Group at a glance

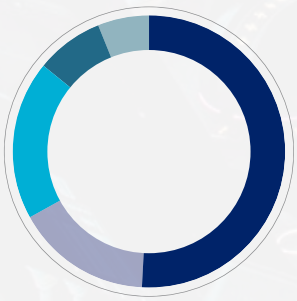
The Group is organised into five customer-facing businesses: Civil Aerospace, Defence Aerospace, Power Systems, Marine and Nuclear.

GROUP

UNDERLYING REVENUE
£13,783m

UNDERLYING PROFIT BEFORE FINANCING
£915m

UNDERLYING REVENUE MIX



Civil Aerospace	51%
Defence Aerospace	16%
Power Systems	19%
Marine	8%
Nuclear	6%

ORDER BOOK
£79.8bn

GROSS R&D EXPENDITURE
£1.3bn

PATENTS APPLIED FOR
672

COUNTRIES
50

ENGINEERS (YEAR END)
16,526

EMPLOYEES (YEAR AVERAGE)
49,900

Our award-winning Unified Bridge is the result of detailed studies of how crews use the equipment on the bridge, making the vessel safer and easier to operate.

CIVIL AEROSPACE

UNDERLYING REVENUE
£7,067m

UNDERLYING PROFIT BEFORE FINANCING
£367m

UNDERLYING REVENUE MIX

OE revenue	48%
Services revenue	52%

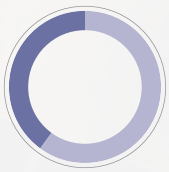
PAGES 18 TO 23 FOR MORE INFORMATION

DEFENCE AEROSPACE

UNDERLYING REVENUE
£2,209m

UNDERLYING PROFIT BEFORE FINANCING
£384m

UNDERLYING REVENUE MIX



OE revenue	40%
Services revenue	60%

PAGES 24 TO 26 FOR MORE INFORMATION

POWER SYSTEMS

UNDERLYING REVENUE
£2,655m

UNDERLYING PROFIT BEFORE FINANCING
£191m

UNDERLYING REVENUE MIX

OE revenue	68%
Services revenue	32%

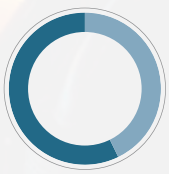
PAGES 27 TO 29 FOR MORE INFORMATION

MARINE

UNDERLYING REVENUE
£1,114m

UNDERLYING LOSS BEFORE FINANCING
£(27)m

UNDERLYING REVENUE MIX



OE revenue	57%
Services revenue	43%

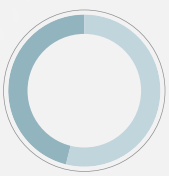
PAGES 30 TO 32 FOR MORE INFORMATION

NUCLEAR

UNDERLYING REVENUE
£777m

UNDERLYING PROFIT BEFORE FINANCING
£45m

UNDERLYING REVENUE MIX



OE revenue	46%
Services revenue	54%

PAGES 33 TO 35 FOR MORE INFORMATION

Chairman's statement

Ian Davis
Chairman

> "Progress in 2016 can be judged by how we have overcome our challenges; we have delivered on our commitments in a difficult year while at the same time embarking on a significant transformation."

UNDERLYING EPS

30.1p

PAYMENT TO SHAREHOLDERS

11.7p

OTHER STATUTORY INFORMATION P186

Last year I talked about how Rolls-Royce is a business in transition and how important the next few years were going to be, laying the groundwork for future success. In 2016, we have made a good start to the transformation programme, designed to bring significant and sustainable benefits over the coming years.

Our core strengths lie in our product portfolio, admired by our customers and respected by our competitors. This underpins our exceptional order book which will drive future shareholder value. To unlock these benefits, we need to sustain our investment in our key competitive advantages, including our world-leading research & development capability, as we introduce new products, ramp up production and expand our service capability to support our growing aftermarket.

By necessity, the transformation programme targeted simplifying the way we manage the business and reducing our fixed cost base. I have been very encouraged by the engagement across the Group on what is, understandably, a difficult exercise for many and which has seen around 20% of management roles being removed.

There is much more to do in terms of efficiency and behavioural change to achieve greater cost competitiveness. Key to this will be embedding the thinking around pace and simplicity that Warren East, your Chief Executive, has brought to the business. He will talk more about how we are doing this in the Strategic report.

Corporate governance

The recent settlements, with the UK Serious Fraud Office and other authorities, are a salient reminder of how critical it is to 'win right'. As a result of past, unacceptable conduct we have agreed to pay financial penalties and costs of around £671m. These dishonest acts, some as recent as 2013, are a major blemish on the reputation of the business and we have apologised unreservedly.

Importantly, the Board has taken extensive action to strengthen ethics and compliance procedures across the Group over recent years, so that high standards of conduct are embedded as an essential part of the way we do business. We share a determination to see that Rolls-Royce comes out of this episode as a more trusted, resilient and better managed business that wins right every time. Every employee, from the bottom to the top of the Group, is fully aware of the importance of doing the right thing.

As described in the Nominations & Governance Committee report (see page 70) our governance framework was rolled out in the summer and provides clarity and accountability, providing additional integrity to our business.

> "These dishonest acts... are a major blemish on the reputation of the business and we have apologised unreservedly."

Shareholder payments

Our stated objective in the long term is to progressively rebuild our payment to shareholders to an appropriate level, subject to the short-term cash needs of the business. This reflects the Board's long-standing confidence in the strong future cash generation of Rolls-Royce.

At this stage, the investment needs of the business remain high, reflected in the low level of free cash flow in 2016 and this is expected again in 2017. In addition, the Board sees the need to retain a degree of balance sheet flexibility.

As a result, it is proposed that the final payment for 2016 is unchanged from 2015 at 7.1 pence per share. Taken together with the interim payment, this brings the full year payment to 11.7 pence per share. As with past payments, the distribution will be in the form of C Shares.

Board developments

During the year, there have been a number of important changes to the Board. In March, we appointed Brad Singer, a partner of ValueAct Capital, to the Board, at which time he also joined the Science & Technology Committee. Sir Kevin Smith took over the role of Senior Independent Director from Lewis Booth, who continues as chairman of the Audit Committee, an important role for us at the present time. In May, following the 2016 AGM, Dame Helen Alexander stepped down from the Board. In November 2016, Alan Davies stepped down from the Board.

In addition, we announced in September that Stephen Daintith will join the Board in 2017 as Chief Financial Officer. His record of achievement in change management is particularly relevant to the Group. He will succeed David Smith.

Colin Smith will be leaving the Company after 43 years of service and will be stepping down from the Board after this year's AGM. Colin has made a major contribution to the success of the business over many years, including 12 years on the Board. I would like to thank both David and Colin for their valuable support during their time with Rolls-Royce.

More detail on the changes to the Board are set out in the Nominations & Governance Committee report on page 68.

Overall I believe we have a strong and experienced Board, fully engaged with the business and well able to provide both support and scrutiny in equal measure.

Rebuilding trust and confidence

We made significant efforts in 2016 to improve our communication with stakeholders. The foundations laid in the second half of 2015 were enhanced by a broad range of engagement, including formal events such as the corporate governance seminar in April, which I hosted, and the capital markets' event in November, led by Warren and his team. This latter event brought together senior management from all of our business units with analysts and investors. The event gave our guests the chance to ask questions and improve their understanding of the business.

Despite the challenges we face as a business, we know how important it is to sustain our investment in our people and communities. This has included maintaining active graduate and apprenticeship schemes, as well as investing in our research partnerships and STEM (science, technology, engineering and mathematics) programmes. Internally, we are working hard on employee engagement, including initiatives around diversity and wellbeing (see Sustainable business on page 42 and the Safety & Ethics Committee report on page 109).

During the year, we have also done significant work on the new revenue reporting standard, IFRS 15 *Revenue from Contracts with Customers*. Due to be adopted at the start of 2018, this will go a long way to better align the recognition of profit and cash for our original equipment business in particular, and will help make our performance improvements more transparent. I believe this will be welcomed by many stakeholders, but may take time to be properly understood. As a result, we have undertaken a progressive communication programme in 2016 to outline the changes, culminating in the capital markets' event in November. You can read more about this on pages 66 and 130.

We have noted with interest the Government's green paper on UK Corporate Governance: The Options for Change and we are actively taking steps to strengthen our interaction with stakeholders, particularly employees. Further detail is included in my introduction to the Directors' report on page 58. I look forward to reporting our progress in our Annual Report next year.

Since taking over as chairman of the Remuneration Committee in May, Ruth Cairnie has undertaken a comprehensive consultation on our proposed new incentive schemes, ahead of this year's AGM. You can read more about our proposed remuneration policy in the Directors' remuneration report on pages 72 to 82.

Feedback from investors suggests that we have improved the level of engagement, transparency and openness in many of our communications. While we can always do better, I believe the team has made a strong start in rebuilding trust.

I know Warren looks forward to introducing Stephen Daintith and Simon Kirby, our new Chief Operating Officer, to the market in the coming months to present their combined views on the strategic priorities for the business, which will define our future path.

Looking forward

2017 will be another transformative year for Rolls-Royce. We continue to operate in uncertain markets and will need to respond to shifting market dynamics, while at the same time make progress on our core priorities both in terms of customer deliveries and internal organisation changes.

Warren has been building a strong and experienced management team to help him achieve his strategic and operational goals. The Board will continue to both challenge and support their actions as they work to ensure we transition successfully over the next few years to a more profitable and cash-generative future.

Ian Davis
Chairman
13 February 2017

Chief Executive's review

Warren East
Chief Executive

"2016 has been an important year as we accelerated the transformation of Rolls-Royce."

Introduction

Overall, we have performed ahead of our expectations for the year as a whole while delivering significant changes to our management and processes. We increased our large aero-engine production output by 25%, supported the needs of our customers, and made good technical progress in the final stages of the development of the three new large engines, due to enter service over the next twelve months. At the same time we have improved manufacturing lead times for our key Civil Aerospace programmes, an important goal as we ramp up production over the next few years. Progress with our transformation programme was also better than expected, delivering over £60m of in-year benefits compared to our initial target of between £30-50m. Overall, the performance improvements have helped offset a number of changing trading conditions and higher research & development (R&D) spend.

This Strategic report describes the business in depth and provides further information on our financial position and business performance.

Review of 2016

Performance in 2016

In 2015, we identified a number of significant headwinds that would hold back performance in 2016, including mixed market conditions and the revenue and cost impacts of some key product transitions.

Looking first at our markets, demand for our large Civil Aerospace products and services remained robust, despite some specific weaknesses for service demand in respect of older engines. At the same time, demand for new corporate jets softened, as did the aftermarket for the regional jets powered by our AE 3007 engines. Defence Aerospace markets held up well with a steady demand for our aftermarket services in particular. Offshore oil & gas markets for our Marine business continued to suffer from the consequences of low oil prices. Alongside weaker industrial demand, this also impacted Power Systems.

Other known headwinds transpired broadly as expected, led by lower Trent 700 volumes and prices, legacy civil large engine aftermarket reductions and weakness in marine markets. At the same time, we have continued to invest in products and services to support our customers and reinforce the long-term strength of our order book, valued at the end of the year at around £80bn.

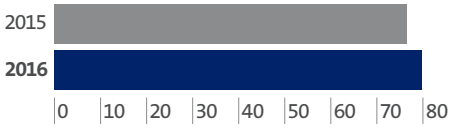
Against this backdrop, Group underlying revenue reduced by 2% on a constant currency basis with reductions in both original equipment and aftermarket revenues, led by the Marine business where revenues were down 24%. More details are included in the Financial summary on page 16 and the Business reviews on pages 18 to 35.

Compared to 2015, underlying profit before finance charges and tax was 45% lower at £915m. On this basis, Civil Aerospace delivered £367m (2015: £812m); Defence Aerospace delivered £384m (2015: £393m); Power Systems delivered £191m (2015: £194m); Marine generated a loss of £27m (2015: £15m profit) and Nuclear delivered £45m (2015: £51m excluding the £19m R&D credit benefits highlighted in 2015). More detail on each business is included in the Business review.

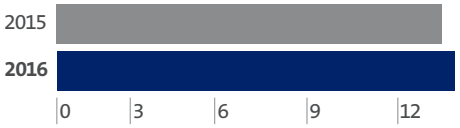
After underlying financing costs of £102m (2015: £60m including a £34m gain from hedging overseas dividends), underlying profit before tax was £813m (2015: £1,432m).

Since the EU referendum at the end of June, the value of sterling relative to the US dollar has fallen significantly. As a result, we have recognised a £4.4bn in-year non-cash mark-to-market valuation adjustment for our currency hedge book as part of our reported financing costs of £(4,677)m (2015: £(1,341)m). While reported revenue of £14,955m (2015: £13,725m) was unaffected by this adjustment, it impacted reported profit. In addition, our reported results also included a £671m charge for financial penalties from agreements with investigating authorities in connection with historic bribery and corruption involving

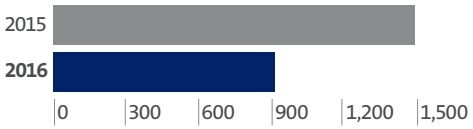
ORDER BOOK (£BN)



UNDERLYING REVENUE (£BN)



UNDERLYING PROFIT BEFORE FINANCING (£M)



FREE CASH FLOW (£M)

intermediaries in a number of overseas markets. Our reported loss before tax was £(4,636)m (2015: £160m profit).

After an underlying tax charge of £261m (2015: £351m), underlying profit after tax for the year was £552m (2015: £1,081m). With an average 1,832m shares in issue, underlying earnings per share were 30.1p (2015: 58.7p).

After a reported tax credit of £604m (2015: £76m charge), the reported loss for the year was £(4,032)m (2015: £84m profit). Reported earnings per share were (220.1)p (2015: +4.5p).

A full reconciliation of underlying to reported profit can be found in note 2 on page 134.

Free cash inflow in the year was £100m (2015: inflow of £179m), better than expected, reflecting strong cash collections from a number of key customers at the very end of the period and an improvement in underlying working capital performance. While some of this positive variance is a timing impact and likely to reverse early in 2017, improved efficiencies should drive a level of sustainable benefit.

A more detailed review of financial performance is included in the Financial summary on page 16 and the Financial review on page 36.

Our focus on clear priorities for 2016 has helped deliver positive outcomes

Our 2016 priorities were threefold: to strengthen our focus on engineering, operational and aftermarket excellence to drive long-term profitable growth; to deliver a strong start to our transformation programme; and to start rebuilding trust and confidence in our long-term growth prospects.

Agreement reached with various investigating authorities

In mid-January 2017, we announced that we had entered into Deferred Prosecution Agreements (DPAs) with the UK's Serious Fraud Office (SFO) and the US Department of Justice (DoJ) and completed a Leniency Agreement with Brazil's Ministério Público Federal (MPF). These agreements relate to bribery and corruption involving intermediaries in a number of overseas markets, concerns about which we passed to the SFO from 2012 onwards following a request from the SFO.

The agreements are voluntary and result in the suspension of prosecution provided that the Company fulfils certain requirements, including the payment of financial penalties.

The agreements will result in the total payment of around £671m. This is recognised within our 2016 accounts.

Under the terms of the DPA with the SFO, we agreed to pay £497m plus interest under a schedule lasting up to five years, plus a £13m payment in respect of the SFO's costs. We also agreed to make payments to the DoJ totalling around US$170m and to the MPF totalling around US$26m. As a result, the total payment in 2017 is expected to be £293m (at prevailing exchange rates) with some elements having already been paid.

It is our intention that these financial penalties will be paid from existing facilities and an improved underlying cash flow performance in the longer term.

Payment schedule	SFO	DoJ	MPF	Total
2017	£119m* + £13m	US$170m	US$26m	£293m*
2019	£100m*			£100m*
2020	£130m*			£130m*
2021	£148m*			£148m*

* Plus interest.

PRIORITY 1

Strengthen focus to drive long-term profitable growth

Increased our focus on engineering, operational and aftermarket excellence

Over the last few years, we have invested significantly in new product development and manufacturing capabilities. In engineering, in 2016 we invested over £1.3bn in gross R&D. The net investment of £937m was higher than 2015 and our expectations for 2016. A large proportion of this was focused on Civil Aerospace to support delivery of three new engine programmes which will enter service over the next 12 months: the Trent 1000 TEN (Thrust, Efficiency, and New technology) the Trent XWB-97 and the Trent 7000. Supporting these investments was a Group-wide engineering efficiency programme, known internally as E³, which has formed part of our overarching transformation programme. Within the engineering team, this change programme has focused on delivering a lean, resilient, lower-cost engineering function through reducing complexity, improving work prioritisation and simplifying management structures.

In operations, over £1.4bn has been invested in new capital equipment since 2011 (£225m in 2016) in transforming our manufacturing footprint across the business.

In Civil Aerospace, these investments in state-of-the-art manufacturing facilities will enable us to meet the significant growth in engine deliveries required to match customer demand for our new Trent engines, particularly the Trent 1000, Trent XWB and Trent 7000. At the same time, the investments lower unit costs and reduce the net cash outflows related to engine production. In Defence Aerospace, the investments have focused on modernisation of facilities such as in Indianapolis to reduce costs and improve delivery performance of both original equipment and spares to support higher standards of customer service. In Marine, new facilities will contribute to a more efficient and scalable manufacturing capability that will address the demands of our customers today, while markets are weak, and tomorrow, when they have recovered.

The benefits of these investments are starting to be seen in improved delivery performance, lower assembly lead times, lower unit costs and increased capacity. For example, in Civil Aerospace, large engine deliveries increased by over 15% to over 355 and capacity is now in place to deliver around 500 engines in 2017; an increase of over a third.

The focus on improving aftermarket excellence has been driven business-by-business, by customer needs as well as through the broader transformation activities. In Civil Aerospace for example, this has resulted in a progressive change to the structure of our engine overhaul services, our commercial TotalCare® and time and materials product offerings, and management structures. These have enabled us to respond to a changing market and maturing installed engine portfolio by adapting our resources to focus on areas of greatest value to the Group and our customers – such as supporting airframe transitions and rolling out SelectCare™ and TotalCare Flex® offerings and preparing for the launch of LessorCare™. In Defence Aerospace, the focus has been driven by the customer need for more embedded support. This has included increasing our service presence at key customer facilities in the UK and overseas, improving response time and resolving a greater proportion of issues on-wing.

Engineering excellence

- → Invested to support delivery of three new engine programmes to enter service in the next 12 months.
- → New powered gearbox design successfully tested at new German facility.
- → Launched a Group-wide engineering efficiency programme, known as E³ – part of our Group-wide transformation programme.

Operational excellence

- → £225m invested in 2016 in transforming our manufacturing footprint across the business.
- → Increased large aero-engine production output by 25%.
- → Started modernisation of Defence Aerospace facility in Indianapolis to reduce costs and improve delivery performance.
- → Invested to support delivery of the UK's new Astute and Dreadnought class nuclear-powered submarines.

Capturing aftermarket value

- → Investment driven business-by-business, by customer needs.
- → Restructured our engine overhaul services including an increased equity investment in our MRO JVs.
- → Launched new commercial TotalCare product offerings to support maturing installed base.
- → Embedded aftermarket support for key Defence Aerospace customers at key customer facilities in the UK and overseas.

PRIORITY 2

Deliver a strong start to our transformation programme

Transformation programme ahead of expectations

In November 2015, we announced a major transformation programme focused on simplifying the organisation, streamlining senior management, reducing fixed costs and adding greater pace and accountability to decision making. The initial target was to deliver incremental gross cost savings of between £150m-£200m per annum, with the full benefits accruing from the end of 2017 onwards.

Against these initial objectives, which included a target of delivering in-year savings of £30m-50m in 2016, we have made a better than expected start. In-year savings in 2016 were above target, at over £60m. During the year, we also identified significant opportunities to drive sustainable cost savings from the business. As a result, we expect the in-year savings that can be delivered in 2017 to be between £80m-£110m and we are on track to achieve the top end of the target for the programme as a whole, targeting a run rate of over £200m by the end 2017.

