

6 August 2019

ROLLS-ROYCE HOLDINGS PLC - 2019 Half Year Results

Full year guidance maintained

Warren East, Chief Executive commented: "We delivered further progress across the group in the first half in line with our full year expectations. We expect a significant improvement in cash in the second half as we unwind inventory built up to support customer deliveries and benefit from improved trading in both Power Systems and Civil Aerospace. In Civil Aerospace we delivered on key drivers of future cash flow with further improvement in average OE unit losses and continued aftermarket growth. Defence grew both revenue and profit and enjoyed substantial order intake. In Power Systems we also saw good revenue growth and order intake and entered the second half underpinned by a healthy backlog.

We have made good progress on resolving the Trent 1000 compressor issue, though regrettably, customer disruption remains. Progress on our restructuring programme is in line with the plan we outlined a year ago. We took significant strides in accelerating our electrification ambitions through the announced acquisition of Siemens' eAircraft business in our drive to create cleaner, more sustainable and scalable power for the future."

- Good revenue progress; underlying Core and Group +7%; Group reported revenue +5%
- Core free cash outflow of £(391)m; to materially improve in H2 as inventory reduces
- Delivery on services growth in Civil Aerospace +18% and Power Systems +7%
- Large engine flying hour growth +8%; OE unit loss -13%; Trent 7000 production ramp-up
- Progress on Trent 1000 in-service issues; Pack B & C aircraft on ground (AOG) below 25
- Trent 1000 in-service costs increased by a total of ~£100m across the next three years
- Restructuring on track; £134m run-rate cost savings; acceleration expected in H2
- On track for FY guidance for Core underlying operating profit and FCF of £700m +/- £100m
- Outlook: at least £1bn free cash flow in FY 2020; mid-term ambition > £1 CPS

Six months to 30 June	Underlying Group ¹			Underlying Core ^{1,2}		
	H1 2019	H1 2018 ³	Organic Change ⁴	H1 2019	H1 2018 ³	Organic Change ⁴
Revenue (£m)	7,353	7,040	+7%	7,213	6,680	+7%
Operating profit (£m)	203	141	+32%	203	146	+33%
Earnings per share	(1.6)p	2.5p	(4.6)p	(1.4)p	3.1p	(4.6)p
Free cash flow ⁵	(429)	(72)	(357)*	(391)	10	(401)*

*Change in Free Cash Flow represents YoY movement

Reported Group

Six months to 30 June	H1 2019	H1 2018 ³	Change
Revenue (£m)	7,883	7,487	+5%
Operating profit/(loss) (£m)	83	(747)	830
Earnings per share	(48.0)p	(51.6)p	3.6p
Net cash* (£m)	508*	298	210
Payment per share	4.6p	4.6p	n/a

*Net cash excludes IFRS 16 lease liability of £2.4bn in 2019
For other notes to table see page 3

2019 Half Year Group Highlights⁴

Financial:

- Group underlying revenue of £7,353m up 7%; reported revenue £7,883m up 5%. Underlying Civil Aerospace revenue up 11%, Power Systems up 6%, Defence up 2%; ITP Aero up 23%
- Group underlying operating profit up £48m to £203m; significant improvement in Civil Aerospace to £(21)m loss, strong growth in Power Systems +20%, solid growth in Defence +2% and an 18% decline in ITP Aero. Reported operating profit of £83m up £830m largely driven by a reduction in exceptional charges to £128m (H1 2018: £733m)
- Exceptional charges: Trent 900 of £59m following further assessment of impact of A380 production line closure, taking total exceptional costs to £245m; restructuring charges of £69m
- Group net R&D spend of £518m in line with previous year. Continued investment in improving efficiency of existing products and developing future technologies; progress on electrical strategy including announced acquisition of Siemens' eAircraft business and programme to strengthen hybrid electric power and propulsion R&D activities in Germany; SMR development a step closer
- Group free cash outflow returned to typical seasonality with an outflow of £(429)m (H1 2018: £(72)m) with planned inventory build in Civil Aerospace & Power Systems, which will unwind in H2; net cash balance improved to £508m, excluding lease liabilities (H1 2018: £298m)
- Portfolio simplification with disposal of Commercial Marine and Power Development

Operational:

- Civil Aerospace: 257 large engines delivered; further good progress in reducing average large engine OE unit losses, down by £0.2m to £1.3m; growth in large engine installed fleet of 7% year-on-year to 4,897 installed engines driving engine flying hour growth of 8%; material ramp up in Trent 7000 production
- Power Systems: strong revenue growth of 6%; increasing penetration of services; £1.7bn order intake (book to bill 1.1x); full year outlook underpinned by strong order coverage of ~80%
- Defence: solid revenue and profit performance; strong book-to-bill ratio 1.5x gives confidence in outlook; F-35 LiftSystem driving higher OE sales; directed energy successfully demonstrated
- ITP Aero good underlying revenue growth at 23% led by civil programmes; profit lower reflecting temporary OE mix headwind and lower spare parts sales which are expected to pick up in H2

Civil Aerospace in-service performance:

- Trent XWB cumulative flying hours now over 4m, 562 engines in service achieving 99.9% dispatch reliability; OE deficit reduced by a third in the first half
- Progress made on Trent 1000, increasing our MRO capacity to help minimise disruption and reducing AOGs, albeit pace of decline has been slightly below our original plans; in-service cost estimates increased by a total of £100m across the next three years
- Trent 1000 TEN high pressure turbine (HPT) blade issue being managed through proactive inspections; new blade design and certification underway; costs expected to be within the bounds of normal risk we manage on our programmes in any given year

Market environment:

- Air traffic growth is at the long-term trend level of 4-5%; stable widebody airframe build-rates expected short to medium term; A380 production ceasing 2021; widebody order backlog at 2,136 engines; supports good ongoing growth in our in-service fleet to underpin medium term plan
- Increased focus on life-cycle solutions and further improving environmental performance puts Power Systems in a strong position to take advantage of OE demand. Global defence markets remain stable with a number of appealing mid-term growth opportunities

2019 Half Year Results: Financial Highlights

Percentage or absolute change figures in this document are on an organic basis⁴ unless otherwise stated.

	Underlying revenue (£m)	Organic Change ⁴	Underlying op. profit (£m)	Organic Change ⁴
Civil Aerospace	4,018	+11%	(21)	+86
Power Systems	1,553	+6%	96	+20%
Defence	1,494	+2%	173	+2%
ITP Aero	457	+23%	32	-18%
Corporate / eliminations	(309)	-	(77)	-
Core² operating business	7,213	+7%	203	+33%
Non-core ² business	140	-	-	-
Total Group	7,353	+7%	203	+32%

For notes to table see page 3

Civil Aerospace metrics:	H1 2019	H1 2018	Core: £m	H1 2019	H1 2018
Large engines deliveries	257	259	Gross R&D spend	677	663
Average loss per widebody OE (£m)	1.3	1.5	Net R&D spend	511	518
Large engine in-service fleet	4,897	4,567	R&D capitalised	220	239
Large engine invoiced flying hours	7.5m	6.9m	Capex	348	332
Large engine LTSA major refurbs	141	137	Hedge book \$/£ average ⁶	1.54	1.54
Large engine LTSA check & repair	295	242	Hedge book (US\$bn) ⁶	\$35	\$37

2019 Outlook: Guidance maintained

Commenting on the full year outlook, Warren East added: “We remain on track to meet our full year guidance for underlying Core operating profit and Core free cash flow⁷ of £700m +/- £100m. Our outlook remains positive, underpinned by continued progress on our key free cash flow drivers towards our ambition to exceed £1 of free cash flow per share in the mid-term, together with the steadily improving health of the Trent 1000 fleet.

After a decade of significant investment, we remain committed to delivering improved returns while continuing to invest in the innovation needed to realise our long-term aspiration to be the world’s leading industrial technology company.”

Notes to financial tables and commentary on pages 1-3:

¹ Underlying: for definition see Note 2 on page 29

² Core includes Civil Aerospace, Power Systems, Defence and ITP Aero. Non-core includes Commercial Marine sold on 1 April 2019, Rolls-Royce Power Development sold on 15 April 2019, L’Orange sold on 1 June 2018 and other smaller non-core businesses. The H1 2018 segmental analysis has been presented on a consistent basis with the new segmental structure and excludes L’Orange which was sold on 1 June 2018

³ The financial information for the prior period has been restated to reflect changes to the provisional ITP Aero balances and other adjustments. See note 1 on page 27 for more details

⁴ Organic change at constant translational currency (‘constant currency’) by applying FY 2018 average rates to H1 2019 and H1 2018 numbers excluding M&A. All commentary is provided on an organic basis unless otherwise stated

⁵ Free cash flow is defined as operating cash after capital expenditure, pensions and taxes, before payments to shareholders, payments to investigating authorities and M&A. Excludes cash costs of 2018 restructuring plan. The derivation of free cash flow from the cash flow statement is shown on page 42

⁶ Comparators for currency hedge book shown at FY 2018 position

⁷ Free cash flow outlook includes in-service engine costs as outlined on page 14

This announcement has been determined to contain inside information.

Enquiries:

Investors:
Jennifer Ramsey +44 20 7227 9087

Media:
Richard Wray +44 20 7227 9163

*Photographs and broadcast-standard video are available at www.rolls-royce.com.
A PDF copy of this report can be downloaded from www.rolls-royce.com/investors.*

This Half Year Results announcement contains forward-looking statements. Any statements that express forecasts, expectations and projections are not guarantees of future performance and will not be updated. By their nature, these statements involve risk and uncertainty, and a number of factors could cause material differences to the actual results or developments. This report is intended to provide information to shareholders, is not designed to be relied upon by any other party, or for any other purpose and the Company and its directors accept no liability to any other person other than under English law.

Results presentation

A presentation will be held at 09:00 (BST) today. Details of how to join the event online are provided below. Downloadable materials will be available on the Investor Relations section of the Rolls-Royce website from the start of the event.

Online webcast registration details:

To register for the live webcast, including Q&A participation, please visit the following link:

<https://edge.media-server.com/mmc/p/vwgm75xu>

Please use this same link to access the webcast replay which will be made available shortly after the event concludes.

Trading Summary

Core Trading Summary

The income statement table below and all commentary relate to the underlying performance of our core business and percentage or absolute change figures in this document are on an organic basis, unless otherwise stated.

Summary income statement

£m	2019 H1	2018 H1	Change	Organic ⁴ change
Underlying revenue	7,213	6,680	+8%	+7%
Underlying OE revenue	3,350	3,201	+5%	+4%
Underlying services revenue	3,863	3,479	+11%	+10%
Underlying gross profit	995	897	+11%	+10%
Gross margin %	13.8%	13.4%	+40bps	+30bps
Commercial and administration costs	(516)	(467)	+10%	+10%
Restructuring	(9)	(12)	-25%	-25%
Research and development charge	(314)	(296)	+6%	+5%
Joint ventures and associates	47	24	+96%	+80%
Underlying operating profit	203	146	+39%	+33%
Underlying operating margin	2.8%	2.2%	+60bps	+60bps
Financing costs	(109)	(65)	+68%	+68%
Underlying profit before tax	94	81	+16%	6%
Tax	(118)	(22)	-	-
Underlying effective tax rate	125.5%	27.2%	-	-
Underlying (loss)/profit	(24)	59	(83)	(85)
Underlying earnings per share	(1.4)	3.1	(4.5)	(4.6)

For notes to table see page 3

Revenue up 7%

Revenue rose by 7% to 7,213 reflecting growth in both OE and services led by Civil Aerospace and Power Systems. Civil Aerospace delivered OE revenue growth of 3% led by improved widebody OE pricing and programme mix. Services revenue in Civil Aerospace rose 18% driven by increased shop visit volumes and higher spare parts sales. Power Systems achieved 6% OE revenue growth due to strength in power generation markets, notably for data centres, with this progress delivered despite the non-recurrence of the emissions driven pre-buy effect seen in construction & agriculture in 2018. Power Systems services revenue was up 7%, reflecting higher spare parts sales driven by growth of the installed engine base and increased LTSA penetration. Defence OE revenue was 4% higher driven by F-35 LiftSystem growth, AE2100 product mix and increased naval volumes. Defence service revenue grew 1% with increased LTSA activity in transport markets. ITP Aero revenue growth of 23% reflected volume growth largely across ITP Aero's civil markets.

Gross profit up 10%

Gross profit increased by 10% to £995m with gross margin improvement of 30bps. Civil Aerospace gross profit increased 54% reflecting a reduction in widebody OE average unit losses and an improved aftermarket performance, including non-recurrence of the materially negative contract accounting catch-ups which had impacted 2018. Power Systems delivered gross profit and margin improvement driven by volume growth and improvement in product mix. Defence gross profit increased by 1% with stable margins, underlying performance improvements in our US operations and higher transport volumes mitigating UK MoD pricing headwinds. ITP Aero gross profit fell by 4% reflecting lower levels of high margin aftermarket sales and a temporary headwind from mix changes in OE engines.

C&A costs up 10%

Adjusted underlying C&A costs rose 3%. This increase was driven by pay escalation together with higher sales related activity in Power Systems offsetting a modest benefit from restructuring programme headcount reductions. The majority of the restructuring benefits are within R&D and cost of sales. Including the non-recurrence of credits within C&A in H1 2018, C&A costs were 10% higher.

Self-funded R&D cash spend 2% lower; Income statement charge 5% higher

Gross R&D spend was up £13m. After funding from customers and other third parties, core self-funded cash spend reduced by £8m to £511m, benefitting from engineering headcount reductions despite ongoing significant R&D investment across most businesses. Investment in Civil Aerospace in new widebody and business aviation programmes was lower following the recent entry into service of several new engine programmes. Investment in new technology, including the suite of technologies that underpin Ultrafan in Civil Aerospace and Tempest in Defence, increased. Capitalisation was £18m lower although remained significant due to the current development stage of several Civil Aerospace programmes. The P&L charge overall was £16m higher reflecting the reduction in capitalisation.

Profit from joint ventures and associates

Where spare engines are sold to joint venture companies, the transaction is accounted for in full in the Group's gross profit. The consequential deferral of profit to reflect the Group's share of the joint venture is then eliminated and accounted for against the share of the joint ventures results. In 2019, fewer engines were sold, resulting in a lower deferral adjustment against the joint ventures. This was a key driver in the increase in profit from joint ventures and associates (H1 2019 £47m; H1 2018 £24m). Before this reduced elimination of profit, the share of results of joint ventures was broadly flat.

Operating profit up 33%

Operating profit saw a £49m improvement on prior year to £203m, reflecting 20% growth in Power Systems to £96m due to volume growth and improved product mix, and an £86m improvement in Civil Aerospace, reflecting a number of factors:

- Further progress reducing average large engine OE unit losses down to £(1.3)m from £(1.5)m
- Increased sales of spare parts and higher LTSA shop visit volumes
- Reduced level of net contract accounting adjustments to £1m (H1 2018 £(154)m)
- Offset to an extent by higher C&A costs and R&D charge and some under recovery of production costs

Financing costs

Financing costs increased from £(65)m in 2018 to £(109)m in 2019. Within financing costs, net interest payable of £(67)m increased by £36m in part due to the adoption of IFRS16. Other financing costs were £(42)m in 2019 (H1 2018: £(34)m). The increase reflects higher charges related to the unwind of discounting of provisions and other financing charges.

Taxation

Core underlying taxation was £118m (H1 2018: £22m), an underlying rate of 125.5% compared with 27.2% in 2018. The increased tax rate reflected the fact that we have not recognised any deferred tax in respect of H1 2019 UK losses. This movement was also due to the increased profits arising in higher tax jurisdictions such as the US and Germany.

Exceptional restructuring charge

An exceptional restructuring charge of £69m has been recognised in H1 2019 (H1 2018: £179m), of which £39m related to the cost of our Group-wide restructuring set out at June 2018 CMD. The total expected cash cost to implement our restructuring programme remains around £500m and should be completed by the end of 2020. The remainder of the exceptional charge taken in H1 2019 relates to restructuring programmes that were already in place at Power Systems and Defence, reflecting actions to remove costs and improve operational efficiency.

Positive progress has been made so far on our restructuring plan and to date we have achieved a gross headcount reduction of around 2,500 with a net reduction of around 1,600 since commencing the programme. Run rate savings achieved to date on the programme have now reached £134m with our target maintained to deliver around £400m run-rate savings by the end of 2020.

A380 closure costs updated

With our full year 2018 results we took a preliminary view of costs relating to Airbus' decision to close the A380 production line. We have now had the opportunity to update and finalise our impact assessment and as a result recorded an additional exceptional charge of £59m, bringing the total A380 related exceptional charge to £245m.

