0.8)
Net book value	
At 31 December 2019	1.8
At 31 December 2018	0.6

38 Investments

a) Principal subsidiary undertakings

The Company owns either directly or indirectly 100% of the ordinary share capital of a number of subsidiary undertakings as set out in note 35.

b) Investment in subsidiary undertakings

	Total
	£m
At 1 January 2019	748.2
Additions	1.3
At 31 December 2019	749.5

39 Leased assets

	Total £m
Cost	
At 1 January 2019	-
Adoption of IFRS 16	-
Additions	2.8
At 31 December 2019	2.8
Accumulated depreciation	
At 1 January 2019	-
Charge	(0.3)
At 31 December 2019	(0.3)
Carrying amount	
At 31 December 2019	2.5

40 Debtors

	2019	2018
	£m	£m
Amounts falling due within one year:		
Amounts due from subsidiary undertakings	5.3	3.5
Deferred tax assets	0.9	0.8
Other receivables	1.3	0.5
Prepayments	0.4	0.4
	7.9	5.2

41 Deferred tax

Movements in the deferred tax asset were as follows:

	2019	2018
	£m	£m
Beginning of year	0.8	0.5
(Charge)/credit to the profit and loss account	(0.7)	0.3
End of year	0.1	0.8

The deferred tax balances are analysed as follows:

	2019	2018
	£m	£m
Other temporary differences relating to current assets and liabilities	0.1	0.8
Deferred tax	0.1	0.8

These balances are shown as follows:

	2019	2018
	£m	£m
Debtors: Amounts falling due within one year	0.9	0.8
Creditors: Amounts falling due within one year	(0.8)	-
Deferred tax	0.1	0.8

Deferred tax assets, in excess of offsetting tax liabilities, are recognised for loss carry forwards and deductible temporary differences to the extent that the utilisation against future taxable profits is probable. At the balance sheet date the Company had deferred tax assets of £2.1m (2018: £1.2m) that have not been recognised as their recovery is uncertain.

42 Creditors: amounts falling due within one year

	2019 £m	2018 £m
Borrowings and overdraft	4.1	207.4
Amounts owed to subsidiary undertakings	122.3	39.9
Deferred tax liability	0.8	-
Other payables	1.4	3.5
Accruals	11.4	10.1
	140.0	260.9

The bank loans held in borrowings above are unsecured. Interest was predominantly charged at 0.90% (2018: 0.96%) over base or contracted rate.

Notes to accounts – Company

For the year ended 31 December 2019

continued

43 Creditors: amounts falling due after more than one year

	2019 £m	2018 £m
Borrowings	188.8	67.6
	188.8	67.6

The financial risk management objectives and policies of the Company are managed at a Group level; further information is set out in note 22.

44 Borrowings

Borrowings fall due as analysed below:

	2019	2018
	£m	£m
Bank loans and overdraft		
Amounts due in less than one year		
Bank loans and overdrafts	3.7	160.4
Unsecured loan notes	-	47.0
Lease liability	0.4	-
	4.1	207.4
Amounts due after more than one year		
Bank loans	83.8	17.6
Unsecured loan notes	102.5	50.0
Lease liability	2.5	-
	188.8	67.6

The Company repaid a \$165m term loan in the year. Interest was charged at 3.73% (2018: 3.11%). Included in the above, £102.5m (2018: £50.0m) is repayable after five years. Refer to note 22 for more details.

45 Called-up share capital

The movements are disclosed in note 26.

46 Equity reserve

The profit and loss account includes £65.4m (2018: £65.4m) which is not distributable. A net foreign exchange gain of £4.4m was taken to reserves in the year (2018: £12.1 loss). Further details in respect of dividends are presented in note 11 and in respect of share-based payments in note 26.

The Company holds 131,542 own shares (2018: 235,247).

47 Related parties

Transactions with Corvid Holdings Limited are set out in note 32.

Statement of accounting policies For the Company accounts

A summary of the Company's principal accounting policies, all of which have been applied consistently throughout the year and preceding year, unless otherwise stated below, in the separate financial information presented for the Company, are set out below:

Basis of accounting

The Company accounts have been prepared under the historical cost convention and in accordance with FRS 101 Reduced Disclosure Framework. No profit and loss account is presented for the Company, as permitted by section 408 of the Companies Act 2006. As permitted by FRS 101, the Company has taken advantage of the disclosure exemptions available under that standard in relation to share-based payments, financial instruments, capital management, presentation of a cash flow statement and certain related-party transactions. The Company's retained profit for the year is disclosed in the Company statement of changes in equity.