At the same time, other restructuring initiatives have delivered their expected benefits. These included programmes to improve operational efficiency in Civil Aerospace and Defence Aerospace (announced in 2014) and Marine (announced in May 2015), as well as a back office cost saving programme in Marine (announced in October 2015).
In December 2016, an additional reorganisation of the Marine business was announced to further rationalise manufacturing activities in Scandinavia, targeting incremental annualised savings of £50m from mid-2017. Reflecting our cautious near-term outlook for the Marine business, we have also taken an exceptional charge of around £200m for the impairment of goodwill, principally associated with the acquisition of Vickers in 1999.

In summary, expected ongoing benefits of all current restructuring programmes initiated since 2014 will reduce costs by around £400m by the end of 2018, compared to a 2014 baseline.

In aggregate, ongoing divisional restructuring programmes together with the new programme announced in November 2015 are expected to reduce costs by around £400m by the end of 2018, including the full benefit of the Marine restructuring announced in December 2016. The cost reduction breaks down into incremental legacy Civil Aerospace and Defence Aerospace restructuring savings of £80m, Marine savings of now around £110m and the transformation programme savings of around £200m.

2016 progress on our US transformation

In January 2016, construction began on a five-year, US$600m modernisation programme for our manufacturing and technology research plant in Indianapolis, Indiana, US. This is the largest investment by the Group in the US since we purchased the Allison Engine Company in 1995.

In September 2016, we achieved a major milestone by opening a new, dedicated pre-production facility. This enables us to digitally design, develop, test and perfect new manufacturing methods for the entire site as modern production comes online over the next four years.

When complete, the 1.5 million square feet manufacturing facility will leverage the latest technologies and production methods which, alongside a highly-skilled workforce, will establish our Indianapolis plant as one of the most competitive manufacturing facilities in the world. The site will also house new technology development capabilities which we will apply to our next-generation engines in the US.

We currently employ about 4,000 people in Indianapolis, where engines are designed, assembled and tested for US defence aircraft, civil helicopters, regional and business jets and power systems for US naval vessels.

1. Turbines manufacturing and pre-production method development.
2. Production assembly and test, and customer delivery centre.
3. Experimental assembly and test labs, and LibertyWorks®.

Making transformation happen

Civil Aerospace | Defence Aerospace | Power Systems | Marine | Nuclear | Group

Simpler organisation

Simpler processes

Right behaviours and culture

Competitiveness: improved productivity and cost

£200m
cost savings
On track to deliver £200m of annual cost savings by the end of 2017.

25%
growth in large engines
Significant improvement in Trent 1000 and Trent XWB lead times enabling a 25% year-on-year increase in production output of large aero engines.

Continuous improvement: embedded change for ongoing results

30%
performance improvement
30% improvement in the lead time and cost of instrumentation and control products for civil nuclear reactors.

42,000
employees involved in improvement activities
42,000 employees involved in 2016 continuous improvement activities, supported by a network of over 700 facilitators and champions.

Pace and simplicity: the right tools to stay ahead of our competitors

20%
reduction in senior management positions
Five market-facing businesses have replaced a divisional structure with significant reduction in management layers and central bureaucracy.

20%
fewer engine variants
Power Systems has met its customers' needs while cutting engine variants by 20% as a result of its simplified portfolio of reciprocating engines.

Accountability: clear ownership and responsibility to deliver

Increased P&L accountability
Full accountability for legacy spares business has allowed service teams in Defence Aerospace to react faster to customer needs and increase revenues.

Efficiencies in Marine
Restructuring of the Marine business has placed full accountability under four market-facing businesses, while right-sizing the organisation to meet the challenges of the offshore marine market.

PRIORITY 3

Rebuild trust and confidence in our long-term growth prospects

Rebuilding trust and confidence; steady year with few major surprises

2016 out-turned ahead of expectations with only a few unexpected developments from an operational perspective, despite the challenges presented by a changing macro-environment and some known weaknesses in the business. The expected headwinds in Civil Aerospace and Marine transpired largely as forecast. In addition, the benefits of outperformance on transformation savings and foreign exchange hedging more than offset some additional programme costs in Civil Aerospace and a range of other smaller one-off items. As a result, external expectations remained largely unchanged throughout the year.

The introduction of the new revenue reporting standard, IFRS 15 *Revenue from Contracts with Customers*, will have a significant impact on how we present our revenues and profits, particularly for Civil Aerospace. As a result, a combination of significant in-house analysis and appropriate progressive communication was undertaken, culminating in a capital markets' event in November. This set out in some detail how we now expect the new standard to change the presentation of our financial results, illustrated through a re-presentation of 2015 performance. All the materials from this investor event were shared at the time and are available on the Company's website at www.rolls-royce.com.

Priorities for 2017 broadly unchanged; additional focus on developing our long-term vision and strategy

Overall, the priorities for 2017 are largely unchanged from those set out in 2016. We will continue to invest in strengthening our focus on engineering, operational and aftermarket excellence to drive long-term profitable growth. At the same time, 2017 will be an important year to drive incremental savings from our transformation programme.

At our capital markets' event in November 2016 we set out how our focus is turning towards the Group's long-term goals. Over the next few months, the senior leadership team will be concluding the review of our strengths and investment opportunities to define an appropriate vision for the business and the best way we can deliver sustainable shareholder value. Conclusions from this work will be shared during 2017.

Rebuilding trust and confidence in the Group and its long-term prospects remains a key priority for the management team. The focus remains on progressive, effective communication combined with strong operational delivery. While we have made a steady start, more remains to be done. The addition of new management and a renewed focus within the business leadership teams, with clear goals and stronger accountabilities, should provide a strong platform for further progress in 2017.

Acquisition of outstanding 53.1% stake in Industria de Turbo Propulsores SA (ITP)

We were notified in early July that SENER Grupo de Ingeniería SA (SENER) had decided to exercise the put option in respect of its 53.1% stake in ITP. This decision provides us with the opportunity to effectively consolidate several key large engine risk and revenue sharing arrangements (RRSAs) into the business, strengthen our position on a number of important defence aero engine platforms and will enable us to enjoy greater benefits from future aftermarket growth.

Under the shareholder agreement, the consideration of €720m will be settled over a two-year period following completion in eight equal, evenly-spaced instalments. The agreement allows flexibility to settle up to 100% of the consideration in the form of Rolls-Royce shares. Final consideration as to whether the payments will be settled in cash, shares or cash and shares will be determined by Rolls-Royce during the payment period. Completion remains subject to regulatory clearances and is expected in mid-2017.

The acquisition of ITP strengthens our position on Civil Aerospace large engine growth programmes by capturing significant additional value from its long-term aftermarket revenues, including the high volume Trent 1000 and Trent XWB engines, where ITP has played a key role as a participant in RRSAs. It also enhances the Group's own manufacturing and services capabilities and adds value to the Defence Aerospace business, particularly on the TP400 and EJ200 programmes.

Further details of its impact on the Group will be made available on completion of the acquisition.

New Trents to enter service

2017 will be a milestone year for our Civil Aerospace business and its Trent engine programmes, with three new engines approaching entry into service.

The Trent 1000 TEN will power all variants of the Boeing 787 Dreamliner family and draws on technologies from the Trent XWB and Advance engine programmes.

The Trent XWB-97 will be the sole powerplant for the Airbus A350-1000. Delivering an increased 97,000lbs of thrust, the new engine will allow Airbus to increase the aircraft's payload, range and maximum take-off weight.

The Trent 7000 builds on the success of its predecessor, the Trent 700, delivering a 10% improvement in specific fuel consumption while halving noise output. It will be the sole powerplant for the Airbus A330neo.

Taken together, these developments underline the scale of our commitment to research and technology and delivering on the needs of our customers.

Priorities For 2017

1 Strengthen our focus to drive long-term profitable growth

Engineering excellence

Investing in and developing the excellence of our engineering to produce high-performance power systems.

Operational excellence

Transforming our manufacturing and supply chain to embed a lean approach across our facilities and processes.

Capturing aftermarket value

Leveraging our installed base, product knowledge and capabilities to provide outstanding services to customers.

2 Sustain the strong start to our transformation programme.

3 Continue to rebuild trust and confidence in our long-term growth prospects.

4 Develop our long-term vision and strategy.

Underpinned by a commitment to developing our people and our culture in a safe and ethical environment.

Outlook for 2017

After a better than expected 2016, year-on-year incremental progress will be modest. Our medium-term trajectory for revenue, profit and free cash flow remains unchanged. On a constant currency basis, Group revenue for 2017 should be marginally higher than that achieved in 2016, despite expected further weakening in offshore oil & gas markets in Marine. Underlying improvements in performance should be driven largely by transformation savings and free cash flow should benefit from increased aftermarket cash revenues in Civil Aerospace, further improvements in working capital efficiency and cost savings. As a result, we expect a modest performance improvement overall and we are targeting free cash flow to be similar to that achieved in 2016. Individual outlooks are provided in the Business review starting on page 18.

Looking further ahead: long-term outlook remains strong

We continue to see value in the underlying strengths of our business: the underlying growth of our long-term markets; the quality of our mission-critical technology and services; and the strength of customer demand for these which is reflected in our strong order book. While we have near-term challenges and some core execution priorities, these constants provide us with confidence in a strong, profitable and cash-generative future.

The successful roll-out of new engines, led in particular by the Trent XWB, Trent 1000 and Trent 7000, together with a growing aftermarket, is expected to drive significant revenue growth over the coming ten years as we build towards a 50% plus share of the installed widebody passenger market. As a result, we remain confident that the important investments we are making to modernise our production will create a strong platform to drive customer service and strong cash flows, together with the current investments in new products and the streamlining of our existing product portfolios to ensure we are providing high-value, cost-competitive products into our target end markets.

Our business model

Our business model seeks to capture value from markets for high-performance power. We do this by developing advanced, integrated power and propulsion systems and providing long-term aftermarket support and delivery of outstanding customer services. We seek to recoup our investment through developing superior products, many of which are selected for use on major multi-year programmes.

Value creation

Our highly-skilled people create value through a combination of a deep research and product development capability, world-class technology and engineering expertise, and a substantial and experienced supply chain with many relationships and collaborations going back over 25 years.

We make significant investments in advanced technology and engineering programmes to deliver market-leading products together with the manufacturing capability to produce them.

Outputs

The outputs from the operation of this business model are: long-term value creation for our customers; a sustainable and competitive market position; and the generation of returns for our shareholders.

Our long-life products typically operate in challenging environments where they are expected to deliver sustained levels of performance, such as fuel efficiency and reliability. For our customers, they deliver value through enhancing the competitiveness of their own product or service, whether airframe or other transport or industrial application.

The product offering is often combined with flexible service options to best suit each customer's operating needs. In certain markets we further strengthen our customer relationships through long-term service agreements where we commit to deliver exceptional standards of service, including high levels of product operational availability. This provides significant value to customers and, in return, we achieve long-term predictable revenues.

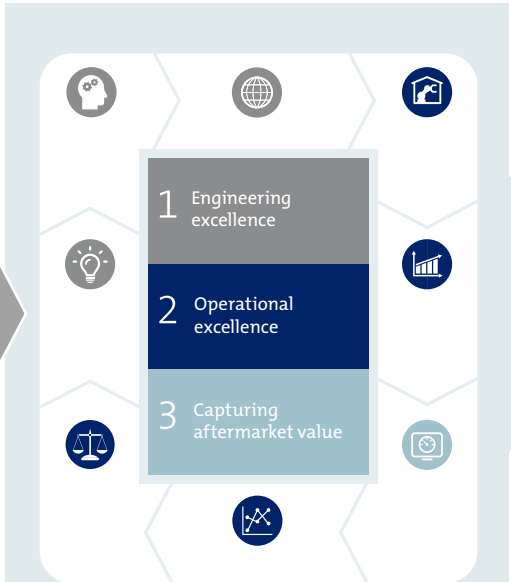
Our long-term competitive position also relies on having a full lifecycle design, sourcing and manufacturing platform which is capable of developing products which incorporate advanced materials often operating close to the limits of their capabilities. Our operational focus is on ensuring we can deliver these on-time and in increasing scale. As production levels rise, we will benefit from increasingly cost-efficient manufacturing and lower unit costs.

By growing our installed base of power systems and leveraging our aftermarket service activities, we enhance our revenue, profit and cash flow. Cash flow is then invested to support future product development and technology programmes, driving growth while providing shareholder returns.

How we create value

Inputs

- People and expertise
- R&D capability
- Supply chain collaboration
- Advanced manufacturing
- Customer relationships
- Financial investment



Value creation

Customers:
Differentiated products aligned to their operating requirements

Corporate:
Strong market position

World-class development and production facilities

Shareholders:
Long-term cash flow generation

Invest in R&D and skilled people
Developing and protecting leading-edge technology and deploying it across our businesses allows us to compete on a global basis and creates high barriers to entry.

Design, make and service world-class products
We win and retain customers by developing and delivering products and services that provide more capability and offer better through-life value than those of our competitors.

Manufacturing capability
We manufacture cost-efficiently through a combination of economies of scale, developing a lean enterprise and integrated management of our supply chain.

1 Engineering excellence

- → Industry-leading R&D
- → Proven product reliability
- → Exceptional long-life products
- → Differentiated products and services

Develop technology that anticipates customer needs
Our deep understanding of customer needs drives the development of new technologies and products.

2 Operational excellence

- → Strong supply chain partnerships
- → Sustained cost reduction
- → Transforming to world-class production capability
- → Cost-focused lean enterprise
- → High performance culture

Grow market share and installed base
Our substantial order book for both original equipment and services provides good visibility of future revenues and provides a firm foundation to invest with confidence.

3 Capturing aftermarket value

- → Long-term relationships with civil and defence customers
- → Decades of in-service experience
- → Flexible range of service offerings
- → Growing installed base and global aftermarket footprint

Disciplined capital allocation
We allocate our capital to achieve a balance of financial strength and liquidity to deliver commercial advantage and sustainable long-term shareholder returns.

Secure and maximise aftermarket opportunity
Our equipment is in service for decades. Our deep design knowledge and in-service experience ensures that we are best placed to optimise product performance and availability.

Investment in future programme development
We make significant investment in development programmes which we believe will deliver cost-efficient and competitive next-generation products and services.

Financial summary

David Smith
Chief Financial Officer

Order book and order intake

During the year, our order book increased by £3.3bn to £79.8bn, led by Civil Aerospace, which, alongside strong order intake, also benefited from a £2.1bn uplift from a five cent decrease to our long-term US dollar planning rate. Order intake in our Marine business was poor, largely as a result of the continuing weak offshore market. Overall, orders were also lower in Defence Aerospace, Power Systems and Nuclear, although we view the prospects for these businesses as unchanged, reflecting long-term orders won in previous years.

Underlying trading

Underlying Group revenue declined 2% in 2016 compared to 2015 on a constant currency basis, reflecting declines in both original equipment revenue (down 2%) and services (down 3%) and driven almost entirely by Marine. By business on a constant currency basis, Civil Aerospace revenue was unchanged, Defence Aerospace revenue increased 1%, Power Systems revenue decreased 1%, Marine revenue decreased 24% and Nuclear revenue increased 11%.

Underlying profit before financing of £915m (2015: £1,492m) was 45% lower on a constant currency basis, led by a significant reduction in Civil Aerospace profit. This reflected the previously communicated volume and margin reductions on link-accounted Trent 700 engines, reduced business jet original equipment volumes, reduced large engine utilisation and increased technical costs for large engines. In addition, reported 2015 numbers included one-off benefits from a methodology change in respect of risk assessment and reversal of impairments and provisions in respect of a Trent 1000 launch customer, totalling £189m and £65m respectively. These were partially offset by strong lifecycle cost improvements on installed engines and some provision releases. Profit in Defence Aerospace at £384m was 8% lower on a constant currency basis largely reflecting additional costs related to the TP400 programme. Power Systems was down 14% year-on-year principally due to volume reduction and adverse changes to product mix.

GROUP TRADING SUMMARY

£m	2015*	Underlying change**	Foreign exchange***	2016
Order book	**76,399**	**3,329**	**82**	**79,810**
Underlying revenue	**13,354**	**(296)**	**725**	**13,783**
Change		*-2%*	*+5%*	*+3%*
Underlying OE revenue	6,724	(112)	415	7,027
Change		*-2%*	*+6%*	*+5%*
Underlying services revenue	6,630	(184)	310	6,756
Change		*-3%*	*+5%*	*+2%*
Underlying gross margin	**3,203**	**(577)**	**197**	**2,823**
Gross margin %	*24.0%*	*-390bps*		*20.5%*
Commercial and administrative costs	(1,025)	(71)	(67)	(1,163)
Restructuring costs	(39)	41	(2)	–
Research and development costs	(765)	(47)	(50)	(862)
Joint ventures and associates	118	(11)	10	117
Underlying profit before financing	**1,492**	**(665)**	**88**	**915**
Change		*-45%*	*+6%*	*-39%*
Underlying operating margin	**11.2%**	**-480bps**		**6.6%**

* 2015 figures have been restated as a result of £21m of costs previously reported in 'cost of sales', being reclassified as 'other commercial and administrative costs' to ensure consistent treatment with 2016.
** Order book underlying change includes £2.1bn increase from a change to our long-term US dollar planning rate.
*** Translational foreign exchange impact.

Marine profit was sharply lower led by continuing weakness in the offshore markets. Nuclear profit was 37% lower than 2015 due to a lower margin mix in submarine projects.

Underlying gross margin was £2,823m, down 390 basis points to 20.5% largely reflecting the lower margins in Civil Aerospace, Defence Aerospace and Marine. Commercial and administrative costs include accruals for employee incentive schemes in line with our current policies. Given the good performance relative to original plan, these are higher than in the prior year. This contributed to commercial and administrative costs being £71m higher on a constant currency basis year-on-year.

The R&D charge increased by 6% over 2015 on a constant currency basis, reflecting increased charges in Civil Aerospace and the adverse year-on-year effect of the favourable R&D credit adjustment taken in 2015 in Nuclear.

Underlying restructuring charges reduced by £41m reflecting the lower level of underlying restructuring as most costs in 2016 were taken as exceptional due to the nature of the restructuring activities within the Group. The exceptional charge in relation to these programmes was £129m in 2016. This included £92m for the transformation programme launched in November 2015, which delivered in-year benefits of over £60m in 2016. The underlying tax rate for 2016 increased to 32.1% (2015: 24.5%). The primary reasons for the increase are the non-recognition of deferred tax assets on losses in Norway, which reflects the current uncertainty in the oil & gas markets, and a different profit mix with more profits arising in countries with higher tax rates.

Reported results

Reported results are impacted by the mark-to-market adjustments driven by movements in USD:GBP and EUR:GBP exchange rates over the year. In addition, we recognised the £671m charge related to the agreements reached in respect of regulatory

investigations, a goodwill impairment charge of £219m largely reflecting a more cautious outlook for our Marine business and £129m of exceptional restructuring cost. As a result, the reported loss before tax was £(4,636)m (2015: a profit of £160m).

Free cash flow

Free cash inflow in the year was £100m (2015: £179m), better than expected, reflecting strong cash collections from a number of key customers at the very end of the period and an improvement in underlying working capital performance. This helped offset the lower profit before tax and higher expenditure on property, plant and equipment and intangibles. The latter reflects the increased capital investment in new manufacturing capacity, higher capitalised R&D, mainly related to the Trent 1000 TEN and higher certification costs on the Trent XWB-97. More details on the movement in trading and free cash are included in the Funds flow section of the Financial review.

While some of this positive variance is a timing impact and likely to reverse early in 2017, improved efficiencies should drive a level of sustainable benefit.

Net debt and foreign currency

The Group is committed to maintaining a robust balance sheet with a healthy, investment-grade credit rating. We believe this is important when selling high-performance products and support packages which will be in operation for decades. Standard & Poor's updated its rating in January 2017 to BBB+ from A-/negative outlook and Moody's maintained a rating of A3/stable.

During 2016, the Group's net debt position increased from £111m to £225m, reflecting the £100m free cash inflow, shareholder payments of £301m and £154m for the increased investment in our approved maintenance centre joint ventures following receipt of regulatory approval for the changes to the joint venture agreements in June 2016. In April, we increased our revolving credit facilities by £500m to £2bn to provide additional liquidity.