IFRS 16

IFRS 16 is effective for the year beginning 1 January 2019 and has required the total commitments of all leases to be recognised on the balance sheet. The impact of the standard is as follows:

- 1 January 2019 Balance Sheet we recorded an additional lease liability of £2,248m and lease assets of £2,213m
- In the Income Statement rental payments are now replaced with depreciation on the leased assets. Underlying financing costs on lease liabilities increased from £2m in H1 2018 to £39m in H1 2019 due to the new liability
- There is no impact on free cash flow

We estimate that the net impact of IFRS 16, *Leases* was to increase the underlying loss after tax by £38m in H1 2019.

Group Trading Summary

Group results include core and non-core businesses. Group underlying revenues rose 7% to £7,353m, primarily driven by growth at Civil Aerospace and Power Systems, offsetting a (29)% decline in non-core revenue. Group underlying operating profit improved by 32% to £203m as a result of improved gross profit and higher profit from joint ventures offsetting the increase in C&A costs and a higher R&D charge.

Group Funds Flow

Free cash flow

Group free cash outflow of £429m deteriorated from a £72m outflow in H1 2018, reflecting higher Trent 1000 in-service cash costs and non-recurrence of an unusually high level of aftermarket deposits in Civil Aerospace which benefitted H1 2018. We saw the usual seasonality of increased inventory levels in Civil Aerospace and Power Systems in the first half ahead of increased trading in the second half. Capital expenditure and R&D investments remained broadly stable. Given the one-off nature of the restructuring announced in 2018, the £66m cash costs relating to this restructuring programme are reported outside of group free cash flow.

Summary funds flow statement ¹			
£m	H1 2019	H1 2018	Change
Underlying operating profit	203	141	62
Depreciation and amortisation	511	315	196
Lease payments (capital plus interest)	(184)	-	(184)
Expenditure on intangible assets	(274)	(327)	53
Capital expenditure (Property, Plant and Equipment)	(348)	(342)	(6)
Change in inventory	(433)	(461)	28
Change in receivables/payables	391	130	261
Civil Aerospace net LTSA balance change	128	487	(359)
<i>Of which: underlying change</i>	120	295	(175)
<i>Of which: impact of contract catch-ups</i>	8	192	(184)
Movement on provisions	(271)	1	(272)
Net interest received and paid	(45)	(36)	(9)
Other	(8)	66	(74)
Trading cash flow	330	(26)	(304)
Contributions to defined benefit pensions in excess of underlying PBT charge	1	31	(30)
Taxation paid	(100)	(77)	(23)
Group free cash flow	(429)	(72)	(357)
<i>Of which: Disposed entities²</i>	<i>(41)</i>	<i>(77)</i>	<i>36</i>
Group free cash flow (pre disposed entities)	(388)	5	(393)
<i>Of which: Non-core businesses³</i>	<i>3</i>	<i>(5)</i>	<i>8</i>
Core free cash flow	(391)	10	(401)
Shareholder payments	(85)	(85)	-
Disposals and acquisitions	458	584	(126)
Exceptional group restructuring	(66)	-	(66)
Payment of financial penalties	(102)	-	(102)
Foreign exchange	(8)	30	(38)
Other	11	13	(2)
Change in net funds/(debt)	(221)	470	(691)

¹ The derivation of the summary funds flow statement above from the reported cash flow statement is included on page 42

² Disposed entities include Commercial Marine and Power Development in 2019 and both of these plus L'Orange in 2018

³ Non-core businesses include the former Energy businesses not sold to Siemens

Depreciation and amortisation

The £196m increase in depreciation and amortisation to £511m was due to the additional c.£200m of charge relating to right of use assets following the adoption of IFRS 16 from 1 January 2019.

Lease payments

Lease payments of £184m reflects the cash cost of leases in H1 2019. In H1 2018, prior to the adoption of IFRS 16, the equivalent lease payments were reflected within underlying operating profit.

Expenditure on intangible assets

Intangible asset additions were £274m in the period. This included £224m of R&D capitalisation (H1 2018: £241m) largely reflecting ongoing investment in Civil Aerospace engine programmes including the Trent 7000, Trent XWB and Pearl 15. Intangible additions also included £39m of capitalised IT systems and software applications, of which £10m related to the Group wide restructuring programme and are therefore excluded from free cash flow.

Capital expenditure on property, plant and equipment

Investment of £348m in H1 2019 was £6m higher than the prior year. This reflects our ongoing investment in capacity and capability, projects to modernise our facilities, together with spare engines to support our growing in-service fleet in Civil Aerospace.

Change in inventory

Inventory increased by £433m (H1 2018: £461m) in the first half reflecting seasonality and planned inventory build in Civil Aerospace and Power Systems, and will unwind in H2. The rise in inventory also included 14 Trent 7000 engines on the Airbus final assembly line which are expected to reduce in the second half as aircraft are delivered to customers.

Change in receivables/payables

Change in receivables/payables of £391m in H1 2019, reflecting:

- Customer deposits and advance payments of c.£300m, largely driven by a number of recent successful contract wins in Defence at approximately £240m
- Broadly neutral trade and other receivables as volume-related growth was offset by an improvement in the collection of overdue receipts

Movement in Civil Aerospace net LTSA balance

The net LTSA balance represents deferred revenue and is a core part of our business model where we receive payments from our customers in respect of our long-term service and overhaul agreements. In H1 2019 the balance increased by £128m. This movement included an £8m increase driven by negative contract catch-ups (H1 2018: £192m). The underlying change net of these items was £120m. This reflects engine flying receipts invoiced to customers in excess of underlying revenue traded in the income statement. The H1 2018 equivalent of £295m included higher levels of deposits received on conversion of existing customer fleets to TotalCare.

Movement on provisions

The movement in provisions of £(271)m in H1 2019 largely reflected utilisation of the Trent 1000 exceptional provision taken in 2018, (£219m), cash costs in onerous contracts (£20m) and higher utilisation on short-term warranties (£30m).

Pensions

Cash contributions were in line with the profit and loss charge in H1 2019. This was a £30m year on year movement, reflecting a non-recurrence of the 2018 benefit from changing to quarterly payments.

Taxation

The increase in cash tax in H1 2019 of £23m to £100m was largely due to a higher proportion of full year tax payments in Germany and the US being made in the first half.

Shareholder payments

Payments to shareholders of £85m in H1 2019 remains unchanged.

Acquisitions and disposals

In H1 2019 the disposals of Commercial Marine and Power Development were completed. The combined net proceeds were £458m. The £584m cash inflow in H1 2018 related to the disposal of the L'Orange business, previously within Power Systems.

Payment of financial penalties

Following the agreements reached with investigating authorities in January 2017, a payment schedule was agreed. No payments were due in 2018 and UK payments of £100m, £130m and £148m (plus interest) were due in 2019, 2020 and 2021, respectively. The £102m paid in H1 2019 reflects the agreed payment plus interest. Consistent with prior years this payment is reported outside of free cash flow.

Balance sheet

	30 June 2019	31 Dec 2018
Summary balance sheet		
£m		
Intangible assets	5,437	5,295
Property, plant and equipment	4,768	4,929
Right of use assets	2,104	–
Joint ventures and associates	405	412
Contract assets and liabilities	(7,546)	(7,073)
Working capital ¹	(705)	(1,255)
Provisions	(1,675)	(1,917)
Net funds ²	(1,937)	611
Net financial assets and liabilities ²	(4,468)	(4,117)
Net post-retirement scheme (deficit)/ surplus	(335)	641
Tax	1,337	1,026
Held for sale	–	374
Other net assets and liabilities	16	22
Net liabilities	(2,599)	(1,052)
Other items		
US\$ hedge book (US\$bn)	35	37
Civil Aerospace LTSA asset	1,217	1,097
Civil Aerospace LTSA liability	(5,947)	(5,584)
Civil Aerospace net LTSA liability	(4,730)	(4,487)

¹ Net working capital includes inventory, trade receivables and payables and similar assets and liabilities.

² Net funds includes £384m (2018: £293m) of the fair value of financial instruments which are held to hedge the fair value of borrowings.

Key drivers of balance sheet movements were:

Intangible assets: The net increase of £142m includes additions of £283m, primarily related to programme development in Civil Aerospace (£224m), together with further investment in software applications of £39m. Amortisation for the period was £(153)m.

Property, plant and equipment: Following the adoption of IFRS 16, *Leases*, finance leased assets, previously held in PPE, have been transferred to right of use assets. Capital additions of £270m related to investment in maintenance, repair and overhaul (MRO) capacity in Civil Aerospace and the ongoing modernisation of facilities including our Defence facility in Indianapolis. We also expanded our spare engine lease pool to support our growing in-service widebody engine fleet. These were offset by depreciation of £(229)m.

Right of use assets: IFRS 16 was adopted effective 1 January 2019 resulting in the recognition of leased assets with a value of £2.2bn after £200m of depreciation. See note 10 in the condensed consolidated half-year financial statements.

Investments in joint ventures and associates: There was no material change in our investment in joint ventures and associates year-on-year.

Contract assets and liabilities: This represents deferred revenue and is a core part of our business model where we receive payments from our customers in respect of our long-term service and overhaul agreements. In H1 2019 the balance increased by £(473)m, of which £(243)m related to the Civil Aerospace LTSA balance and the balance related to Defence. The movement in the Civil Aerospace LTSA balance of £(243)m included non-cash items including foreign exchange of £115m. This reflected engine flying receipts invoiced to customers in excess of underlying revenue traded in the income statement. The H1 2018 equivalent of £295m included higher levels of deposits, received on conversion of existing customer fleets to TotalCare. The movement in Defence of £(240)m related to customer deposits and advance payments as a result of a number of recent successful contract wins.

Working capital: Working capital reduced by £550m primarily driven by a financial penalty payment of £102m related to agreements reached with investigating authorities in January 2017, and a £165m reduction in relation to deferred consideration for the acquisition of ITP Aero offset by planned inventory build.

Provisions: Provisions decreased by £242m largely driven by the utilisation of the Trent 1000 disruption (£219m) and contract losses (£34m).

Net funds: Net funds have moved from a net cash position of £611m in FY 2018 to a net debt position of £(1,937)m. The change is primarily driven by the adoption of IFRS 16 *Leases*, increasing lease liabilities by £(2,216)m.

Net financial assets and liabilities: These items principally relate to the fair value of foreign exchange, commodity and interest rate contracts. There was a reduction of £(351)m, primarily relating to an adverse mark to market movement on the foreign exchange hedge book of £(763)m, offset by settled contracts of £281m. This was partially offset by the reclassification of £79m of financial RRSAs to borrowings.

Net post-retirement scheme deficits: Decreased by £(976)m. The reduction in the UK surplus was primarily driven by the agreement with Legal & General Assurance Society Limited, which resulted in a decrease of around £(600)m. This transaction is expected to be fully completed by 31 December 2019. There have also been changes in financial and demographic assumptions.

US\$ hedge book: The US hedge book at period end was \$35bn. It extends out to 2026 on a declining basis and remains sufficient to cover our medium term requirements.

Group Reported Results

The changes resulting from underlying trading are described on pages 5 to 20.

Consistent with past practice and IFRS, we provide both reported and underlying figures. As the Group does not generally hedge account for forecast transactions in accordance with IFRS 9 *Financial Instruments*, we believe underlying figures are more representative of the trading performance by excluding the impact of period-end mark-to-market adjustments. In particular, the USD:GBP hedge book has a significant impact on the reported results. In H1 2019, the USD:GBP rate fell from 1.28 to 1.27 while the EUR:GBP remained stable at 1.12. The adjustments between the underlying income statement and the reported income statement are set out in Note 2 to the condensed consolidated financial statements. This basis of presentation has been applied consistently.

Reconciliation between underlying and reported results								
£m Six months to 30 June	Revenue		Profit before financing		Financing		Profit/(loss) before tax	
	2019	2018	2019	2018	2019	2018	2019	2018
Underlying	7,353	7,040	203	141	(110)	(68)	93	73
1 Revenue and costs recognised at exchange rate on date of transaction	530	447	78	103	–	–	608	550
2 Mark-to-market adjustments on derivatives and related foreign exchange adjustments	–	–	–	–	(861)	(786)	(861)	(786)
3 Trent 1000 exceptional charge	–	–	–	(554)	–	–	–	(554)
3 Trent 900 exceptional item	–	–	(59)	–	–	–	(59)	–
4 Exceptional restructuring	–	–	(69)	(179)	–	–	(69)	(179)
5 Effects of acquisition accounting	–	–	(71)	(96)	–	–	(71)	(96)
6 Impairments of Commercial Marine	–	–	–	(160)	–	–	–	(160)
6 Disposal of Commercial Marine	–	–	84	–	–	–	84	–
7 Disposal of Power Development	–	–	34	–	–	–	34	–
8 Disposal of L'Orange	–	–	–	358	–	–	–	358
9 Hedge ineffectiveness	–	–	–	–	(15)	–	(15)	–
Other	–	–	1	(2)	(6)	9	(5)	7
Reported	7,883	7,487	201	(389)	(992)	(845)	(791)	(1,234)

See Note 2 to the Condensed Consolidated Financial Statements for further details, page 29

The most significant items included in the reported income statement, but not in underlying are summarised below.

- ¹ The impact of measuring revenues at spot rates rather than achieved hedge rates increased revenues by £530m (H1 2018: £447m) and profit before financing by £78m (H1 2018: £103m).
- ² There was a mark to market loss on the Group's hedge book of £(763)m (H1 2018: £(854)m). This reflected the large hedge book held by the Group (e.g. USD \$35bn); and the weakening of sterling, against the US dollar (1.28 to 1.27) in H1 2019. At each period end, our foreign exchange hedge book is included in the balance sheet at fair value ('mark to market') and the movement in the year included in reported financing costs.

Adjustments are also included to recognise the gain on derivatives settled during the period £281m (H1 2018: £240m) and the impact of valuation of assets and liabilities using the spot exchange rate rather than the exchange rate that is expected to be achieved by the use of the hedge book.
- ³ As described on page 29, the exceptional items are excluded from the underlying results. This includes the exceptional items in respect of the Trent 1000 and 900 costs. These have been explained on page 32.
- ⁴ Exceptional restructuring costs of £69m (H1 2018: £179m). These are costs associated with the substantial closure or exit of a site, facility or activity related to the significant transformation project that the business is currently undertaking. A number of the projects within the transformation programme are spread over several years. Of the 2019 costs, £39m (H1 2018: £132m) relates to the Group Restructure announced in June 2018.
- ⁵ The effects of acquisition accounting £71m (H1 2018: £96m) principally relate to the amortisation of intangible assets arising on the acquisition of Power Systems in 2013 and ITP Aero in 2017.
- ⁶ The Commercial Marine business was disclosed as held for sale from 30 June 2018. In our 2018 half year financial statements, we reported an impairment charge of £160m as a result of the decision to classify Commercial Marine as a business held for sale. The Group completed the sale to KONGSBERG on 1 April 2019 and recognised a profit of £84m. Further details can be found on page 41.
- ⁷ On 15 April 2019, the Group sold its shareholding in Rolls-Royce Power Development Ltd and recognised a profit of £34m. Further details can be found on page 41.
- ⁸ The disposal of L'Orange in June 2018 gave rise to a gain of £358m, net of disposal costs. Further details can be found on page 41.
- ⁹ To hedge the Group's fixed rate borrowings, it has entered into several cross-currency interest rate swaps (CCIRS). The effect of these is to convert fixed foreign currency payments into GBP floating rate payments; these have been designated as fair value hedges under IFRS 9. As the CCIRS involves two currencies the fair value of these is impacted by cross-currency basis. Under IFRS 9 this is a source of ineffectiveness as it does not affect the fair value of the hedged item and the Group has chosen to take this ineffectiveness direct to its P&L. This is a headline only item as it does not relate to the underlying performance of the business and is not within management control. The £(15)m taken to headline profit before tax in 2019 is predominately driven by volatility in EUR GBP basis.

Tax affecting these adjustments resulted in a tax credit of £5m (H1 2018: £307m). The reduction in the tax impact is mainly due to the fact we have not recognised any deferred tax in respect of H1 2019 UK losses. In H1 2018, a credit of £42m was recognised in respect of changes in the Basque tax rates, applying to ITP Aero.

Civil Aerospace

Overview

Civil Aerospace delivered 257 large engines in H1 2019 and shipped a further 14 engines to airframers. We remain on track to deliver over 500 large engines for the Full Year. We have continued to make progress reducing large engine OE average unit losses, down by £0.2m year on year to £1.3m. Our widebody installed fleet increased further in the first half, driving 8% growth in widebody engine flying hours and a £0.1bn increase in aftermarket cash margin.