Fixed assets and depreciation

Property, plant and equipment are shown at original historical cost, net of depreciation and any provision for impairment. Depreciation is provided at rates calculated to write off the cost, less estimated residual value, of each asset on a straight-line basis over its expected useful life as follows:

Short leasehold improvements	over remaining period of lease
Plant and machinery	3 to 20 years

Leases

IFRS 16 Leases came into effect on 1 January 2019 and replaced IAS 17 and IFRIC 4. The Company has adopted the modified retrospective approach and has recognised the cumulative effect of applying IFRS 16 at the 1 January 2019 transitional date. The expedients adopted for the Group accounts (outlined in note 36) are also applied for the Company. The prior period has not been restated; the adjustment to opening retained earnings of £1,000 at 1 January 2019 is reflected in the consolidated statement of changes in equity. IFRS 16 requires that all leases and the related rights and obligations should be recognised on the lessee's balance sheet, unless the lease is less than one year in length or is for a low-value asset. Leases that do not meet these criteria are expensed on a straight-line basis.

For each lease, a liability for lease obligations to be incurred in the future must be recognised. Correspondingly, a right-of-use asset is capitalised. The asset and liability are initially measured at the present value of all future lease payments plus directly attributable costs.

Under IFRS 16, previous lease charges (recognised in gross profit or indirect costs) are replaced with depreciation on the right-of-use asset and interest on the lease liability in the consolidated income statement. In addition, the cash impact of the lease is split between the principal and interest, with net cash flow remaining unchanged to pre-IFRS 16 cash flow.

The Company's impacted leases relate to real estate, vehicles, printers and copiers and other equipment. The Company therefore chose to split the leases between the following categories: property and non-property.

The Company's property lease is eight years in length and is based in the UK. The Company's non-property leases range from one year to three years.

The Company recognises a right-of-use asset and a lease liability at the lease commencement date. The asset and liability are initially measured at the present value of all future lease payments plus directly attributable costs. Payments made before the commencement date and incentives received from the lessor are also included in the carrying amount of the right-of-use asset. The asset is then amortised over the useful life of the lease on a straight-line basis. Further details on the valuation of the right-of-use asset and the lease liability and the discount rate applied in calculating the present value are discussed below.

Short-term leases and leases of low-value assets

The Company has elected not to recognise leases that are less than one year in length or are for a low-value asset (<£3.5k) on the balance sheet. These leases are expensed on a straight-line basis as short-term leases or leases of low-value assets.

Valuation of lease liabilities and right-of-use assets

IFRS 16 requires the Company to make judgements that impact the initial valuation of the lease liabilities and the right-of-use assets. These judgements include: determining what contracts are in scope of IFRS 16, determining the lease contract term and determining the interest rate used for discounting future cash flows.

The lease term is the non-cancellable period of the lease contract. It can also be impacted by periods covered by an option to extend the lease if the Company is reasonably certain that it will exercise that option. For lease contracts with an indefinite term the Company estimates the length of the contract to be equal to the economic useful life of the asset or typical market contract term. The lease term is used to determine the depreciation rate of right-of-use assets.

For property leases, the Company has assumed that for leases that are due to expire within three years of the transition date that these will be renewed for the same length of time as the initial lease term, except where lease-specific non-renewal information was already known at the transition date.

The lease liability is measured at amortised cost using the effective interest method. The present value of the lease payment is determined using the discount rate. The Company has used two discount rates; one for property and one for non-property leases. The discount rate is determined based on: 1) the risk free rate on government bonds in the location and currency of the lease over a similar term as the lease; 2) the Company's borrowing rate; and 3) an asset-specific premium. Discount rates remain the same throughout the lease unless the lease term or renewal assumptions change and range between 1.9% and 2.9%.

For the Company accounts continued

Leases continued

Onerous lease provisions are offset against the right-of-use asset and replaced by an annual assessment of impairment on the right-of-use assets in accordance with IAS 36. Additionally, under IFRS 16, lease incentives (e.g. rent free periods) will be recognised as part of the measurement of the right-of-use asset and lease liability, rather than recognised as a separate liability as under IAS 17.

The lease liability and right-of-use asset are remeasured when there is a change in the future lease payments arising from a change in the expected lease term, or a change in the estimated total cost of the lease.

For the year ended 31 December 2018, leases were accounted for according to IAS 17 and IFRIC 4; the 2018 accounting policy is noted below.

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. Rentals under operating leases, where the Company acts as either lessee or lessor, are charged on a straight-line basis over the lease term, even if the payments are not made on such a basis. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

Assets held under finance leases are recognised as assets of the Company at their fair value or, if lower, at the present value of the minimum lease payments, each determined at the inception of the lease. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation. Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly against income.

Taxation

UK corporation tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantially enacted by the balance sheet date.