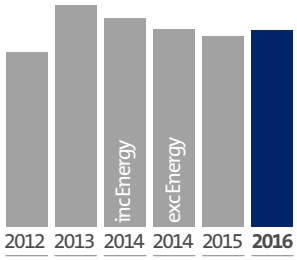
The Group hedges the transactional foreign exchange exposures to reduce volatility to revenues, costs and resulting margins. The hedging policy sets maximum and minimum cover ratios of hedging for net transactional foreign exchange exposure. It allows us to take advantage of attractive foreign exchange rates, whilst remaining within the cover ratios. A level of flexibility is built into the hedging instruments to manage changes in exposure from one period to the next and to reduce volatility by smoothing the achieved rates over time.

The most significant exposure is the net US dollar income which is converted into GBP (currently approximately $5bn per year and forecast to increase significantly by 2021). Following the fall in the value of sterling, which resulted from the outcome of the EU referendum, additional cover has been taken out to benefit from the favourable rates. This has resulted in an increase in the nominal value of the hedge book to approximately $38bn at the end of 2016 (end 2015: $29bn) together with a reduction in the average rate in the hedge book to £/$1.55 (end 2015: £/$1.59). The movement in the average achieved rate year-on-year was around two and a half cents, providing a net underlying Group benefit, after balance sheet effects (the movement in achieved rate also affects creditor and debtor balances of hedged cash flows), of around £20m.

UNDERLYING REVENUE

£13,783m

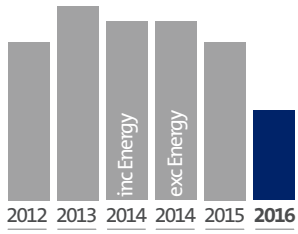
2015	£13,354m
2014 exc	£13,864m
2014 inc	£14,588m
2013	£15,505m
2012	£12,209m



UNDERLYING PROFIT BEFORE TAX

£813m

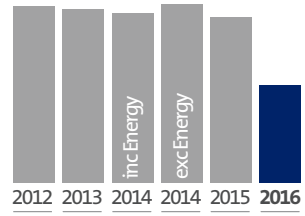
2015	£1,432m
2014 exc	£1,617m
2014 inc	£1,618m
2013	£1,759m
2012	£1,434m



UNDERLYING OPERATING MARGIN

6.6%

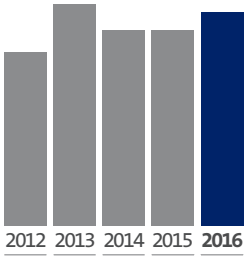
2015	11.2%
2014 exc	12.1%
2014 inc	11.5%
2013	11.8%
2012	12.0%



REPORTED REVENUE

£14,955m

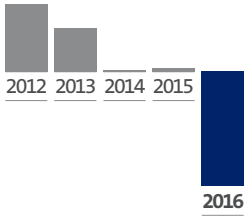
2015	£13,725m
2014	£13,736m
2013	£15,513m
2012	£12,161m



REPORTED (LOSS)/PROFIT BEFORE TAX

£(4,636)m

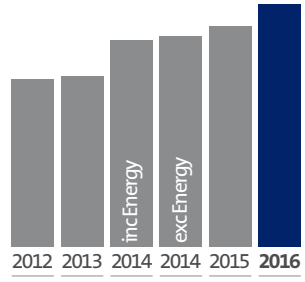
2015	£160m
2014	£67m
2013	£1,759m
2012	£2,766m



NET R&D AS A PROPORTION OF UNDERLYING REVENUE

6.8%

2015	6.2%
2014 exc	5.9%
2014 inc	5.8%
2013	4.8%
2012	4.7%



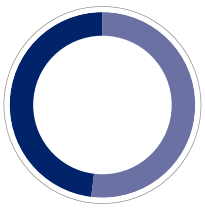
Business review

Summary
The Civil Aerospace business is a major manufacturer of aero engines for the large commercial aircraft and corporate jet markets. We power 35 types of commercial aircraft and have more than 13,000 engines in service around the world.

Key highlights

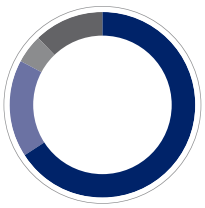
- Underlying revenue unchanged; gross margins lower:
  - Original equipment (OE): increased deliveries of newer Trent engines but lower link-accounted Trent 700 and business aviation sales reduced achieved margins.
  - Services: growth from in-production large engine fleet, but declining regional and older large engine fleet aftermarket revenues; increase in technical costs for large engines, including the Trent 700 and Trent 900, largely mitigated by foreign exchange benefits.
- £4.4bn order book growth; includes £2.1bn benefit from long-term US dollar planning rate change.
- New programmes: Trent 1000 TEN received EASA certification in July; first test run of new UltraFan® gearbox; first flight of the Airbus A350-1000 powered by the Trent XWB-97.
- Supply chain modernisation reducing costs and increasing capacity for Trent XWB ramp up.
- 2017 outlook: modest growth in revenue and profit; cost improvements offsetting OE and aftermarket mix effects.

UNDERLYING REVENUE MIX



OE revenue	**48%**
Services revenue	**52%**

UNDERLYING REVENUE BY SECTOR



Large engine	**66%**
Business aviation	**17%**
Regional	**5%**
V2500	**12%**

In 2016, the Trent 1000 was selected to power the first test flight of the Boeing 787-10 Dreamliner. It has already powered the first flights of the 787-8 and 787-9.

CIVIL AEROSPACE

Operational review

Financial overview

Overall, underlying revenue for Civil Aerospace was unchanged (up 2% at actual exchange rates). OE revenue was unchanged, with increases from higher volumes of large engines being offset by the decline in business jet engines and V2500 modules. Aftermarket revenue was down 1% despite strong growth from our in-production engines.

OE revenue from *Large engine: linked and other** was up 2% reflecting increased volumes of Trent 900s and a higher number of spare Trent XWB engines, partly offset by Trent 700 volume and price reductions, ahead of the introduction of the Trent 7000 for the Airbus A330neo. Sales of spare engines to joint ventures, included in *Large engine: linked and other**, generated revenue of £288m (2015: £189m).

OE revenue from *Large engine: unlinked installed** increased 47%, led by higher volumes of Trent XWBs.

* See table on page 20.

Large engine service revenue reflected double digit growth from our in-production engines which more than offset the reduction from older engines, including the expected lower year-on-year utilisation of Trent 500 and Trent 800 engines. Time and material revenue reduced, as a result of fewer overhauls of engines across the out-of-production fleet. Contract accounting effects within service revenue in 2016 were significantly lower than prior year. As a result, while there was a small foreign exchange improvement in 2016, underlying service revenue from large engines was down 4%. Adjusting for contract accounting effects, service revenue from large engines would have been up 2%.

Revenue from *business aviation** OE engine sales was, as expected, lower, particularly for the BR710 engines, reflecting general market weakness and a transition to newer non Rolls-Royce powered platforms. Volumes of our newer BR725 engine, which powers the Gulfstream G650 and G650ER, were stable. Overall, *business aviation** OE revenues declined 25% while aftermarket revenue was slightly down. Service revenue from our *regional** jet engines declined 14%, reflecting retirements and reduced utilisation of relevant fleets by North American operators in particular.

On the *V2500** programme, which powers aircraft including the Airbus A320, revenue from OE modules declined 10% reflecting the production slow-down as Airbus transitions to the A320neo, powered by another engine provider. However, *V2500** service revenues were 21% higher, reflecting price escalation on flying hour payments together with increased overhaul activity. Overall gross margins for Civil Aerospace were 16.8% (2015: 22.0%), declining £397m from 2015 on a constant currency basis. The main headwinds were as forecast at the start of the year: OE reductions to the Trent 700 programme; business aviation engines and V2500 modules; reduced utilisation and fewer overhauls of our out-of-production Trent 500 and Trent 800 and RB211 engines; and the declining regional aftermarket. In addition, we also incurred programme charges of around £30m for engines still in development. These were partially offset by the release, after accounting and legal review, of accruals related to the termination in prior years of intermediary services, totalling £53m (2015: £nil). Gross margin from spare engine sales to joint ventures contributed £97m (2015: £67m).

The in-year net benefit from long-term contract accounting adjustments totalled £90m (2015: total benefit of £222m, which included a £189m one-off benefit associated with the refinement of our methodology for risk assessment of future revenue). The £90m included a £217m benefit from lifecycle cost improvements (2015: benefit of £140m). We also recognised in this period a £35m benefit from a five cent change (2015: £nil) to our estimated long-term US dollar to sterling exchange rate to bring our own planning rate within updated external benchmark long-term forecast data. These benefits were offset by technical costs of £98m (2015: £24m) for large engines, including the Trent 900, relating to the need for increased shop visits in the short term, and the Trent 700, where we are upgrading the engine management system, together with a charge of £64m (2015: £83m), reflecting other operational changes.

ORDER BOOK

£71.4bn

The year-on-year change was also impacted by a one-off £65m write-back in 2015 of a previously recognised impairment of contractual aftermarket rights (CARs) for sales to a launch customer and the release of a related provision; in 2016 these sales were capitalised as CARs.

Costs below gross margin were £89m higher than the previous year at £818m on an underlying basis. Within this, R&D charges of £568m were £34m higher, reflecting higher spend on key programmes, particularly in respect of the Trent 7000 which are being expensed ahead of capitalisation and lower development cost contributions from risk and revenue sharing partners, partly offset by increased R&D capitalisation on the Trent 1000 TEN.

Underlying commercial and administrative costs were £43m higher than 2015 reflecting increased employee incentive charges. Underlying restructuring costs of £11m were £4m higher than 2015 and profits from joint ventures and associates were down £8m.

As a result, profit before financing and tax was 55% down, reflecting a combination of lower overall gross margins, higher commercial and administrative, R&D and restructuring costs and reduced joint venture and associate profits. Taking account of foreign exchange effects, underlying profit before financing and tax was £367m (2015: £812m).

CIVIL AEROSPACE | KEY FINANCIAL DATA

£m	2015	Underlying change*	Foreign exchange **	2016
Order book	**67,029**	**4,395**	**2**	**71,426**
Engine deliveries	**712**	**(63)**		**649**
Underlying revenue	**6,933**	**(27)**	**161**	**7,067**
Change		*–*	*+2%*	*+2%*
Underlying OE revenue	3,258	14	85	3,357
Change		*–*	*+3%*	*+3%*
Underlying services revenue	3,675	(41)	76	3,710
Change		*-1%*	*+2%*	*+1%*
Underlying gross margin	**1,526**	**(397)**	**56**	**1,185**
Gross margin %	*22.0%*	*-570bps*		*16.8%*
Commercial and administrative costs	(296)	(43)	(3)	(342)
Restructuring costs	(7)	(4)	–	(11)
Research and development costs	(515)	(34)	(19)	(568)
Joint ventures and associates	104	(8)	7	103
Underlying profit before financing	**812**	**(486)**	**41**	**367**
Change		*-60%*	*+5%*	*-55%*
Underlying operating margin	**11.7%**	**-700bps**		**5.2%**

* Order book underlying change includes £2.1bn increase from a change to our long-term US dollar planning rate.
** Translational foreign exchange impact.

Trading cash flow

Trading cash flow before working capital movements of £22m declined year-on-year by £462m, driven by a reduction in underlying profit before financing of £445m and increased property, plant and equipment additions. There were also increased certification costs driven by the Trent XWB-97 and higher R&D capitalisation of the Trent 1000 TEN development costs, offset in part by other timing differences including provision movements.

The overall trading cash flow improvement of £43m resulted largely from a significant year-on-year improvement in working capital, due mainly to differences in the timing of payments to suppliers and increased deposits, offset in part by an increase in inventory. In addition, reflecting the lower profits recorded on our linked engines such as the Trent 700, net long-term contract debtor additions were also lower.

TotalCare net assets and contractual aftermarket rights

TotalCare net assets increased in 2016 by £230m (2015: £406m) to £2.44bn reflecting accounting for new linked engines of £432m (2015: £521m), contract accounting adjustments taken in the year of £90m (2015: £222m) offset by the cash inflows and net other items of £(292)m (2015: £(337)m). It should be noted that the £230m net asset increase is different from the £246m used in the trading cash flow above because of foreign exchange effects on evaluating TotalCare net debtor balance movements.

The CARs balance increased by £169m (2015: increase of £156m) to £574m reflecting higher sales of unlinked Trent XWB engines partly offset by engine cost improvements.

Investment and business development

Order intake of £14.1bn in 2016 for Civil Aerospace was £1.3bn higher than the previous year. The order book closed at £71.4bn, up £4.4bn or 7% from 2015, which included a £2.1bn benefit from the change in the long-term planning foreign exchange rate discussed previously. Excluding this, the order book was up 3%.

Significant orders in 2016 included a US$2.7bn order from Norwegian for Trent 1000 engines, an order from Garuda Indonesia worth $1.2bn for Trent 7000 engines and a $900m order from Virgin Atlantic for Trent XWB. All of these include the provision of long-term TotalCare engine services.

Foundations for future growth are built from our investment in engineering excellence

During the year, we committed resources in order to ensure we made significant

CIVIL AEROSPACE | REVENUE SEGMENTATION

	2015					2016	
	£m	% of total	Underlying change	Underlying change %	Foreign exchange £m	% of total	£m
Original equipment	**3,258**	***48%***	**14**	**–**	**85**	***48%***	**3,357**
Large engine: linked and other	1,570	*23%*	32	*+2%*	2	*23%*	1,604
Large engine: unlinked installed	504	*7%*	237	*+47%*	1	*10%*	742
Business aviation	903	*14%*	(228)	*-25%*	82	*11%*	757
V2500	281	*4%*	(27)	*-10%*	–	*4%*	254
Service	**3,675**	***52%***	**(41)**	**-1%**	**76**	***52%***	**3,710**
Large engine	2,371	*34%*	(84)	*-4%*	2	*32%*	2,289
Business aviation	425	*6%*	(13)	*-3%*	40	*6%*	452
Regional	360	*5%*	(52)	*-14%*	34	*5%*	342
V2500	519	*7%*	108	*+21%*	–	*9%*	627

CIVIL AEROSPACE | TRADING CASH FLOW

£m	2016	2015	Change
Underlying profit before financing	**367**	**812**	**(445)**
Depreciation and amortisation	491	410	81
Sub-total	**858**	**1,222**	**(364)**
CARs additions	(208)	(161)	(47)
Property, plant, equipment and other intangibles	(739)	(502)	(237)
Other timing differences*	111	(75)	186
Trading cash flow pre-working capital movements	**22**	**484**	**(462)**
Net long-term contract debtor movements	(246)	(406)	160
Other working capital movements	267	(78)	345
Trading cash flow**	**43**	**–**	**43**

* Includes timing differences between underlying profit before financing and cash associated with: joint venture profits less dividends received; provision charges higher /(lower) than cash payments; non-underlying cash and profit timing differences (including restructuring); and financial assets and liabilities movements including the effect of foreign exchange movements on non-cash balances.

** Trading cash flow is cash flow before: deficit contributions to the pension fund; taxes; payments to shareholders; foreign exchange on cash balances; and acquisitions and disposals.

progress across all key engineering programmes in 2016. The Trent 1000 TEN engine undertook its first test flight in March and received its European Aviation Safety Agency (EASA) certification on 11 July. The Trent 1000 TEN will power all variants of the Boeing 787 Dreamliner family and will power the first flight of the 787-10 in 2017.

In November, the latest version of the Trent XWB, the higher thrust -97 engine, successfully powered the first flight of the Airbus A350-1000 in Toulouse. The Trent 7000 engine, which will exclusively power the Airbus A330neo, undertook ground testing for the first time and we started assembly of the first flight test engines.

In respect of future technologies, the Advance3 large engine demonstrator is proceeding well. The engine will test the new core architecture for future engine families and other key technologies such as lean burn combustion, ceramic matrix composites (CMC), CastBond (specialist turbine manufacturing) plus additive layer manufacturing (or 3D printing). It is currently in development at our Bristol, UK, facility with all core modules advancing well.

In September, we successfully ran the world's most powerful aerospace gearbox for the first time under the joint venture Aerospace Transmission Technologies (ATT). The gearbox is designed to reach up to 100,000 horsepower and is a significant step in the development of the new UltraFan engine technology.

Supporting our commitment to research and development, we also announced a US$30m expansion into a new facility in Cypress, California, that will be dedicated to research and development of ceramic matrix composite materials and processes for use in next generation aircraft engine components.

Investing in new aerospace supply chain capabilities to help drive operational excellence

In January 2016, we announced plans to invest more than £30m at our site in Washington, Tyne & Wear, UK, creating a new facility to manufacture a range of aerospace discs for in-service engines. The new facility is expected to be fully operational in 2018 and will have the capacity to manufacture well over 1,500 fan and turbine discs a year for use in a wide range of existing engines.

The construction of a £50m extension to our wide-chord fan blade facility in Barnoldswick, UK, started in December. The expanded facility will be able to manufacture 6,000 large Trent fan blades a year, almost twice its current capacity. We also announced the creation of a centre of excellence in structures & transmissions at the same site. The new centre, supported by £20m of investment, will manufacture many of the complex structures that feature in all Rolls-Royce aero engines.

Good progress strengthening our aerospace aftermarket service offering

We have continued to invest in our service capabilities to support our customers with state-of-the-art facilities and relevant products and services, particularly within our portfolio of TotalCare offerings.

During the year, we completed changes to three Approved Maintenance Centre (AMC) joint ventures. This included investing £154m to increase our stake in both Hong Kong Aero Engine Services Limited (HAESL) and Singapore Aero Engine Services Pte Limited (SAESL) to 50%. These AMCs support our strategy to offer a competitive, capable and flexible Trent service network to meet the changing needs of customers across the lifecycle of engines and to support the growing Trent engine fleet.

Additionally, we announced further details of a new AMC in Abu Dhabi with Mubadala Development Company, the emirate-based investment and development organisation. This purpose-built facility will carry out work on the Trent XWB.

We also announced that we are further expanding our global network of Authorised Service Centres (ASC) for business aviation aircraft under our CorporateCare® service provision for customers. Rolls-Royce now has 62 ASCs in place with key maintenance providers worldwide.

Following the launch of SelectCare in 2016, we secured our first agreement for Trent 800 engines as part of a wide-ranging deal with Delta Airlines.

Civil Aerospace outlook

On a constant currency basis, our Civil Aerospace business should deliver modest growth in revenue and profit in 2017, supported by large engine aftermarket growth, further lifecycle cost reductions and a higher level of R&D capitalisation. Business jet demand is expected to weaken further, as will the demand for aftermarket services to support Rolls-Royce powered regional aircraft. After a better year for trading cash flow in 2016, we now expect this to be broadly unchanged year-on-year reflecting higher volumes of cash-loss-making engines offsetting the positive effects of higher aftermarket cash revenues.

We expect the TotalCare net asset to peak in the next 12 months at between £2.5bn and £2.7bn, reflecting further targeted lifecycle cost improvements and other timing differences between cost and cash.

Positive market developments continue to drive long-term growth in Civil Aerospace

The long-term positive market trends for our leading power and propulsion systems remain unchanged despite some near-term uncertainties in Civil Aerospace that continue to impact business jet engine production volumes and service activity on older large engines. The long-term trends driving demand for growth in large passenger aircraft, business jets, power systems and maritime activity remain strong; in particular a growing aspirational and mobile middle-class, particularly in Asia, and globalisation in business, trade and tourism.

While recent political and economic developments have added some uncertainty to near-term utilisation, we continue to expect that strong widebody airframe demand – driven by the need for newer, more fuel-efficient aircraft – should provide resilience to manufacturing schedules over the next few years as the industry undergoes a strong replacement cycle.

New airframe growth and transitions are in line with expectations

Preparations for the transition of the Airbus A330ceo to A330neo models are also progressing well and once the transition is completed we will benefit from an exclusive position with the new Trent 7000 on the A330neo.

The roll-out of new engines, including the Trent XWB for the highly successful Airbus A350 family, will significantly grow our market share and the installed base of new engines that will deliver strong aftermarket revenues for decades to come.

Market review

Rolls-Royce is one of the world's leading civil aero-engine manufacturers with particular strengths in engines for civil widebody aircraft and large business jets, underpinned by our strength and continued investment in technology.

We have a strong market position on widebody aircraft produced by the world's two major aircraft manufacturers: Airbus and Boeing, who are broadly consistent in forecasting air traffic growth (revenue passenger kilometres) of approximately 5% compound annual growth rate over the next 20 years. In the engine market for narrowbody aircraft, we continue to supply some parts and services for the IAE V2500 engine family.