Financial overview

£m	H1 2019	H1 2018	Change	Organic change
Engine deliveries	369	365	+1%	+1%
Underlying revenue	4,018	3,600	+12%	+11%
Underlying OE revenue	1,570	1,530	+3%	+3%
Underlying services revenue	2,448	2,070	+18%	+18%
Underlying gross profit	276	175	+58%	+54%
Gross margin %	6.9%	4.9%	+200bps	+190bps
Commercial and administrative	(178)	(148)	+20%	+20%
Restructuring	(7)	(9)	-22%	-22%
Research and development cost	(157)	(152)	+3%	+3%
Joint ventures and associates	45	22	+105%	+91%
Underlying operating result	(21)	(112)	+91	+86
Underlying operating margin %	-0.5%	-3.1%	+260ps	+240bps

Underlying revenue

£m	H1 2019	H1 2018	Change	Organic change
Original Equipment	1,570	1,530	+3%	+3%
<i>Large engine</i>	1,226	1,157	+6%	+6%
<i>Business aviation</i>	330	305	+8%	+9%
<i>V2500</i>	14	68	-79%	-79%
Services	2,448	2,070	+18%	+18%
<i>Large engine</i>	1,595	1,328	+20%	+20%
<i>Business aviation</i>	261	201	+30%	+29%
<i>Regional</i>	163	151	+8%	+5%
<i>V2500</i>	429	390	+10%	+10%

Underlying revenue

Underlying revenue increased 11%, reflecting modest growth in OE, up 3% to £1,570m and 18% growth in services to £2,448m. OE growth was led by large engines, up 6%, driven by improved widebody mix and pricing. Widebody engine sales volumes, which were broadly flat overall at 257, reflected strong growth in Trent 7000 engines.

Large engine service revenue increased 20% to £1,595m (H1 2018: £1,328m) reflecting growth in servicing volumes, with major LTSA shop visit quantities up 3% and check and repair visits up 22% led by Trent 1000 activity. Sales of spare parts and activity not covered by LTSAs also increased.

Business aviation OE sales were 9% higher driven by modest engine volume increases and an improved mix of higher value engines. The 29% growth in service revenue reflected a combination of increased servicing activity and a benefit to revenue from positive contract catch-ups. The 5% increase in regional aviation was driven by increased servicing of our Tay-powered fleet. V2500 OE revenue was down 79% due to end of life production on the Airbus A320ceo. The 10% increase in V2500 service revenue was driven by higher spare parts sales and increased servicing activity, with the payment from Pratt & Whitney International Aero Engines (PWIAE) relating to engine flying hours remaining stable.

Underlying operating result

The underlying operating loss of £(21)m improved £86m reflecting higher gross profit and increased profit from joint ventures but with C&A costs 20% higher.

Gross profit improved by £97m and gross margin by 190bps, driven by increased servicing activity and higher spare parts sales together with lower widebody OE losses, with the average unit loss down to £(1.3)m (H1 2018: £(1.5)m). Partially offsetting these effects was a lower LTSA underlying gross margin reflecting shop visit mix. The net negative impact of contract catch-ups to profits previously recognised over the life of long-term contracts to date was £1m, a material improvement over 2018 H1 (£(154)m negative) comprising the following:

- Life cycle cost benefit of £58m primarily reflecting lower Business Aviation servicing costs
- Technical costs of £3m reflecting reassessed costs of technical issues across various engine programmes
- Operational costs of £(54)m reflecting the latest information around future aircraft utilisation patterns and the resultant effect on flying hour receipts and shop visit costs

£m	H1 2019	H1 2018
Life-cycle costs	58	19
Technical costs	(3)	(71)
Operational changes	(54)	(102)
Total contract accounting adjustments	1	(154)

Self-funded R&D cash spend reduced by £17m to £354m reflecting lower investment in widebody and business aviation programmes and an increase in next generation technology demonstrator programmes. Net R&D capitalisation was £22m lower, driven by widebody and business aviation development programme maturity. Overall, the R&D charge increased to £157m from £152m in 2018.

Underlying C&A costs were 1% lower year on year. Including the impact of prior year credits C&A costs increased 20% to £178m. The increase in profit from joint ventures to £45m (2018 H1: £22m) reflected increased servicing activity in overhaul bases together with lower elimination of profit on spare engine sales to joint ventures, where volumes were lower.

In service performance highlights

Our in-service large engine fleet grew by 7% year on year to 4,897 engines with widebody engine flying hours increasing 8%, led by growth in the Trent 1000 and Trent XWB fleets. There are now over 280 XWB powered Airbus A350s in service with 27 airlines across the world, representing 11% of our in-service fleet. In service performance has remained very good with over 4 million engine flying hours accrued by the total fleet with a dispatch reliability of 99.9%. One of our Trent 700 engines which entered into service in 2008 completed more than 50,000 engine flying hours without requiring an overhaul, the equivalent of travelling around the world more than 1,000 times.

On the Trent 1000 we continue with our plans to resolve the customer disruption caused by the compressor issue. We have been installing the new certified blade designs in the overhaul of all Package C compressors since early this year. We have made progress, increasing our MRO capacity to help minimise disruption and reducing the number of aircraft on ground (AOG), albeit the pace with which this has fallen has been slightly below our original plans. As such, our estimate of costs has deteriorated, increasing by around £100m across the next three years.

The total cash impact on Civil Aerospace from the Trent 1000 package B and C in-service issues in H1 2019 was £219m (H1 2018: £107m). We expect the full year 2019 impact to now be around £450-500m, before declining by £50-100m in 2020 and stepping down materially thereafter. All technical changes are expected to be fully embodied into the Trent 1000 Package B/C fleets by 2022.

In April an issue was identified with the high pressure turbine (HPT) blades on the Trent 1000 TEN and an airworthiness directive was issued mandating an engine inspection regime. Inspections to date have shown HPT blade deterioration that is faster than the certified hard life limit in the engines of around a third of our Trent 1000 TEN customers. This has led us to work closely with these customers to minimise the disruption to them as engines are removed for HPT blade replacement. The projected number of AOG driven by this issue is much smaller than that caused by Trent 1000 Package B/C disruption.

However, it may modestly impact the pace of our overall AOG recovery on the Trent 1000. The expected cost of dealing with this is within the bounds of the normal risk we manage on our programmes in any given year.

Operational and strategic review

In H1 2019 we delivered 257 engines and shipped a further 14 engines to airframer OEMs. We remain on track to deliver over 500 large engines for the Full Year. We have continued to make progress reducing large engine OE unit losses, down by £0.2m to £1.3m in H1 2019. A key contributor continues to be the Trent XWB-84 engines with around a third reduction in average OE loss in H1.

Passenger air traffic growth rates continue to support the long-term trend level of 4-5% per annum and this underpins our future engine flying hour growth. Following a period of high orders driven by new aircraft programme launches, the widebody order environment is returning to trend ahead of growth in the replacement cycle in the early 2020s. We expect both Airbus and Boeing widebody production rates to remain stable in the short to medium term, with A380 production ceasing in 2021 as announced at the start of the year. Our market share of the Boeing 787 programme remains approximately 35%. We anticipate a growing number of A330ceo transitions over the coming years and based on our proven experience and market confidence in the Trent 700 powered A330ceo, we are working with operators and leasing companies to manage this. Our widebody order backlog remains significant at 2,136 engines and we continue to expect good growth in our in-service fleet over the short and medium term.

There were 320 new widebody engine firm & announced orders in the first half including 62 Trent 1000s and 112 Trent XWBs, with 202 cancellations which included 84 from Emirates relating to the A380 announced earlier this year.

We continue to expand our global service network with a new independent Authorised Maintenance Centre (AMC) in Abu Dhabi operated by Sanad Aerotech to provide complete Trent 700 overhaul services. Construction of the world's largest indoor testbed at Derby also continues, with commissioning expected in 2020. The £90m facility provides a 7,500 sq. metres capacity, harnessing the latest digital technology to set conditions and obtain evidence from a range of tests.

In business aviation we delivered our first Pearl 15 production standard engines to Bombardier to be fitted to the Global 6500 aircraft in readiness to power it into service, expected later this year. This supports our strategy of regaining market share in this sector. We took further steps to strengthen our services infrastructure by expanding the global network of Authorised Service Centres of our large CorporateCare customer base and introduced CorporateCare Enhanced in business aviation as standard for all new CorporateCare customers going forward.

We continue to make progress in our strategy to champion electrification. In June we announced the acquisition of Siemen's eAircraft business, a move that will accelerate the delivery of our electrification strategy. The business, based in Germany and Hungary, employs around 180 specialist electrical designers and engineers who have been developing a range of all electric and hybrid electric propulsion solutions for the aerospace industry. The team is already known to us working on the E-Fan X demonstrator project which, when flying, will demonstrate hybrid electric propulsion at the scale required to power regional aircraft. This creates a re-entry point into an OE market in which Rolls-Royce does not presently participate.

Our UltraFan programme, which encapsulates a broad range of enabling technologies, made further progress in the first half as the final phase of Advanced Low Pressure System (ALPS) testing got underway. This was the first time all composite elements of ALPS, including fan blades, a fan case and annulus fillers were tested together on a donor engine. The system also demonstrates the digital element of the Rolls-Royce Intelligent Engine vision with each blade having a digital twin enabling a comparison of digital and empirical test results.

We are further enhancing our digital capability via a co-innovation agreement with Singapore Airlines to identify new opportunities to enhance flight efficiency, safety and aircraft availability through data-driven digital applications and services. Additionally, Qatar Airways and Rolls-Royce have started to use Virtual Reality to train engineers, a first for both companies.

Power Systems

Overview

Power Systems made good progress in the first half, with sales continuing to outgrow global GDP growth and gross margins improving due to a better product mix. We continued to advance our services strategy, with strong growth in LTSA sales a particular highlight. Order intake was good at £1.7bn, a book-to-bill of 1.1x and a healthy level of order cover underpins our full year guidance. While there was a significant build-up of inventory in the first half, this is to support growth in the second half. This will largely unwind by the full year.

Financial overview

£m	H1 2019	H1 2018	Change	Organic change
Underlying revenue	1,553	1,471	+6%	+6%
Underlying OE revenue	994	945	+5%	+6%
Underlying services revenue	559	526	+6%	+7%
Underlying gross profit	389	354	+10%	+10%
Gross margin %	25.0%	24.1%	+90bps	+90bps
Commercial and administrative	(198)	(188)	+5%	+6%
Research and development cost	(94)	(86)	+9%	+10%
Joint ventures and associates	(1)	-	-	-
Underlying operating profit	96	80	+20%	+20%
Underlying operating margin %	6.2%	5.4%	+80bps	+70bps

Underlying revenue

Underlying revenue of £1,553m increased by 6%, with OE revenues up 6% driven by strong demand for mission critical power generation products, notably to serve the data centre market. This growth more than offset the anticipated reduction in demand from the construction & agriculture sectors, following the non-recurrence of the emissions led pre-buy effect seen in 2018.

Services revenues grew by 7% in the first half. We continue our focus to drive greater value from our large installed base, both through a more proactive approach to spare parts sales and a greater focus on long term service agreements (LTSAs). In the first half LTSA revenues increased by more than 25%, with LTSA sales accounting for ~11% of total services in the period.

The expected H2 seasonal bias to revenues, together with specific inventory build to support our growth strategy in emerging markets saw inventory increase in the first half. This will unwind through the second half to support the expected step-up in revenues, supported by a high level of order coverage.

Underlying operating profit

Underlying operating profit rose by 20% to £96m, led by the higher revenue growth and favourable mix. Gross profit increased by 10% to £389m, with gross margins up 90bps to 25%, driven by improved product mix. C&A costs of £(198)m were 6% higher year on year reflecting increased sales related activity, pay escalation and the first time consolidation of certain overseas subsidiaries. The R&D charge increased by £9m, driven by our continuing investment in future engine types and our electrification and hybrid strategy.

Operational and strategic review

Most of our end markets remain resilient despite the somewhat weaker economic backdrop. In power generation demand for mission critical power for data centres, particularly in the US, remains robust and government policies continue to favour renewable technologies driving demand for our microgrid solutions. In marine we continue to see growth in ferries and tugs and there are signs of a slow recovery from the prolonged slump in offshore oil & gas markets. As expected, in industrial markets we've seen weakness in construction and flat agricultural markets, partially offset by the recovery in mining.

As anticipated, given the benefit in 2018 from the pre-buy effect in construction and agriculture markets ahead of EU emission changes, order intake fell year on year but remained strong at £1.7bn, a book to

bill ratio of 1.1. Excluding the 2018 pre-buy impact, underlying order intake improved by 2%. Full year order coverage remains strong at around 80% supporting our confidence in the second half.

In power generation we enhanced our microgrid solutions offering through a global partnership with ABB, combining our integrated MTU diesel and gas genset systems and control solutions with ABB's modular microgrid and control capability. This enables us to offer an innovative, energy-efficient microgrid solution. Similarly, through developing a battery pack for microgrids we have expanded our portfolio of energy systems with a microgrid solution for mines, providing operators with a reliable and sustainable energy supply.

In marine we launched the fifth generation S4000 engine with both exhaust after treatment and a new gas version to comply with the most stringent emission regulations. We announced a collaboration with British luxury yacht manufacturer, Sunseeker, as launch customer for an MTU powered hybrid propulsion yacht. We also entered into collaboration with ZF Group to develop a new electronic monitoring system for ships to improve vessel availability, fuel consumption and emissions.

In industrial MTU engines were chosen by both Hyster for forklift trucks and Bell for articulated dump trucks in order to meet the Stage V European emissions standards. Continuing our successful partnership with Chinese railcar company CRRC and Sri Lanka Railways our Series 4000 MTU drive system was chosen as the power plant, bringing the total number of Sri Lanka Railways MTU powered CRRC railcars to 60. In rail we converted the Iarnród Éireann Irish Rail MOU for Hybrid Power Packs into a firm order for delivery from May 2020 and signed further letters of intent for hybrid rail solutions.

In nuclear we benefitted from our broad in-house capability agreeing to provide MTU diesel generators to provide back-up power to the new nuclear power station at Hinkley Point C alongside all instrumentation and controls and full systems integration.

Progress continues in China, where we are growing our revenue and market share as well as building engineering capabilities. Our joint venture, MTU Yuchai Power, has increased the volume of locally produced engines and is targeting a wider range of applications through our extensive sales and service network. In India, we are expanding our engineering centre in Pune. Our Indian joint venture, Force MTU Power Systems is building its first plant with production expected to start in 2020 to cater for both local and export sales.

We continue to invest in the development of new products to meet more stringent environmental restrictions and to offer life-cycle services, such as hybrid and electrical solutions. Longer term we expect the hybrid market to move away from the current domination by diesel hybrid solutions towards a more even split of diesel and gas hybrid solutions. While microgrids offer an opportunity for us to combine our current combustion engines with intelligent controls and sustainable new energy sources, we continue to evaluate options on how best to incorporate other base load technologies, such as hydrogen fuel cells.

Defence

Overview

Defence performed well in H1, delivering stable revenues and a strong order intake of £2.3bn, strong customer deposits and a book-to-bill of 1.5x. Operating profit margins were modestly up compared with H1 2018. Headwinds in combat and lower LTSA accounting benefits were offset by a strong transport aftermarket and the ongoing operational efficiency improvement delivered across the business in the first half.

Financial overview

£m	H1 2019	H1 2018	Change	Organic change
Underlying revenue	1,494	1,415	+6%	+2%
Underlying OE revenue	653	608	+7%	+4%
Underlying services revenue	841	807	+4%	+1%
Underlying gross profit	295	281	+5%	+1%
Gross margin %	19.7%	19.9%	-20bps	-10bps
Commercial and administrative	(76)	(76)	-	-3%
Restructuring	(1)	(1)	-	-
Research and development cost	(48)	(44)	+9%	+9%
Joint ventures and associates	3	2	+50%	+50%
Underlying operating profit	173	162	+7%	+2%
Underlying operating margin %	11.6%	11.4%	+20bps	-10bps

Underlying revenue

Underlying revenue of £1,494m was 2% higher than the prior year. OE revenue, 4% higher year-on-year, was driven by F-35 LiftSystem growth, better AE2100 contract mix and increased volumes in naval marine, partly offset by lower Trent 700 volumes for the Multi-Role Tanker Transport (MRTT) aircraft. Service revenue was 1% higher, as Long Term Service Agreement (LTSA) revenues increased on key transport programmes including the AE series, partly offset by lower naval T&M sales in the first half.