Deferred tax is recognised in respect of all timing differences that have originated but not reversed at the balance sheet date where transactions or events that result in an obligation to pay more tax in the future, or a right to pay less tax in the future, have occurred at the balance sheet date. Temporary differences are differences between the Company's taxable profits and its results as stated in the financial statements. These arise from including gains and losses in tax assessments in different periods from those recognised in the financial statements. A net deferred tax asset is regarded as recoverable, and therefore recognised, only when, on the basis of all available evidence, it can be regarded as more likely than not that there will be suitable taxable profits from which the future reversal of the underlying timing difference can be deducted. Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the timing differences are expected to reverse based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax is not discounted.

Retirement benefit costs

The Company participates in a defined benefit plan that shares risks between entities under common control. The details of this UK scheme, for which Ultra Electronics Limited is the sponsoring employer, are set out in note 29. There is no contractual agreement or stated policy for charging the net benefit cost to Ultra Electronics Holdings plc.

Investments

Fixed asset investments are shown at cost less provision for impairment. Assessment of impairments requires estimates to be made of the value-inuse of the underlying investments. These value-in-use calculations are dependent on estimates of future cash flows and long-term growth rates. The criteria used in this assessment are consistent with those set out in note 13 and the critical accounting estimates and assumptions as set out below.

Going concern

The Directors have, at the time of approving the financial statements, a reasonable expectation that the Group has adequate resources to continue to adopt the going concern basis of accounting in preparing the financial statements. Further detail is contained in the strategic report on page 46.

Foreign currency

Transactions denominated in foreign currencies are recorded in the local currency at the actual exchange rate at the date of the transaction (or, where appropriate, at the rate of exchange in a related forward exchange contract). Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are reported at the rates of exchange prevailing at that date (or, where appropriate, at the rate of exchange in a related forward exchange contract). Any gain or loss arising from a change in exchange rates subsequent to the date of the transaction is included as an exchange gain or loss in the profit and loss account.

Share-based payments

The Company issues equity-settled share-based payments to certain employees. Equity-settled share-based payments are measured at fair value at the date of the grant. The fair value determined at the grant date is expensed on a straight-line basis over the vesting period, based on the Company's estimate of shares that will eventually vest. Further disclosure in relation to share-based payments is given in note 26.

Related parties

The Remuneration of the Directors, who are considered to be the key management personnel of the Company, is disclosed in the audited part of the Directors' Remuneration Report on pages 85.

Loans and overdrafts

Interest-bearing loans and overdrafts are recorded as the proceeds received, net of direct issue costs where there is a facility commitment. In these circumstances, issue costs are deducted from the value of the loan and amortised over the life of the commitment. Where there is no facility commitment, issue costs are written off as incurred. Finance charges including premiums payable on settlement or redemption are accounted for on an accruals basis in profit or loss using the effective interest rate method and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Critical accounting judgements and key sources of estimation uncertainty

In the application of the Company's accounting policies, the Directors are required to make judgements (other than those involving estimates) that have a significant impact on the accounts recognised and to make estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from the period in which the estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical accounting judgements in applying the Company's accounting policies

There were no critical accounting judgements that would have a significant effect on the amounts recognised in the Parent Company financial statements.

Critical accounting estimation and assumptions

Impairments to investments in subsidiary undertakings

Following the review of the recoverability of investments within the corporate company structure, an impairment was not identified due to the calculated value-in-use being higher than the book value of investments. The value-in-use is calculated by discounting the forecast cash flows of each investment to present value. The Directors consider the investments in the US business to be most sensitive to the achievement of the forecast cash flows and to the discount rate applied in calculating the present value of the future cash flows. A sensitivity analysis has been performed on the value-inuse calculations to increase the discount rate by 0.1% and reduce forecast future cash flows by 1%. The value-in-use calculations exceed the CGU carrying values after applying sensitivity analysis.

For the Company accounts continued

Footnote

A reconciliation is set out in note 2 between operating profit, underlying operating profit and EBITDA, between profit before tax and underlying profit before tax and between cash generated by operations and underlying operating cash flow and between net cash flow from operating activities and free cash flow. The calculations for organic measures are also set out in note 2. The calculation for underlying earnings per share is set out in note 12. Further detail on non-statutory performance measures is set out on page 155.

Underlying operating profit is before amortisation of intangibles arising on acquisition, acquisition and disposal related costs, significant legal charges and expenses, and, for 2018, the S3 programme and impairments. IFRS operating profit was £94.2m (2018: £65.3m). See note 2.

Underlying operating margin is the underlying operating profit as a percentage of revenue.

Net finance charges exclude fair value movements on derivatives and, prior to 31 December 2018, the defined benefit pension finance charges.

Underlying profit before tax is before amortisation of intangibles arising on acquisition, fair value movements on derivatives, acquisition and disposal-related costs, gain or loss on disposal, significant legal charges and expenses and for 2018 the S3 programme, impairments, GMP equalisation, defined benefit pension finance charges and the loss on closing out a foreign currency derivative contract. See note 2.