We are market leaders in the large business jet fleet market powering aircraft from most of the main aircraft manufacturers.

Key Rolls-Royce differentiators

⊕ Barriers to entry are extremely high. We invest heavily to maintain market-leading technologies and system level integration capabilities to deliver the best engine performance for our customers. We offer a wide range of aftermarket services which provide flexible and cost-effective options to our customers and build long-term relationships.

Market dynamics

- Overall there has been a slowdown in all major geographical markets for new aircraft orders after a period of higher than normal order placement for new airframe products in recent years (principally Airbus A350 XWB and A330neo, and Boeing 787 and 777X).
- Long-term growth in the number of widebody aircraft in the global fleet has historically been strongly correlated to global GDP growth and disposable income.
- Historically, growth has recovered quickly following major economic shocks. The geographic spread of our installed base and wide customer base spreads our risk and reduces our exposure to any one shock.
- Our current share in the widebody engine market is at 32% of the installed passenger fleet and is expected to exceed 50% early in the next decade.
- Older widebody aircraft are experiencing reduced utilisation by certain airlines.
- Trent-powered aircraft are starting to transition from their original operators to other operators as the fleet matures. This year, 46 Trent-powered aircraft transitioned, 13 of which were Trent 800-powered Boeing 777 aircraft.
- Over 90% of the Rolls-Royce widebody engine fleet is covered by our TotalCare service agreements.
- Over 65% of Rolls-Royce business jet engines are covered by our CorporateCare service agreements.
- Long-term demand for large business jets is related to global economic growth and increases in the number of high net worth individuals; the sector has historically been fairly resilient to financial shocks.
- The business jet market is slowly recovering in the US (our largest market), but is currently going through a slowdown elsewhere due to political tensions and customer anticipation of new models about to enter into service.
- Aftermarket demand for engines on 50-70 seat aircraft is reducing in line with expectations.

Competition

- GE is the main competitor supplying engines in the widebody sector. In 2016, deliveries of engines for widebody passenger aircraft were split Rolls-Royce 38%, GE 54%, Engine Alliance 6% and Pratt & Whitney 2%.
- Rolls-Royce is well positioned on all Airbus widebody airliner programmes and competes with GE on the Boeing 787 family.
- Rolls-Royce is the sole engine provider on the Airbus A350 XWB family where 810 aircraft have been ordered so far.
- GE is the sole engine provider on the Boeing 777X aircraft, scheduled to enter into service in 2020 where 306 have been ordered so far.
- In large business jets, the main competition is GE, Pratt & Whitney and Safran.
- Rolls-Royce has 3,100 powered business jets flying, representing 55% market share of the large/very large business jet fleet.

Business risks

- If we experience a major product failure in service, then this could result in significant adverse financial and reputational consequences and potential litigation.
- If an external event or severe economic downturn significantly reduces air travel and thereby reduces engine flying hours and demand for aircraft, then our financial performance may be impacted.
- If our aircraft manufacturer customers significantly delay their production rates, then our financial performance may be impacted.
- If we fail to achieve cost reductions at the necessary pace, then our ability to invest in future programmes and technology may be reduced.
- If we experience significant pricing pressure from increased competitor challenge in our key markets, then our financial performance may be impacted.
- If we suffer a major disruption in our supply chain, then our delivery schedules may be delayed, damaging our financial performance and reputation.
- If there are significant changes to the regulatory environment for the airline industry, then our market position may be impacted.

Trent XWB

The latest version of the Rolls-Royce Trent XWB, the most efficient large aero engine flying in the world today, has powered the Airbus A350-1000 aircraft to the skies for the first time. The Trent XWB-97 is the sole powerplant for the longer range A350-1000, which will enter service in 2017.

The first test flight, which took place in November at Toulouse, France, marked another milestone for the Trent XWB, our largest Civil Aerospace programme.

The Trent XWB-84 has already delivered outstanding performance and reliability since it first went into service in January 2015, powering the A350-800 and A350-900. The Trent XWB, specifically designed for the A350 XWB, is the fastest-selling widebody engine ever, with more than 1,600 already sold or on order.

READ MORE AT WWW.ROLLS-ROYCE.COM

Opportunities

- Our position and long-term prospects in the widebody sector are strong across our Trent family.
- We continue to invest in our technology demonstrator programmes which underpin our Advance and UltraFan engine programmes. We are well positioned for future aircraft requirements, while also delivering technologies to enhance our existing product portfolio.
- The Trent XWB has now been in service for two years, with 64 Airbus A350s delivered to ten airlines and one lessor. In November, the A350-1000 successfully completed its first flight.
- Rolls-Royce is the sole supplier of engines for the new Airbus A330neo. The Trent 7000 engine is in development, and the first flight is expected in 2017.
- The new Trent 1000 TEN for the Boeing 787 is scheduled to enter service in 2017, which will deliver significant fuel efficiency improvement and an opportunity for greater market capture.
- China's COMAC is also planning a joint programme with Russia's UAC to develop a widebody aircraft, targeting entry into service around 2025. We remain in close dialogue with COMAC and UAC to understand their plans and whether their widebody programme presents an opportunity for Rolls-Royce.
- Our business jet market share is likely to fall in the medium term with the success of new entrants into the large/very large sector, but the market remains attractive and we will continue to invest to improve our position and retain leadership.

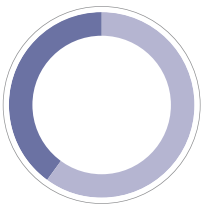
Summary
We are a leading engine maker for the military transport and patrol market and the second largest provider of defence aero-engine products and services globally. Rolls-Royce has 16,000 defence engines in service with 160 customers in over 100 countries.

Key highlights

- Underlying revenue up slightly; modest growth in OE.
- Underlying profit before financing down 8%; reflecting adverse product mix and costs related to the TP400 programme, partially offset by through-life cost-savings on a major EJ200 contract.
- Investing to enhance manufacturing, aftermarket service and closer proximity to core customers.
- 2017 outlook: revenue steady; margin and profit expected to soften from recent levels.

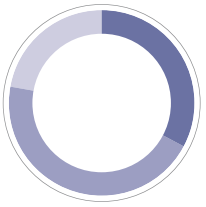
The F-35 Lightning II employing the Rolls-Royce LiftSystem®, demonstrated its vertical landing capabilities in the UK for the first time in 2016.

UNDERLYING REVENUE MIX



OE revenue	**40%**
Services revenue	**60%**

UNDERLYING REVENUE BY SECTOR



Combat	**33%**
Transport and patrol	**45%**
Other	**22%**

DEFENCE AEROSPACE

Operational review

Financial overview

Underlying revenue of £2,209m was up slightly on the prior year. Higher volumes for TP400 production, together with increased Adour engine deliveries, helped original equipment (OE) revenues increase 3%. Service revenues were stable, with lower demand for spare parts offset by increased revenues from long-term Eurofighter Typhoon and C-130J service contracts.

Gross margin declined by £49m, reflecting lower sales of spare parts, an adverse change in OE product mix, additional expenditure of £31m on the TP400 programme and higher payroll costs. Retrospective contract margin improvements totalled £82m, £5m lower than prior year, but ahead of early expectations. Of this, around half relates to delivering significant cost saving benefits on the largest Eurofighter Typhoon contract, which triggered a cost-saving incentive award.

While overall R&D costs were slightly lower than the prior year, the business continued to invest in future programme development and the Indianapolis transformation.

Restructuring costs were lower due to reduced level of severance costs and reversal of a provision for the closure of the defence facility at Ansty, UK, through better cost recovery than expected. Underlying commercial and administrative costs and other costs were similar to prior year.

Profit before financing of £384m was 8% lower than the prior period, driven by the lower gross margin.

Investment and business development

Order intake for 2016 was £1.5bn (2015: £1.7bn), reflecting significant follow-on export orders being delayed to 2017.

Significant activities in 2016 included: winning orders for the F-35B LiftSystem™; increased MRTT engines for A330 aircraft; and contract renewals for services. Deliveries of engines were slightly higher in 2016, driven by increased units for TP400 and Adour export. Services revenues were steady, reflecting higher flying hours from newer EJ200, F405 Adour and AE 2100 powered aircraft in the UK, North America and the Middle East.

The first T56 Series 3.5 technology insertion kits delivered to the US Air Force (USAF) for its legacy Hercules C-130 fleet have validated the expected fuel saving and performance benefits, prompting growing interest in the upgrade.

The UK and French Governments also committed to the €2bn UK-France Unmanned Combat Air System (FCAS) unmanned combat air system programme in December, enabling progress through to the demonstrator phase of the programme in 2017. Our LibertyWorks development unit was selected to provide the vertical lift propulsion for the new DARPA VTOL X-Plane. The unit also launched an infrared footprint suppression module, reflecting our diverse and cutting-edge technology capability.

Within the Services portfolio, the support contract for the US C-130J transport fleet was renewed and we signed a memorandum of understanding with Pratt & Whitney to extend support for the UK's new F-35B Lightning fleet beyond the Rolls-Royce LiftSystem.

This strategy of strengthening our service offerings closer to our major customers saw the opening of new on-base Service Delivery Centres in the UK (at RAF Brize Norton) and in the US (at Kingsville, Texas), as well as a new joint engine support facility for the USAF Global Hawk fleet.

ORDER BOOK

£3.9bn

As part of the TP400 consortium, the focus was on delivering solutions to improve the on-wing reliability of the GE-Avio gearbox. This included an on-wing exchange procedure which has greatly helped to reduce the service time and backlog.

Transformation milestones were achieved as planned, including completion of the first production cell as part of the investment activity in Indianapolis. Further manufacturing changes are due to come on stream in the first half of 2017.

Defence Aerospace outlook

While revenues should remain steady, margins are expected to come under pressure from the essential investments in efficiency and long-term growth. These reflect important product development and manufacturing transformation initiatives as the business looks to capitalise on its strong positions, particularly in combat and transport & patrol, and the absence of significant incentive arrangements under remaining long-term service agreements. As a result, margins and profits are expected to soften from the recent levels.

DEFENCE AEROSPACE | KEY FINANCIAL DATA

£m	2015	Underlying change	Foreign exchange*	2016
Order book	**4,316**	**(391)**	**1**	**3,926**
Engine deliveries	**649**	**12**	**–**	**661**
Underlying revenue	**2,035**	**17**	**157**	**2,209**
Change		*+1%*	*+8%*	*+9%*
Underlying OE revenue	801	22	67	890
Change		*+3%*	*+8%*	*+11%*
Underlying services revenue	1,234	(5)	90	1,319
Change		*–*	*+7%*	*+7%*
Underlying gross margin	**579**	**(49)**	**34**	**564**
Gross margin %	*28.5%*	*-260bps*		*25.5%*
Commercial and administrative costs	(124)	(3)	(7)	(134)
Restructuring	(8)	18	–	10
Research and development costs	(73)	5	(3)	(71)
Joint ventures and associates	19	(4)	–	15
Underlying profit before financing	**393**	**(33)**	**24**	**384**
Change		*-8%*	*+6%*	*-2%*
Underlying operating margin	**19.3%**	**-180bps**		**17.4%**

* Translational foreign exchange impact.

Market review

Rolls-Royce is a market leader in defence aero engines for military transport and patrol aircraft and has strong positions in other sectors, including combat aircraft, trainer aircraft and helicopters. We are pursuing new opportunities emerging in Asia and the Middle East to mitigate flat defence budgets in the established North American and European markets.

Key Rolls-Royce differentiators

We are investing heavily in technology, integration capabilities and facility modernisation to deliver capable, affordable engines for our customers. Additionally, we leverage our large installed base and strong services capabilities to provide superior and affordable service solutions.

Market dynamics

- Defence budgets are expected to show modest growth, flat in real terms in the US and UK, partially offset by growth in other emerging markets.
- Western customers are seeking to reduce and minimise costs by delaying or deferring purchase, improving asset availability and extending lifecycles of aircraft/engines.
- Increasing levels of economic affluence and political tension in the Asia Pacific and Middle East regions are leading to increases in both OE and services spend.
- Revenue has historically been broadly balanced between OE sales and aftermarket services, biased towards the latter.

Business risks

- If we experience a major product failure in service, then this could result in loss of life and have a major, negative impact on our reputation.
- If global defence spending experiences a further downturn, then our financial performance may be impacted.
- If we do not continue to invest to improve the performance and cost of our products, then we may lose market share.
- If we suffer a major disruption in our supply chain, then our delivery schedules may be delayed, damaging our financial performance and reputation.
- If we do not secure new applications, then our capabilities may be eroded in the long term.

Competition

- GE, Pratt & Whitney, Honeywell, and Safran are our main competitors in our sectors.
- In Europe, large defence programmes tend to be addressed by consortia of two or more companies due to the political environment. Examples include our collaboration with ITP, MTU and Safran on the TP400 engine for the Airbus A400M and with GE Avio, ITP and MTU on the EJ200 engine for the Eurofighter Typhoon.
- We work with our EJ200 engine partners on campaigns for Eurofighter Typhoon export sales opportunities as well as new indigenous combat programmes.
- Barriers to entry are high and we do not envisage the competitive landscape changing significantly in the near future.

Opportunities

- The UK's commitment to the next phase of the FCAS programme presents a next-generation combat development opportunity for Rolls-Royce.
- Our LiftFan system for the F-35B is just entering service and we expect to deliver over 400 systems in the next 20 years.
- Developing markets, such as India and Turkey, are inviting bids on new combat aircraft. We estimate a potential of over 300 aircraft for these programmes.
- In transport, we believe the Airbus A400M transport aircraft and V-22 Osprey have overseas sales opportunities.
- We see strong growth potential for increased service provision to the military and we are well positioned with programmes such as MissionCare®.

Improving fuel efficiency

Technical advances for our T56 engines on legacy Lockhead Martin C-130 and P-3 aircraft have led to significant improvements in fuel economy. The US National Oceanic and Atmospheric Administration (NOAA) was the launch customer and installed T56 engine upgrade kits, known as the Series 3.5, on its two 'Hurricane Hunter' P-3 aircraft. The result: fuel economy improvement of 12% on average after more than 3,000 engine flight hours through and around hurricanes. The USAF completed a Series 3.5 installation on the first of its fleet of C-130H aircraft and early flights showed similar results. The USAF will roll out the upgrades into C-130s operated by USAF Reserve and Air National Guard units, leading the way for installation of the Series 3.5 kits into the global fleet of hundreds of transport aircraft flown by other customers around the world.

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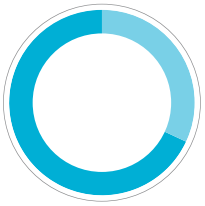
Summary
Power Systems is a leading provider of high-speed and medium-speed reciprocating engines, complete propulsion systems and distributed energy solutions as well as key engine components including fuel injection systems and turbochargers. The business serves the marine, defence, power generation and industrial markets through its core brands MTU, MTU Onsite Energy and L'Orange.

Key highlights

- Underlying revenue 1% lower; growth in power generation and industrial markets offset by reduction in commodity and oil price driven sales.
- Underlying profit before financing 14% lower; volume reduction and adverse product mix.
- Good start to transformation with new leadership in place to drive further performance improvement.
- 2017 outlook: steady, healthy order book in key segments offsetting some challenging markets.

UNDERLYING REVENUE MIX



OE revenue	68%
Services revenue	32%

UNDERLYING REVENUE BY SECTOR

Marine	33%
Energy	33%
Industrial	21%
Defence and other	13%

A 20-cylinder MTU Series 4000 engine powers a Liebherr mining truck.

POWER SYSTEMS

Operational review

Financial overview

Underlying revenue of £2,655m was 1% lower at constant currency (11% higher including the impact of translational foreign exchange). Overall original equipment (OE) revenue declined 1%. Growth in sales of diesel and gas products to power generation and industrial customers offset reductions within markets where demand is linked to low oil and commodity prices, and reduced activity in naval markets.

Service revenues reduced 2%, largely reflecting weaker marine medium-speed markets, once again reflecting low oil prices.

Gross margin reduced by £28m in absolute terms and by 90 basis points, to 26.6% (2015: 27.5%) with good progress on cost reduction generated from transformation activity offsetting some of the impact of volume reduction, adverse changes in product mix and a reduction in the discount rate applied to the warranty provision.

Overall, underlying profit declined £27m or 14%, led by the reduction in gross margin. Costs below gross margin remained broadly unchanged on an underlying basis. The £9m increase in commercial and

administrative costs was offset by a £5m reduction in R&D reflecting a more focused approach to future product development activity together with reduced underlying restructuring costs. An exceptional charge of £45m has been taken for restructuring activity.

Investment and business development

Power Systems' customers span a range of markets from power generation and defence to marine, industrial and construction markets. This end-market diversity has enabled the business to mitigate some of the weak market environments and as a result, the order book ended the year at £1.8bn (2015: £1.9bn).

2016 order intake of £2.4bn (2015: £2.5bn) was 2% down at constant currency, with the year-on-year reduction being mainly in oil & gas and commodity-related markets including marine, together with lower government project orders. This was offset by improvements within power generation, agricultural and industrial markets.

Within power generation markets, we delivered 200 gensets (a package of engine and generator) to the Asian VPower Group, one of our strategic partners in the region. We have continued to strengthen our position in the growing market for back-up power for larger mission-critical applications.

Order intake later in the year was healthy for solutions to support data systems in both Europe and the US and also for independent power customers. We have also agreed to establish a 50/50 joint venture with Yuchai Machinery Company Ltd for the production under licence of MTU Series 4000 diesel engines in China, targeting the Chinese off-highway market.

Demand for our marine products remained good. Naval orders included gensets for the UK Royal Navy's Type 26 Global Combat Ship and a supply contract for the Italian Navy relating to a new multi-purpose ocean-going patrol vessel. Within the land defence markets, there was a follow-up order for use in a German armoured vehicle.

In other areas, we continued to attract new customers in new regional markets including Japanese high-tech crane producer Kato. We also made progress within the rail market in both Europe and Asia. This included a notable order from Hitachi Rail Europe for over 100 MTU PowerPacks® for use in the UK and an order to remanufacture (an in-house process, known as Reman, to refurbish and extend the life of existing systems) around 400 MTU PowerPacks for Transdev Group in Germany.

Innovation was again strong with some notable new products coming to market in the year. We launched new advanced diesel and gas propulsion systems which meet new IMO and EPA emissions standards.

ORDER BOOK

£1.8bn

At the same time, we launched advanced propulsion systems for the construction and industrial markets which satisfy new emission standards in those industries. Finally, we launched a hybrid power pack and energy pack battery system for the rail market.

Power Systems also made progress with the transformation programme, targeting reductions in product costs as well as strengthening sales and service resources and leveraging digital capabilities to develop value adding services.

Power Systems outlook

The outlook for Power Systems remains steady. The business finished the year with a strong order book for several of its key markets. Whilst some markets, particularly those impacted by oil and commodity prices, remain difficult, we expect the business to deliver modest growth in revenue and profit in 2017.

POWER SYSTEMS | KEY FINANCIAL DATA

£m	2015*	Underlying change	Foreign exchange**	2016
Order book	**1,928**	**(113)**	**–**	**1,815**
Underlying revenue	**2,385**	**(25)**	**295**	**2,655**
Change		*-1%*	*+12%*	*+11%*
Underlying OE revenue	1,618	(9)	201	1,810
Change		*-1%*	*+12%*	*+12%*
Underlying services revenue	767	(16)	94	845
Change		*-2%*	*+12%*	*+10%*
Underlying gross margin	**656**	**(28)**	**79**	**707**
Gross margin %	*27.5%*	*-90bps*		*26.6%*
Commercial and administrative costs	(296)	(9)	(35)	(340)
Restructuring	(4)	4	–	–
Research and development costs	(162)	5	(20)	(177)
Joint ventures and associates	–	1	–	1
Underlying profit before financing	**194**	**(27)**	**24**	**191**
Change		*-14%*	*+12%*	*-2%*
Underlying operating margin	**8.1%**	**-110bps**		**7.2%**

* 2015 figures have been restated as a result of costs previously reported in 'cost of sales', being reclassified as 'other commercial and administrative costs' to ensure consistent treatment with 2016.
** Translational foreign exchange impact.