Underlying operating profit

Underlying operating profit of £173m was £3m higher than prior year. Gross profit increased by 1% to £295m, with margins stable at 19.7%. Profits benefited from higher LTSA transport revenues, increased sales of T56 series 3.5 upgrade kits and better operational performance in our US facilities. Partially offsetting this were the expected headwinds from reduced combat profits in the UK, as our contract to support the RB199 ended and as we entered into a new EJ200 services contract which is at lower margins due to Sole Source Pricing Regulations (SSPR). Additionally, positive LTSA contract accounting catch-ups were significantly lower year-on-year at £4m (2018 H1: £28m).

We continue to increase our investment for future programmes, with R&D up by £4m. C&A costs were £2m lower reflecting progress on cost reduction.

Operational and strategic review

The outlook for our core defence markets is unchanged. In our largest addressable market, the United States, we expect geopolitical factors to continue to drive modest growth over the medium term, though annual defence budgets remain subject to fluctuations and delay. In the UK, we still see a stable environment. In export markets, regional threats are driving pockets of growth in Asia. We also see changes in how defence budgets are being spent; the push for greater value for money across the industry continues, with customers seeking to meet new technology challenges in unmanned aircraft, space, hypersonic and directed energy weapons without major spending increases.

Our strategy is built around three pillars: continuing to hold our share of OE and services for existing products; expanding our core product offering; and growing beyond our core into adjacencies.

So far this year we have made progress against each of these strategic objectives. We continue to leverage our existing installed base with the Series 3.5 upgrade kit for the popular T56 engine (powering

the C-130 Hercules transport aircraft). This helped drive sales growth in the half year and secured its first export order from the Royal Thai Air Force. The Series 3.5 upgrade delivers around 25% greater reliability and a 10% fuel cost saving. We have continued to step up our investment in new products, making good progress on our early work as part of Team Tempest, where we aim to secure a lead role in developing a new power and propulsion system for the UK's future air combat capability. Aligned to this, the UK and Sweden recently signed a Memorandum of Understanding to work on a joint development and acquisition programme to meet both nations' future combat aircraft requirements.

As we look to expand our offerings, a key milestone was reached in May as Rolls-Royce LibertyWorks demonstrated an integrated power and thermal management system for a high-power defensive directed energy system. This system leverages our expertise in power to support a new product in a growing area of defence spend. Subsequently we have been announced as part of Team Dynetics which was awarded a \$130m contract to build and test the US Army's High Energy Laser Tactical Vehicle Demonstrator programme, a 100-kilowatt class laser weapon system. We also announced an agreement with Bell Helicopter for the development of an optimised propulsion system for the V-280 Valor and V-247 advanced vertical lift platforms.

Finally, as we look to grow beyond our core into technology adjacencies, the UK MOD recently announced a £10m contract to develop hypersonic propulsion systems which will be undertaken by Rolls-Royce and its technology partners, BAE Systems and Reaction Engines.

Operationally, the Submarines business has now been fully integrated into Defence, and as part of the group-wide restructuring, plans are now in place to further simplify the business. In the US, our modernisation efforts are beginning to yield material efficiency benefits, which helped offset the profit challenges in combat in the first half. The major redevelopment of our Indianapolis operations is nearing completion with 60% of production moved to the new facilities with zero customer disruption, and the remainder set to move by 2020. Significantly, as part of our bid to re-engine the USAF B-52 fleet we announced Indianapolis as our proposed engine assembly and test site for the F-130 engine. The F-130 is based on the proven and best-selling Rolls-Royce BR725 business jet engine, and already powers E-11A and C-37 aircraft for the US Air Force.

Order intake remained strong in H1 at £2.3bn, with a 1.5 book-to-bill ratio and a closing order backlog of c.£7.5bn. Notable orders included the design and manufacture of power plants for four additional Dreadnought Submarines (£0.5bn); a multi-year India spare parts order for Adour engines and future spare parts for Spey naval engines with the UK MOD.

ITP Aero

Financial overview

£m	H1 2019	H1 2018	Change	Organic change
Underlying revenue	457	375	+22%	+23%
Underlying OE revenue	400	290	+38%	+40%
Underlying services revenue	57	85*	-33%	-32%
Underlying gross profit	80	85	-6%	-4%
Gross margin %	17.5%	22.7%	-520bps	-490bps
Commercial and administration costs	(32)	(29)	+10%	+14%
Restructuring	(1)	(2)	-50%	-50%
Research and development costs	(15)	(14)	+7%	+7%
Underlying operating profit	32	40	-20%	-18%
Underlying operating margin	7.0%	10.7%	-370bps	-350bps

* Restated to show In Service Support Solutions (ISS) revenue as Services

Underlying revenue

Underlying revenue was £457m, an increase of 23% versus H1 2018. Growth was led by higher engine volumes on civil programmes, with continued ramp-up across civil aerospace programmes in ITP's portfolio, partially offset by a reduction in defence sales. Aftermarket revenue declined versus H1 2018 due to lower spare parts consumption, largely driven by phasing and is expected to increase in H2. Revenues remained stable in MRO and services.

Underlying operating profit

Operating profit of £32m was £7m down versus H1 2018 largely driven by gross margin reduction. This reflected the lower levels of high-margin aftermarket sales, a temporary headwind from mix change in OE engines, together with learner production costs to support the continued OE ramp-up. C&A costs and R&D were also modestly higher in the first half.

Operational and strategic review

Our presence on newly launched platforms that are currently ramping up provides a solid base for ongoing growth in our civil aerospace business, with good progress in single aisle and widebody platforms, as well as in business aviation.

We continue with our industrialisation efforts, including the expansion of our externals business, with a new factory now operational in Derio (Spain) as well as the extension of our facilities in Queretaro (Mexico). In parallel, actions are being taken to improve manufacturing efficiency, delivering progress in unit cost reduction, particularly across our civil engine programmes.

Significant milestones in the first half include the first Rolls-Royce UltraFan's intermediate pressure turbine aerodynamic tests carried out by ITP Aero together with the Aerospace Test Laboratory (CTA); the support of new production technologies with a first additive manufacturing cell installed in our Zamudio plant. In Defence and MRO, ITP Aero has been certified as the second company worldwide to service the MTR390-E engine from our Albacete plant.

Our exposure to growing civil aerospace platforms continues to support our mid-term growth ambitions for the business.

Condensed consolidated half-year financial statements

Condensed consolidated income statement

For the half-year ended 30 June 2019

		Half-year to 30 June 2019 £m	Restated * Half-year to 30 June 2018 £m
	Notes		
Revenue		7,883	7,487
Cost of sales ¹	2	(6,882)	(7,169)
Gross profit	2	1,001	318
Commercial and administrative costs ¹	2	(614)	(723)
Research and development costs	3	(349)	(360)
Share of results of joint ventures and associates		45	18
Operating profit/(loss)		83	(747)
Gain on the disposal of businesses	16	118	358
Profit/(loss) before financing and taxation		201	(389)
Financing income	4	73	106
Financing costs	4	(1,065)	(951)
Net financing		(992)	(845)
Loss before taxation		(791)	(1,234)
Taxation	5	(116)	282
Loss for the period		(907)	(952)
Attributable to:			
Ordinary shareholders		(909)	(954)
Non-controlling interests		2	2
Loss for the period		(907)	(952)
Other comprehensive (expense)/income		(708)	334
Total comprehensive loss for the period		(1,615)	(618)
Earnings per ordinary share attributable to ordinary shareholders:	6		
Basic		(48.02)p	(51.60)p
Diluted		(48.02)p	(51.60)p
Underlying earnings per ordinary share are shown in note 6.			
Payments to ordinary shareholders in respect of the period	7		
Pence per share		4.6p	4.6p
Total		87	86
Underlying profit before taxation	2	93	73

* The financial information for the prior period has been restated to reflect changes to the provisional ITP Aero balances and other adjustments. See note 1 for more details.

¹ Included within cost of sales and commercial and administrative costs for the prior period are exceptional charges relating to the Trent 1000 Civil Aerospace programme and restructuring costs. Included within cost of sales for the current period are exceptional charges relating to the Trent 900 Civil Aerospace programme and restructuring costs. Further details can be found in note 2.

Condensed consolidated statement of comprehensive income

For the half-year ended 30 June 2019

	Notes	Half-year to 30 June 2019 £m	Restated * Half-year to 30 June 2018 £m
Loss for the period		(907)	(952)
Other comprehensive income (OCI)			
Movements in post-retirement schemes	13	(943)	451
Share of OCI of joint ventures and associates		(1)	–
Related tax movements		313	(154)
Items that will not be reclassified to profit or loss		(631)	297
Foreign exchange translation differences on foreign operations		20	48
Reclassification to income statement on disposal of Commercial Marine	16	(98)	(19)
Cash flow hedge reserve movements		10	–
Share of OCI of joint ventures and associates		(7)	8
Related tax movements		(2)	–
Items that may be reclassified to profit or loss		(77)	37
Total other comprehensive (expense)/income		(708)	334
Total comprehensive expense for the period		(1,615)	(618)
Attributable to:			
Ordinary shareholders		(1,617)	(620)
Non-controlling interests		2	2
Total comprehensive expense for the period		(1,615)	(618)

* The financial information for the prior period has been restated to reflect changes to the provisional ITP Aero balances and other adjustments.
See note 1 for more details.

Condensed consolidated balance sheet

At 30 June 2019

	Notes	30 June 2019 £m	31 December 2018 £m
ASSETS			
Intangible assets	8	5,437	5,295
Property, plant and equipment	9	4,768	4,929
Right-of-use assets ¹	10	2,104	–
Investments – joint ventures and associates		405	412
Investments – other		16	22
Other financial assets	11	437	343
Deferred tax assets	5	2,149	2,092
Post-retirement scheme surpluses	13	1,143	1,944
Non-current assets		16,459	15,037
Inventories		4,711	4,287
Trade receivables and other assets		4,764	4,690
Contract assets	12	2,217	2,057
Taxation recoverable		27	34
Other financial assets	11	33	22
Short-term investments		–	6
Cash and cash equivalents		4,208	4,974
Current assets		15,960	16,070
Assets held for sale	16	–	750
TOTAL ASSETS		32,419	31,857
LIABILITIES			
Borrowings and lease liabilities		(464)	(858)
Other financial liabilities	11	(918)	(647)
Trade payables and other liabilities		(8,216)	(8,292)
Contract liabilities	12	(4,248)	(3,794)
Current tax liabilities		(178)	(138)
Provisions for liabilities and charges		(919)	(1,122)
Current liabilities		(14,943)	(14,851)
Borrowings and lease liabilities		(6,065)	(3,804)
Other financial liabilities	11	(3,636)	(3,542)
Trade payables and other liabilities		(1,964)	(1,940)
Contract liabilities	12	(5,515)	(5,336)
Deferred tax liabilities	5	(661)	(962)
Provisions for liabilities and charges		(756)	(795)
Post-retirement scheme deficits	13	(1,478)	(1,303)
Non-current liabilities		(20,075)	(17,682)
Liabilities associated with assets held for sale	16	–	(376)
TOTAL LIABILITIES		(35,018)	(32,909)
NET LIABILITIES		(2,599)	(1,052)
EQUITY			
Called-up share capital		383	379
Share premium account		269	268
Capital redemption reserve		160	161
Cash flow hedging reserve		(105)	(106)
Merger reserve		567	406
Translation reserve		731	809
Accumulated losses		(4,628)	(2,991)
Equity attributable to ordinary shareholders		(2,623)	(1,074)
Non-controlling interests		24	22
TOTAL EQUITY		(2,599)	(1,052)

¹ IFRS 16 Leases has been adopted from 1 January 2019 and under the transitional arrangements the Group has adopted IFRS 16 Leases on a modified retrospective basis. See note 1 and note 18 for more details.

Condensed consolidated cash flow statement

For the half-year ended 30 June 2019

	Notes	Half-year to 30 June 2019 £m	Restated * Half-year to 30 June 2018 £m
Reconciliation of cash flows from operating activities			
Operating profit/(loss)		83	(747)
Loss on disposal of property, plant and equipment		–	(11)
Share of results of joint ventures and associates		(45)	(18)
Dividends received from joint ventures and associates		36	46
Amortisation and impairment of intangible assets ¹	8	153	332
Depreciation and impairment of property, plant and equipment	9	229	239
Depreciation and impairment of right-of-use assets	10	200	–
(Decrease)/increase in provisions		(172)	809
Increase in inventories		(433)	(461)
Increase in trade receivables and other assets		(50)	(187)
Increase in contract assets	12	(160)	(127)
Decrease in amounts payable for financial penalties from agreements with investigating bodies		(102)	–
Increase in trade payables and other liabilities		265	330
Increase in contract liabilities	12	633	664
Cash flows on other financial assets and liabilities held for operating purposes		(314)	(261)
Net defined benefit post-retirement cost recognised in profit before financing	13	107	118
Cash funding of defined benefit post-retirement schemes	13	(106)	(87)
Share-based payments		20	22
Other		(1)	–
Net cash inflow from operating activities before taxation		343	661
Taxation paid		(100)	(77)
Net cash inflow from operating activities		243	584
Cash flows from investing activities			
Additions of unlisted investments		(2)	(4)
Disposals of unlisted investments		4	–
Additions of intangible assets	8	(283)	(327)
Disposals of intangible assets		2	2
Purchases of property, plant and equipment	9	(349)	(343)
Government grants received		–	1
Disposals of property, plant and equipment		7	60
Disposal of businesses (net of cash transferred)	16	458	584
Investments in joint ventures and associates and other investment movements		(2)	–
Reclassification of joint operations to subsidiaries		–	4
Other		(1)	–
Net cash outflow from investing activities		(166)	(23)
Cash flows from financing activities			
Repayment of loans	11	(585)	(5)
Proceeds from increase in loans		46	969
Capital element of lease payments (2018: Capital element of finance lease payments)		(140)	(8)
Net cash flow from (decrease)/increase in borrowings and finance leases		(679)	956
Interest received		19	11
Interest paid		(64)	(47)
Interest element of lease payments (2018: Interest element of finance lease payments)		(44)	–
Decrease/(increase) in short-term investments		6	(4)
Issue of ordinary shares (net of expenses)		1	–
Purchase of ordinary shares		(15)	–
Other transactions in ordinary shares		21	–
Redemption of C Shares		(85)	(85)
Net cash (outflow)/inflow from financing activities		(840)	831
Change in cash and cash equivalents		(763)	1,392
Cash and cash equivalents at 1 January		4,952	2,933
Exchange (losses)/gains on cash and cash equivalents		(7)	33
Cash and cash equivalents at period end ²		4,182	4,358

* The comparative financial information for the prior period has been represented to show cash flow movements for contract assets and contract liabilities. See note 17 for more details.

¹ In 2018 a goodwill impairment of £160m in respect of Commercial Marine was included in this line

² The Group considers overdrafts (repayable on demand) to be an integral part of its cash management activities and these are included in cash and cash equivalents for the purposes of the cash flow statement.