Underlying tax is the tax charge on underlying profit before tax. The underlying tax rate is underlying tax expressed as a percentage of underlying profit before tax.

Underlying operating cash flow is cash generated by operations and dividends from associates, less net capital expenditure, R&D, and excluding the cash outflows from acquisition and disposal-related payments and significant legal charges and expenses and for 2018, the S3 programme. See note 2.

Operating cash conversion is underlying operating cash flow as a percentage of underlying operating profit. See note 2.

Net debt comprises loans, overdrafts and finance lease liabilities, less cash and cash equivalents. See note 27.

Bank interest cover is the ratio of underlying operating profit to finance costs associated with borrowings (excluding IFRS 16 liabilities).

Organic growth (of revenue, profit or orders) is the annual rate of increase that was achieved at constant currencies, assuming that acquisitions made during the prior year were only included for the same proportion of the current year, and adjusted for disposals to reflect the comparable period of ownership. The organic measure also eliminates the impact of adoption of new accounting standards IFRS 16 in 2019 and IFRS 15 in 2018. See note 2.

Underlying order book growth excludes the impact of foreign exchange and the order book arising on acquisition. See note 2.

Underlying earnings per share is before amortisation of intangibles arising on acquisition, fair value movements on derivatives, acquisition and disposal-related costs net of contingent consideration adjustments, gain or loss on disposal, significant legal charges and expenses and, for 2018 the S3 programme, impairments, GMP equalisation, defined benefit pension finance charges and the loss on closing out a foreign currency derivative contract. Basic EPS was 105.1p (2018: 43.6p). See note 12.

Average Working Capital Turn is the ratio of the 12 month average month-end working capital (defined as the total of inventory, receivables and payables excluding IFRS 16 lease liabilities) to gross revenue, calculated at constant FX rates.

ROIC is calculated as underlying operating profit expressed as a percentage of invested capital (average of opening and closing balance sheets). Invested capital is defined as net assets of the Group, excluding net debt and lease liability, pension obligations, tax and derivatives. See note 2.

Total shareholder return is annual shareholder return (capital growth plus dividends paid, assuming dividends reinvested) over a rolling five-year period.

Definitions and KPIs

Acronym	Definition	Acronym	Definition
ADSI	Air Defense Systems Integrator	MSC/ECP	Main static Converter/electric cruise propulsion
AGR	Active Guard and Reserve	NATO	North Atlantic Treaty Organization
AI/ML	Artificial intelligence/machine learning	NCSC	National Computer Security Center
ASW	Anti-submarine warfare	NGSSR	Next generation surface search radar
ATCS	Amphibious Tactical Communications Systems	OBU	Operating Business Unit
AWCT	Average Working Capital Turn	ORION	Ultra ORION is a family of multichannel, multiband, point-to-point (PTP), point-to-multipoint (PMP) and
C2I	Command, Control and Intelligence	-	
C3	Command, Communication and Control, including Cyber	- PCS	mesh radio systems.
C4ISTAR-EW	Command, Control Communications, Computers, Intelligence, Surveillance, Acquisition & Reconnaissance –		Precision Control Systems
		PSSC	Precision Strike Sensor Core
	Electronic Warfare	REAP	Rosetta Echo Advanced Payloads
CSC	Canadian Surface Combatant	RF	Radio frequency
ECU RP	End Crypto Unit Replacement Programme	ROIC	Return on invested capital
EW	Electronic warfare	SBU	Strategic Business Unit
FIPS	Federal Information Processing Standards	SSA	US Social Security Administration
FTR	Flight Termination Receiver	SSNR	Spectral signal to noise ratio
HMS	Hull mounted sonar	SSTD	Surface Ship Torpedo Defence
Hippag	High pressure air-generating unit	SWaP	Size, Weight and Power
HSM	Hardware security modules	TRILOS	US Army network modernization programme, Terrestrial Transmission Line of Sight Radio
IAMD	Integrated Air and Missile Defence		
IDIQ	Indefinite-delivery/indefinite-quantity contract	UAV	Unmanned aerial vehicle
IFRS	International Financial Reporting Standards	UGV	Unmanned ground vehicle
IP	Intellectual property	UI/UX	User experience/user interface
IR&D	Internal research and development	uIFF	Micro identifier friend or foe
IS	Information systems	USAF	United States Air Force
ISR	Intelligence, surveillance, and reconnaissance	USMC	United States Marine Corps
ISS	Integrated sonar system	US MSA	United States Missile Defense Agency
ITAR	International Traffic in Arms Regulations	USN S&T	United States Navy Science and Technology
ITN	Integrated tactical network	VDS	Variable depth sonar
MIS	Management information systems	VMV	Vision, Mission, Values
MDIS	Multi-Domain intelligence systems		