Market review

The markets served by Power Systems are driven by long-term global trends such as increasing population growth, rising demand for energy, natural resources and food as well as stricter emissions legislation. Despite an unprecedented downturn in commodity prices in recent years, the utilisation rates in the exploration and production industry are showing some early signs of recovery. Demand for high-specification system solutions such as power for data centres and rail power packs has proved robust. We remain confident of long-term growth in our principal markets. Power Systems continues to invest in new technology, improved customer solutions and aftermarket services to address market developments and new requirements.

Key Rolls-Royce differentiators

- Technology leadership and reputation with market-leading performance and system solutions; new product innovation (eg. hybrid/e-drive and mobile gas solutions); and high level of customisation.

Market dynamics

- Population growth and increasing urbanisation are driving demand for clean, efficient power and infrastructure investments.
- Global GDP development with particular growth in Asia and Africa.
- Increasing global and regional trade and transport of goods.
- Geopolitics and migration are driving modest defence budget growth (1-2%) in NATO countries with higher growth in emerging markets and the Middle East.
- Increasing focus on renewable energy sources requires decentralised and clean energy solutions (eg. back-up power).
- Increasing environmental legislation and efficiency requirements help drive emission and efficiency technologies.
- Current weak environment in certain end markets (eg. oil & gas and mining), due to current low oil and commodity price levels.

Business risks

- Economic: some of our markets, especially oil & gas and mining, continue to be impacted by low commodity prices – this has been partially offset by a resilient performance in other sectors (eg. power generation and rail).
- Political: increasing political tensions and uncertainties, and remaining sanctions limit levels of global trade and customer access in certain regions.
- Competitive: increasing activities of Asian competitors and new market entrants in our core power range of MTU Series 4000 engines potentially influence volumes and margins.
- Technological: emerging new technologies with falling costs (eg. battery and solar) might influence existing solutions such as back-up power generators.

Competition

- Fragmented competitor landscape in off-highway engine markets which varies depending on specific market segments – multiple players although a few dominate.
- Continuing industry consolidation results in strong, large-scale and integrated players.
- Expansion of western competitors in our specific core engine markets.
- Competition from Asia increasingly focusing on higher power ranges where MTU operates.
- While traditional competition has been limited to engine suppliers, solution providers are becoming more relevant.

Opportunities

- Regional growth, especially in China, India and South East Asia.
- Leveraging partnerships to expand geographical reach and extend product scope in core market segments.
- Stricter global emission legislation strengthens demand for emission and efficiency technologies (eg. exhaust after treatment).
- Enhancement of system competence and solutions to create customer value through optimised total system functionality and performance.
- Growth in service and digital offerings to serve complete lifecycle solutions and improve customer operations.
- Growth through extended key engine component offering, including turbochargers.
- Leveraging trend towards increasing electrification through strengthening electric capabilities (eg. hybrid and diesel-electric propulsion systems).

MTU drives for key British railway projects

The Intercity Express Programme (IEP) is one of the biggest transport projects in the UK: 122 new high-speed trains built by Hitachi Rail Europe are scheduled to go into service on the East Coast Main Line and Great West Main Line routes from 2017.

Rolls-Royce is supplying more than 330 MTU PowerPacks each producing up to 700 kilowatts for these super express trains. At the heart of the drive system is the state-of-the-art, fuel efficient MTU 12V 1600 R80L engine, which meets the stringent EU Stage IIIB emission standard thanks to an integrated selective catalytic reduction system. MTU will maintain and guarantee the availability of the engines throughout the entire 27-year lifetime of Hitachi's contract for IEP.

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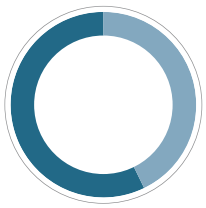
Summary
Marine is a leading provider of propulsion and handling solutions for the maritime offshore, merchant and naval markets. The offerings range from standalone products to complex integrated systems including ship design. The business has more than 4,000 customers, with 70 naval forces and over 30,000 commercial vessels using our equipment.

Key highlights

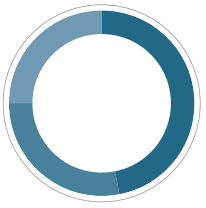
- Underlying revenue down 24%; weak offshore markets impacting both OE and service revenues.
- Underlying profit before financing negative; lower volumes and reduced overhead absorption.
- Net restructuring benefits from current and legacy programmes starting to improve performance.
- £200m impairment of goodwill reflecting a more cautious outlook; further weakness in offshore oil & gas markets offset by ongoing cost improvements as we refocus the business.

UNDERLYING REVENUE MIX



OE revenue	**57%**
Services revenue	**43%**

UNDERLYING REVENUE BY SECTOR



Offshore	**47%**
Merchant	**28%**
Naval	**25%**

The Bergensfjord, a ferry operating between Norway and Denmark, has won awards for environmental performance thanks to four Bergen pure gas engines and a Rolls-Royce propulsion and steering system.

MARINE

Operational review

Financial overview

Underlying revenue of £1,114m was 24% lower on a constant currency basis. Within this, original equipment (OE) and services revenues were 26% and 21% lower respectively. This reflected continued weakness in offshore and merchant, as ship owners deferred overhaul and maintenance on the back of reduced utilisation of their vessels.

Gross margin was £236m, an improvement of 170 basis points versus 2015, but £(44)m lower in absolute terms, as a result of the lower volume. The improved gross margin percentage partly resulted from cost reduction actions. Overall this resulted in a net loss of £27m.

The announcement in December 2016 of further organisational changes and headcount reduction in 2017 has led to an exceptional £5m restructuring charge. In addition, £200m of the Group impairment of goodwill was in Marine and mainly related to the acquisition of Vickers in 1999.

Investment and business development

Overall, the Marine order book declined 29% during the year at constant currency, reflecting adjustments for a number of postponed or cancelled orders and very weak offshore markets. Orders for new vessels, projects and services were all sharply lower than 2015 and, as a result, order intake was only £715m, 29% down on the previous year at constant currency.

The offshore market was extremely challenging, driven by a low oil price and reduced capital expenditure within the upstream oil exploration and related services sectors. Several merchant segments were also subdued, reflecting generally weak conditions in the global marine industry. The business focused on using its strengths as a system integrator to leverage across adjacencies, including designing and equipping the UK's new polar research ship, RSS Sir David Attenborough. It also landed a major deal to design and equip Hurtigruten's new explorer cruise ships, along with battery solutions to make full electric propulsion possible.

The business announced a contract to supply the world's first automatic crossing system to ferry operator, Fjord 1, and also launched our new Azipull Carbon thruster with yacht builder Benetti, reflecting the increasing importance of newer technologies. The fishing segment remained strong, with contracts won for a range of vessels. The naval business was focused on further development work and supporting customers across Asia, Europe and the US. These included supporting successful sea-trials for the US Navy's most advanced warship the USS Zumwalt, further MT30 orders for new Italian helicopter landing craft and selection by the New Zealand Navy for ship design of its MSC programme.

The Marine business continues to lower its cost base and build flexibility into the organisation, particularly across back-office and operational activities. The restructuring programmes announced in 2015 have led to a reduction of around 1,100 headcount with £65m of annual savings recognised from 2017.

Reflecting the ongoing subdued and increasingly cost-conscious market environment, in December further restructuring to take place in early 2017 was announced, targeting annualised savings of around £50m. This included a further headcount reduction of around 800 across operations and back-office functions as the business continues to shrink footprint, reduce indirect headcount, and consolidate manufacturing activity.

At the same time, investments were made in the strategic enablers of the future, including upgrading our azimuth thruster production facility in Rauma, Finland. The £44m project will create a state-of-the-art production facility for one of our most important product groups.

ORDER BOOK

£905m

The pace of technology change in the sector is accelerating, and we continue to invest in pioneering research into ship intelligence technologies focused on data-driven, value-added services that facilitate full ship automation in the long term.

Marine outlook

Overall, the outlook for Marine remains cautious. We expect that the market will continue to feel the impact of low oil prices, and the general overcapacity in several segments will take time to reach equilibrium. This will impact the demand for our products and services. We will sustain our active cost reduction programmes, focusing on manufacturing, supply chain and overhead costs, in order to drive a more competitive business adapted to the current market conditions.

MARINE | KEY FINANCIAL DATA

£m	2015	Underlying change	Foreign exchange*	2016
Order book	**1,164**	**(337)**	**78**	**905**
Underlying revenue	**1,324**	**(312)**	**102**	**1,114**
Change		*-24%*	*+8%*	*-16%*
Underlying OE revenue	773	(198)	56	631
Change		*-26%*	*+7%*	*-18%*
Underlying services revenue	551	(114)	46	483
Change		*-21%*	*+8%*	*-12%*
Underlying gross margin	**260**	**(44)**	**20**	**236**
Gross margin %	*19.6%*	*+170bps*		*21.2%*
Commercial and administrative costs	(201)	(6)	(17)	(224)
Restructuring	(16)	19	(1)	2
Research and development costs	(28)	(11)	(2)	(41)
Underlying profit before financing	**15**	**(42)**	**–**	**(27)**
Change		*-280%*		*-280%*
Underlying operating margin	**1.1%**	**-380bps**		**-2.4%**

* Translational foreign exchange impact.

Market review

We forecast long-term growth opportunities across our commercial and naval market segments. Short-term performance will continue to be impacted by the weakness in offshore oil & gas exploration.

Key Rolls-Royce differentiators

- Unique domain knowledge, portfolio of products with overlaying levels of systems integration; joint value proposition within naval markets with Power Systems; continuous maritime innovation and technology leadership, and leadership in emerging digital marine markets.

Stealth power

The commissioning of the world's most advanced naval ship, USS Zumwalt, took place in October. Powered by two Rolls-Royce MT30 main gas turbine generators and two auxiliary turbine generators, and driven by two fixed pitch Rolls-Royce propellers, the USS Zumwalt is an all-electric ship at the cutting edge of naval technology.

Rolls-Royce technicians joined the ship throughout an extensive period of sea trials to ensure a successful entry into service.

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Market dynamics

- We operate in three key markets – offshore, merchant and naval – with growth fundamentally driven by GDP, trade, oil price and defence spending.
- Population growth, urbanisation and industrialisation support growth in demand for energy and trade, in turn driving demand for offshore and merchant vessels.
- Exploration and production spending cuts result in the offshore segment experiencing very low fleet utilisation, declining charter rates, lay up of vessels (impacting services revenue) and increased scrapping.
- We expect exploration activity to return to growth over time to compensate for the depletion rate of current wells. However, there is unlikely to be a positive impact in 2017.
- Merchant segment facing overcapacity and weak earnings in most cargo segments; however, good opportunities in cruise and passenger vessels, and a stable tug and workboat market.
- Expect strong efficiency and cost focus when merchant and offshore markets rebound.
- Naval market is forecast to remain stable as defence expenditure remains consistent.
- Overcapacity in shipbuilding and vessel fleets leading to consolidation at customer level.
- Asian yards are expected to continue playing a major role in shipbuilding with further increased regional vessel ownership, particularly in China.
- Continuing trend of supply chain moving east to where the majority of ships are built.

Business risks

- Markets: continuing low oil price results in sustained pressure in the offshore market with customer groups reducing costs and capital commitments, thereby delaying market recovery.
- Competition: competitors react to a depressed market by cutting costs, pricing aggressively and partnering with other players.
- Contracting: order delays and cancellations impact our revenue, cash and profit but also put our supply chain under financial stress.
- Customer and supply chain financial pressure: continuing market downturn leaves some customers and suppliers exposed to consolidation and/or market exit.
- Technology: failure to invest in the right technologies to meet customer future demand.
- Product failure: risk of failure in the field resulting in the need for intervention to rectify the issue with financial and/or reputational consequences.

Competition

- Array of competitors is diverse but falls generally into two main groups: systems integrators with broad portfolios and specialists in narrow product categories.
- Competitors reacting to current market dynamics with cost reduction programmes.
- Cross-industry electrical specialists increasingly active in several vessel segments to capitalise on marine vessel electrification trend.
- Key competitors looking to grow into digital offerings with investment and niche acquisitions.
- Increased pricing pressure with competition for fewer orders in challenging market.

Opportunities

- Continue growth in merchant segments (eg. ferries, tugs and short-sea cargo) and adjacent offshore markets (eg. special purpose and offshore wind) with more advanced offerings.
- Continue to leverage the joint value proposition in naval markets together with Power Systems.
- Leverage local partnerships to generate regional growth in Asia, especially China.
- Owners are increasingly interested in solutions to improve efficiency and environmental impact as well as safety in more diverse and complex operations.
- Increasing role of data and analytics in optimising asset operations and reducing costs.
- Growth in intelligent shipping with greater integration of propulsion and electric systems.
- Increased modularisation and standardisation as well as advanced manufacturing methods.
- Increased uptake of long-term service agreements to create greater value within the market.

Summary

Nuclear is a leader in propulsion system design and development for the Royal Navy's nuclear submarine fleet and is the sole provider and technical authority, managing all aspects of plant design, safety, manufacture, performance and through-life support.

In civil nuclear we provide nuclear reactor vendors and utility operators with integrated, long-term support services and solutions spanning the whole reactor lifecycle, from concept design through to obsolescence management and plant-life extension. Safety-critical systems have been supplied to around 50% of the global nuclear power plants in service. We have been a key player in the nuclear industry for more than 50 years.

Key highlights

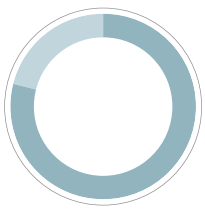
- → Underlying revenue 11% higher; strong revenues led by increased submarine work.
- → Underlying profit before financing 37% lower; adverse margin mix in submarine projects, lower R&D credit than 2015 and R&D spend on small modular reactor concept development.
- → 2017 outlook: focus on further delivery improvements and investing to address future opportunities.

The Royal Navy Astute class is the latest submarine powered by a Rolls-Royce designed nuclear propulsion unit.

UNDERLYING REVENUE MIX

OE revenue	46%
Services revenue	54%

UNDERLYING REVENUE BY SECTOR



Submarines	79%
Civil nuclear	21%

NUCLEAR

Operational review

Financial overview

Underlying revenue increased by 11% to £777m, led by growth in several key programmes in the submarines business, including support for the next generation Dreadnought class submarines (the successor to the Vanguard class), various refuelling projects and decommissioning activities. Volumes on key civil instrumentation and control programmes in both France and Finland were also good.

Gross margin was lower at 15.6%, reflecting the revenue mix favouring lower margin government-led submarine projects. Below gross margin, the change in treatment of R&D credits, which significantly impacted the full year in 2015, produced an R&D credit of £7m in 2016. This was offset by additional costs to support the higher volumes and to improve delivery performance. In addition, there were extra payroll costs, as well as additional R&D to support the initial design phase for small modular reactors (SMRs).

As a result, underlying profit before financing excluding the R&D credit was £37m at constant currency, 27% below the prior year (2015: £51m adjusted for the R&D credit). After the R&D credit and including a £1m foreign exchange benefit, underlying profit was £45m.

Investment and business developments

Order intake of £385m was 8% higher than 2015. Notwithstanding, the closing order book of £1.8bn was 17% below 2015, reflecting the business working through the large multi-year orders, particularly in submarines, received in prior years.

Submarine activities focused on continuing our support to the Royal Navy's current operational fleet of nuclear-powered submarines, as well as delivery of propulsion systems for the remaining Astute class submarines and for the Dreadnought programme. As well as implementing a range of performance improvement initiatives during the year, we also completed delivery of the nuclear propulsion system for the fourth (of seven) Astute class submarine and have made good progress both in the preparation for the refuelling programme of HMS Vanguard and for decommissioning the Naval Reactor Test Establishment in Scotland. In conjunction with the UK's Ministry of Defence and BAE Systems, we have also advanced discussions around a long-term alliance framework for the Dreadnought programme. Once concluded, this new framework should ensure that the delivery structure and commercial benefits are clarified for all key partners in this £31bn investment programme.

The civil nuclear business successfully concluded the first phase of its major instrumentation and control modernisation programme at Fortum's Loviisa plant in Finland, using our Spinline® technology. It also continued with its upgrade programme across the French civil nuclear fleet as part of a multi-year contract.

The UK government announced final approval for the Hinkley Point C nuclear power station in September, where our Nuclear business was awarded preferred bidder status for contracts covering waste treatment systems, heat exchangers and diesel generators.

The business also announced the strengthening of the strategic collaboration, started in 2014, with the China National Nuclear Corporation, including engineering and training services. The Chinese market is expected to sustain strong growth and we are well positioned with relevant technology.

During the year we started an R&D programme, together with a number of partners, to scope out the initial design phase for SMRs. These smaller, more flexible nuclear power generation units offer the potential for a more flexible power generation in future decades and directly build on the knowledge and specialist skills of our Nuclear business. Any significant further development work will be dependent on government support for this technology.

ORDER BOOK

£1.8bn

Nuclear outlook

The long-term outlook for Nuclear remains positive, supported by confirmation from the UK Government of the ongoing investment in the Dreadnought class submarines. Together with renewed activities in the civil market, particularly in the UK and China, these provide encouraging growth opportunities.

Performance in 2017 will be impacted by the loss of R&D credits on investments and further modest increases in the investment in SMR technology. As a result, profit is expected to be around half that achieved in 2016.

NUCLEAR | KEY FINANCIAL DATA

£m	2015	Underlying change	Foreign exchange*	2016
Order book	**2,168**	**(379)**	**1**	**1,790**
Underlying revenue	**687**	**74**	**16**	**777**
Change		*+11%*	*+2%*	*+13%*
Underlying OE revenue	251	95	8	354
Change		*+38%*	*+3%*	*+41%*
Underlying services revenue	436	(21)	8	423
Change		*-5%*	*+2%*	*-3%*
Underlying gross margin	**111**	**6**	**4**	**121**
Gross margin %	*16.2%*	*-80bps*		*15.6%*
Commercial and administrative costs	(53)	(14)	(3)	(70)
Restructuring	(2)	2	–	–
Research and development costs	14	(20)	–	(6)
Underlying profit before financing	**70**	**(26)**	**1**	**45**
Change		*-37%*	*+1%*	*-36%*
Underlying operating margin	**10.2%**	**-440bps**		**5.8%**

* Translational foreign exchange impact.

Market review

Respected global energy forecasts continue to predict that nuclear power will play a significant role in providing low-carbon, continuous, secure power. More than 80% of today's civil nuclear capacity is in the Organisation for Economic Co-operation and Development (OECD) member countries; however non-OECD countries, including some new to nuclear, will account for the bulk of growth whilst mature markets will focus on current operations and life extension.

Key Rolls-Royce differentiators

⊕ Unique key technology capability in defence and civil nuclear with substantial credibility (more than 50 years' experience); broad mix of offerings over the whole lifecycle; reactor independent portfolio; capable of global reach.

Market dynamics

- Population growth and improved living standards in emerging markets are driving a rise in demand for electricity.
- Within the future energy mix, low-carbon energy is expected to increase, with nuclear energy accounting for a significant share.
- In the US, lower energy prices are putting nuclear operating costs under pressure.
- Market conditions have changed, notably the slowdown in western new build programmes. China and Russia dominate large reactor new build projects.

Business risks

- If we experience a major product failure in service, then this could result in loss of life and significant damage to our reputation.
- Delivery: failure to meet customer expectations or regulatory requirements.
- Markets: if civil nuclear markets do not grow as anticipated due to political or other external events then business will be diminished.
- Customer strategy: if programmes are cancelled as a result of strategic decisions, or vertical integration by reactor vendors, then future revenues will be diminished.
- If we suffer a major disruption in our supply chain, then our delivery schedules may be delayed, damaging our financial performance and reputation.

Competition

- In civil nuclear the competitor landscape is fragmented and comprises reactor vendors, original equipment manufacturers, diversified industrial companies and nuclear operators in service.
- Plant operators increasingly outsource service activities.
- Key competitors and independent data service providers are investing and acquiring capabilities to further enhance their digital offerings.

Opportunities

- Increasing the pace of growth of the civil nuclear business.
- Focusing on growth regions beyond current core markets.
- Strengthening our position with the rapidly growing importance of China in the civil nuclear market.
- Capturing a higher share of the nuclear service market through extension of our geographic reach.
- Exploiting our historical data acquisition coupled with digital investment to launch a digital service portfolio that enables growth into asset management.
- Our capabilities in nuclear can be applied to the development of SMRs for civil power stations.