³ In deriving the consolidated cash flow statement, movements in balance sheet line items have been adjusted for non-cash items.

	to 30 June 2019 £m	Half-year to 30 June 2018 £m
Reconciliation of movements in cash and cash equivalents to movements in net funds		
Change in cash and cash equivalents	(763)	1,392
Cash flow from decrease/(increase) in borrowings and leases	679	(956)
Cash flow from (decrease)/increase in short-term investments	(6)	4
Change in net funds resulting from cash flows	(90)	440
New leases in the period	(87)	–
Exchange (losses)/gains on net funds	(29)	30
Fair value adjustments	(106)	7
Reclassifications	(79)	–
Movement in net funds	(391)	477
Net funds at 1 January excluding the fair value of swaps	318	(532)
Adoption of IFRS 16 (see note 18)	(2,248)	–
Net funds at 1 January restated	(1,930)	(532)
Net funds at period end excluding the fair value of swaps	(2,321)	(55)
Fair value of swaps hedging fixed rate borrowings	384	220
Net funds at period end	(1,937)	165

The movement in net funds (defined by the Group as including the items shown below) is as follows:

	At 31 December 2018 £m	Transition to IFRS 16 £m	At 1 January 2019 £m	Reclassification ¹ £m	Funds flow £m	Exchange differences £m	Fair value adjustments £m	Reclassifications ² £m	Leases £m	At 30 June 2019 £m
Cash at bank and in hand	1,023	–	1,023	–	(103)	4	–	–	–	924
Money market funds	1,222	–	1,222	–	228	(4)	–	–	–	1,446
Short-term deposits	2,729	–	2,729	–	(884)	(7)	–	–	–	1,838
Cash and cash equivalents (per balance sheet)	4,974	–	4,974	–	(759)	(7)	–	–	–	4,208
Overdrafts	(22)	–	(22)	–	(4)	–	–	–	–	(26)
Cash and cash equivalents (per cash flow statement)	4,952	–	4,952	–	(763)	(7)	–	–	–	4,182
Short-term investments	6	–	6	–	(6)	–	–	–	–	–
Borrowings – Current	(802)	–	(802)	(14)	542	(1)	5	192	–	(78)
Borrowings – Non-current	(3,609)	–	(3,609)	(65)	(3)	–	(111)	(192)	–	(3,980)
Lease liabilities	(229)	(2,248)	(2,477)	–	184	(21)	–	–	(131)	(2,445)
Financial liabilities	(4,640)	(2,248)	(6,888)	(79)	723	(22)	(106)	–	(131)	(6,503)
Net funds/(debt) excluding the fair value of swaps	318	(2,248)	(1,930)	(79)	(46)	(29)	(106)	–	(131)	(2,321)
Fair value of swaps hedging fixed rate borrowings	293	–	293	–	–	–	91	–	–	384
Net funds/(debt)	611	(2,248)	(1,637)	(79)	(46)	(29)	(15)	–	(131)	(1,937)
<i>Net cash (excluding lease liabilities)</i>	<i>840</i>		<i>840</i>							<i>508</i>

¹ The Group has reclassified £79m as borrowings previously included in other financial liabilities. These borrowings mature between 2019 and 2029.

² Reclassifications relate principally to the Group exercising its 3-year extension option on a £200m bank loan, moving the maturity date from 2019 to 2022.

Condensed consolidated statement of changes in equity

	Attributable to ordinary shareholders									
	Share capital	Share premium	Capital redemption reserve	Cash flow hedging reserve	Merger reserves	Translation reserve	Accumulated losses ¹	Total	Non-controlling interests (NCI)	Total equity
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2018	368	195	162	(112)	3	657	(358)	915	3	918
Loss for the period	–	–	–	–	–	–	(954)	(954)	2	(952)
Foreign exchange translation differences on foreign operations	–	–	–	–	–	48	–	48	–	48
Reclassified to the income statement on disposal of L'Orange	–	–	–	–	–	(19)	–	(19)	–	(19)
Movement on post-retirement schemes	–	–	–	–	–	–	451	451	–	451
Share of other comprehensive income of joint ventures and associates	–	–	–	9	–	(1)	–	8	–	8
Related tax movements	–	–	–	–	–	–	(154)	(154)	–	(154)
Total comprehensive expense for the period	–	–	–	9	–	28	(657)	(620)	2	(618)
Shares issued in respect of acquisition of ITP Aero ⁴	6	–	–	–	240	–	–	246	–	246
Other issues of ordinary shares	–	–	–	–	–	–	–	–	–	–
Issue of C Shares ²	–	–	(85)	–	–	–	–	(85)	–	(85)
Redemption of C Shares	–	–	85	–	–	–	(85)	–	–	–
Share-based payments – direct to equity ³	–	–	–	–	–	–	22	22	–	22
Reclassification of joint operations to subsidiaries	–	–	–	–	–	–	–	–	15	15
Transactions with non-controlling interests	–	–	–	–	–	–	–	–	(1)	(1)
Related tax movements	–	–	–	–	–	–	4	4	–	4
Other changes in equity in the period	6	–	–	–	240	–	(59)	187	14	201
At 30 June 2018	374	195	162	(103)	243	685	(1,074)	482	19	501
At 31 December 2018	379	268	161	(106)	406	809	(2,991)	(1,074)	22	(1,052)
Impact of adopting IFRS 16 (net of tax)	–	–	–	–	–	–	(40)	(40)	–	(40)
At 1 January 2019 including the impact of IFRS 16	379	268	161	(106)	406	809	(3,031)	(1,114)	22	(1,092)
Loss for the period	–	–	–	–	–	–	(909)	(909)	2	(907)
Foreign exchange translation differences on foreign operations	–	–	–	–	–	20	–	20	–	20
Reclassification to income statement on disposal of Commercial Marine	–	–	–	–	–	(98)	–	(98)	–	(98)
Movement on post-retirement schemes	–	–	–	–	–	–	(943)	(943)	–	(943)
Amount credited to cash flow hedge reserve	–	–	–	10	–	–	–	10	–	10
Share of other comprehensive income of joint ventures and associates	–	–	–	(7)	–	–	(1)	(8)	–	(8)
Related tax movements	–	–	–	(2)	–	–	313	311	–	311
Total comprehensive expense for the period	–	–	–	1	–	(78)	(1,540)	(1,617)	2	(1,615)
Shares issued in respect of acquisition of ITP Aero	4	–	–	–	161	–	–	165	–	165
Other issues of ordinary shares	–	1	–	–	–	–	–	1	–	1
Issue of C Shares ²	–	–	(87)	–	–	–	1	(86)	–	(86)
Redemption of C Shares	–	–	86	–	–	–	(86)	–	–	–
Shares issued to employee share trust	–	–	–	–	–	–	–	–	–	–
Ordinary shares purchased	–	–	–	–	–	–	(15)	(15)	–	(15)
Share-based payments – direct to equity ³	–	–	–	–	–	–	41	41	–	41
Transactions with non-controlling interests	–	–	–	–	–	–	–	–	–	–
Related tax movements	–	–	–	–	–	–	2	2	–	2
Other changes in equity in the period	4	1	(1)	–	161	–	(57)	108	–	108
At 30 June 2019	383	269	160	(105)	567	731	(4,628)	(2,623)	24	(2,599)

¹ At 30 June 2019, **6,869,303** ordinary shares with a net book value of **£60m** (30 June 2018: 6,347,623 ordinary shares with net book values of £51m) were held for the purpose of share-based payment plans and included in accumulated losses. During the period, **8,416,510** ordinary shares with a net book value of **£78m** (30 June 2018: 153,281 ordinary shares with a net book value of £1m) vested in share-based payment plans. During the period, the Company acquired **73,849** (30 June 2018: 34,801) of its ordinary shares via reinvestment of dividends received on its own shares and purchased **1,673,043** (2018: nil) of its ordinary shares through purchases on the London Stock Exchange. During the period, the Company issued **17,983,068** new ordinary shares (30 June 2018: 28,956,521 new ordinary shares) relating to the 6th and 7th (30 June 2018: first three) instalments for the acquisition of ITP Aero.

² In Rolls-Royce Holdings plc's own Financial Statements, C Shares are issued from the merger reserve. This reserve was created by a scheme of arrangement in 2011. As this reserve is eliminated on consolidation, in the consolidated financial statements, the C Shares are shown as being issued from the capital redemption reserve.

³ Share-based payments – direct to equity is the share-based payment charge for the period less the actual cost of vesting excluding those vesting from own shares and cash received on share-based schemes vesting.

⁴ Share premium of £240m in respect of shares issued for the acquisition of ITP Aero has been reclassified from share premium to merger reserve for the period ended 30 June 2018. This is consistent with the presentation adopted at 31 December 2018.

1 Basis of preparation and accounting policies

Notes to the accounts

Reporting entity

Rolls-Royce Holdings plc (the 'Company') is a public company incorporated under the Companies Act 2006 and domiciled in the UK. These condensed consolidated half-year financial statements of the Company as at and for the six months ended 30 June 2019 consist of the consolidation of the financial statements of the Company and its subsidiaries (together referred to as the "Group") and include the Group's interest in jointly controlled and associated entities.

The consolidated financial statements of the Group as at and for the year ended 31 December 2018 (Annual Report 2018) are available upon request from the Company Secretary, Rolls-Royce Holdings plc, 62 Buckingham Gate, London SW1E 6AT.

The Board of directors approved the condensed consolidated half-year financial statements on 5 August 2019.

Statement of compliance

These condensed consolidated half-year financial statements have been prepared in accordance with IAS 34 *Interim Financial Reporting* as adopted by the European Union. They do not include all of the information required for full annual statements, and should be read in conjunction with the 2018 Annual Report.

The interim figures up to 30 June 2019 and 2018 are unaudited. The 2018 financial statements have been reported on by the Group's auditors and delivered to the registrar of companies. The report of the auditors was (i) unqualified, (ii) did not include a reference to any matters to which the auditors drew attention by way of emphasis without qualifying their report, and (iii) did not contain a statement under section 498(2) or (3) of the Companies Act 2006.

Significant accounting policies

Except for the adoption of IFRS 16 *Leases* and IFRIC 23 *Uncertainty over Income Tax Treatment*, the accounting policies applied by the Group in these condensed consolidated half-year financial statements are the same as those that were applied to the consolidated financial statements of the Group for the year ended 31 December 2018 (International Financial Reporting Standards issued by the International Accounting Standards Board (IASB), as adopted for use in the EU effective at 31 December 2018).

Comparative financial information

The comparative financial information for the prior period has been restated for ITP Aero to reflect changes to the provisional ITP Aero balances reflecting additional information obtained during 2018 about facts that existed at the date of acquisition. This adjustment has reduced cost of sales by £28 million and increased profit after taxation by £8 million.

As at 31 December 2018, the Group concluded that it was more appropriate for deferred profit on sales to joint ventures to be recognised within 'share of results on joint ventures and associates' instead of 'cost of sales'. A reclassification adjustment of £34 million between these line items has been made to the prior period's results. No profit or cash impact arose from this adjustment.

Further details of these adjustments are in the 2018 Annual Report.

IFRS 16 Leases

The Group adopted IFRS 16 *Leases* on 1 January 2019 using the modified retrospective approach. Under the specific transitional provisions in the standard, comparative information has not been restated though the reclassifications and the adjustments arising from the new leasing rules have been recognised in the opening balance sheet on 1 January 2019 (see note 18).

The Group leases various aero engines that are used to support customers' aircraft fleets; land and buildings used for production, administration or training purposes; and equipment. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease arrangements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Until 31 December 2018, leases of aircraft and engines, plant and equipment and land and buildings were classified as either finance or operating leases. Payments made under operating leases were charged to profit or loss on a straight-line basis over the period of the lease. From 1 January 2019, leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between reducing the liability and a finance cost. The finance cost is charged to the income statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

On adoption of IFRS 16, the Group recognised additional lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 *Leases*. These liabilities were measured at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rate as of 1 January 2019. The weighted average incremental borrowing rate applied by the Group to the lease liabilities on 1 January 2019 was 3.7%.

The associated right-of-use assets for certain high value property leases are measured on a retrospective basis as if the new rules had always been applied. Other right-of-use assets are measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the balance sheet as at 31 December

2018. There was a single onerous lease contract where as a permitted practical expedient we have adjusted the right-of-use asset at the date of initial application by the amount of the provision on the balance sheet at 31 December 2018.

In applying IFRS 16 for the first time, the Group has used the following practical expedients permitted by the standard:

- on initial application, IFRS 16 will only be applied to contracts that were previously classified as leases, the Group has elected not to reassess whether a contract is, or contains, a lease at the date of initial application. Instead, for contracts entered into before the transition date the Group has relied on its assessment made applying IAS 17 and IFRIC 4 *Determining whether an Arrangement contains a Lease*;
- lease contracts with a duration of less than 12 months will continue to be expensed to the income statement on a straight-line basis over the lease term;
- the lease term has been determined with the use of hindsight where the contract contains options to extend the lease; and
- reliance on previous assessments on whether or not leases are onerous.

Accounting policy

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments less any lease incentive receivable;
- variable lease payments that are based on an index or a rate;
- amounts expected to be payable by the Group under residual value guarantees;
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the Group exercising that option.

Where leases commence after the initial transition date the lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the Group's incremental borrowing rate is used, being the rate that the Group would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions. Lease liabilities are revalued at each reporting date using the spot exchange rate.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability;
- any lease payments made at or before the commencement date less any lease incentives received;
- any initial direct costs; and
- restoration costs.

Each right-of-use asset is depreciated over the shorter of its useful life and the lease term on a straight-line basis unless the lease is expected to transfer ownership of the underlying asset to the Group in which case the asset is depreciated to the end of the useful life of the asset.

Payments associated with short-term leases are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

IFRIC 23 *Uncertainty over Income Tax Treatment*

The Group adopted IFRIC 23 *Uncertainty over Income Tax Treatment* on 1 January 2019. Adoption of this interpretation did not have a material impact on the Group's financial statements.

The Group does not consider that any other standards, amendments or interpretations issued by the IASB, but not yet applicable will have a significant impact on the condensed consolidated financial statements.

2 Analysis by business segment

The analysis by Divisions (business segment) is presented in accordance with IFRS 8 *Operating segments*, on the basis of those segments whose operating results are regularly reviewed by the Board (which acts as the Chief Operating Decision Maker as defined by IFRS 8). Our four divisions are set out below and referred to collectively as the core businesses.

Civil Aerospace	development, manufacture, marketing and sales of commercial aero engines and aftermarket services.
Power Systems	development, manufacture, marketing and sales of reciprocating engines, power systems and nuclear systems for civil power generation.
Defence	development, manufacture, marketing and sales of military aero engines, naval engines, submarines and aftermarket services.
ITP Aero	design, research and development, manufacture and casting, assembly and test of aeronautical engines and gas turbines.

Non-core businesses include the trading results of Commercial Marine until the date of disposal on 1 April 2019, the results of Rolls-Royce Power Development Limited until the date of disposal on 15 April 2019, the results of L'Orange until the date of disposal on 1 June 2018 and other smaller businesses including former Energy businesses not included in the disposal to Siemens in 2014 (Retained Energy).

Underlying results

We present the financial performance of our businesses in accordance with IFRS 8 and consistently with the basis on which performance is communicated to the Board each month. Underlying results are presented to reflect the economic impact of the Group's foreign exchange risk management activities. Trading transactions are valued at the exchange rates achieved on the derivative contracts settled to cover the net exposures.

Underlying performance excludes the following:

- the effect of acquisition accounting and business disposals;
- the impairment of goodwill and other assets arising on acquisition;
- exceptional items.

We classify items as "exceptional" where the Directors believe that presentation of our results in this way is more relevant to an understanding of our financial performance, as exceptional items are identified by virtue of their size, nature or incidence.

In determining whether an event or transaction is exceptional, management considers quantitative as well as qualitative factors such as the frequency or predictability of occurrence. Examples of exceptional items include one-time costs and charges in respect of aerospace programmes, costs of restructuring programmes and one time past service charges and credits on our post-retirement schemes.

Exceptional items are not allocated to segments and may not be comparable to similarly titled measures used by other companies.

The tax effects of the adjustments above are excluded from the underlying tax charge. In addition, changes in tax rates or changes in the amount of recoverable advance corporation tax recognised are also excluded.

See page 32 for the reconciliation between Underlying performance and Reported performance.

The following analysis sets out the results of the core businesses on the basis described above and also includes a reconciliation of the underlying results to those reported in the condensed consolidated income statement.

	Civil Aerospace £m	Power Systems £m	Defence £m	ITP Aero £m	Corporate and inter- segment £m	Core businesses £m
For the half-year ended 30 June 2019						
Underlying revenue from sale of original equipment	1,570	994	653	400	(267)	3,350
Underlying revenue from aftermarket services	2,448	559	841	57	(42)	3,863
Total underlying revenue	4,018	1,553	1,494	457	(309)	7,213
Gross profit	276	389	295	80	(45)	995
Commercial and administrative costs	(178)	(198)	(76)	(32)	(32)	(516)
Restructuring	(7)	–	(1)	(1)	–	(9)
Research and development costs	(157)	(94)	(48)	(15)	–	(314)
Share of results of joint ventures and associates	45	(1)	3	–	–	47
Underlying operating profit/(loss)	(21)	96	173	32	(77)	203

For the half-year ended 30 June 2018						
Underlying revenue from sale of original equipment ¹	1,530	945	608	290	(172)	3,201
Underlying revenue from aftermarket services ¹	2,070	526	807	85	(9)	3,479
Total underlying revenue	3,600	1,471	1,415	375	(181)	6,680
Gross profit ²	175	354	281	85	2	897
Commercial and administrative costs	(148)	(188)	(76)	(29)	(26)	(467)
Restructuring	(9)	–	(1)	(2)	–	(12)
Research and development costs	(152)	(86)	(44)	(14)	–	(296)
Share of results of joint ventures and associates ²	22	–	2	–	–	24
Underlying operating profit/(loss)	(112)	80	162	40	(24)	146

¹ In the prior period, revenue of £46m within ITP Aero was reclassified from OE to aftermarket services to better reflect the underlying nature of the revenue.