Small modular reactors

SMRs can provide safe, reliable and affordable low-carbon electricity. An SMR programme presents the opportunity to create a UK nuclear plant through the design phase, to construction and delivery; establishing a sustainable skills base and supply chain capability that demonstrates the UK's overall nuclear excellence to international export markets. Compared with current large-scale reactors, SMRs can deliver significant programme risk reduction through controlled offsite modular manufacturing, compact passive safety systems and easier financing.

With our unique position and over 50 years' experience in developing nuclear technologies, Rolls-Royce has the capability to develop proprietary SMR nuclear reactor technology and bring together its UK industrial and academic partners to deliver an SMR plant solution which will offer lower build, through-life and decommissioning costs, as well as increased regulatory and programme certainty.

A Rolls-Royce led UK consortium offers a significant opportunity to position the UK as a global leader in innovative nuclear technologies.

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Financial review

UNDERLYING INCOME STATEMENT

Year to 31 December £m	2016	2015*	Change
Revenue – 2015 exchange rates	**13,058**	13,354	-296
Translation to 2016 exchange rates	**725**		
Revenue	**13,783**	13,354	+429
Gross profit	**2,626**	3,203	-577
Commercial and administrative costs	**(1,096)**	(1,025)	-71
Restructuring	**2**	(39)	+41
Research and development costs	**(812)**	(765)	-47
Share of results of joint ventures and associates	**107**	118	-11
Profit before financing at 2015 exchange rates	**827**	1,492	-665
Translation to 2016 exchange rates	**88**		
Profit before financing	**915**	1,492	-577
Net financing	**(102)**	(60)	-42
Profit before tax	**813**	1,432	-619
Tax	**(261)**	(351)	+90
Profit for the year	**552**	1,081	-529
Earnings per share (EPS)	**30.13p**	58.73p	-28.60p
Payment to shareholders	**11.70p**	16.37p	-4.67p
Gross R&D expenditure	**(1,331)**	(1,240)	-91
Net R&D charge	**(862)**	(765)	-97

SEGMENTAL ANALYSIS

	Revenue			Gross profit			Profit before financing		
Year to 31 December £m	2016	2015	Change	2016	2015	Change	2016	2015	Change
Civil Aerospace	**6,906**	6,933	-27	**1,129**	1,526	-397	**326**	812	-486
Defence Aerospace	**2,052**	2,035	+17	**530**	579	-49	**360**	393	-33
Power Systems	**2,360**	2,385	-25	**628**	656	-28	**167**	194	-27
Marine	**1,012**	1,324	-312	**216**	260	-44	**(27)**	15	-42
Nuclear	**761**	687	+74	**117**	111	+6	**44**	70	-26
Other	**35**	96	-61	**6**	64	-58	**1**	52	-51
Intra-segment	**(68)**	(106)	+38	**–**	7	-7	**–**	7	-7
Central costs							**(44)**	(51)	+7
Group at 2015 exchange rates	**13,058**	13,354	-296	**2,626**	3,203	-577	**827**	1,492	-665
Translation to 2016 exchange rates	**725**			**422**			**88**		
Group	**13,783**	13,354	+429	**3,048**	3,203	-155	**915**	1,492	-577

* 2015 figures have been restated as a result of £21m of costs previously reported in 'cost of sales', being reclassified as 'other commercial and administrative costs' to ensure consistent treatment with 2016.

Underlying revenue and **underlying profit before financing** are discussed in the Review of 2016 (page 7), the Financial summary (page 16) and the Business reviews (pages 18 to 35).

Underlying financing costs increased by £42m to £102m. Net interest payable increased by £4m to £63m. Other underlying financing costs increased by £38m to £39m, principally due to the non-recurrence of an underlying foreign exchange gain recognised in 2015, which arose from the realised gains on foreign exchange contracts settled to translate overseas dividends into sterling.

Underlying taxation was £261m (2015: £351m), an underlying rate of 32.1% compared with 24.5% in 2015. The primary reasons for the increase are the non-recognition of deferred tax assets on losses in Norway, which reflects the current uncertainty in the oil & gas market, and a different profit mix with more profits arising in countries with higher tax rates.

Underlying EPS decreased 49% to 30.13p, reflecting the reduction in profit for the year.

At the Annual General Meeting on 4 May 2017, the Directors will recommend an issue of 71 C Shares with a total nominal value of 7.1 pence for each ordinary share. Together with the interim issue on 4 January 2017 of 46 C Shares for each ordinary share with a total nominal value of 4.6 pence, this is the equivalent of a total annual **payment to ordinary shareholders** of 11.7 pence for each ordinary share. Further details are included on page 186.

Reported results

The changes in 2016 resulting from underlying trading are described in the previous sections.

Consistent with past practice and IFRS, we provide both reported and underlying figures. As the Group does not hedge account in accordance with IAS 39 *Financial Instruments*, we believe underlying figures are more representative of the trading performance, by excluding the impact of year-end mark-to-market adjustments, principally the USD:GBP hedge book, which has had a significant impact on the reported results in 2016 as the USD:GBP rate has fallen from 1.48 to 1.23 and the EUR:GBP has fallen from 1.36 to 1.17. The adjustments between the underlying income statement and the reported income statement are set out in note 2 to the Consolidated financial statements. This basis of presentation has been applied consistently.

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

Profit before financing

The impact of measuring revenues and costs at spot rates rather than rates achieved on hedging transactions. This increased revenues by £1,172m (2015: £371m) and increased profit before financing by £570m (2015: £265m).

The effects of acquisition accounting £115m (2015: £124m), principally relating to the amortisation of intangible assets arising on the acquisition of Power Systems in 2013.

The impairment of goodwill of £219m (2015: £75m), principally relating to the Marine business as a result of the continued weakness in the oil & gas market (see note 9).

REPORTED INCOME STATEMENT

Year to 31 December £m	2016	2015[1]
Revenue	**14,955**	13,725
Gross profit	**3,048**	3,277
Other operating income	**5**	10
Commercial and administrative costs[2]	**(2,208)**	(1,070)
Research and development costs	**(918)**	(818)
Share of results of joint ventures and associates	**117**	100
Operating profit	**44**	1,499
(Loss)/profit on disposal of businesses	**(3)**	2
Profit before financing	**41**	1,501
Net financing	**(4,677)**	(1,341)
(Loss)/profit before tax	**(4,636)**	160
Tax	**604**	(76)
(Loss)/profit for the year	**(4,032)**	84
Earnings per share (EPS)	**(220.08)p**	4.51p

[1] 2015 figures have been restated as a result of £11m costs previously reported in 'cost of sales', being reclassified as 'commercial and administrative costs' to ensure consistent treatment with 2016.
[2] In 2016, 'commercial and administrative costs' include £671m for financial penalties from agreements with investigating bodies and £306m for the restructuring of the UK pension schemes.

RECONCILIATION BETWEEN UNDERLYING AND REPORTED RESULTS

Year to 31 December	Revenue		Profit before financing		Financing		(Loss)/profit before tax	
£m	2016	2015	2016	2015	2016	2015	2016	2015
Underlying	**13,783**	13,354	**915**	1,492	**(102)**	(60)	**813**	1,432
Revenue recognised at exchange rate on date of transaction	**1,172**	371	**–**	–	**–**	–	**–**	–
Mark-to-market adjustments on derivatives	**–**	–	**–**	(9)	**(4,420)**	(1,306)	**(4,420)**	(1,315)
Related foreign exchange adjustments	**–**	–	**570**	265	**(151)**	(15)	**419**	250
Movements on other financial instruments	**–**	–	**–**	–	**(8)**	8	**(8)**	8
Effects of acquisition accounting	**–**	–	**(115)**	(124)	**–**	–	**(115)**	(124)
Impairment of goodwill	**–**	–	**(219)**	(75)	**–**	–	**(219)**	(75)
Exceptional restructuring	**–**	–	**(129)**	(49)	**–**	–	**(129)**	(49)
Acquisitions and disposals	**–**	–	**(3)**	2	**–**	–	**(3)**	2
Financial penalties	**–**	–	**(671)**	–	**–**	–	**(671)**	–
Post-retirement schemes	**–**	–	**(306)**	–	**3**	32	**(303)**	32
Other	**–**	–	**(1)**	(1)	**1**	–	**–**	(1)
Reported	**14,955**	13,725	**41**	1,501	**(4,677)**	(1,341)	**(4,636)**	160

SUMMARY BALANCE SHEET

At 31 December £m	2016	2015
Intangible assets	**5,080**	4,645
Property, plant and equipment	**4,114**	3,490
Joint ventures and associates	**844**	576
Net working capital[1]	**(1,553)**	(501)
Net funds[2]	**(225)**	(111)
Provisions	**(759)**	(640)
Net post-retirement scheme deficits	**(29)**	(77)
Net financial assets and liabilities[2]	**(5,751)**	(1,883)
Other net assets and liabilities[3]	**143**	(483)
Net assets	**1,864**	5,016
Other items		
US$ hedge book (US$bn)	**37.8**	28.8
TotalCare assets	**3,348**	2,994
TotalCare liabilities	**(907)**	(783)
Net TotalCare assets	**2,441**	2,211
Gross customer finance commitments	**238**	269
Net customer finance commitments	**61**	54

[1] Net working capital includes inventories, trade and other receivables, trade and other payables and current tax assets and liabilities.
[2] Net funds includes £358m (2015 £13m) of the fair value of financial instruments which are held to hedge the fair value of borrowings.
[3] Other includes other investments and deferred tax assets and liabilities.

Exceptional restructuring costs of £129m (2015: £49m). These are costs associated with the substantial closure or exit of a site, facility or activity and increased as a result of the ongoing transformation programme.

Financial penalties of £671m from agreements with investigating bodies (see page 8).

Costs of restructuring the UK pension schemes in 2016 of £306m, principally a settlement charge on the transfer of the Vickers Group Pension Scheme to an insurance company (see note 19).

Financing and taxation

The mark-to-market adjustments on the Group's hedge book of £4,420m (2015: £1,306m). These reflect: the large hedge book held by the Group (eg. US$38bn); and the weakening of sterling, particularly against the US dollar and the euro, as noted above. At each year 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.

Appropriate tax rates are applied to these additional items included in the reported results, leading to an additional tax credit of £865m (2015: £275m), largely as a result of the mark-to-market adjustments.

Balance sheet

Intangible assets (note 9) increased by £435m mainly due to exchange differences of £438m. Additions of £631m (including £154m of certification and participation fees, £100m of development costs and £208m of contractual aftermarket rights) were largely offset by amortisation of £406m and impairment of £222m (including £200m on Marine goodwill).

The carrying values of the intangible assets are assessed for impairment against the present value of forecast cash flows generated by the intangible asset. The principal risks remain: reductions in assumed market share; programme timings; increases in unit cost assumptions; and adverse movements in discount rates.

Property, plant and equipment (note 10) increased by £624m, around half of which was caused by exchange differences of £330m. Additions of £701m (including £75m of TotalCare Flex engines) were offset by depreciation of £424m and £41m was added from the reclassification of joint ventures to joint operations.

Investments in joint ventures and associates (note 11) increased by £268m, including an increase of £154m in the Group's share of authorised maintenance centre joint ventures. The other main movements were: exchange gains of £107m; and the Group's share of retained profit of £43m; offset by a £57m reclassification of certain joint ventures to joint operations.

Movements in **net funds** are shown opposite.

Net working capital reduced by £1,052m, including a £671m accrual for financial penalties, £134m increased deposits and £265m of foreign exchange movements. This was partially offset by higher inventory of £194m.

Provisions (note 18) largely relate to warranties and guarantees provided to secure the sale of OE and services. The increase of £119m includes reclassifications from accruals of £92m, following a review of accounting consistency during the period. The remaining increase of £27m includes net additional charges of £271m (including £147m for warranties and guarantees), and foreign exchange movements of £75m, offset by utilisation of £227m.

Net post-retirement scheme deficits (note 19) have reduced by £48m.

In the UK (increase in surplus of £293m), changes in actuarial estimates increased the value of the obligations £1.8bn, largely due to the discount rate reducing from 3.6% to 2.7%. This was more than offset by returns (in excess of those assumed) on the scheme assets of £2.3bn. This return is largely due to the liability-driven investment policy of the assets being invested to match changes in value of the obligations (on a proxy solvency basis, which is more onerous than the accounting valuation). The net increase in surplus was reduced by the recognition of a settlement charge of £301m on the insurance buy-out of the Vickers Group Pension Scheme.

The principal movements in overseas schemes (increase in deficit of £245m) were exchange differences of £208m.

Net financial assets and liabilities (note 17) principally relate to the fair value of foreign exchange, commodity and interest rate contracts. All contracts continue to be held for hedging purposes. The fair value of foreign exchange derivatives is a net financial liability of £5.6bn, an increase of £3.9bn in the period, mainly a result of the

weakening of sterling against the US dollar and euro.

The US$ hedge book increased by 31% to US$37.8bn. This represents around 5½ years of net exposure and has an average book rate of £1 to US$1.55.

Net TotalCare assets relate to long-term service agreement (LTSA) contracts in the Civil Aerospace business, including the flagship services product TotalCare. These assets represent the timing difference between the recognition of income and costs in the income statement and cash receipts and payments.

Customer financing facilitates the sale of OE and services by providing financing support to certain customers. Where such support is provided by the Group, it is generally to customers of the Civil Aerospace business and takes the form of various types of credit and asset value guarantees. These exposures produce contingent liabilities that are outlined in note 23. The contingent liabilities represent the maximum aggregate discounted gross and net exposure in respect of delivered aircraft, regardless of the point in time at which such exposures may arise. The reduction in gross exposures is a result of guarantees expiring.

Funds flow

Movement in working capital – the £55m increase in working capital includes an increase in inventory, partially offset by a net reduction in financial working capital. These movements are largely driven by the increased sales volumes during 2016.

Expenditure on property, plant and equipment and intangibles – the major increases are: £98m higher PPE expenditure as we build the supply chain; £37m software costs relating to systems development; £81m certification costs driven by the Trent XWB-97 programme; £45m capitalised development costs largely relating to the Trent 1000 TEN; and £46m higher contractual aftermarket rights, mainly on Trent XWB sales.

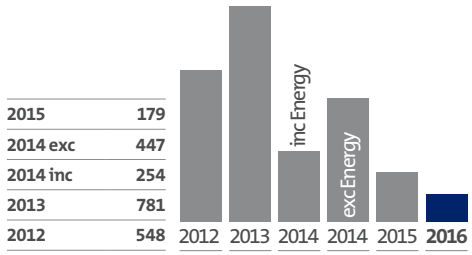
Pensions – the increase in pension contributions in excess of the underlying income statement largely reflects changes in net past service costs of £13m.

Shareholder payments – the change in shareholder payments reflects the difference between the 2014 and 2015 payments, which are paid in the following year.

Acquisitions and disposals include the £154m increase in stake in joint ventures described on the opposite page.

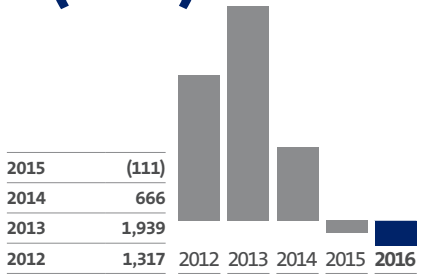
FREE CASH FLOW

£100m



NET (DEBT)/FUNDS

£(225)m



SUMMARY FUNDS FLOW STATEMENT[1]

Year to 31 December £m	2016	2015	Change
Opening net (debt)/funds	**(111)**	666	
Closing net debt	**(225)**	(111)	
Change in net (debt)/funds	**(114)**	(777)	
Underlying profit before tax	**813**	1,432	-619
Depreciation and amortisation	**720**	613	+107
Movement in net working capital	**(55)**	(544)	+489
Expenditure on property, plant and equipment and intangible assets	**(1,201)**	(887)	-314
Other	**47**	(229)	+276
Trading cash flow	**324**	385	-61
Contributions to defined benefit pensions in excess of underlying PBT charge	**(67)**	(46)	-21
Taxation paid	**(157)**	(160)	+3
Free cash flow	**100**	179	-79
Shareholder payments	**(301)**	(421)	+120
Share buyback	**–**	(414)	+414
Acquisitions and disposals	**(153)**	(3)	-150
Discontinued operations	**–**	(121)	+121
Foreign exchange	**240**	3	+237
Change in net debt	**(114)**	(777)	

[1] The derivation of the summary funds flow statement above from the reported cash flow statement is included in note 26 of the condensed consolidated financial statements.

A sustainable business

We continue to invest in the resources and capabilities which underpin our future success as we transform the business.

THROUGH ENGINEERING AND INNOVATION

Our investments in world-class technology, research and engineers are essential for sustaining our competitive advantages and creating new growth opportunities. Ultimately, our innovations deliver the differentiated high-technology products and services that attract our customers.

In 2016, we spent over £1.3bn on gross R&D to develop the technology we embed in our products and deliver to market. As a result, we applied for 672 patents in the year, a Rolls-Royce record.

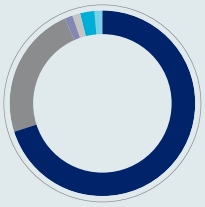
PATENTS FILED

672

Over two-thirds of our R&D expenditure is dedicated to improving the environmental performance of our products, helping our customers do more using less and minimising the environmental impact of our engines.

2016 GROSS R&D EXPENDITURE

£1.3bn



Rolls-Royce	**£936m**
UK government	**£309m**
EU funding	**£20m**
US government	**£18m**
German government	**£31m**
Other sources	**£18m**

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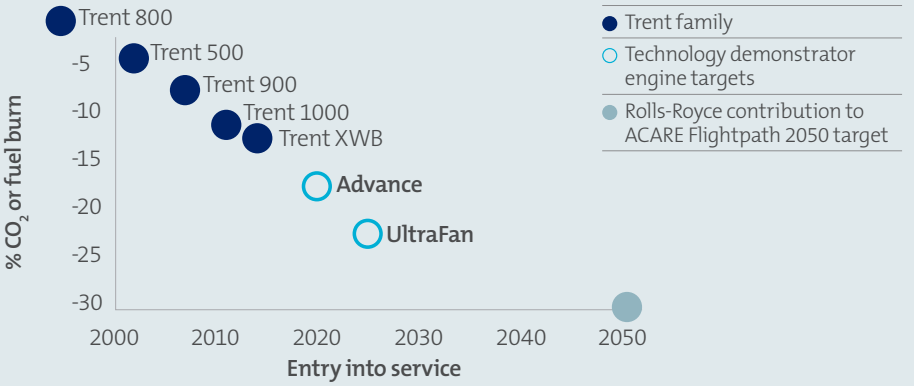
ACARE flightpath 2050 goals

We continue to meet the environmental performance targets for 2050 set by the Advisory Council for Aviation Research and Innovation in Europe (ACARE).



RSS Sir David Attenborough

Rolls-Royce has designed the UK's future polar research ship, the RSS Sir David Attenborough, one of the most advanced scientific maritime vessels ever constructed. It will be equipped with highly efficient Bergen B33:45 engines, running on low sulphur fuel, and a supporting electrical system that will reduce the vessel's fuel consumption, emissions, noise and vibration, minimising the impact in the sensitive polar environment.

Research partnerships

For over 25 years, Rolls-Royce has been co-ordinating research with leading academic institutions and industry partners to harness the knowledge of renowned experts and gain the best value from our investments.

University Technology Centres (UTCs)
This global network of university research partners advances our understanding of specialist science and technologies which are core to our next-generation products.

Advanced Manufacturing Research Centres (AMRCs)
These collaborative public/private partnerships help us to bridge the gap between early research and industrial application, with a focus on developing new manufacturing processes and technologies.

Engineering expertise

We seek to attract the best and brightest engineers by providing them with world-class projects, tools and processes.

We have a culture of developing our people within the Group through opportunities such as our Specialist Academy and the Rolls-Royce Fellowship programmes. We value professional development and work closely with a number of institutes and external organisations to encourage our engineers to earn professional recognition.

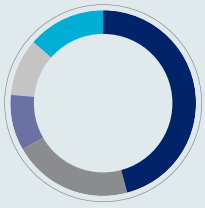
In 2016, we invested £21m to enhance our digital engineering toolset across all our businesses. These developments include:

- **DaVinci**
  This new software enables our engineers to create and test whole engine models virtually. This reduces costs, improves our designs and removes expensive physical hardware tests as we develop new products.
- **High performance computing**
  We have continued investing in upgrades to our high performance computing infrastructure to enable our engineers to make the most of the software tools we have available.