² The financial information for the prior period has been restated to reflect changes to the provisional ITP Aero balances and other adjustments. See note 1 for more details.

Reconciliation to reported results

	Core businesses £m	Non-core businesses ¹ £m	Total underlying £m	Underlying adjustments and adjustments to foreign exchange £m	Group results at actual exchange rates £m
For the half-year ended 30 June 2019					
Revenue from sale of original equipment	3,350	57	3,407	267	3,674
Revenue from aftermarket services	3,863	83	3,946	263	4,209
Total revenue	7,213	140	7,353	530	7,883
Gross profit	995	35	1,030	(29)	1,001
Commercial and administrative costs	(516)	(29)	(545)	(69)	(614)
Restructuring	(9)	1	(8)	8	–
Research and development costs	(314)	(7)	(321)	(28)	(349)
Share of results of joint ventures and associates	47	–	47	(2)	45
Operating profit	203	–	203	(120)	83
Gain on the disposal of businesses	–	–	–	118	118
Profit before financing and taxation	203	–	203	(2)	201
Net financing	(109)	(1)	(110)	(882)	(992)
Profit/(loss) before taxation	94	(1)	93	(884)	(791)
Taxation ⁴	(118)	(3)	(121)	5	(116)
Profit/(loss) for the period	(24)	(4)	(28)	(879)	(907)
Attributable to:					
Ordinary shareholders			(30)	(879)	(909)
Non-controlling interests			2	–	2

For the half-year ended 30 June 2018					
Revenue from sale of original equipment ²	3,201	177	3,378	196	3,574
Revenue from aftermarket services ²	3,479	183	3,662	251	3,913
Total revenue	6,680	360	7,040	447	7,487
Gross profit ³	897	109	1,006	(688)	318
Commercial and administrative costs	(467)	(92)	(559)	(164)	(723)
Restructuring	(12)	–	(12)	12	–
Research and development costs	(296)	(22)	(318)	(42)	(360)
Share of results of joint ventures and associates ³	24	–	24	(6)	18
Operating profit/(loss)	146	(5)	141	(888)	(747)
Gain on the disposal of L'Orange	–	–	–	358	358
Profit/(loss) before financing and taxation	146	(5)	141	(530)	(389)
Net financing	(65)	(3)	(68)	(777)	(845)
Profit/(loss) before taxation	81	(8)	73	(1,307)	(1,234)
Taxation ⁴	(22)	(3)	(25)	307	282
Profit/(loss) for the period	59	(11)	48	(1,000)	(952)
Attributable to:					
Ordinary shareholders			46	(1,000)	(954)
Non-controlling interests			2	–	2

¹ Includes Commercial Marine sold on 1 April 2019, Rolls-Royce Power Development Limited sold on 15 April 2019, L'Orange sold on 1 June 2018 and other smaller non-core businesses including former Energy businesses not included in the disposal to Siemens in 2014 (Retained Energy) .

² In the prior period, revenue of £46m within ITP Aero was reclassified from OE to aftermarket services to better reflect the underlying nature of the revenue.

³ The financial information for the prior period has been restated to reflect changes to the provisional ITP Aero balances and other adjustments. See note 1 for more details.

⁴ Appropriate rates of tax have been applied to underlying adjustments made to profit/(loss) before taxation. In 2019 there is a credit of £5m (30 June 2018: £307m). The credit in 2019 is lower than the prior period mainly due to deferred tax not being recognised on UK losses arising in 2019.

Disaggregation of revenue from contracts with customers

Analysis by type and basis of recognition	Civil Aerospace £m	Power Systems £m	Defence £m	ITP Aero £m	Corporate and inter-segment £m	Core businesses £m
For the half-year ended 30 June 2019						
Original equipment recognised at a point in time	1,570	939	253	400	(267)	2,895
Original equipment recognised over time	–	55	400	–	–	455
Aftermarket services recognised at a point in time	827	497	330	57	6	1,717
Aftermarket services recognised over time	1,576	62	511	–	(48)	2,101
Total underlying customer contract revenue	3,973	1,553	1,494	457	(309)	7,168
Other underlying revenue	45	–	–	–	–	45
Total underlying revenue	4,018	1,553	1,494	457	(309)	7,213

For the half-year ended 30 June 2018						
Original equipment recognised at a point in time	1,530	905	281	290	(172)	2,834
Original equipment recognised over time	–	40	327	–	–	367
Aftermarket services recognised at a point in time	797	448	336	85	(28)	1,638
Aftermarket services recognised over time	1,257	78	471	–	19	1,825
Total underlying customer contract revenue	3,584	1,471	1,415	375	(181)	6,664
Other underlying revenue	16	–	–	–	–	16
Total underlying revenue ²	3,600	1,471	1,415	375	(181)	6,680

	Core businesses £m	Non-core businesses ¹ £m	Total underlying £m	Underlying adjustments and adjustments to foreign exchange £m	At actual exchange rates £m
For the half-year ended 30 June 2019					
Original equipment recognised at a point in time	2,895	22	2,917	267	3,184
Original equipment recognised over time	455	35	490	–	490
Aftermarket services recognised at a point in time	1,717	83	1,800	149	1,949
Aftermarket services recognised over time	2,101	–	2,101	114	2,215
Total customer contract revenue	7,168	140	7,308	530	7,838
Other revenue	45	–	45	–	45
Total revenue	7,213	140	7,353	530	7,883

For the half-year ended 30 June 2018					
Original equipment recognised at a point in time	2,834	36	2,870	195	3,065
Original equipment recognised over time	367	141	508	1	509
Aftermarket services recognised at a point in time	1,638	183	1,821	113	1,934
Aftermarket services recognised over time	1,825	–	1,825	138	1,963
Total customer contract revenue	6,664	360	7,024	447	7,471
Other revenue	16	–	16	–	16
Total revenue ²	6,680	360	7,040	447	7,487

¹ Includes Commercial Marine sold on 1 April 2019, Rolls-Royce Power Development Limited sold on 15 April 2019, L'Orange sold on 1 June 2018 and other smaller non-core businesses including former Energy businesses not included in the disposal to Siemens in 2014 (Retained Energy).

² In the prior period, revenue of £46m within ITP Aero was reclassified from OE to aftermarket services to better reflect the underlying nature of the revenue.

	Total assets		Total liabilities		Net assets/(liabilities)	
	30 June 2019 £m	31 December 2018 £m	30 June 2019 £m	31 December 2018 £m	30 June 2019 £m	31 December 2018 £m
Civil Aerospace	17,130	14,652	(22,005)	(21,310)	(4,875)	(6,658)
Power Systems	3,990	3,759	(1,588)	(1,668)	2,402	2,091
Defence	2,531	2,628	(2,951)	(2,924)	(420)	(296)
ITP Aero	2,254	2,210	(1,216)	(1,168)	1,038	1,042
Inter-segment	(1,450)	(1,621)	1,667	1,743	217	122
Core businesses	24,455	21,628	(26,093)	(25,327)	(1,638)	(3,699)
Non-core businesses	53	136	(79)	(141)	(26)	(5)
Held for sale assets/(liabilities)	–	750	–	(376)	–	374
Net funds	4,592	5,273	(6,529)	(4,662)	(1,937)	611
Tax assets/(liabilities)	2,176	2,126	(839)	(1,100)	1,337	1,026
Post-retirement scheme surpluses/(deficits)	1,143	1,944	(1,478)	(1,303)	(335)	641
	32,419	31,857	(35,018)	(32,909)	(2,599)	(1,052)

Underlying profit adjustments	Half-year to 30 June 2019			Restated * Half-year to 30 June 2018		
	Revenue £m	Profit before financing £m	Net financing £m	Revenue £m	Profit before financing £m	Net financing £m
Underlying performance	7,353	203	(110)	7,040	141	(68)
Revenue recognised at exchange rate on date of transaction	530	–	–	447	–	–
Realised losses on settled derivative contracts ¹ (see note 11)	–	241	40	–	207	33
Net unrealised fair value changes to derivative contracts ² (see note 11)	–	(2)	(738)	–	1	(815)
Effect of currency on contract accounting	–	(115)	–	–	(30)	–
Effect of currency on contract loss provision	–	(24)	–	–	–	–
Revaluation of trading assets and liabilities	–	(22)	(163)	–	(75)	(4)
Net post-retirement scheme financing	–	–	10	–	–	11
Financial RRSAs – exchange differences and changes in forecast payments	–	–	1	–	–	(2)
Effect of acquisition accounting	–	(71)	–	–	(96)	–
Gain arising on the disposal of L'Orange ³	–	–	–	–	358	–
Commercial Marine - Gain on disposal (2018: Impairment of goodwill)	–	84	–	–	(160)	–
Gain arising on the disposal of RRPD ³	–	34	–	–	–	–
Trent 1000 exceptional charge ⁴	–	–	–	–	(554)	–
Trent 900 exceptional charge ⁴	–	(59)	–	–	–	–
Hedge ineffectiveness	–	–	(15)	–	–	–
Exceptional restructuring charge ⁵	–	(69)	–	–	(179)	–
Other	–	1	(17)	–	(2)	–
Total underlying adjustments	530	(2)	(882)	447	(530)	(777)
Reported per consolidated income statement	7,883	201	(992)	7,487	(389)	(845)

* The financial information for the prior period has been restated to reflect changes to the provisional ITP Aero balances and other adjustments. See note 1 for more details.

¹ The adjustments for realised losses on settled derivative contracts include adjustments to reflect the losses in the same period as the related trading cash flows.

² The adjustments for unrealised fair value changes to derivative contracts include those included in equity accounted joint ventures and exclude those for which the related trading contracts have been cancelled when the fair value changes are recognised immediately in underlying profit.

³ Gain on the disposal of businesses. See note 16 for more details.

The table below summarises the exceptional items recorded in 2019 and 2018.

	Half-year to 30 June 2019 £m	Half-year to 30 June 2018 £m
Programme exceptional items ⁴	59	554
Related foreign exchange impact ⁴	3	95
Restructuring charge ⁵	69	179
	131	828

⁴ Included within programme exceptional items is £59m (£62m at prevailing exchange rates) relating to the decision by Airbus to cease Airbus A380 deliveries in 2021. Included in the prior period is £554m (£649m at prevailing exchange rates) in respect of the abnormal wastage costs on the Trent 1000.

⁵ The Group recorded an exceptional restructuring charge of £69m (30 June 2018: £179m). The costs include: £39m (30 June 2018: £132m) in respect of the Group-wide restructuring programme announced on 14 June 2018; costs relating to ongoing multi-year significant restructuring programmes at Power Systems and in respect of Defence, reflecting actions to remove cost and improve operational efficiency.

3 Research and development costs

	Half-year to 30 June 2019 £m	Half-year to 30 June 2018 £m
Expenditure in the period	(518)	(542)
Capitalised as intangible assets	224	241
Amortisation and impairment of capitalised costs	(55)	(59)
Net cost recognised in the income statement	(349)	(360)
Underlying adjustments relating to the effects of acquisition accounting and foreign exchange	28	42
Net underlying cost recognised in the income statement	(321)	(318)

4 Net financing

	Half-year to 30 June 2019		Half-year to 30 June 2018	
	Per consolidated income statement £m	Underlying ¹ financing £m	Per consolidated income statement £m	Underlying ¹ financing £m
Interest receivable	19	19	11	11
Financial RRSAs – foreign exchange differences and changes in forecast payments	1	–	–	–
Net fair value gains on commodity contracts	25	–	39	–
Financing on post-retirement scheme surpluses	28	–	27	–
Net foreign exchange gains	–	–	29	–
Financing income	73	19	106	11
Interest payable	(97)	(87)	(48)	(48)
Net fair value losses on foreign currency contracts	(763)	–	(854)	–
Financial RRSAs – foreign exchange differences and changes in forecast payments	–	–	(2)	–
Financial charge relating to financial RRSAs	(2)	(2)	(5)	(5)
Net fair value losses on commodity contracts	–	–	–	–
Financing on post-retirement scheme deficits	(18)	–	(16)	–
Net foreign exchange losses	(123)	–	–	–
Other financing charges	(62)	(40)	(26)	(26)
Financing costs	(1,065)	(129)	(951)	(79)
Net financing	(992)	(110)	(845)	(68)
Analysed as:				
Net interest payable	(78)	(68)	(37)	(37)
Net fair value losses on derivative contracts	(738)	–	(815)	–
Net post-retirement scheme financing	10	–	11	–
Net other financing	(186)	(42)	(4)	(31)
Net financing	(992)	(110)	(845)	(68)

¹ See note 2 for definition of underlying results.

5 Taxation

The tax charge for the half year is £116m on a reported loss before taxation of £791m (30 June 2018: tax credit of £282m on a reported loss before taxation of £1,234m). The key driver of the tax charge in the period is the non-recognition of deferred tax on UK losses.

Deferred tax assets are recognised to the extent it is probable that future taxable profits will be available against which to recover the asset. This is based on management's assumptions relating to the amounts and timing of future taxable profits. The Board continually reassess the appropriateness of recognising deferred tax assets relating to losses which includes a consideration of the time period over which they are recovered. We have not recognised any deferred tax assets in respect of 2019 UK losses, including mark to market valuations of derivative instruments. The deferred tax assets at 30 June 2019 have been reassessed for recoverability in line with the approach set out in Note 5 of the 2018 Annual Report.

6 Earnings per ordinary share

Basic earnings per share (EPS) are calculated by dividing the profit /(loss) attributable to ordinary shareholders by the weighted average number of ordinary shares in issue during the period, excluding ordinary shares held under trust, which have been treated as if they had been cancelled.

Diluted EPS are calculated by adjusting the weighted average number of ordinary shares in issue during the period for the bonus element of share options.

	Half-year to 30 June 2019			Restated * Half-year to 30 June 2018		
	Basic	Potentially dilutive share options ¹	Diluted	Basic	Potentially dilutive share options	Diluted
Loss attributable to ordinary shareholders (£m)	(909)	–	(909)	(954)	–	(954)
Weighted average number of ordinary shares (millions)	1,893	–	1,893	1,849	–	1,849
EPS (pence)	(48.02)p	–	(48.02)p	(51.60)p	–	(51.60)p

* The financial information for the prior period has been restated to reflect changes to the provisional ITP Aero balances and other adjustments. See note 1 for more details.

¹ As there is a loss, the effect of potentially dilutive ordinary shares is anti-dilutive.

The reconciliation between underlying EPS and basic EPS is as follows:

	Half-year to 30 June 2019		Half-year to 30 June 2018	
	Pence	£m	Pence	£m
Underlying EPS / Underlying (loss)/profit attributable to ordinary shareholders re-presented	(1.58)	(30)	2.49	46
Total underlying adjustments to loss before tax (note 2)	(46.70)	(884)	(70.69)	(1,307)
Related tax effects	0.26	5	16.60	307
EPS / Loss attributable to ordinary shareholders	(48.02)	(909)	(51.60)	(954)
Diluted underlying EPS ¹	(1.58)		2.48	

¹ As there is a loss, the effect of potentially dilutive ordinary shares is anti-dilutive.

7 Payments to shareholders in respect of the period

Payments to shareholders in respect of the period represent the value of C Shares to be issued in respect of the results for the period. Issues of C Shares were declared as follows:

	Half-year to 30 June 2019		Half-year to 30 June 2018	
	Pence per share	£m	Pence per share	£m
Interim (issued in January)	4.6	87	4.6	86

8 Intangible assets

	Goodwill £m	Certification costs £m	Development expenditure £m	Customer relationships £m	Software £m	Other £m	Total £m
Cost:							
At 1 January 2019	1,087	948	2,883	1,384	964	811	8,077
Additions	–	7	224	–	39	13	283
Disposals	–	–	–	(1)	(37)	(4)	(42)
Reclassifications	–	–	–	–	11	(2)	9
Exchange differences	5	1	9	5	2	1	23
At 30 June 2019	1,092	956	3,116	1,388	979	819	8,350
Accumulated amortisation and impairment:							
At 1 January 2019	42	373	1,111	304	607	345	2,782
Charge for the period ¹	–	9	55	34	42	13	153
Disposals	–	–	–	(1)	(35)	(4)	(40)
Reclassifications	–	–	–	–	11	(2)	9
Exchange differences	–	–	4	5	–	–	9
At 30 June 2019	42	382	1,170	342	625	352	2,913
Net book value at:							
30 June 2019	1,050	574	1,946	1,046	354	467	5,437
31 December 2018	1,045	575	1,772	1,080	357	466	5,295

¹ Charged to cost of sales except development costs, which are charged to research and development costs.