We are also growing our in-house capabilities to capitalise on emerging opportunities. In 2016, we established our digital business to leverage decades of data-driven in-service product knowledge to develop new customer services, and we are leading the way in the development of intelligent ships.

NUMBER OF ENGINEERS (YEAR END)

16,526[1]



Design	7,611
Manufacturing	3,435
Services	1,623
Electrical	1,622
Other	2,235
Total	**16,526**

Inspiring future generations of engineers

We aim to reach six million people through our science, technology, engineering and mathematics (STEM) education outreach programmes by 2020. Our activities are designed to demonstrate the life-long opportunities that STEM careers can offer, helping to secure a future talent pipeline for ourselves and the wider industry. In 2016, we reached 1.2 million people☑, 68% of whom were actively engaged in our programmes. Since launching in 2014, we are now 47% towards our 2020 target.

☑External assurance over STEM, Energy, GHG and TRI rate data provided by Bureau Veritas. See page 183 for the sustainability assurance statement.
[1] Our total number of engineers rose slightly from 15,564 in 2015. This is primarily due to reclassification of 517 roles in Power Systems, and the recruitment of around 270 roles at the new engineering campus in Bangalore, India.

THROUGH OUR PEOPLE

We continue to develop our employee base, ensuring we have the right skills for our business today and the right capabilities for the future.

The skills, knowledge and passion of our workforce are key enablers to our transformation programme. We are embedding a high performance culture across the organisation that encourages pace and simplicity.

As part of our people transformation we have simplified the organisation through management restructuring and leadership change. This has included a reduction of around 700 management positions in 2016 to drive accountability, simplicity and pace through the organisation and improve decision making. In addition, we have continued to make changes to our headcount mix to align with our markets and associated challenges. This has affected our Marine business in particular.

Our transformation is underpinned by our ongoing commitment to maintain the highest standards of ethics, safety and human rights.

In 2016, 97% of Rolls-Royce employees completed annual ethics training, focused on dealing with ethical dilemmas. We are committed to having an environment where anyone can ask questions or raise concerns without fear of retaliation, anonymously if required.

During the year, all of our management population completed Global Code of Conduct certification. We also introduced an ethics e-learning module for new employees to help familarise them with our approach and expectations. In 2016, 99% of new employees who joined us during the year completed this course within the first three months of their employment.

We regard the health and safety of our employees and those working on our premises, or on our behalf, as paramount.

In 2016, there were no fatalities in the Group, and our Total Reportable Injury (TRI) rate was 0.60 per 100 employees☑. This represents a 6% improvement since 2014.

We continue to concentrate on global improvement programmes aligned to our risk profile. Electrical safety and process safety programmes concluded this year and have now transitioned to form part of our ongoing Group assurance activity.

For more information see the Safety & Ethics Committee report, on pages 103 to 109.

We remain committed to protecting and preserving the human rights of our employees, those working in our global supply chain and those who may be impacted by our operations. Our Global Code of Conduct and global human rights policy set out this commitment. More information on our approach can be found in our 2016 anti-human trafficking and modern slavery statement, available at www.rolls-royce.com.

PERCENTAGE OF EMPLOYEES WHO COMPLETED ANNUAL ETHICS TRAINING

97%

TOTAL REPORTABLE INJURY RATE (PER 100 EMPLOYEES)☑

0.60

Headcount by business unit[1,2,3]

	2015	2016
Civil Aerospace	23,100	**23,800**
Defence Aerospace	6,300	**6,000**
Power Systems	10,600	**10,300**
Marine	6,000	**5,300**
Nuclear	4,100	**4,300**
Other businesses and corporate	400	**200**
Total	50,500	**49,900**

Headcount by location[1,3]

	2015	2016
UK	23,200	**22,300**
US	6,400	**6,300**
Canada	1,100	**1,000**
Germany	10,700	**10,700**
Nordic countries	3,800	**3,400**
Rest of world	5,300	**6,200**
Total	50,500	**49,900**

☑External assurance over STEM, Energy, GHG and TRI rate data provided by Bureau Veritas. See page 183 for the sustainability assurance statement.

[1] Headcount data is calculated in terms of average full-time employees.

[2] Other businesses and corporate includes Energy businesses not sold into Siemens in 2014 and corporate employees who do not provide a shared service to the segments. Where corporate functions provide such a service, employees have been allocated on an appropriate basis. 2015 figures have been restated on this basis.

[3] Certain joint ventures have been reclassified as joint operations from 1 January 2016. This has increased the Group reported headcount by 800 employees.

Our early career development programmes continue to attract large numbers of high-quality graduates and apprentices, providing a pipeline of talent into finance, HS&E, operations, HR and engineering.

Our programmes include technical and practical engineering, specialist sciences and corporate function programmes including accountancy, supply chain management and project management.

GRADUATES RECRUITED IN 2016

274

PERCENTAGE OF OUR GRADUATES WHO ENTERED ENGINEERING DEVELOPMENT PROGRAMMES

60%

APPRENTICES RECRUITED IN 2016

327

PERCENTAGE OF OUR APPRENTICES WHO JOINED HIGHER APPRENTICESHIP PROGRAMMES

33%

OUR APPRENTICE SCHEME HAS BEEN RUNNING FOR OVER

100 years

Our training programmes have helped employees to embrace and drive change. In 2016, we invested over £32m in employee learning and development, delivering over one million hours of employee training.

- **High Performance Culture (HPC)**
  HPC is our flagship cultural change programme. It is designed to provide insights and tools to help our people operate and collaborate with pace, simplicity and accountability. More than 80% of employees have been engaged in the programme to date.
- **Columbus Academy**
  The Columbus Academy is our principal executive development programme, run in partnership with Oxford Said Business School. It challenges our leadership teams to consider larger, strategic issues as we continue to transform our business. All our senior leaders have attended the course.

As part of our cultural change programme, we have introduced assessments of individuals' alignment to our values and behaviours into our performance management approach for all employees.

Maintaining employee engagement is critical during times of change and transformation. More than 30,000 employees took part in our employee opinion survey this year, our highest participation rate to date.

Our sustainable employee engagement index score declined slightly from 81 in 2015 to 75 in 2016, six points below the high performance norm.

We consider a subset of the results of our employee opinion survey when calculating our non-financial KPIs, recognising that an engaged workforce is a key measure of success. For more information see page 47.

We provide a variety of channels to communicate with employees and encourage participation and engagement. Our community investment and education outreach programmes are a key component of our employee involvement activities. We invested £9.5m in supporting communities in 2016, including £5.6m in cash contributions and £3.9m in employee time equivalent.

We are committed to creating an environment where every employee can reach his or her full potential, by encouraging diversity, wellbeing and development. We have employee resource groups in our UK, US and Germany operations. These bring together employees who share similar characteristics or experiences.

More information on our approach to diversity and gender distribution can be found in the Nominations & Governance Committee report, on pages 67 and 69.

THROUGH OUR OPERATIONS AND FACILITIES

We continue to develop world-class production capabilities while optimising our operational footprint.

Derby Campus, UK

As part of our commitment to retain manufacturing and engineering capability in the UK, we launched a five-year investment programme to redevelop our Derby Campus.

- Over 10,000 employees, including 7,500 engineers
- Future product development programmes
- Final assembly of our Trent XWB and Trent 1000 engines
- Our corporate functions

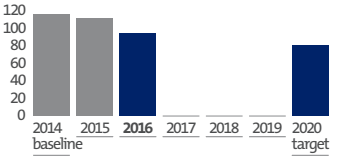
INVESTMENT IN ENERGY EFFICIENCY IMPROVEMENT PROJECTS

£10m

In 2016, we invested £50m in improvements to existing facilities and £184m in the development of new facilities, while at the same time reducing our global operational footprint by 2%.

Our investments in state-of-the-art facilities also enable us to reduce the environmental impacts of our operations.

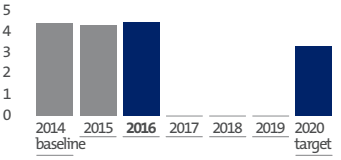
ENERGY USE (MWH/£M)☑



Target: reduce energy use in our operations and facilities by 30%, normalised by revenue, by 2020.
(excluding product test and development)

Our total energy consumption for 2016, excluding product test, was 95 MWH/£m, which represents a 17% reduction since 2014. This has been driven by continued investment in energy efficiency improvement projects, including upgrading lighting and heating systems, and building management systems. Our expenditure for 2016 totalled £10m, our highest annual investment to date.

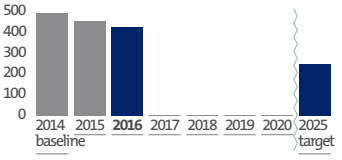
TOTAL SOLID AND LIQUID WASTE (T/£M)§



Target: reduce total solid and liquid waste in our operations and facilities by 25%, normalised by revenue, by 2020.

Our total solid and liquid waste production in 2016 was 4.48 t/£m, a 2% increase from 2014. This is largely driven by improved data collection and validation, particularly in Power Systems.
We continue to focus on opportunities to prevent and reduce the amount of waste we generate. We expect waste reduction activity to be accelerated in 2017 through a global waste action programme.

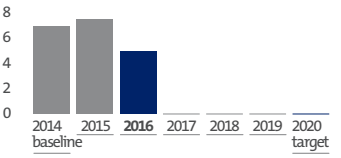
ABSOLUTE GHG EMISSIONS ($KTCO_2E$)☑†



Target: reduce greenhouse gas (GHG) emissions in our operations and facilities by 50%, absolute, by 2025.
(excluding product test and development)

Our total GHG emissions for 2016, excluding product test, was 424 $ktCO_2e$. This represents a 13% reduction since 2014. This has been achieved by investing in a number of low carbon and renewable energy projects across our global facilities, including completing two large solar power installations at our Singapore and Bristol, UK manufacturing sites.

WASTE TO LANDFILL (000 TONNES)§



Target: zero waste to landfill in our operations and facilities, by 2020.
(excluding hazardous waste)

The amount of waste sent to landfill has decreased by 28% from 6,700 tonnes in 2014 to 4,800 tonnes in 2016, with particularly good progress in our Defence Aerospace and Power Systems businesses. This has been accelerated in 2016 by a reduction in output from our two major foundries. We continue to work closely with our waste management partners to identify recycling and recovery alternatives to landfill across a variety of waste streams.

† Regulatory greenhouse gas (GHG) emissions data details on page 188.
☑ External assurance over STEM, Energy, GHG and TRI rate data provided by Bureau Veritas. See page 183 for the sustainability assurance statement.
§ Waste data for 2016 is calculated in accordance with our basis of reporting, as set out on www.rolls-royce.com/sustainability. Whilst we were able to determine the total waste production and waste to landfill for 2016, we maintain a limited degree of uncertainty in the waste categorisation and quantities which may impact our reported numbers. We will continue to review historical and source data and if a material impact is identified will restate in accordance with our basis of reporting.

THROUGH OUR SUPPLIER AND CUSTOMER RELATIONSHIPS

We pride ourselves on being trusted partners to suppliers and customers in more than 150 countries worldwide. Our long-term relationships provide insights and capabilities which enable us to deliver world-class products and services.

Our external suppliers

Rolls-Royce spends over £7bn annually with suppliers. We invest significant resources to ensure this complex supply chain is resilient, efficient and able to consistently deliver to Rolls-Royce standards. Our supply chain is built on long-term relationships, frequently based on shared investments and capability.

We also invest in developing new supplier relationships as we move into new technologies, new customer markets and geographies, particularly in the Asia Pacific region.

At the same time, we are rationalising our supply base as we continue to streamline our product portfolio and operational footprint, particularly in our Marine business where we have reduced the number of OE suppliers by 40% since 2013.

We engage collaboratively with key suppliers to drive out cost and enhance value, underpinned by full transparency and agreed joint improvement plans. Over 65% of our spend is managed through mature and collaborative supplier engagement programmes.

We remain committed to maintaining the highest levels of ethical behaviour across our supply chain. At the end of 2016, 99% of our suppliers had contractually agreed to adhere to our Global Supplier Code of Conduct. We have also introduced risk-based compliance monitoring; 22% of our prioritised suppliers have completed this assessment, covering business ethics, labour practices, anti-bribery and human rights.

ANNUAL SPEND WITH OUR SUPPLIERS

>£7bn

SUPPLIERS CONTRACTUALLY AGREED TO ADHERE TO OUR GLOBAL SUPPLIER CODE OF CONDUCT

99%

Our customers

Our customers expect outstanding product performance and reliability. They operate our products for decades, frequently in combination with aftermarket services. This leads to a deep understanding of their needs which we apply to the development of new technologies and products.

The quality of our customer relationships is based on mutual trust, as well as our engineering expertise. As a steering committee member of the International Forum on Business Ethical Conduct for the Aerospace and Defence Industry (IFBEC), we strive to implement best practice ethical business standards and continue to apply a zero tolerance approach to bribery and corruption.

In addition, we have introduced a customer delivery metric into our remuneration policy to ensure continued focus on the delivery of our commitments to customers. For more information see page 47.

50-year partnership with the Royal Navy

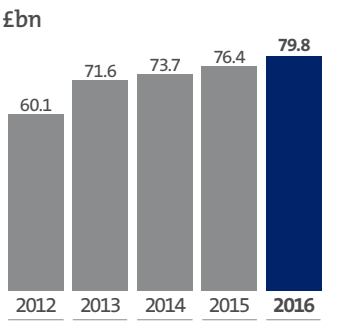
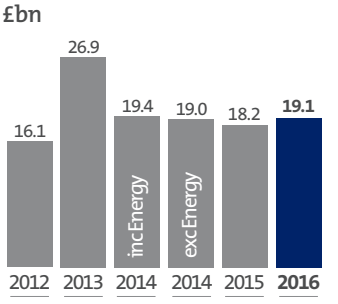
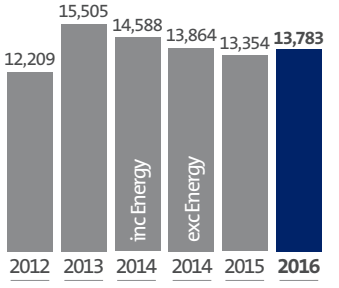
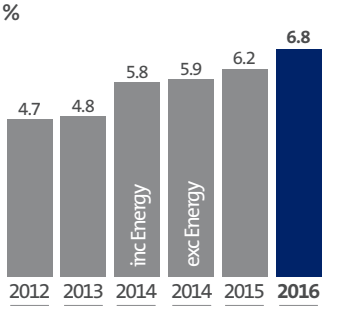
Rolls-Royce is a world-leader in nuclear submarine systems and support services incorporating design, procurement and operation. For the past 50 years, we have been the Technical Authority for the UK Nuclear Steam Raising Plant, responsible for powering the UK's Royal Navy submarine fleet.

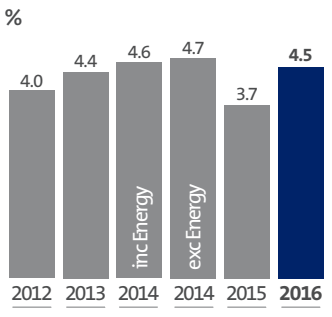
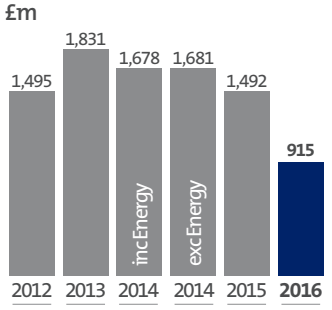
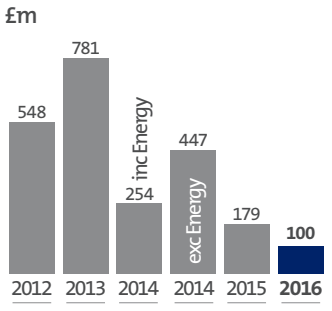
A superior supplier to the US Air Force

In September 2016, the USAF recognised Rolls-Royce as a Superior Supplier. We are the only engine manufacturer to be recognised by the USAF as a Tier 1 Superior Supplier three years in a row.

Key performance indicators

Our key financial and non-financial performance indicators are shown below. The areas of focus of the Board and its committees are described on pages 58 to 112, and other non-financial performance indicators are shown in the Sustainable business section on pages 40 to 45 and the Safety & Ethics Committee report on pages 103 to 109.

Description	Why we measure it	How we have performed	
Order book **£79.8bn**	We measure our order book in line with industry practice and believe it is an indicator of future business; however, its value may not be reflective of future revenue. We measure it at our long-term planning exchange rate (LTPR) and list prices and include both firm and announced orders. In Civil Aerospace, it is common for a customer to take options for future orders in addition to firm orders placed. Such options are excluded from the order book. In Defence Aerospace, long-term programmes are often ordered for only one year at a time. In such circumstances, even though there may be no alternative engine choice available to the customer, only the contracted business is included in the order book. Conservatively, we only include the first seven years' revenue of long-term aftermarket contracts.	The order book grew by £3.4bn. An increase of £4.4bn in Civil Aerospace (including £2.1bn from a five cent improvement in the LTPR) was offset by a reductions in the other segments, reflecting the current weak market conditions, particularly in oil & gas markets.	
Order intake **£19.1bn**	Order intake is a measure of new business secured during the year and represents new firm orders, adjusted for the movement in the announced order book between the start and end of the period. Any orders which were recorded in previous periods and which are subsequently cancelled, reducing the order book, are included as a reduction to intake. We measure order intake at constant exchange rates and list prices and, consistent with the order book policy of recording the first seven years' revenue of long-term aftermarket contracts, include the addition of the following year of revenue on long-term aftermarket contracts.	An increase of £1.3bn in Civil Aerospace order intake was offset by weaker intake in Defence Aerospace and Marine.	
Underlying revenue **£13,783m**	Monitoring of revenue provides a measure of business growth. Underlying revenue is used as it reflects the impact of our FX hedging policy by valuing foreign currency revenue at the actual exchange rates achieved as a result of settling foreign exchange (FX) contracts in the year. This provides a clearer measure of the year-on-year trend.	At constant exchange rates, revenue was broadly stable except in Marine where it fell by 24%. Improved achieved rates on currency hedging increased underlying revenues by £0.7bn.	
Net R&D expenditure as a proportion of underlying revenue **6.8%**	This measure reflects the need to generate current returns as well as to invest for the future. We measure R&D as the self-funded expenditure before both amounts capitalised in the year and amortisation of previously-capitalised balances. We expect to spend approximately 5% of underlying revenue on R&D although this proportion will fluctuate depending on the stage of development of current programmes. We expect this proportion will reduce modestly over the medium term.	The increase is largely due to increased expenditure on three large engine programmes, Trent 1000 TEN, Trent XWB-97 and Trent 7000, as they approach entry into service.	

Description	Why we measure it	How we have performed	
Capital expenditure as a proportion of underlying revenue **4.5%**	To deliver on its commitments to customers, the Group invests significant amounts in its infrastructure. All proposed investments are subject to rigorous review to ensure that they are consistent with forecast activity and will provide value for money. We measure annual capital expenditure as the cost of property, plant and equipment acquired during the period and, over the medium term, expect a proportion of around 4%. (Capital expenditure excludes additions arising from TotalCare Flex arrangements.)	Expenditure increased to £626m (2015: £494m) principally reflecting the major investment in aerospace footprint and capacity.	
Underlying profit before financing **£915m**	We measure underlying profit before financing on a basis that shows the economic substance of the Group's hedging strategies in respect of the transactional exchange rate and commodity price movements. In particular: (a) revenues and costs denominated in US dollars and euros are presented on the basis of the exchange rates achieved during the year; (b) similar adjustments are made in respect of commodity derivatives; and (c) consequential adjustments are made to reflect the impact of exchange rates on trading assets and liabilities, and long-term contracts, on a consistent basis.	The reduction is predominantly in Civil Aerospace reflecting reductions in: volume and margin on link accounted Trent 700 engines; business jet original equipment volumes; large engine aftermarket utilisation; and increased technical costs for large engines. In addition, 2015 benefited from changes in risk assessments, partially offset by strong lifecycle cost improvements and provision releases.	
Free cash flow **£100m**	In a business requiring significant investment, we monitor cash flow to ensure that profitability is converted into cash generation, both for future investment and as a return to shareholders. We measure free cash flow as the movement in net debt/funds during the year, before movements arising from payments to shareholders, acquisitions and disposals, and FX.	The reduction reflects lower profits and increased capital expenditure offset by improvements in net working capital.	

Non-financial key performance indicators*

Description	Why we measure it	How we have performed
Customer delivery **88%**	To deliver on our commitments to our customers we measure the percentage of 'on-time to purchase order' including new equipment, spare parts, equipment repair and overhaul. This is tracked Group-wide in our scheduling and order fulfilment system.	As we continue to ramp up our delivery of Trent Engines, the challenge to improve on-time delivery remains a priority. The 2016 score of 88% fell slightly short of our target of 90%.
Employee engagement **75**	This is measured through our long-standing employee opinion survey which produces a composite engagement score. The targets are based on absolute scores for six key questions within the overall survey.	Our employee engagement score achieved our target of 75 in 2016. This was the same score as in 2015 and the target reflected the significant impact of the transformation programme on our employees in 2016.

* 2016 is the first year that we have included these non-financial performance indicators in our remuneration structure.

REMUNERATION COMMITTEE REPORT ON PAGE 72

Principal risks

Risk management

Risk management is built into our daily activities and is an integral part of how we work: from our engineering design, through to engine production, servicing and how we run our operations.

The Board is responsible for the Group's risk management and internal control systems and reviews their effectiveness. These systems are designed to identify and manage, rather than eliminate, the risk of failure to achieve business objectives and to provide reasonable, but not absolute, assurance against material misstatement or loss.

More information about our internal control system can be found in the Audit Committee report on pages 100 and 101.

Our risk management system

Our risk management system (RMS) helps us make better decisions and to deal with problems if they occur. It is implemented through a Group-wide framework mandated in the Group risk management policy and a network of trained risk management facilitators. It is supported through the use of risk software.

Businesses and functions are accountable for identifying and managing risks in line with the Group risk management policy. Business continuity plans are in place to mitigate continuity risks and this year there has been more regular testing of the adequacy of these plans through exercises with the businesses.

The Group's enterprise risk team, led by the Director of Risk, is responsible for disseminating the risk policy and processes and co-ordinating the effective operation of the RMS. Progress of actions to mitigate risks and the adequacy of risk controls are regularly reviewed by the sector audit committees.

Joint ventures constitute a large part of the Group's activities. Responsibility for risk and internal control in joint ventures lies with the managers of those operations. We seek to exert influence over such joint ventures through board representation. Management and internal audit regularly review the activities of these joint ventures.

In 2016, we continued to embed enhancements to our RMS throughout the Group, including strengthening risk governance and building improvements to our risk operating model, reporting, infrastructure and assurance processes.

Examples of enhancements implemented in 2016 include:

- Launching a new risk policy which was mandated as part of the governance framework and supported by improved risk management training, which is mandatory for new employees.
- Adopting a risk visualisation tool for use at the Board, Executive Leadership Team (ELT) and in the businesses to bring risk discussions to life and enable better interrogation of risk information.
- Holding more regular ELT risk committee meetings (quarterly) to conduct deep dives into specific risks, in particular their mitigation plans and controls, and to consider systemic issues and common root causes.
- Building much closer links to strategic and business financial planning and forecasting processes to develop risk scenarios used to support our viability statement.
- Updating the way we monitor and measure the effectiveness of the RMS, including the use of incident information to drive learning and continuous improvement of our risk mitigation activities.

The Board is aware that the effectiveness of risk management is highly dependent on behaviours, as a good process does not automatically lead to a good outcome. The roll-out of the Group's High Performance Culture programme will continue to strengthen risk management as part of our culture. In addition, the emphasis in our ethics and compliance programme of providing a culture of speaking up, reinforces the values and behaviours required for an effective RMS.

In 2017, we will continue to look for opportunities to strengthen our RMS and our corporate culture by focusing on embedding risk content in leadership training programmes, discussing our principal risks in employee communications and regularly evaluating the effectiveness of our risk management activities.

Management of principal risks

Our risk framework ensures that risks are identified, managed and communicated throughout the Group.

Principal risks

Our RMS is designed so that principal risks can be identified from multiple sources. Key bottom-up risks are identified by businesses and functions and the detail of risks that meet the Group threshold are subject to review and challenge by the ELT and the Board during their risk reviews.

These include monitoring the status of mitigation actions, adequacy of controls and any incidents that have occurred since the last review. Risks captured during the strategy and business planning activities also inform the development of the principal risks.

The Board, assisted by the ELT, has carried out a robust assessment of, and reviewed our appetite for, the principal risks facing the Group. These include those principal risks that threaten the business model, future performance, solvency and liquidity of the Group. These reviews have been informed by the financial evaluation of severe but plausible scenarios of our principal risks which has also been used to support our viability statement on page 53.

During the year, the Board and ELT reviews have involved: discussing changes to the risks; reviewing the risk indicators for principal risks; understanding any unplanned incidents that have occurred to support the Board's consideration of our risk appetite; and, discussing with management about how risks will be managed.

The Board, or the most appropriate Board committee, undertakes in-depth reviews (deep dives) of our principal risks in which it assesses our material controls and the effectiveness of our risk management and mitigation activities. These reviews are supported by the ELT risk committee performing deep dives of related bottom-up key risks and the actions and controls in place to manage them. During the year, the Board or the most appropriate Board committee has undertaken a deep dive on all of the Group's principal risks. The Board has also conducted a review of our strategic risks as part of its annual strategy review.

This ongoing review of risks has resulted in a further principal risk being added this year: Disruptive technologies and business models. This risk has been added to reflect the increasing importance of transformative technologies and new ways of doing business, not least digitisation of processes, products and services, that if not properly managed, could impact our future growth and profitability. This risk will be overseen by the Science & Technology Committee and was subject to a deep dive by the ELT at its meeting in December 2016.

The principal risks are also used to help select scenarios to exercise our Group crisis management team (CMT). This year an appropriate scenario was developed based on the IT vulnerability principal risk. This provided an opportunity for the CMT to understand the nature and complexity of cyber threats and to test the Group's response procedures and identify where our plan can be further strengthened.

The Board gave initial consideration to the implications of Brexit for the Group, and due to the prevailing uncertainty of timing and impact set up a steering group to monitor developments and report back to the Board. Rolls-Royce is headquartered in the UK but across continental Europe the Group has significant infrastructure, a large workforce, many business units and a very important customer and supplier base. Whilst the details of Brexit are still unclear, we are working with the UK government and others to ensure the implications of leaving the EU are understood and mitigated if possible. We recognise we have an obligation to look after our people in the UK, Europe and beyond, and to ensure that we take the necessary steps to position the Group to address both the opportunities and threats presented so that we can continue to do business effectively in and with Europe and the rest of the world with minimal disruption.

Additionally, Rolls-Royce has significant operations, a substantial employee base, and important customers in North America, where the new US administration has signalled broad policy changes. Some of these changes in policy with regard to trade, tax and defence and infrastructure spending could affect the industries which we serve. The North America leadership team is actively monitoring these developments to mitigate risk and position us advantageously in this new environment.

Risk management enables our strategy

1 Engineering excellence
2 **Operational excellence**
3 Capturing aftermarket value

PRIORITIES FOR 2017 ON PAGE 13

Change in risk level

- Increased
- Decreased
- Static
- N New risk

Risk or uncertainty and potential impact	How we manage it	Key controls	Change in risk level	Strategic priorities
Disruptive technologies and business models Disruptive technologies, new entrants with alternative business models or disruptions to key markets or customers could reduce our ability to win sustainable future business, achieve operating results and realise future growth opportunities.	• Horizon and emerging technology scanning, and understanding our competitors, including patent searches. • Investing in innovation and new technologies (see page 9). • Focusing on enhancing our skills and capabilities to maintain our technology leadership (see page 41). • Forming strategic partnerships and conducting joint research programmes. • Establishing our digital business. **This principal risk is subject to review by the Science & Technology Committee.**	• **Strategic planning process** • **Investment review committee** • **Digital board** • **Research & technology board**	N	1 2 3
Product failure Product not meeting safety expectations, or causing significant impact to customers or the environment through failure in quality control.	• Ensuring a culture that puts safety first. • Applying our engineering design and validation process from initial design, through production and into service. • Reviewing the scope and effectiveness of the Group's product safety policies to ensure that they operate to the highest industry standards. • Operating a safety management system (SMS), governed by the product safety review board, and subject to continual improvement based on experience and industry best practice. Product safety training is an integral part of our SMS (see pages 104 and 107). • Improving our supply chain quality. **This principal risk is subject to review by the Safety & Ethics Committee.**	• **Product safety review board** • **Quality compliance audit** • **Engineering technical audit** • **Crisis management team**	⇔	1 2 3
Business continuity Breakdown of external supply chain or internal facilities that could be caused by destruction of key facilities, natural disaster, regional conflict, financial insolvency of a critical supplier or scarcity of materials which would reduce the ability to meet customer commitments, win future business or achieve operational results.	• Continuing our investment in adequate capacity and modern equipment and facilities (see page 21). • Identifying and assessing points of weakness in our internal and external supply chain, our IT systems and the skills of our people. • Selecting stronger suppliers, developing dual sources or dual capability (see page 45). • Developing and testing site-level incident management and business recovery plans. • Providing improved response to supply chain disruption through customer excellence centres. • Understanding potential changes to supply chain responsiveness and resilience resulting from Brexit and change to the US administration (eg. due to logistics delays). **This principal risk is subject to review by the Audit Committee.**	• **Crisis management team** • **Major incidents board** • **Quality board and process councils** • **Operations and IT executive teams** • **Supplier audit**	⇔	2 3
IT vulnerability Breach of IT security causing controlled or critical data to be lost, made inaccessible, corrupted or accessed by unauthorised users.	• Implementing 'defence in depth' through deployment of multiple layers of software and processes including web gateways, filtering, firewalls, intrusion, advanced persistent threat detectors and integrated reporting (see page 100). • Running security and network operations centres. • Actively sharing IT security information through industry, government and security forums. **This principal risk is subject to review by the Audit Committee.**	• **Operations and IT executive teams** • **IT security management** • **Crisis management team**	⇔	1 2

Risk or uncertainty and potential impact	How we manage it	Key controls	Change in risk level	Strategic priorities
Competitive position The presence of large, financially strong competitors in the majority of our markets means that the Group is susceptible to significant price pressure for original equipment or services even where our markets are mature or the competitors few. Our main competitors have access to significant government funding programmes as well as the ability to invest heavily in technology and industrial capability.	• Accessing and developing key technologies and service offerings which differentiate us competitively (see page 40). • Focusing on being responsive to our customers and improving the quality, delivery and reliability of our products and services. • Partnering with others effectively. • Driving down cost and improving margins (see page 10). • Protecting credit lines. • Investing in innovation, manufacturing and production, and continuing governance of technology programmes (see pages 111 and 112). • Maintaining a healthy balance sheet to enable access to cost-effective sources of third-party funding. • Understanding our competitors. • Understanding the potential implications on our competitiveness resulting from Brexit and change to the US administration. **This principal risk is subject to review by the Board.**	• **Financial performance review** • **Strategic planning process** • **Investment review committee** • **Science & Technology Committee** • **Research & technology board**	↔	1 2 3
Political risk Geopolitical factors that lead to an unfavourable business climate and significant tensions between major trading parties or blocs which could impact the Group's operations. For example: explicit trade protectionism, differing tax or regulatory regimes, potential for conflict; or broader political issues.	• Where possible, locating our facilities and supply chain in countries with a low level of political risk and/or ensuring that we maintain dual capability. • Diversifying global operations to avoid excessive concentration of risks in particular areas. • The Group's international network and its businesses proactively monitoring local situations. • Maintaining a balanced business portfolio with high barriers to entry and a diverse customer base (see page 14). • Proactively influencing regulation where it affects us. • Steering committee, chaired by Group President, to co-ordinate activities across the Group and minimise the impact of Brexit. • Monitoring the potential impact of changes following the change to the US administration, relating to tax policy, trade and relationships with the UK government. **This principal risk is subject to review by the Board.**	• **Government relations and Group tax teams** • **Strategic planning process** • **Supplier audit**	↑	2
Major programme delivery Failure to deliver a major programme on time, within budget, to specification, or technical performance 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.	• Major programmes are subject to Board approval (see page 185). • Reviewing major programmes at levels and frequencies appropriate to their criticality and performance, against key financial and non-financial deliverables and potential risks throughout the programmes lifecycles (see page 185). • Conducting technical audits at pre-defined points which are performed by a team that is independent from the programme. • Requiring programmes to address the actions arising from reviews, and audits and then monitoring and controlling progress through to closure. • Applying knowledge management principles to provide benefit to current and future programmes. **This principal risk is subject to review by the Board.**	• **Rolls-Royce management system** • **Operational performance review** • **Project assurance** • **Gated business and technical reviews** • **Quality compliance audit**	↑	1 2

Risk or uncertainty and potential impact	How we manage it	Key controls	Change in risk level	Strategic priorities
Compliance Non-compliance by the Group with legislation or other regulatory requirements in the heavily regulated environments in which it operates (eg. export controls; use of controlled chemicals and substances; and anti-bribery and corruption legislation) compromising the ability to conduct business in certain jurisdictions and exposing the Group to potential: reputational damage; financial penalties; debarment from government contracts for a period of time; and/or suspension of export privileges (including export credit financing), each of which could have a material adverse effect.	• Taking an uncompromising approach to compliance. • Operating an extensive compliance programme. This programme and the Global Code of Conduct are disseminated throughout the Group and are updated from time to time to ensure their continued relevance, and to ensure that they are complied with, both in spirit and to the letter. The Global Code of Conduct and the Group's compliance programme are supported by appropriate training (see page 105). • Strengthening of the ethics, anti-bribery and corruption, compliance and export control teams. • A legal team is in place to manage regulatory investigations. • Engaging with external regulatory authorities. • Implementing a comprehensive Registration, Evaluation, Authorisation and restriction of CHemicals (REACH) compliance programme. This includes establishing appropriate data systems and processes, working with our suppliers, customers and trade associations and conducting research on alternative materials. **This principal risk is subject to review by the Safety & Ethics Committee.**	• **Corporate governance framework** • **Compliance and export control teams** • **Group Secretariat** • **Legal teams**	⇔	**2**
Market and financial shock The Group is exposed to a number of market risks, some of which are of a macro-economic nature (eg. oil price, exchange rates) and some of which are more specific to the Group (eg. liquidity and credit risks, credit rating, profitability post IFRS 15, 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.	• Maintaining a healthy balance sheet, through managing cash balances and debt levels and maturities (see page 17). • Providing financial flexibility by maintaining high levels of liquidity and an investment grade credit rating. • Sustaining a balanced portfolio through earning revenue both from the sale of original equipment and aftermarket services, providing a broad product range and addressing diverse markets that have differing business cycles (see page 18). • Deciding where and what currencies to source in, and where and how much credit risk is extended or taken. The Group has a number of treasury policies that are designed to hedge residual risks using financial derivatives (foreign exchange, interest rates and commodity price risk – see page 185). • Review debt financing and hedging in light of volatility in external financial markets caused by external events, such as Brexit and change of US administration. **This principal risk is subject to review by the Audit Committee.**	• **Financial performance review** • **Financial risk committee** • **Operational performance review** • **Group finance, treasury and taxation teams**	↑	**2** **3**
Talent and capability Inability to attract and retain the critical capabilities and skills needed in sufficient numbers and to effectively organise, deploy and incentivise our people to deliver our strategy, business plan and projects.	• Attracting, rewarding and retaining the right people with the right skills globally in a planned and targeted way, including regular benchmarking of remuneration (see pages 70 and 72). • Developing and enhancing organisational, leadership, technical and functional capability to deliver global programmes and transformational change. • Continuing a strong focus on individual development and succession planning (see page 58). • Proactively monitoring retirement in key areas and actively managing the development and career paths of our people with a special focus on employees with the highest potential. • Embedding a lean, agile high performance culture that tightly aligns Group strategy with individual and team objectives. • Retaining, incentivising and effectively deploying the critical capabilities, skills and people needed to deliver our strategic priorities, plans and projects whilst implementing the Group's major programme to transform its business, to be resilient and to act with pace and simplicity. • Tracking engagement through our annual employee opinion survey and a commitment to drive year-on-year improvement to the employee experience and communications (see page 43). • Reviewing employee mobility as part of Brexit steering committee. **This principal risk is subject to review by the Nominations & Governance Committee.**	• **Remuneration Committee** • **ELT** • **HR executive team**	⇔	**1** **2** **3**

Going concern and viability statements

Introduction

Rolls-Royce operates an annual planning process which includes strategic (greater than five years), medium-term (five year) and short-term (one year) financial forecasts, based on the inputs from each of the businesses. These plans and risks to their achievement are reviewed by the Board as part of its strategy review and budget approval processes. Once approved these plans are cascaded throughout the Group and are used as the basis for monitoring our performance, incentivising employees and providing external guidance to our shareholders. These were updated to reflect the impact of the financial penalties from agreements with investigating bodies.

The processes for identifying and managing the principal risks are described on pages 48 and 49. As also described there, the risk management process, and in consequence the going concern and viability statements, are designed to provide reasonable, but not absolute, assurance.

Going concern

The going concern assessment considers whether it is appropriate to prepare the financial statements on a going concern basis.

As described on page 185, the Group meets its funding requirements through a mixture of shareholders' funds, bank borrowings, bonds and notes. At 31 December 2016, the Group had borrowing facilities of £5.3bn and total liquidity of £5.1bn, including cash and cash equivalents of £2.8bn and undrawn facilities of £2.3bn. £170m of the facilities mature in 2017.

The Group's forecasts and projections, taking into account reasonably possible changes in trading performance, show that the Group has sufficient financial resources. The Directors have reasonable expectations that the Company and the Group are well placed to manage business risks and 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) and have not identified any material uncertainties to the Company's and the Group's ability to do so.

On the basis described above, the Directors consider it appropriate to adopt the going concern basis in preparing the consolidated financial statements (in accordance with the *Guidance on Risk Management, Internal Control and Related Financial and Business Reporting* published by the Financial Reporting Council in September 2014).

Viability

The viability assessment considers solvency and liquidity over a longer period than for the purposes of the going concern assessment above. Inevitably, the degree of certainty reduces over this longer period.

In making the assessment, severe but plausible scenarios have been considered that estimate the potential impact of the principal risks arising over the assessment period, for example: the loss of a key element of the supply chain; the impact on aircraft travel of a global pandemic; or a failure to achieve planned cost reductions.

The scenarios assume an appropriate management response to the specific event, but not broader mitigating actions which could be undertaken, which were considered separately. The impacts of these scenarios were overlaid on the medium-term forecast to assess how the Group's liquidity and solvency would be affected.

The assessment took account of the Group's current funding, forecast requirements and existing committed borrowing facilities. It assumed that existing facilities could be refinanced as they mature. There are modest maturities over the first two years of the medium-term forecast with more significant maturities in 2019 and 2021.

On the basis described above, the Board confirms that it has a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the next five years, consistent with the period of the medium-term forecast.

In making this statement, the Directors have made the following key assumptions:

- That maturing facilities will be refinanced. The Group currently has access to global debt markets and expects to be able to refinance these facilities on commercially-acceptable terms. The Group's medium-term and long-term financing plans are designed to allow for periods of adverse conditions in world capital markets but not a prolonged (say 12 month) period where debt markets were effectively closed to the Group.
- That in the event of a single risk or multiple lesser risks occurring which have a particularly severe effect on the Group, all potential actions, such as constraining capital spending and reducing or suspending payments to shareholders, would be taken on a timely basis. The Group believes it has the early warning mechanisms to identify the need for such actions and the ability to implement them on a timely basis if necessary.
- That implausible scenarios, whether involving multiple risks occurring at the same time or the impact of individual risks occurring that cannot be mitigated by management actions to the degree assumed, do not occur. For instance, whilst the Directors have considered a scenario where cost reductions are not achieved and a major programme is delayed, they have not considered it plausible that any other of the key risks would crystallise in a way that would create a worse outcome over the five-year assessment period.

Signed on behalf of the Board

Warren East
Chief Executive
13 February 2017