Intangible assets have been reviewed for impairment in accordance with the requirements of IAS 36 *Impairment of Assets*. Where an impairment test was considered necessary, it has been performed on the following basis:

- The carrying values have been assessed by reference to value in use. These have been estimated using cash flows from the most recent forecasts prepared by management, which are consistent with past experience and external sources of information on market conditions over the lives of the respective programmes.
- The key assumptions underlying cash flow projections are assumed market share, programme timings, unit cost assumptions, discount rates and foreign exchange rates.
- The pre-tax cash flow projections have been discounted at 7-13% (31 December 2018: 7-13%), based on the Group's weighted average cost of capital adjusted for the risks subject to the asset.
- No impairment is required on this basis. However, a combination of changes in assumptions and adverse movements in variables that are outside the Group's control (discount rate, exchange rate and airframer delays), could result in impairment in future periods.

9 Property, plant and equipment

	Land and buildings £m	Plant and equipment £m	Aircraft and engines £m	In course of construction £m	Total £m
Cost:					
At 31 December 2018	1,916	5,296	967	722	8,901
Impact of adoption of IFRS 16 (see note 18)	(12)	(11)	(205)	(29)	(257)
At 1 January 2019	1,904	5,285	762	693	8,644
Additions	10	85	30	145	270
Disposal of businesses	(4)	(168)	–	–	(172)
Disposals	(6)	(76)	(1)	(1)	(84)
Reclassifications	57	153	16	(235)	(9)
Exchange differences	7	17	2	2	28
At 30 June 2019	1,968	5,296	809	604	8,677
Accumulated depreciation and impairment:					
At 31 December 2018	579	3,142	244	7	3,972
Impact of adoption of IFRS 16 (see note 18)	(7)	(13)	(40)	–	(60)
At 1 January 2019	572	3,129	204	7	3,912
Charge for the period	29	183	17	–	229
Disposal of businesses	–	(165)	–	–	(165)
Disposals	(14)	(61)	–	–	(75)
Reclassifications	–	(9)	–	–	(9)
Exchange differences	4	11	2	–	17
At 30 June 2019	591	3,088	223	7	3,909
Net book value at:					
30 June 2019	1,377	2,208	586	597	4,768
1 January 2019	1,332	2,156	558	686	4,732
31 December 2018	1,337	2,154	723	715	4,929

10 Right-of-use assets

	Land and buildings £m	Plant and equipment £m	Aircraft and engines £m	Total £m
Cost:				
At 31 December 2018	–	–	–	–
Impact of adoption of IFRS 16 (see note 18)	493	107	1,654	2,254
Transferred to assets held for sale ¹	(40)	(1)	–	(41)
At 1 January 2019	453	106	1,654	2,213
Additions/modification of leases	22	4	61	87
Disposals	(1)	–	(3)	(4)
Reclassifications	–	–	–	–
Exchange differences	3	–	1	4
At 30 June 2019	477	110	1,713	2,300
Accumulated depreciation and impairment:				
At 31 December 2018	–	–	–	–
Impact of adoption of IFRS 16 (see note 18)	–	–	–	–
At 1 January 2019	–	–	–	–
Charge for the period	26	15	149	190
Impairment	–	–	10	10
Disposals	(1)	–	(3)	(4)
At 30 June 2019	25	15	156	196
Net book value at:				
30 June 2019	452	95	1,557	2,104
1 January 2019	453	106	1,654	2,213
31 December 2018	–	–	–	–

¹ Relates to the Commercial Marine business classified as a “held for sale” business at 31 December 2018. See note 16 for more details.

11 Financial assets and liabilities

Other financial assets and liabilities comprise:

	Derivatives			Total £m	Financial RRSAs £m	Other £m	C Shares £m	Total £m
	Foreign exchange contracts £m	Commodity contracts £m	Interest rate contracts ¹ £m					
At 30 June 2019								
Non-current assets	22	10	388	420	–	17	–	437
Current assets	13	8	–	21	–	12	–	33
Current liabilities	(805)	(8)	–	(813)	(34)	(41)	(30)	(918)
Non-current liabilities	(3,480)	(10)	(4)	(3,494)	(110)	(32)	–	(3,636)
	(4,250)	–	384	(3,866)	(144)	(44)	(30)	(4,084)
At 31 December 2018								
Non-current assets	47	4	292	343	–	–	–	343
Current assets	16	2	4	22	–	–	–	22
Current liabilities	(523)	(15)	–	(538)	(52)	(28)	(29)	(647)
Non-current liabilities	(3,304)	(25)	(4)	(3,333)	(175)	(34)	–	(3,542)
	(3,764)	(34)	292	(3,506)	(227)	(62)	(29)	(3,824)

¹ Includes the foreign exchange impact of cross-currency interest rate swaps.

Derivative financial instruments

	Half-year to 30 June 2019				Year to 31 December 2018
	Foreign exchange £m	Commodity £m	Interest rate £m	Total £m	Total £m
At 1 January 2019	(3,764)	(34)	292	(3,506)	(2,084)
Movements in fair value hedges	–	–	91	91	66
Movement in cash flow hedges	(4)	9	1	6	(24)
Movements in other derivative contracts ¹	(763)	25	–	(738)	(2,144)
Contracts settled	281	–	–	281	680
At period/year end	(4,250)	–	384	(3,866)	(3,506)

¹ Included in financing.

Financial risk and revenue sharing arrangements (RRSAs) and other financial assets and liabilities

	Financial RRSAs		Other	
	Half-year to 30 June 2019 £m	Year to 31 December 2018 £m	Half-year to 30 June 2019 £m	Year to 31 December 2018 £m
At 1 January as previously reported	(227)	(247)	(62)	(57)
Reclassification to borrowings ¹	79	–	–	–
At 1 January restated	(148)	(247)	(62)	(57)
Exchange adjustments included in OCI	2	(3)	–	(1)
Additions	–	(3)	(35)	(25)
Financing charge ²	(2)	(8)	–	(1)
Excluded from underlying profit:				
Changes to forecast payments	–	(2)	–	–
Exchange adjustments	1	–	–	–
Cash paid to partners	9	36	24	22
Other	(6)	–	–	–
Reclassification from trade receivables	–	–	29	–
At period/year end	(144)	(227)	(44)	(62)

¹ The Group has reclassified £79m as borrowings previously included in other financial liabilities. These borrowings mature between 2019 and 2029.

² Included in net financing.

Fair values of financial instruments equate to book values with the following exceptions:

	Half-year to 30 June 2019		Year to 31 December 2018	
	Book value £m	Fair value £m	Book value £m	Fair value £m
Borrowings – Level 1	(3,363)	(3,334)	(3,754)	(3,634)
Borrowings – Level 2	(721)	(719)	(908)	(887)
Financial RRSAs	(144)	(154)	(227)	(235)

Fair values

The fair value of a financial instrument is the price at which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arms-length transaction. Fair values have been determined with reference to available market information at the balance sheet date, using the methodologies described below.

- Non-current investments – other comprise unconsolidated companies and are measured at fair value.
- The fair values of held to collect trade receivables and similar items, trade payables and other similar items, other non-derivative financial assets and liabilities, short-term investments and cash and cash equivalents are assumed to approximate to cost either due to the short-term maturity of the instruments or because the interest rate of the investments is reset after periods not exceeding six months.
- Fair values of derivative financial assets and liabilities and trade receivable held to collect or sell (30 June 2019: £456m; 31 December 2018: £146m) are estimated by discounting expected future contractual cash flows using prevailing interest rate curves or cost of borrowing, as appropriate. Amounts denominated in foreign currencies are valued at the exchange rate prevailing at the balance sheet date. These financial instruments and money-market funds are included on the balance sheet at fair value, derived from observable market prices (Level 2 as defined by IFRS 13 *Fair Value Measurement*).
- Borrowings are carried at amortised cost. Amounts denominated in foreign currencies are valued at the exchange rate prevailing at the balance sheet date. The fair value of borrowings is estimated using quoted prices (Level 1 as defined by IFRS 13) or by discounting contractual future cash flows (Level 2 as defined by IFRS 13).
- The fair values of RRSAs and other liabilities are estimated by discounting expected future cash flows. The contractual cash flows are based on future trading activity, which is estimated based on latest forecasts (Level 3 as defined by IFRS 13).
- The fair value of lease liabilities are estimated by discounting future contractual cash flows using either the interest rate implicit in the lease or the Group's incremental cost of borrowing (Level 2 as defined by IFRS 13).

Borrowings

During the period, the Group repaid £500m 6.75% Notes and exercised an option to extend the maturity of a £200m bank borrowing to 2022.

12 Contract assets and liabilities

	Half-year to 30 June 2019 £m	Year to 31 December 2018 £m
Contract assets		
Contract assets with operators	1,582	1,403
Participation fee contract assets	635	654
Total contract assets	2,217	2,057
Contract liabilities		
Current	(4,248)	(3,794)
Non-current	(5,515)	(5,336)
Total contract liabilities	(9,763)	(9,130)

13 Pensions and other post-retirement and long term employee benefits

The net post-retirement scheme deficit as at 30 June 2019 is calculated on a year to date basis, using the latest valuation as at 31 December 2018, updated to 30 June 2019 for the principal schemes.

Movements in the net post-retirement position recognised in the balance sheet were as follows:

	UK schemes £m	Overseas schemes £m	Total £m
At 1 January 2019¹	1,926	(1,312)	614
Exchange adjustments	–	(11)	(11)
Current service cost and administrative expenses	(80)	(27)	(107)
Financing recognised in the income statement	28	(18)	10
Contributions by employer	69	37	106
Actuarial gains/(losses) recognised in OCI	(1,111)	(198)	(1,309)
Returns on plan assets excluding financing recognised in OCI	291	75	366
Disposal of businesses (see note 16)	–	28	28
Transferred from other payables	–	(32)	(32)
At 30 June 2019²	1,123	(1,458)	(335)
Analysed as:			
Post-retirement scheme surpluses – included in non-current assets	1,123	20	1,143
Post-retirement scheme deficits – included in non-current liabilities	–	(1,478)	(1,478)
Post-retirement scheme deficits – liabilities held for sale	–	–	–
	1,123	(1,458)	(335)

¹ Includes £27m of post-retirement scheme liabilities which were included in 'liabilities associated with assets held for sale' at 31 December 2018.

² The surplus in the UK scheme is recognised as, on ultimate wind-up when there are no longer any remaining members, any surplus would be returned to the Group, which has the power to prevent the surplus being used for other purposes in advance of this event.

On the 5 June 2019, the Group entered into a partial buy-in with Legal and General Assurance Society Limited covering the benefits of 33,000 in-payment pensioners. As a result of the transaction, an asset re-measurement net loss of c. £600 million has been recognised within the line 'Actuarial gains/(losses) recognised in OCI'. The partial buy-in is expected to be converted to a buy-out by 31 December 2019, at which point pension assets and pension liabilities of c. £4bn are expected to be derecognised from the Group's balance sheet.

14 Contingent liabilities

In January 2017, after full cooperation, the Company concluded deferred prosecution agreements with the SFO and the US Department of Justice and a leniency agreement with the MPF, the Brazilian federal prosecutors. The Central Bureau of Investigation in India has opened a formal investigation naming Rolls-Royce plc, Rolls-Royce India Private Limited and others alleging bribery in relation to historical matters. The Company will respond appropriately. Action may be taken by other authorities against the Company or individuals. In addition, we could still be affected by actions from customers and customers' financiers. The Directors are not currently aware of any matters that are likely to lead to a material financial loss over and above the penalties imposed to date, but cannot anticipate all the possible actions that may be taken or their potential consequences.

In connection with the sale of its products the Group will, on some occasions, provide financing support for its customers, generally in respect of civil aircraft. The Group's commitments relating to these financing arrangements are spread over many years, relate to a number of customers and a broad product portfolio and are generally secured on the asset subject to the financing. These include commitments of US\$2.5bn (2018: \$2.3bn) (on a discounted basis) to provide facilities to enable customers to purchase aircraft (of which approximately US\$228m could be called during 2019). These facilities may only be used if the customer is unable to obtain financing elsewhere and are priced at a premium to the market rate. Consequently the Directors do not consider that there is a significant exposure arising from the provision of these facilities.

Commitments on delivered aircraft in excess of the amounts provided are shown in the table below. These are reported on a discounted basis at the Group's borrowing rate to reflect better the time span over which these exposures could arise. These amounts do not represent values that are expected to crystallise. The commitments are denominated in US dollars. As the Group does not generally adopt cash flow hedge accounting for future foreign exchange transactions, this amount is reported together with the sterling equivalent at the reporting date spot rate. The values of aircraft providing security are based on advice from a specialist aircraft appraiser.

	30 June 2019		31 December 2018	
	£m	\$m	£m	\$m
Gross commitments	69	88	93	119
Value of security ¹	(9)	(12)	(24)	(30)
Indemnities	(11)	(14)	(19)	(24)
Net commitments	49	62	50	65
Net commitments with security reduced by 20% ²	49	62	60	77
¹ Security includes unrestricted cash collateral of:	–	–	4	6

² Although sensitivity calculations are complex, the reduction of the relevant security by 20% illustrates the sensitivity of the contingent liability to changes in this assumption.

Contingent liabilities exist in respect of guarantees provided by the Group in the ordinary course of business for product delivery, performance and reliability. The Group has, in the normal course of business, entered into arrangements in respect of export finance, performance bonds, countertrade obligations and minor miscellaneous items. Various Group undertakings are parties to legal actions and claims which arise in the ordinary course of business, some of which are for substantial amounts. As a consequence of the insolvency of an insurer as previously reported, the Group is no longer fully insured against known and potential claims from employees who worked for certain of the Group's UK-based businesses for a period prior to the acquisition of those businesses by the Group. While the outcome of some of these matters cannot precisely be foreseen, the directors do not expect any of these arrangements, legal actions or claims, after allowing for provisions already made, to result in significant loss to the Group.

15 Related party transactions

Transactions with related parties are shown on page 163 of the 2018 Annual Report. Significant transactions in the current financial period are as follows:

	Half-year to 30 June 2019 £m	Half-year to 30 June 2018 £m
Sales of goods and services to joint ventures and associates	1,614	1,400
Purchases of goods and services from joint ventures and associates	(2,152)	(1,556)

Included in sales of goods and services to joint ventures and associates are sales of spare engines amounting to £91m (30 June 2018: £185m).

Profit recognised in the period on such sales amounted to £40m (30 June 2018: £54m), including profit on current year sales and recognition of profit deferred on similar sales in previous years. On an underlying basis (at actual achieved rates on settled derivative transactions), the amounts were £33m (30 June 2018: £47m).

16 Acquisitions and disposals

Acquisition

On the 18 June 2019, the Group announced its intention to acquire the electric and hybrid-electric aerospace propulsion activities of Siemens. The transaction is expected to be completed by 31 December 2019, subject to certain conditions.

Disposals

On the 1 April 2019, the Group completed the sale of its Commercial Marine business to KONGSBERG for £569m. The business was disclosed as held for sale from 30 June 2018. In our 2018 half year financial statements, we reported an impairment charge of £160m as a result of the decision to classify Commercial Marine as a business held for sale. Upon the disposal of Commercial Marine on 1 April 2019, and in accordance with IAS 21 *The Effects of Changes in Foreign Exchange Rates* we have recycled the cumulate currency translation reserve through the Income Statement in 2019. This has resulted in a cumulative currency translation gain of £98m. Under the Sale and Purchase Agreement, the cash consideration may be adjusted based upon finalisation of the net assets disposed of, expected to be concluded by 31 December 2019.

On the 15 April 2019, the Group sold its shareholding in Rolls-Royce Power Development Limited to Rockland Capital Partners for £29m. The principal activity of this company was to operate a fleet of six industrial Trent power stations in the UK.

	Total
	£m
Proceeds	
Cash consideration	598
Cash and cash equivalents disposed	(118)
Net cash consideration	480
Disposal costs paid	(22)
Cash inflow per cash flow statement	458
Assets and liabilities disposed	
Intangible assets	236
Property, plant and equipment	146
Right-of-use assets	40
Deferred tax assets	7
Inventory	210
Trade receivables and other assets	213
Current tax assets	1
Lease liabilities	(39)
Trade payables and other liabilities	(280)
Deposits (payments received on account)	(74)
Provisions for liabilities and charges	(28)
Post-retirement scheme deficits	(28)
Net assets disposed	404

The provisional gain of disposal of businesses (net of disposal costs) totalled £118m.

L'Orange disposal

On 1 June 2018, the Group sold its L'Orange business, part of Rolls-Royce Power Systems, to Woodward Inc. for €673m. Under the sale agreement, the cash consideration may be adjusted by up to +/-€44m, based on L'Orange aftermarket sales over the five-year period to 31 May 2023 and this will be reviewed at each reporting date over the adjustment period, based on actual sales. No significant change has been identified to the cash consideration at 30 June 2019. Profit on disposal of business (net of disposal costs) was £358m.

17 Derivation of summary funds flow statement from reported cash flow statement

	Half-year to 30 June 2019		Restated * Half-year to 30 June 2018	
	£m	£m	£m	£m
Underlying operating profit (see note 2)		203		141
Depreciation and impairment of property, plant and equipment	229		172	
Amortisation and impairment of intangible assets	153		239	
Depreciation and impairment of right-of-use assets	200		–	
Acquisition accounting	(71)		(96)	
Depreciation and amortisation		511		315
Lease payments (capital plus interest)		(184)		–
Additions of intangible assets		(274)		(327)
Purchases of property, plant and equipment		(348)		(342)
Increase in inventories		(433)		(461)
Movement in receivables/payables ¹	220		123	
Movement in contract assets and liabilities	230		20	
Realised derivatives in financing	(40)		(33)	
Revaluation of trading assets (excluding exceptional items)	(19)		20	
Movement on receivables/payables/contract balances (excluding Civil LTSA)		391		130
Underlying Civil Aerospace LTSA contract balances		128		487
Movement on provisions		(271)		1
Net interest received and paid		(45)		(36)
Other		(8)		66
Trading cash flow		(330)		(26)
Contributions to defined benefit schemes in excess of underlying PBT charge		1		31
Tax		(100)		(77)
Free cash flow		(429)		(72)
Shareholder payments		(85)		(85)
Disposal of Commercial Marine and RRPD (2018: Disposal of L'Orange)		458		584
Exceptional restructuring costs		(66)		–
DPA payments		(102)		–
Other		11		13
Foreign exchange		(8)		30
Change in net funds/(debt)		(221)		470

* The comparative financial information for the period ended 30 June 2018 has been restated to show cash flow movements for contract assets and contract liabilities. Cash flow movements were previously shown within the lines 'increase in trade and other receivables' and 'increase in trade and other payables'.

¹ We offer reduced payment terms for smaller suppliers, so that they are paid in 30 days. Our terms with other suppliers vary on the products and services being sourced, the competitive global markets we operate in and other commercial aspects of suppliers' relationships. We offer a Supply Chain Finance programme in partnership with banks to enable suppliers who are on our standard payment term to receive their payment sooner. The Supply Chain Finance programme is available to suppliers at their discretion and does not change our rights and obligations with suppliers nor the timing of our payment of suppliers.

The table below shows a reconciliation of free cash flow to the change in cash and cash equivalents presented in the condensed consolidated cash flow statement on page 24.

	Half-year to 30 June 2019		Half-year to 30 June 2018		Source
	£m	£m	£m	£m	
Change in cash and cash equivalents		(763)		1,392	A
Returns to shareholders		85		85	A
Net cash flow from changes in borrowings and lease liabilities (2018: finance leases)		679		(956)	A
(Decrease)/Increase in short-term investments		(6)		4	A
Disposal of Commercial Marine and RRPD (2018: Disposal of L'Orange)	(458)		(584)		A
Other acquisitions and disposals	6		(13)		C
Changes in group structure		(452)		(597)	
Payments of financial penalties from agreements with investigating bodies		102		–	A
Exceptional restructuring expenditure		66		–	C
Capital element of lease repayments ¹		(140)		–	A
Free cash flow		(429)		(72)	

¹ As IFRS 16 has been adopted with effect from 1 January 2019, no adjustments have been made to present the comparative period on a consistent basis.

Sources:

- A Cash flow statement
- B Note 2 - underlying profit adjustments
- C Cash flow statement adjusted for non-underlying items including exchange differences

18 Impact of adopting IFRS 16 Leases

For leases previously classified as finance leases, the Group recognised the carrying amount of the lease asset and lease liability immediately before transition as the carrying amount of the right-of-use asset and the lease liability at the date of initial application. The measurement principles of IFRS 16 are only applied after that date.

The following table reconciles the operating lease obligations under the previous accounting standard, IAS 17 Leases, to the lease liability recorded under IFRS16 on transition:

	£m
Operating lease commitments as reported at 31 December 2018	2,343
Lease commitments at end of aero engines lease contracts previously reflected in provisions and other liabilities	515
Discounted using the incremental borrowing rate at the date of initial application	(749)
Additional commitments recognised during final data review ¹	180
Impact of adoption of IFRS 16	2,289
Commitments relating to businesses disposed	(41)
At 1 January 2019	2,248
Finance lease liabilities recognised as at 31 December 2018	229
Lease liability recognised as at 1 January 2019	2,477
Of which are:	
Current lease liabilities	322
Non-current lease liabilities	2,155

¹ These have been offset by an equivalent right of use change.

The recognised right-of-use assets relate to the following types of asset:

	30 June 2019	1 January 2019
	£m	£m
Land and buildings	452	453
Plant and equipment	95	106
Aircraft and engines	1,557	1,654
Total right-of-use assets	2,104	2,213

The change in accounting policy affected the following items in the balance sheet on 1 January 2019:

Condensed consolidated balance sheet

	Previously reported 31 December 2018 £m	IFRS 16 impact £m	Transferred to assets held for sale ¹ £m	As at 1 January 2019 £m
ASSETS				
Intangible assets	5,295	–	–	5,295
Property, plant and equipment ²	4,929	(197)	–	4,732
Right-of-use assets ³	–	2,254	(41)	2,213
Investments – joint ventures and associates	412	–	–	412
Investments – other	22	–	–	22
Other financial assets	343	–	–	343
Deferred tax assets ⁴	2,092	2	–	2,094
Post-retirement scheme surpluses	1,944	–	–	1,944
Non-current assets	15,037	2,059	(41)	17,055
Inventories	4,287	–	–	4,287
Trade receivables and other assets	4,690	–	–	4,690
Contract assets	2,057	–	–	2,057
Taxation recoverable	34	–	–	34
Other financial assets	22	–	–	22
Short-term investments	6	–	–	6
Cash and cash equivalents	4,974	–	–	4,974
Current assets	16,070	–	–	16,070
Assets held for sale	750	–	41	791
TOTAL ASSETS	31,857	2,059	–	33,916
LIABILITIES				
Borrowings and lease liabilities	(858)	(295)	7	(1,146)
Other financial liabilities	(647)	–	–	(647)
Trade payables and other liabilities ⁵	(8,292)	49	–	(8,243)
Contract liabilities	(3,794)	–	–	(3,794)
Current tax liabilities	(138)	–	–	(138)
Provisions for liabilities and charges ⁶	(1,122)	30	–	(1,092)
Current liabilities	(14,851)	(216)	7	(15,060)
Borrowings and lease liabilities	(3,804)	(1,994)	34	(5,764)
Other financial liabilities	(3,542)	–	–	(3,542)
Trade payables and other payables ⁵	(1,940)	60	–	(1,880)
Contract liabilities	(5,336)	–	–	(5,336)
Deferred tax liabilities ⁴	(962)	6	–	(956)
Provisions for liabilities and charges ⁶	(795)	45	–	(750)
Post-retirement scheme deficits	(1,303)	–	–	(1,303)
Non-current liabilities	(17,682)	(1,883)	34	(19,531)
Liabilities associated with assets held for sale	(376)	–	(41)	(417)
TOTAL LIABILITIES	(32,909)	(2,099)	–	(35,008)
NET LIABILITIES	(1,052)	(40)	–	(1,092)
EQUITY				
Called-up share capital	379	–	–	379
Share premium account	268	–	–	268
Capital redemption reserve	161	–	–	161
Cash flow hedging reserve	(106)	–	–	(106)
Merger reserve	406	–	–	406
Translation reserve	809	–	–	809
Accumulated losses ⁷	(2,991)	(40)	–	(3,031)
Equity attributable to ordinary shareholders	(1,074)	(40)	–	(1,114)
Non-controlling interests	22	–	–	22
TOTAL EQUITY	(1,052)	(40)	–	(1,092)

¹ Relates to the Commercial Marine business which was classified as “held for sale” at 31 December 2018. See note 16 for more details.

² Transfer of net book value of finance leased assets to right-of-use assets.

³ Initial recognition of right-of-use assets accounted for under IFRS 16.

⁴ Deferred tax on the difference between the right-of-use asset measured on a retrospective basis and the lease liability at transition date.

⁵ Lease related creditors reclassified against the IFRS 16 right-of-use asset on transition.

⁶ Provisions related to engine return conditions reclassified against IFRS 16 right-of-use asset.

⁷ Post-tax difference between the right-of-use asset measured on a retrospective basis and the lease liability at transition date

Principal risks and uncertainties

Whilst the Group has a consistent strategy and long performance cycles, it continues to be exposed to a number of risks and has an established, structured approach to identifying, assessing and managing those risks.

The principal risks facing the Group for the remaining six months of the financial year are unchanged from those reported on pages 50 to 54 of the Annual Report 2018, as summarised below:

Strategic transformation

Failure to deliver our strategic transformation, including changing our behaviours could result in: missed opportunities; dissatisfied customers; disengaged employees; ineffective use of our scarce resources; and increasing the likelihood of other principal risks occurring. This could lead to a business that is overly dependent on a small number of products and customers; failure to achieve our vision; non-delivery of financial targets and not meeting investor expectations.

Competitive environment

The presence of competitors in the majority of our markets means that the Group is susceptible to significant price pressure for original equipment or services. Our main competitors have access to significant government funding programmes as well as the ability to invest heavily in technology and industrial capability. Disruptive technologies or new entrants with alternative business models could also reduce our ability to sustainably win future business, achieve operating results and realise future growth opportunities.

Cyber threat

An attempt to cause harm to the Group, its customers, suppliers and partners through the unauthorised access, manipulation, corruption, or destruction of data, systems or products through cyber space.

Major product programme delivery

Failure to deliver a major programme on time, within budget, to technical specification or falling significantly short of customer expectations, or not delivering the planned business benefits, would have potentially significant adverse financial and reputational consequences, including the risk of impairment of the carrying value of the Group's intangible assets and the impact of potential litigation.

Business continuity

The major disruption of the Group's operations, which results in our failure to meet agreed customer commitments and damages our prospects of winning future orders. Disruption could be caused by a range of events, for example: extreme weather or natural hazards (e.g. earthquakes, floods); political events; financial insolvency of a critical supplier; scarcity of materials; loss of data; and fire or infectious disease. The consequences of these events could have an adverse impact on our people, our internal facilities or our external supply chain.

Safety

Failure to meet the expectations of: 1) our customers to provide safe products which also minimise the impact on the environment during their production or use; or 2) people who work for or with us to provide a safe and healthy place of work which minimises the impact on the environment; would adversely affect our reputation and long-term sustainability.

Talent and capability

Inability to identify, attract, retain and apply the critical capabilities and skills needed in appropriate numbers to effectively organise, deploy and incentivise our people would threaten the delivery of our strategies, business plans and projects.

Market and financial shock

The Group is exposed to a number of market risks, some of which are of a macro-economic nature (e.g. foreign currency, oil price, rates) and some of which are more specific to the Group (e.g. liquidity and credit risks, reduction in air travel or disruption to other customer operations). Significant extraneous market events could also materially damage the Group's competitiveness and/or creditworthiness. This would affect operational results or the outcomes of financial transactions.

Political risk

Geopolitical factors (including Brexit) that lead to an unfavourable business climate and significant tensions between major trading parties or blocs which could impact the Group's operations. Examples include: changes in key political relationships; explicit trade protectionism, differing tax or regulatory regimes, potential for conflict or broader political issues; and heightened political tensions.

Compliance

Non-compliance by the Group with legislation, the terms of the deferred prosecution agreements or other regulatory requirements in the heavily regulated environment in which it operates (e.g. export controls; use of controlled chemicals and substances; anti-bribery and corruption; environmental regulations; and tax and customs legislation). This could affect our ability to conduct business in certain jurisdictions and would expose the Group to potential: reputational damage; financial penalties; debarment from government contracts for a period of time; and suspension of export privileges (including export credit financing), each of which could have a material adverse effect.

Going concern

After making enquiries, the directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future (which accounting standards require to be at least a year from the date of this report). There have been no significant changes to the basis described on page 55 of the Annual Report 2018. For this reason they continue to adopt the going concern basis in preparing the consolidated financial statements.

Payments to shareholders

The Company makes payments to shareholders by allotting non-cumulative redeemable preference shares of 0.1 pence each (C Shares). Shareholders can opt to redeem the C Shares for a cash payment, or reinvest the cash proceeds by purchasing additional ordinary shares via the C Share Reinvestment Plan (CRIP), which is operated by our Registrar, Computershare Investor Services PLC. On 3 January 2020, 46 C Shares, with a total nominal value of 4.6p, will be allotted for each ordinary share to those shareholders on the register on 25 October 2019. The final day of trading with entitlement to C Shares is 23 October 2019. Shareholders wishing to redeem their C Shares, or participate in the CRIP, must lodge instructions with our Registrar to arrive no later than 5.00 pm on 2 December 2019 (CREST holders must submit their election in CREST by 3pm GMT). The payment of C Shares redemption monies will be made on 6 January 2020 and the CRIP purchase will begin as soon as practicable after 6 January 2020.

Statement of directors' responsibilities

The directors confirm that, to the best of their knowledge:

- the condensed consolidated half-year financial statements have been prepared in accordance with IAS 34 *Interim Financial Reporting* as adopted by the EU;
- the interim management report includes a fair review of the information required by:
 - (a) DTR 4.2.7R of the *Disclosure and Transparency Rules*, being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed consolidated half-year financial statements; and a description of the principal risks and uncertainties for the remaining six months of the year; and
 - (b) DTR 4.2.8R of the *Disclosure and Transparency Rules*, being related party transactions that have taken place in the first six months of the current financial year and that have materially affected the financial position or performance of the entity during that period; and any changes in the related party transactions described in the last Annual Report that could do so.

The directors of Rolls-Royce Holdings plc at 28 February 2019 are listed in its Annual Report 2018 on pages 59 to 61. There have been no changes since this date.

By order of the Board

Warren East
Chief Executive
5 August 2019

Stephen Daintith
Chief Financial Officer
5 August 2019

Independent review report to Rolls-Royce Holdings plc

Report on the Condensed consolidated half-year financial statements

Our conclusion

We have reviewed Rolls-Royce Holdings plc's Condensed consolidated half-year financial statements (the "interim financial statements") in the 2019 Half Year Results of Rolls-Royce Holdings plc for the six month period ended 30 June 2019. Based on our review, nothing has come to our attention that causes us to believe that the interim financial statements are not prepared, in all material respects, in accordance with International Accounting Standard 34, 'Interim Financial Reporting', as adopted by the European Union and the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority.

What we have reviewed

The interim financial statements comprise:

- the Condensed consolidated balance sheet as at 30 June 2019;
- the Condensed consolidated income statement and Condensed consolidated statement of comprehensive income for the six month period then ended;
- the Condensed consolidated cash flow statement for the six month period then ended;
- the Condensed consolidated statement of changes in equity for the six month period then ended; and
- the explanatory notes to the interim financial statements.

The interim financial statements included in the 2019 Half Year Results have been prepared in accordance with International Accounting Standard 34, 'Interim Financial Reporting', as adopted by the European Union and the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority.

As disclosed in note 1 to the interim financial statements, the financial reporting framework that has been applied in the preparation of the full annual financial statements of the Group is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

Responsibilities for the interim financial statements and the review

Our responsibilities and those of the directors

The 2019 Half Year Results, including the interim financial statements, is the responsibility of, and has been approved by, the directors. The directors are responsible for preparing the 2019 Half Year Results in accordance with the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority.

Our responsibility is to express a conclusion on the interim financial statements in the 2019 Half Year Results based on our review. This report, including the conclusion, has been prepared for and only for the company for the purpose of complying with the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority and for no other purpose. We do not, in giving this conclusion, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

What a review of interim financial statements involves

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410, 'Review of Interim Financial Information Performed by the Independent Auditor of the Entity' issued by the Auditing Practices Board for use in the United Kingdom. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures.

A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and, consequently, does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

We have read the other information contained in the 2019 Half Year Results and considered whether it contains any apparent misstatements or material inconsistencies with the information in the interim financial statements.

PricewaterhouseCoopers LLP
Chartered Accountants
London
5 August 2019